
Name of Mine Project

PROJECT DESCRIPTION

Prepared by:

Mining Company Name and Address

Date

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GUIDANCE TO PROPONENTS

This template's format and content can be modified as desired to reflect the circumstances of the major mine project, such as:

- a new major mine proposal having completed a provincial environmental assessment process under the BC *Environmental Assessment Act* (BCEAA) and is moving to the statutory authorization stage (should include a list of outstanding issues raised in environmental assessment tracking tables that were determined to be best addressed at permitting and proponent commitments which can be included in statutory authorizations);
- a currently operating major mine requesting amendments to existing authorizations and not subject to the modification thresholds under the BCEAA Reviewable Projects Regulation;
- a closed mine proposing to re-open and not subject to the provisions of the BCEAA; and
- a new major mine proposal with annual production level below the BCEAA Reviewable Projects Regulation and moving directly to the statutory authorization stage.

The project description developed should be based on an understanding of the coordinated authorizations approach to bundling authorization applications to provide for efficient and effective consultation with First Nations and to enable a review of the project as a whole.

The information in a project description is not expected to include the type and level of project planning or assessment detail as that required in the forthcoming applications for statutory authorizations.

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1. INTRODUCTION

The purpose of this section is to provide information on:

- project location and ownership and include regional and local maps;
- whether the site is Greenfield or Brownfield (new mine proposal having completed an environmental assessment, a new mine that is non-reviewable under the BCEAA, or an existing mine making applications for amendments to accommodate re-start, expansion or extension);
- topography, access; and
- project proposal including overview of construction, operation and closure stages and mine life.

This section should also provide a summary of the mine project proponent's understanding of the coordinated authorizations process, willingness and capacity to work with the project-specific MRC to ensure the issues and information required to address statutory authorization and public policy requirements can be met in a timely way.

2. PROPONENT

This section should include a description of the corporate structure, location and address of its headquarters office and main company contacts to be involved in the mine project authorization review.

3. PROPERTY HISTORY

This section should provide a description of the property history with respect to:

- mineral tenure;
- exploration and access development;
- surface disturbance; and
- current property status.

4. DEVELOPMENT SCHEDULE

This section should summarize the proponent's development schedule including;

- expectations of timing to complete the pre-application and application review stages of the coordinated authorizations process for statutory authorizations;
- further exploration and site geotechnical, environmental baseline and related studies to adequately address statutory and public policy information and assessment requirements; and
- development schedule including site preparation and construction, mill commissioning and operational life, closure and post closure phases.

5. PROJECT RATIONALE

This section should provide the proponent's view of the reason for developing the project including the factors influencing the successful development and operation of the project.

6. PROJECT DESCRIPTION

This section should describe the project in sufficient detail to enable the project-specific MRC to:

- identify/confirm the list of statutory authorizations to be applied for under the coordinated authorizations process;
- identify issues and information to meet the authorization application requirements and additional issues to be addressed that are within current government policy; and
- assist in determining any matters of federal interest, including any required federal authorizations and information requirements.

6.1 MAJOR COMPONENTS AND INFRASTRUCTURE

This section should identify and describe the:

- onsite facilities and activities;
- any offsite facilities which may be required to be developed or modified to enable the project development;
- offsite activities (e.g. ore concentrate hauling); and
- a detailed project footprint map with reference to water courses, topographic features and other detail useful to help determine issues and the information requirements to address those issues.

6.1.1 *Water Supply*

This section should include detail on the location and amount of water required to operate the project including process and potable water.

6.1.2 *Power Supply*

This section should describe to source and size of the power requirements for the construction and operations stage and whether upgraded or new power sources will be required.

6.1.3 *Explosives*

This section should outline the type and amount of explosives required for the project development, the location of an explosives manufacturing and storage facility and if necessary, intentions to apply under the federal *Explosives Act* for an explosives permit.

This section will be of importance to the federal government to determine federal authorization requirements.

6.1.4 Concentrate Shipment

This section should include a description of the daily and annual production and concentration of ore concentrate, its storage, transport haul volumes and routes, transshipment facilities at port or rail head and an indication of whether any new or upgraded facilities may be required.

6.2 MINE PLAN

This section should introduce the mine plan component, describe the ore reserve and include maps of mine footprints, including a final mine development footprint. The section should include location of facilities, low grade ore piles, waste dumps, access roads, tailings management facility (TMF), mill etc.

6.2.1 Mining

This section should describe the mine operation (open pit, underground), mining methods, daily waste and ore production levels, type and quantity of mining equipment.

A pit figure would be useful here.

6.2.2 Processing/Metallurgy

This section should describe the mill throughput, crushing, grinding, flotation and recovery (general mill flow sheet) and identify the process facilities, pathways and chemicals proposed to be used and an operation schedule (e.g. shifts, annual operating days, etc.).

6.2.3 Tailings Management Facility

This section should describe the location and size of the TMF, design considerations, opportunities for expansion if required to accommodate a mine life expansion or extension, and location of potential effluent discharge locations to the receiving environment, should an effluent discharge permit be required pursuant to the *Environmental Management Act*.

6.3 RECLAMATION & CLOSURE

This section should include preliminary information as required under Part 10 of the Health, Safety and Reclamation Code for Mines in British Columbia.

6.3.1 Projected Disturbed Area

This section should include an estimate of the total disturbed area associated with the mine footprint, including the final footprint at closure.

6.3.2 Reclamation Objectives

Specific objectives of the reclamation plan should give consideration to:

- identifying potential sources of contaminants and to prevent the release of contaminants or wastes to the environment;
- returning affected areas to a state compatible with original undisturbed conditions, considering such practical factors as economics, aesthetics, future productivity, and future users; and
- ensuring that mine facilities, mine rock storage area and tailings storage areas will be closed in such a manner that the requirement for long-term maintenance and monitoring is minimized.

6.3.3 Projected End Land Use

With reference to Part 10 of the Health, Safety and Reclamation Code for Mines in British Columbia, this section should outline the end land use objectives for the project site once reclaimed and indicate the criteria and process used to determine the end land use objectives. This section should include an understanding of the use of the land by First Nations and opportunities and constraints to including First Nations uses in setting land use objectives and in developing reclamation plans.

7. PHYSICAL SETTING

This section should include an assessment of the current baseline information available for:

- topography/geography;
- climate; and
- bio-geo-climatic zonation.

7.1 LOCATION

This section should summarize the location of the project with respect to towns, access routes and include a map.

7.2 ACCESS

This section should describe access to the project site using existing infrastructure or proposed new access. Particular attention should be paid to stream crossings with infrastructure (culverts, bridges, power lines) as this information will assist federal agencies determine interests and authorizations pursuant to the *Navigable Waters Protection Act*.

7.3 TENURE

This section should summarize the historic and current mineral or coal tenures for the project site and an indication that the proponent will be applying for converting tenures to leases as part of the application for statutory authorizations.

7.4 LAND USE

This section should describe the current land and resource uses within and near the project site, including exploration, forestry, ranching, hunting, trapping, outdoor recreation, First Nations use, fishing and other resource tenures.

7.5 LAND USE PLANNING

This section should describe the current land use plans for the area and how the project fits with land use designations.

7.6 FIRST NATIONS

This section should identify and describe:

- the First Nations and their traditional territories/treaty areas which may be affected by the project development, including a map outlining the traditional territories which can be obtained from the provincial government website;
- the use of the area by First Nations; and
- the proponent outreach, information exchange and opportunities for First Nations input in exploration and project planning to date and proposed.

7.7 PUBLIC CONSULTATION

This section should include a summary of any outreach to the public or identified stakeholders during the exploration or project planning stages and a summary of any issues raised and how they are to be addressed.

8. GEOLOGY

This section should provide information available to date for the regional, local and project areas.

8.1 REGIONAL GEOLOGY

This section should describe the regional geology to place the local and project area geology into perspective.

8.2 DEPOSIT DESCRIPTION

This section should describe the current knowledge and assessment of the deposit characteristics, including geological units with the potential for Metal Leaching/Acid Rock Drainage (ML/ARD), sulphate and/ or release of selenium to the environment.

8.3 MINERALIZATION

This section should describe the ore body with respect to the National System for Electronic Document Analysis and Retrieval (SEDAR National Instrument 13-101).

9. SOCIOECONOMICS

This section should provide a description of the current socio-economic setting in the project area and region and describe the benefits and any impacts of project development on the services or requirements for infrastructure upgrades required to facilitate project development.

9.1 WORKFORCE

This section should describe the type and level of workforce required for both the construction and operations stage and an indication of the opportunities for local hire and recruitment and training and worker housing.

9.2 SOCIOECONOMIC BENEFITS

This section should describe the benefits of the project to the local communities, the region and the province and include opportunities for local businesses, procurement and workers.

9.3 CAPITAL AND OPERATING COSTS

This section should include a description of the project capital and operating costs over the life of the project.

9.4 TAXES

This section should include a description of local, provincial and federal taxes to be paid over the stages of the project life.

9.5 LOCAL SERVICES

This section should include a description of the local services available to serve the project and an indication of any additional services or upgrade in infrastructure or services to enable the project to proceed.

10. ENVIRONMENTAL BASELINE, ASSESSMENT AND MANAGEMENT

The purpose of this section is to provide a description of the existing environmental baseline conditions, resource inventories and values and opportunities to adequately manage these values through project development, operation and closure stages.

10.1 METEOROLOGY

This section should provide a description of the local and regional meteorological conditions and how they may impact on the project.

10.2 HYDROLOGY/HYDROGEOLOGY

This section should describe the current data and information available for surface and groundwater flows in the project and local areas potentially impacted by the project and a description of the regional setting to place the project area into context.

10.3 AIR QUALITY

This section should include a description of the existing air quality data and information for the project, local and regional area.

10.4 WATER QUALITY

This section should summarize and describe the current water quality baseline conditions in the project area and the local areas upstream and downstream of the project area to contribute to an adequate baseline to assess project impacts on water quality and management strategies.

10.4 FISH AND AQUATIC LIFE RESOURCES AND HABITAT

This section should describe the fish and aquatic resources and habitat in the project area, local surrounding area and regional area to place the resource values of the project area into perspective. This information will help identify any potential federal interest and authorizations pursuant to the federal *Fisheries Act*.

10.5 CULTURAL AND HERITAGE RESOURCES

This section should describe the archaeological, heritage and cultural resources in the project area and summarize the results of any work completed to meet the provisions of the *Heritage Conservation Act*.

10.6 VEGETATION

This section should describe the existing vegetation based on current data and information and summarize how this information may contribute to the setting of closure land use and reclamation objectives and terrestrial resource impact management strategies.

10.7 WILDLIFE

This section should summarize the current data and information on the species list, distribution and abundance of wildlife populations and wildlife habitats that may be impacted with the project development.

10.8 SPECIES AT RISK

This section should describe the current knowledge and assessment of aquatic and terrestrial species identified by COSEWIC under the *Species at Risk Act* and aquatic and terrestrial ecosystems and species on the Blue and Red lists under the British Columbia Conservation Data Centre.

10.9 POTENTIAL FOR METAL LEACHING AND ACID ROCK DRAINAGE

This section should summarize from the geological assessment, those geological units with the potential for ML/ARD and a summary of any work carried out to date to identify the potential following the ML/ARD Guidelines

11. PERMITS, LICENCES & APPROVALS

This section should identify and describe the list of provincial and federal authorization applications to be part of the forthcoming application package. For closed mines applying to re-open which may have some authorizations held in good standing and for major mine proposals for expansion or extension, the list of statutory authorizations to be applied for together should be discussed with the identified project manager and the project-specific MRC.

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