

CONDITIONS OF ENVIRONMENTAL IMPACT ASSESSMENT APPROVAL SISSON MINE PROJECT

This Approval does not relieve Sisson Mines Limited (SML; the proponent) from the necessity to comply with any other applicable federal, provincial, and municipal acts, regulations, bylaws and codes.

- 1. The proponent shall adhere to all obligations, commitments, monitoring and proposed mitigation measures as outlined in the Final Environmental Impact Assessment Report dated February 2015 (hereinafter "Final EIA Report"), and any other documents or correspondence prepared and submitted by the proponent, or its agents, as deemed applicable by the Minister to this project. In addition, the proponent shall submit compliance updates every six (6) months in the form of a summary table that tracks compliance with all material EIA, permit and approval conditions and commitments made by the proponent during the regulatory review process, project detailed design phase, etc., until such time as determined by the Manager, Environmental Assessment Section, Department of Environment and Local Government (DELG). The summary table must be linked to the project Environmental and Socioeconomic Monitoring System (ESMS) tracking database described in Condition #29 below.
- Commencement of this project must occur within five (5) years of the date of this approval. Should commencement not be possible within this time period, the project must be registered under the *Environmental Impact Assessment Regulation Clean Environment Act* (NB Reg. #87-83) again, unless otherwise stated by the Minister of Environment and Local Government.
- 3. Within three (3) months of the date of this approval, the proponent must submit to DELG the anticipated schedule for applying and obtaining all applicable project permits and approvals.
- 4. The proponent must submit revised water quality modelling results and interpretation in support of a final engineered design, to the Manager, Environmental Assessment Section, DELG, for review/approval, prior to applying for Approvals to Construct or Operate (Conditions 5, 6 & 7 below). The revised modelling must include, but is not limited to the following:
 - Tailings Storage Facility (TSF) seepage account for loading to the seepage from tailings and waste rock pores;
 - b. Pit High Wall an acidic pit wall source term must be developed and included:
 - c. Account for transient loading that can be expected from seepage through ore stockpiles on site during operation;
 - d. Extend the simulation period of the modelling from 100 to 200 years and account for acidification of pit high wall rock that will initiate after 100 years;
 and
 - e. Re-evaluate the potential for adverse effects on aquatic life.

- 5. The proponent must obtain an Approval to Construct under the Air Quality Regulation (N.B. Reg. #97-133 - Clean Air Act), and Water Quality Regulation (N.B. Reg. #82-126 - Clean Environment Act). This Approval will serve as a framework to ensure appropriate environmental protection measures are properly designed and implemented, and compliance with environmental protection commitments made by the proponent during the EIA review are met. During the project detailed design phase, the proponent must apply for an Approval to Construct. An application must be submitted to DELG at least 90 days before the anticipated start date of This application found the construction. can be at following http://www2.gnb.ca/content/dam/gnb/Departments/env/pdf/Air-Lair/RequestingApprovalOfSourceDagrementPourUneSource.pdf
- 6. The proponent must obtain an *Air Quality Approval to Operate* under the *Air Quality Regulation* (N.B. Reg. #97-133 *Clean Air Act*). The class of air quality approval will be determined during final design phase. If the facility falls in the class 1 category for air quality, an application for the *Approval to operate* must be submitted to DELG at least 240 days before the anticipated start date of operation at the facility. If the facility falls in a lower class, the application must be submitted to DELG at least 90 days prior to the anticipated start date of operation. This application can be found at the following link: http://www2.gnb.ca/content/dam/gnb/Departments/env/pdf/Air-Lair/RequestingApprovalOfSourceDagrementPourUneSource.pdf.
- 8. A Water Monitoring/Management Plan, including monitoring for groundwater, surface water and tailings/seepage water must be developed during the project detailed design phase and submitted to DELG for review and approval. The plan must include, but is not limited to, detailed descriptions of sampling locations (including background locations, monitoring well locations and construction details), parameters (including water quality and quantity, water levels, etc.), and sampling frequencies, along with a program to validate the design of potential seepage interception wells including, but not limited to, pumping tests. The plan must also include the requirement for data analysis (including trending and statistical analysis). interpretation, reporting (including frequency) and recommendations (such as changes to the water monitoring management plan, further mitigation requirements, etc.). The plan must include the requirement to regularly compare the measured water quality results to the predicted water quality modelling results, along with an evaluation and interpretation of the comparison results to determine if the predictive water quality modelling results need to be re-visited based on the comparison results or the potential for adverse impacts. In addition, the plan must include a requirement that monitoring data will be used to regularly update the site groundwater flow model and the site water balance, including details on groundwater travel times and seepage management (including, but not limited to,

- the amount of groundwater pumped from any seepage interception wells). If the monitoring data is not adequate to update information then additional data will need to be collected. The Water Monitoring/Management Plan must be submitted along with the Water Quality Approval to Construct permit application, and be approved prior to commencing construction.
- 9. During the detailed project design phase, the proponent must formally respond to project based recommendations outlined in the Panel Report (*Independent EIA Panel Review*, November 2015) and the response must be submitted prior to the onset of construction to the Manager, Environmental Assessment Section, DELG, for review and approval.
- 10. The proponent must obtain a permit under the Watercourse and Wetland Alteration Regulation (N.B. Reg. # 90-80 - Clean Water Act) for any activities/alterations to be conducted in or within 30 meters of any regulated watercourse or wetland if the activity is not already covered and approved in a DELG Approval to Construct and/or Operate under the Water Quality Regulation. Please contact the Manager, Surface Water Protection, DELG at (506) 457-4850 for additional information.
- 11. A conceptual Wetlands Compensation Plan (WCP) must be developed in consultation with DELG, New Brunswick Department of Natural Resources (DNR), and Environment Canada (EC) for any loss or alteration of wetland habitat due to the project and must be submitted to the Manager, Environmental Assessment Section, DELG, for review/approval within six (6) months of the date of this approval. The WCP must be consistent with the requirements for compensation of both the Federal Policy on Wetland Compensation and the New Brunswick Wetland Conservation Policy, and take into consideration any altered wetland habitat, and any opportunities for the potential restoration of habitat in proximity to the project area. The WCP must include, but is not limited to: 1) additional baseline field data on habitat and functions; 2) identification of all wetlands within the project Local Assessment Area (LAA); 3) on the ground determination of total area of wetland that will be altered by project activities; 4) description of proposed compensation activities (i.e. restoration, enhancement, creation); 5) detailed design of the proposed compensation projects; 6) a schedule for implementing wetland compensation activities; and 7) a monitoring program to track the success of compensation efforts. Required environmental effects monitoring of wetlands within the LAA beyond the direct footprint of the project may result in additional compensation requirements in the future, if monitoring indicates a loss of wetland function beyond the initial development area.
- 12. The proponent must obtain a *Mining Lease* and approval of the Tailings Dam design as per the *Mining Act* and a *Quarry Lease* and any necessary Quarry Permits as per the *Quarriable Substances Act*, from the Department of Energy and Mines (DEM). Please contact the Manager, Mining and Mineral Resources, DEM, at (506) 453-6046 for additional information.
- 13. The proponent must secure appropriate land tenure for areas that will be occupied from DNR for lands under the administration and control of the *Crown Lands and Forests Act* prior to commencement of any construction. Further, the proponent must indemnify the Crown/Province against all claims resulting from the use or

- occupation of any subject Crown Lands. Please contact the Director of the Crown Lands Branch, DNR, at (506) 453-7125 for additional details.
- 14. The proponent must conduct a *Water Supply Source Assessment* (WSSA) for all groundwater supply wells to be developed as part of the project. The proponent must follow DELG's March 2014 *Water Supply Source Assessment Guidelines* (http://www2.gnb.ca/content/gnb/en/departments/elg/environment/content/environmental_impactassessment.html) and a WSSA Initial Application must be submitted to the DELG for review and approval before any groundwater supply wells are drilled. Please contact the Manager, Environmental Assessment Section, DELG for additional details.
- 15. The anticipated project construction schedule must be submitted a minimum of 90 days prior to the start of construction to the Manager, Environmental Assessment Section, DELG, for review/approval and must take into consideration a variety of factors, including transportation and noise (nuisance), etc. In addition, First Nations and the local public must be notified of the finalized project construction schedule prior to the commencement of construction activities.
- 16. Within six (6) months of approval of the project, the proponent must submit a Financial Security Plan (FSP) for review and approval by the Ministers of DELG and DEM. The FSP shall be subject to the following conditions:
 - a. The form of security shall be cash, irrevocable letter of credit, bond of an approved guarantee company, or any other form of security, or other guarantee or protection that is acceptable to the Ministers.
 - b. The FSP must indicate and provide that the total security amount, or any portion thereof, may be accessed by the Ministers, on due notice to the proponent, as deemed necessary by the Ministers in the following circumstances:
 - i. where there has been non-compliance with the terms and conditions of any approvals, and/or
 - ii. where there is upset or a catastrophic event to which the proponent has not adequately responded, in the opinion of the Ministers.
 - c. Security funds used by the Ministers shall be replaced by the proponent as required by the Ministers.
 - d. Security amounts shall be reviewed every five (5) years and updated.
 - e. The FSP shall provide for the following:
 - i. Mine Reclamation Security as per the *Mining Lease* approval according to the following schedule:
 - 1. prior to clearing and constructing the foundation of the TSF;
 - 2. prior to depositing tailings in the TSF, an additional security; and
 - 3. updated every 5 years thereafter based on reclamation costs looking 5 years ahead, reaching a pre-determined amount as required by the Ministers.
 - ii. Environmental Securities:
 - 1. Environmental Protection and Monitoring Security prior to any construction activity:
 - Water Treatment Plant (WTP) Security prior to any tailings being deposited into the TSF. Once the WTP is built, the WTP Security will be maintained for repurposing the WTP (or building a new one) for post-closure;

December 2015 4

- Long Term Water Treatment Security prior to any tailings being deposited into the TSF. The amount of this Security shall be enough to cover the annual operating and maintenance cost of the WTP as well as associated monitoring requirements in perpetuity; and
- 4. A certificate of liability insurance in the event of TSF failure, or any catastrophic event, in an amount, form and content that is acceptable to the Ministers.
- 17. The proponent must conduct a pre-construction survey to establish baseline conditions (water quality and quantity) for all water supplies within the LAA, including camp lot lease sites and recreational campsites. The baseline results (with clear location maps and water source descriptions) must be submitted to the Manager, Environmental Assessment Section, DELG for review and approval prior to the commencement of construction and a copy of the individual results given to each landowner and/or leasee. In the event of a complaint that a water supply within the LAA has been negatively impacted (water quality or quantity) the proponent must: 1) immediately investigate the complaint; and 2) mitigate as required if the project activities are implicated. Mitigation can include, but is not limited to, providing a short-term temporary solution (such as bottled water, on-site water storage tank, etc.) and/or a long-term permanent solution (such as drilling a new well, deepening an existing well, providing water treatment, etc.). Any reestablished or replacement water supply must at a minimum have the same capacity and be of similar water quality as the previous water supply. In addition, the restored or replaced water supply must not require excessive maintenance or result in increased costs to operate.
- 18. The proponent must conduct additional baseline (pre-construction) surveys of traditional country foods, which would include foods that are trapped, fished, hunted, harvested or grown for subsistence or medicinal purposes or obtained from recreational activities such as sport fishing and/or game hunting within the LAA. The survey program must be developed with input from First Nations. Foods that are used by First Nations must be monitored for metals, including arsenic, chromium, manganese and thallium in order to confirm the predictions and assumptions as presented in the human health and ecological risk assessment (HHERA) component of the Final EIA Report. The baseline information will then be used to develop a traditional and country foods monitoring program to be undertaken during project operation and decommissioning/post-closure (see Condition 29 (j) (iii)). The proponent must conduct additional modelling of aerial dust deposition on vegetation to also be used in the traditional and country foods monitoring program to verify the revised predictions and ensure the protection of human health. Baseline contaminant concentrations in country foods and additional deposition modelling on vegetation results must be submitted to the Manager, Environmental Assessment Section, DELG, for review and approval prior to the commencement of construction.
- 19. The proponent must conduct a targeted survey(s) for Wood Turtle (Species at Risk) in the Project Area and submit the results to the Manager, Environmental Assessment Section, DELG for review and approval prior to the commencement of construction. Additional mitigation for the protection of this species may be required depending on the results of the survey.

December 2015 5

- 20. The proponent must submit any additional and ongoing baseline datasets (e.g., water quality, air quality, soils, aquatic life, fish, fish habitat data, etc.) that have been collected during the EIA review since 2013 in an acceptable format to regulatory authorities to the Manager, Environmental Assessment Section, DELG for review prior to the commencement of construction. For example, baseline air quality studies for PM10, H₂S and NH₃ have not been submitted to date and are required. Additional baseline data surveys may be required pending the content of datasets submitted.
- 21. In consultation with First Nations, the proponent must collect, submit and interpret quantitative baseline data concerning use of the LAA by animal species of importance to First Nations (e.g., moose, deer, etc.) to the Manager, Environmental Assessment Section, DELG for review prior to commencement of construction. Environmental effects predictions in the Final EIA Report must be verified and monitoring and mitigation programs (see Condition 29 (j) (ii)) developed based on the information collected and interpreted.
- 22. The proponent must submit to the Manager, Environmental Assessment Section, DELG, for review and approval, the details of all works, undertakings or activities proposed to take place in or near water, or that will remove or alter existing watercourses and waterbodies. Additionally, final designs must be reviewed by Fisheries and Oceans Canada Fisheries Protection Program (DFO-FPP) to determine if the proposed work, undertaking or activity would result in serious harm to fish that are part of a commercial, recreational or Aboriginal (CRA) fishery or to fish that support such a fishery in accordance with Section 35.(1) of the *Fisheries Act* (FA). In the case of a DFO serious harm determination, the proponent may submit an application for a Section 35.(2) FA authorization, including proposed off-setting (compensation) measures, to DFO for review. This condition includes but is not limited to the following:
 - a. In keeping with DFO's *Fisheries Protection Policy Statement* (October 2013), exhaust a hierarchy of preferences to avoid, minimize or offset the direct and indirect effects of the project on fish and fish habitat;
 - b. Confirm the design footprint and loss of fish habitat and/or CRA fisheries associated with the proposed work, undertaking or activity as a result of initial development and construction activities and/or operation of the project;
 - c. Complete and submit for review and approval a field based pre-construction survey of fish (CRA fish and fish that support CRA fish), fish habitat and population densities to verify the accuracy of spatial analysis, as required by DFO and DNR;
 - d. Collect additional baseline information to assess the potential impacts to fish and fish habitat if deemed necessary by DFO and DNR;
 - e. Develop a fish rescue and relocation strategy for review and approval prior to construction;
 - f. Submit a detailed offsetting (compensation) plan in accordance with DFO's Fisheries Productivity Investment Policy: A Proponent's Guide to Offsetting (November 2013) to counterbalance unavoidable serious harm to fish and the loss of fisheries productivity resulting from the project; and
 - g. Develop a detailed follow-up monitoring program to assess the effectiveness of mitigation techniques, accuracy of predicted fish mortalities and habitat loss, and the effectiveness of offsetting measures.

- 23. The proponent must test for and map permeable zones of rock disruption/faults or weathered and unconsolidated granitic rock or other surficial material that is potentially unstable or could act as a water conduit from the tailings containment base to the groundwater outside the TSF. The proponent is also required to use the survey results to plan mitigation for the containment base and dam design as well as locations of monitoring wells. Surveys should be undertaken along the centreline and/or perimeter of the proposed dam base plus at least 3 east-west and at least 3 north-south lines across the proposed tailings storage site prior to starting any dam construction. A proposal for this work must be submitted for review and approval prior to implementation. The survey results, associated mapping, mitigation and design features must also be submitted to the Manager, Environmental Assessment Section, DELG, for review and approval, prior to the commencement of construction.
- 24. The proponent must conduct geotechnical drilling and test pitting along the centreline of the proposed TSF dam alignment, in any major surface drainages that pass through the dam alignment, and in areas where the proposed Water Management Ponds are to be located as to allow the proponent to provide a fulsome interpretation of the sub-surface ground conditions. Additional geotechnical drill holes and/or test pits within the TSF basin must also be completed to investigate the sub-surface ground conditions. The proponent will also collect geological information (i.e. soil and rock types) and geotechnical information (i.e. in-situ permeability of bedrock, in-situ density of soil) and provide a detailed interpretation of the sub-surface ground conditions in conjunction with the data collected from Condition #23. The results and interpretation must be submitted to the Manager, Environmental Assessment Section, DELG, for review and approval, prior to commencement of construction.
- 25. The proponent must conduct additional hydrogeological testing in order to evaluate the inferred fault zones underlying Sisson Brook and other features that could act as preferential pathways for groundwater movement. Testing must include, but is not limited to, drill holes and packer tests along the alignment of the inferred fault zones underlying Sisson Brook as well as the aligned holes from which water loss was high in the initial packer tests. The results, along with an interpretation/evaluation of the results and any resulting changes to mine design plans, proposed monitoring or mitigation must be submitted to the Manager, Environmental Assessment Section, DELG, for review and approval, prior to commencement of construction. Additional surveys and/or hydrogeological testing may be required based on the results of the testing done in Conditions 23, 24 and 25.
- 26. The proponent must provide TSF Failure Modelling conducted by a qualified third party for the final engineered design and for each approved lift of the TSF structure. Prior to initiating the modelling, the proponent must submit the proposed modelling framework and approach to the Manager, Environmental Assessment Section, DELG, for review/approval. The modelling should include a variety of scenarios and environmental conditions (i.e. model a range of release volumes 1%, 10%, 25%, 50%) as appropriate to design assumptions and also account for seasonal effects. The modelling results, along with any revised Emergency and Contingency planning updates, must be submitted for review/approval to the Manager, Environmental Assessment Section, DELG.

December 2015 7

- 27. Following the completion of project detailed design, the proponent must provide an updated assessment of the potential effects of the environment on the project (e.g., flood; earthquake; fire, etc.) to the Manager, Environmental Assessment Section, DELG, for review/approval.
- 28. The proponent shall fund two (2) DELG Environmental Monitoring and Compliance Officers for the period of construction and commissioning of the facility. In addition, the proponent shall fund one (1) DELG Compliance Officer for the operational period of the facility. The duties of the Officers include, but are not limited to: monitoring compliance of commitments made, coordinating reviews of plans among different levels of government, ensuring the public is adequately informed and public complaints are addressed. Specific Terms of Reference shall be developed by DELG in consultation with the proponent.
- 29. The proponent must submit a detailed Environmental and Socioeconomic Management System (ESMS) to the Manager, Environmental Assessment Section, DELG for review and approval, prior to commencement of construction, and the ESMS must be revised (as necessary), with approval on an annual basis. The ESMS must include, but is not limited to the following components:
 - a. A Communication Protocol for informing the public, First Nations and stakeholders about the ESMS;
 - b. A comprehensive Environmental Management Plan (EMP), as described in condition 30 below:
 - c. A Heritage Resource Protection Protocol including the Sisson Project Heritage Mitigation Plan already developed, as well as a detailed, site-specific plan to mitigate any impacts on existing archaeological resources prior to construction. The Protocol must include:
 - i. Appropriate mitigation for all identified archaeological resources within the proposed PDA and all other areas with project components through direct consultation with First Nations and Archaeological Services within the Department of Tourism, Heritage and Culture (THC). The proponent is responsible for all costs associated with this mitigation.
 - ii. Archaeological Site Alteration Permits, issued under the authority of the *Heritage Conservation Act*, obtained before any ground disturbance can occur within 200m of all registered archaeological resources.
 - iii. Completion of all outstanding archaeological assessment work (e.g. test pitting of any remaining project areas) and any resulting mitigation required prior to initiation of construction in those areas.
 - iv. All future archaeological assessment and mitigation work must adhere to the Sisson Project Heritage Mitigation Plan.
 - v. If it is suspected that remains of archaeological significance are found during construction, as per the *Heritage Conservation Act*, all activity shall be stopped near the find and the Resource Manager of the Archaeological Services Unit, Heritage Branch of the Department of Tourism, Heritage and Culture, shall be contacted at (506) 453-3014.
 - d. Traffic and Road Maintenance Plans which would take into consideration:
 - i. Scheduling restrictions for truck and equipment operation on main access roads during construction and operation (in collaboration with the New Brunswick Department of Transportation and Infrastructure (DTI), DNR, the Crown Timber Licensee and stakeholders);

- ii. Road maintenance agreement (in collaboration with DTI, DNR, the Crown Timber Licensee, and camp lot lease holders); and
- iii. Other plans as deemed appropriate by regulatory authorities.
- e. An Emergency Preparedness and Response Program, must be developed by the proponent in consultation with the Department of Public Safety (DPS) and other appropriate agencies, and must be submitted to the Manager, Environmental Assessment Section, DELG, for review and approval prior to the commencement of construction. This Program should include, but is not limited to emergency and/or contingency plans for:
 - i. Unexpected rupture of the sealed Ammonium Paratungstate (APT) Plant waste cells and mixing with TSF contents;
 - ii. Scrubber malfunction in APT plant;
 - iii. Leaks or spills of petroleum and other chemical reagents on the Project Site;
 - iv. Overflow from water management ponds (WMP) to surrounding environment;
 - v. Overtopping of TSF contents to surrounding environment;
 - vi. Partial or full breach of TSF dam(s);
 - vii. Forest fire or other facility fires;
 - viii. Flood and/or earthquake events;
 - ix. Protection of wildlife and aquatic life, including waterfowl;
 - x. Sudden loss of electrical power and/or extreme rainfall events; and
 - xi. Security and emergency management programs consistent with the requirements of the Canadian Standards Association Standards Z246 and Z160 respectively, as well as the *Boilerplate Security and Emergency Planning Requirements* of DPS (contact the Provincial Security Advisor, DPS, at (506) 462-5099).
- f. Various Staffing and Human Resources programs and policies:
 - i. Local Hire Policy with specified employment targets for qualified New Brunswick residents/local contractor information sessions;
 - ii. No Hunting Policy (within project area) for Staff and Contractors:
 - iii. Wildlife Awareness Program; and
 - iv. Conceptual Staff Retraining Strategy (for end of project operations).
- g. Communications Protocol for notifying general public, camp lot lease holders, First Nations about blasting schedule and planned blasting activities;
- h. The proponent must establish, fund, and chair a Community Liaison Committee prior to commencing construction of the mine, and will continue to fund and chair this committee for the duration of the project life. A Terms of Reference for the Community Liaison Committee must first be developed and submitted for review and approval by the Manager, Environmental Assessment Section, DELG within six (6) months of the date of this approval;
- i. The proponent must develop a program in consultation with First Nations and appropriate regulatory agencies for the collection/relocation of plant species of importance to First Nations. This plan must be submitted to the Manager, Environmental Assessment Section, DELG for review and approval during the final design phase of the Project, and be implemented and completed prior to commencement of construction in each area of project development;
- j. Adaptive monitoring programs must be developed that compare monitoring results to predicted values, as well as track changes in data over time. These programs are to be developed in consultation with First Nations, stakeholders and appropriate regulatory agencies. The proponent must provide adequate

capacity funding for First Nations to fully and meaningfully participate in the development, planning, and implementation of these programs. The monitoring programs must be designed to provide quantitative evidence of mitigation effectiveness, as described in the Final EIA Report. These plans must be submitted to the Manager, Environmental Assessment Section, DELG, for review and approval prior to commencement of construction. It is understood that these monitoring programs may be revised, with appropriate consultation and approval, as Project activities proceed. These monitoring programs will include, but are not limited to:

- i. Aquatic Resources, specifically Atlantic Salmon;
- ii. Wildlife Access to TSF:
- Country and Traditional Foods (fish, vegetation, berries, small mammals, etc.);
- iv. Socio-economic Benefits and Employment for First Nations; and
- v. Climate change considerations and how the environment affects the project.
- k. In order to ensure First Nations are meaningfully engaged in ongoing project planning, development and delivery of monitoring programs should the project proceed, the proponent must provide for review and approval an overall First Nations engagement strategy with details for:
 - i. First Nation employment opportunities at various stages of Project life potentially in conjunction with the Local Hire Policy in Condition 29 (f) (i);
 - ii. Training and education opportunities targeting First Nations' individuals, potentially in conjunction with Condition 32;
 - iii. Funding for participation in ongoing consultation, and seat(s) on the Community Liaison Committee; and
 - iv. Compensation for relocation of existing individual or community camp sites within the PDA and within the LAA to First Nation individuals on Crown land should the Project impact use of camp sites.
- I. A Public Complaints Protocol, prior to commencement of construction, to address complaints and concerns associated with project activities, including mandatory reporting of all complaints, corrective actions and/or proponent response to complaints. The Protocol must clearly outline the process whereby the public has access to the information; and
- m. A conceptual Closure and Post-closure Monitoring Program will be developed with appropriate regulatory authorities, First Nations, and stakeholders. The conceptual plan must establish targets and thresholds for determining reclamation success and mitigation effectiveness and must integrate data generated from other monitoring programs. This program must be submitted to the Manager, Environmental Assessment Section, DELG, for review and approval prior to commencement of operation, and must be revised as necessary with approval every two (2) years thereafter. The Final Closure and Post-closure Monitoring Program must be approved five (5) years prior to closure of the mine.
- 30. A comprehensive Environmental Management Plan (EMP) is required as a component of the Environmental and Socioeconomic Management System (ESMS). The EMP must be developed and submitted to the Manager, Environmental Assessment Section, DELG, for review and approval. The EMP may be submitted in phases to be completed as various project activities become more defined; however, only activities described within a Project Phase that have an approved EMP may be

carried out. The EMP must include: an Environmental Protection Plan (EPP) that links mitigation to location, a monitoring plan (compliance and environmental effects monitoring), adaptive management consideration, and contingency plans. The EMP must also define and identify roles and responsibilities, accountability and reporting procedures during each phase of the Project. The EMP must contain, but is not limited to the following sub-components:

- a. Soil and Erosion Control Plan including overburden and stockpile runoff management (for both construction and operation phases);
- b. Dust Suppression Plan (for both construction and operation phases);
- c. Spill Prevention and Contingency Plan (for site mixed explosives (SME) Facility, petroleum/reagent/chemical storage and use areas, etc.);
- d. Project Waste Management Plan (details on all project generated wastes, and confirmation that all project related wastes will be disposed of at an appropriate, approved facility);
- e. Groundwater Protection Plan which includes having all production and monitoring wells shown on site maps, protection measures for wells (e.g. flags, locked caps, etc), no chemical or petroleum storage or fueling near wells, etc.;
- f. Water Monitoring/Management Plan (Condition 8) and Air Quality Modelling/Monitoring;
- g. Wood Turtle Management Plan (baseline surveys, contingency planning for avoidance or relocation of wood turtles, etc.) in consultation with DNR's Species at Risk Program;
- h. Species at Risk (SAR) Contingency Plan (must be developed with DNR, DELG and EC):
- i. Avifauna Management Plan (developed with DNR, DELG and EC);
- j. TSF Operation, Maintenance and Surveillance (OMS) Manual developed and submitted for review/approval prior to commissioning of the TSF. This Manual must include a schedule for safety inspections and detailed compliance monitoring and reporting and must be reviewed/revised every 5 years in accordance with the Canadian Dam Safety Guideline and other regulatory instruments determined by regulators to be necessary; and
- k. Other EMP components as identified and required by regulators, including but not limited to soils, surface water, groundwater, vegetation (country foods), air, and fish tissue.
- 31. The proponent must obtain appropriate permits and approvals for the SME Facility, as well as ensure that any contractors are appropriately licenced and permitted. An Explosives Management Plan will be required as part of the permitting process and must be submitted to the Manager, Environmental Assessment Section, DELG for review and approval prior to commencement of operations.
- 32. The proponent must continue to collaborate with the Department of Post-Secondary Education/NB Community College (NBCC) regarding training opportunities/programs.
- 33. In the event that DNR camp lot leases on Crown land are required to be relocated to permit project development in the PDA or are impacted within the LAA, the proponent will be required to compensate for this impact.
- 34. The proponent must submit a corridor/route selection analysis based on environmental, engineering and other constraints for the proposed transmission line

- alignment. The analysis must be submitted for review and receive approval from the Manager, Environmental Assessment Section, DELG prior to the start of construction of the transmission line. Appropriate land tenure for a new transmission line must be secured from DNR for all provincial Crown land that may be affected prior to the commencement of any construction.
- 35. The Reclamation Plan must be further developed in consultation with regulators and First Nations. Once finalized this Plan must be updated every five (5) years, or prior to each new raise of the tailings storage facility (TSF) (whichever comes first), and be submitted to the Manager, Environmental Assessment Section, DELG for review and approval.
- 36. All of these terms and conditions are an integral part of this approval and the approval, including all terms and conditions, apply to the project notwithstanding the rights of any partners, users, lessees, and/or subsequent owners.
- 37. In the event of the sale, lease, or any other conveyance or change of control of the Project, or any portion thereof, the Proponent must provide written acknowledgement from the lessee, controller or purchaser confirming that they will comply with all the Conditions of Approval to the Manager, Environmental Assessment Section, DELG.
- 38. Notwithstanding the preceding conditions, the proponent shall adhere to, and ensure adherence by all developers, contractors, sub-contractors, agents and workers for this project, to all conditions listed herein, and all obligations, commitments, monitoring and proposed mitigation measures identified in the Final EIA Report, and any other documents or correspondence prepared and submitted by the proponent, or its agents during the EIA review.
- 39. The proponent shall establish and fund an Independent Tailings Review Board (ITRB) to evaluate the design, construction and performance of the TSF consistent with good practice and best available technology. A Terms of Reference for the ITRB must be developed in consultation with DELG and submitted for review and approval to the Manager, Environmental Assessment Section, DELG within six (6) months of the date of this approval. The ITRB shall report regularly to DEM and DELG. The ITRB shall consist of a minimum of two qualified geotechnical engineers, and one other engineer or geoscientist specializing in water chemistry and/or hydrogeology. The ITRB will be established prior to commencing construction of the mine, and will continue to function for the duration of the project life including decommissioning.
- 40. The proponent is accountable and responsible for any environmental impacts resulting from catastrophic events due to the project. The proponent is financially responsible for addressing any catastrophic events, including cleaning up any environmental impacts and must provide adequate and appropriate Mine Reclamation Securities, as per the *General Regulation (N.B. Reg. #86-98) Mining Act*, as well as all other securities required in these conditions of approval. All required securities must be accessible by the Ministers. The proponent must provide appropriate monitoring in order to verify that potential environmental impacts are minimized and addressed quickly.