



## ENVIRONMENTAL ASSESSMENT SUPPLEMENTAL CHECKLIST: METAL MINING

This checklist for mining projects is to be used in addition to the [Class I Environmental Assessment checklist](#). Mines also need an operational approval under Part V of the Environment Act, which you can apply for after receiving environmental assessment approval. See the Department of Environment and Climate Change [Application for Approval Division 5 - Metal Mining](#). For other types of mines including gypsum and limestone please contact the EA Branch.

COMPONENT	KEY INFORMATION TO INCLUDE IN THE REGISTRATION DOCUMENT	COMPLETED	N/A
<b>PROJECT DESCRIPTION</b>	<ul style="list-style-type: none"> <li>Describe the proposed project and include:               <ul style="list-style-type: none"> <li>Tailings Management Facility, Water Treatment Plants, Stockpiles (ore, waste, till and overburden), daily maximum rates for production and milling, and the treatment process for all project water discharge to the environment.</li> </ul> </li> </ul>		
<b>GEOCHEMICAL ANALYSIS</b>	<ul style="list-style-type: none"> <li>Describe the static and kinetic tests completed to predict acid rock drainage and metal leaching; as described in Mine Environment Neutral Drainage (MEND) Report 1.20.1*; for all geological materials to be disturbed throughout the project including overburden, topsoil, waste rock, ore, and ore concentrate, and mine tailings.</li> </ul>		
<b>MINERAL PROCESSING FACILITY</b>	<ul style="list-style-type: none"> <li>Describe the complete ore milling circuit including:               <ul style="list-style-type: none"> <li>crushing and grinding, recovery, leaching reactors or piles, cyanide detoxification, precipitation, thickening, washing, elution, smelting, refining, a list of all reagents, and the process water (recirculated and freshwater).</li> </ul> </li> </ul>		
<b>HISTORICAL CONTAMINATION</b>	<ul style="list-style-type: none"> <li>Describe the location and nature of historical contamination on site and provide mitigation strategies for any disturbed material.</li> </ul>		

\* Referenced documents are available upon request from the Department.

If any items do not apply to your project, please explain why.

While this checklist outlines general requirements for mine projects, each project is unique and may require information not listed above in order to assess potential environmental effects.

COMPONENT	KEY INFORMATION TO INCLUDE IN THE REGISTRATION DOCUMENT	COMPLETED	N/A
<b>GROUNDWATER</b> (IMPACTS FROM MINE INFRASTRUCTURE)	<ul style="list-style-type: none"> <li>Describe the quantities and locations of each stockpile type, including timing of when the material will be placed and assess:               <ul style="list-style-type: none"> <li>potential for tailings pond water and runoff from all stockpiles (overburden, till, waste, ore, etc.) to affect groundwater aquifers and provide modeling of flow paths and contaminant transport that includes groundwater discharging to surface water.</li> <li>mitigation strategies to limit groundwater effects from the tailings pond water and stockpiles.</li> <li>potential impacts to human health and aquatic habitats.</li> </ul> </li> </ul>		
<b>SURFACE WATER</b> (IMPACTS FROM EFFLUENT DISCHARGE)	<ul style="list-style-type: none"> <li>Evaluate how effluent discharge from the tailings management facility and collection ponds may impact nearby rivers, lakes, streams and wetlands.</li> </ul>		
<b>SURFACE WATER</b> (IMPACTS FROM MINE INFRASTRUCTURE)	<ul style="list-style-type: none"> <li>Describe surface water management infrastructure to collect and treat surface water runoff from all stockpiles and assess:               <ul style="list-style-type: none"> <li>surface water runoff from all stockpiles (overburden, till, waste, ore, etc.) into nearby water regimes.</li> <li>potential impacts to human health and aquatic habitats.</li> </ul> </li> <li>Provide mitigation strategies for any potential acid rock drainage and metals leaching.</li> </ul>		
<b>TAILINGS MANAGEMENT FACILITY</b>	<ul style="list-style-type: none"> <li>Describe the design including:               <ul style="list-style-type: none"> <li>runoff collection system, polishing pond, location of tailings pipeline, and how the design meets recognized industry standards.</li> <li>dam classification and stability assessment.</li> <li>stormwater management to ensure untreated effluent is not discharged.</li> <li>the effluent treatment plant and the predicted effluent discharge limits that are protective of aquatic life.</li> </ul> </li> </ul>		
<b>RECLAMATION</b>	<ul style="list-style-type: none"> <li>Describe how the physical, chemical and biological quality of the disturbed land and water regimes will be reclaimed.</li> </ul>		