

## GLOSSARY

<b>Air quality criteria</b>	Objectives, guidelines or standards for maximum criteria air contaminant concentrations in the atmosphere, developed to ensure long-term protection of public health and the environment.
<b>Acid rock drainage</b>	Acid rock drainage occurs when minerals containing sulphide and elemental sulphur are exposed to oxygen and water, thus oxidizing and increasing their acidity and that of the receiving water body or drainage, depending on conditions.
<b>Application Information Requirements (AIR)</b>	A document which identifies the information that is needed to complete the provincial and/or federal environmental assessment processes. This document outlines the information that will be included in the Application for an Environmental Assessment Certificate/Environmental Impact Statement.
<b>Archaeological Impact Assessment (AIA)</b>	An assessment carried out under a <i>Heritage Conservation Act</i> (1996) Heritage Inspection Permit to determine the impact of a development on archaeological sites.
<b>Archaeological site</b>	Location where there is evidence of human activity. The <i>Heritage Conservation Act</i> (1996) automatically protects all archaeological sites, whether on provincial Crown or private land, that predate AD 1846. Burial sites and rock art sites are protected regardless of age.
<b>Archaeological Chance Find Procedure</b>	Document detailing the steps that must be followed if an archaeological site is uncovered during ground altering activities.
<b>Ajax Project (the Project)</b>	Proposed copper/gold mine development.
<b>Ajax Property</b>	Surface and subsurface tenure package held by KAM south of Kamloops.
<b>Ajax mine</b>	Historic mine that operated from late 1980s to late 1990s within the Ajax Property.
<b>Baseline studies</b>	Scientific investigations that determine the present state of an area and establish the basic reference necessary for further studies.
<b>Bedrock</b>	Solid rock that underlies sediments, soils, softer rocks, or other unconsolidated materials.
<b>Benthic invertebrate</b>	Non-vertebrate animal living within or near the bottom sediments of a waterbody.

<b>Bioavailability</b>	The portion of the total quantity or concentration of a chemical in the environment or a portion of it that is potentially available for biological action, such as uptake by an aquatic or terrestrial organism (Rand 1995).
<b>Biomass</b>	The quantity of organic matter contained in organisms.
<b>Borden Number</b>	Each archaeological site in Canada is issued a unique, site-specific alphanumeric identifier (Borden Number) using the Borden System. Canada is divided into a series Borden Blocks each roughly 16 by 16 km with a four letter designation. The first two letters, one capital and one lowercase letter, indicate the north-south location of the Borden Block, while the second two letters indicate the east-west location (i.e., AbCd). The four letter alpha segment is then followed by a number (i.e., AbCd-10) which is issued sequentially as sites are found within a Borden Block.
<b>Canadian Council of Ministers of the Environment (CCME)</b>	CCME is comprised of the environment ministers from the federal, provincial, and territorial governments. These 14 ministers normally meet at least once a year to discuss national environmental priorities and determine work to be carried out under the auspices of the CCME. The Council seeks to achieve positive environmental results, focusing on issues that are national in scope and require collective attention by a number of governments.
<b>Carbon monoxide (CO)</b>	A colourless, odorless gas emitted from combustion processes. It can cause harmful health effects by reducing oxygen delivery to the body's organs and tissues.
<b>Carbon dioxide (CO<sub>2</sub>)</b>	A colourless, odorless gas emitted from combustion and respiration processes. It is an important greenhouse gas with a global warming potential value of one.
<b>Committee on the Status of Endangered Wildlife in Canada (COSEWIC)</b>	Committee that assesses the status of species and recommends to the government those species that should be listed as at risk under the federal <i>Species at Risk Act</i> (2002b).
<b>Concentrate</b>	The product of ore processing.
<b>Confidence</b>	Confidence, which can also be thought of as scientific uncertainty, is a measure of how well residual effects are understood, which includes a consideration of the acceptability of the data inputs and analytical methods used to predict and assess Project effects.
<b>Contact water</b>	Includes all water that is collected for treatment at the WSF.
<b>Contaminants of potential concern (COPC)</b>	Chemical substances identified through a screening process that may have the potential to cause adverse effects in receptors.

<b>Criteria Air Contaminants (CACs)</b>	A group of pollutants which cause air issues such as smog and acid rain. CACs include the following pollutants; sulphur oxides (SO <sub>x</sub> ), nitrogen oxides (NO <sub>x</sub> ), various size fractions of particulate matter (PM), volatile organic compounds (VOC), carbon monoxide (CO), and ammonia (NH <sub>3</sub> ).
<b>Cumulative effect</b>	An effect that arises as a result of an effect from the Project interacting with residual effect(s) from another activity to create a cumulative effect ( <i>also used</i> : cumulative change, cumulative impact).
<b>Design Flow</b>	Engineered capacity of a structure to adequately and efficiently retain (pond) or route (culvert, spillway, etc.) water stemming from extreme events.
<b>EA Working Group</b>	A forum for discussion and resolution of technical issues associated with the proposed Project, as well as providing technical advice to the BC EAO and CEA Agency, which remain ultimately responsible for determining significance. Comprises representatives of provincial, federal, and local government, and Aboriginal Groups.
<b>Ecosystem</b>	A volume of earth-space that is composed of non-living parts and living or biotic parts, which are all constantly in a state of motion, transformation, and development.
<b>Effect</b>	The specific consequence (to a resource/receptor) arising from an alteration of existing conditions caused by the Project.
<b>Emissions</b>	Solid or gaseous pollutants released from point sources or fugitive sources, including greenhouse gas.
<b>Exposure</b>	The degree of contact of organisms to a chemical or physical agent.
<b>Freshet</b>	In stream channels, the relatively high annual peak water discharge period resulting from spring/summer meltwater runoff of the snowpack accumulated over the winter.
<b>Greenhouse effect</b>	The natural phenomenon that occurs when atmospheric gases trap radiated heat in the atmosphere. The greenhouse effect keeps the atmosphere warm and makes life on earth possible.
<b>Greenhouse gases (GHGs)</b>	Gases that trap the sun's heat, creating a greenhouse effect that keeps the earth warm and sustains life. However, as GHGs increase in the atmosphere, more heat is trapped, which causes global climate change. GHGs include carbon dioxide (CO <sub>2</sub> ), methane (CH <sub>4</sub> ), nitrous oxide (N <sub>2</sub> O), sulphur hexafluoride (SF <sub>6</sub> ), water vapour (H <sub>2</sub> O), ozone (O <sub>3</sub> ), water vapor, hydrofluorocarbons, and perfluorocarbons.
<b>Heritage Inspection Permit 2009-0349</b>	The permit issued to Terra Archaeology Ltd. authorizing an Archaeological Impact Assessment of the Ajax Project.

<b>Heritage Inspection Permit 2014-0171</b>	The permit issued to ERM authorizing an Archaeological Impact Assessment of the Ajax Project.
<b>Hydrology</b>	The movement and distribution of water.
<b>In situ</b>	Found in its original position.
<b>Legacy Site</b>	An archaeological site is designated as a Legacy Site by the Archaeology Branch when it no longer requires protection under the <i>Heritage Conservation Act</i> (1996).
<b>Metal Leaching/Acid Rock Drainage (ML/ARD) Characterization</b>	<p><b>CaNPR</b> – Calcium net potential ratio that is a screening criteria to classify static test results for the Ajax Project.</p> <p><b>PAG</b> – Potentially Acid Generating based on a screening criteria of CaNPR &lt;2.0.</p> <p><b>NPAG</b> – Non Potentially Acid Generating based on a screening criteria of CaNPR &gt;2.0.</p> <p><b>UNCL</b> – Unclassified due to no samples being available; for planning and design purposes it is assumed that UNCL material is PAG.</p> <p><b>NAG</b> – Net Acid Generation is an analytical method to assess potential for ML/ARD.</p>
<b>Mine rock</b>	Uneconomic rock which is removed in the mining process to provide access to the ore.
<b>Mine Rock Storage Facility</b>	<p>Designated areas for the permanent placement of mine rock:</p> <ul style="list-style-type: none"> <li>• <b>South Mine Rock Storage Facility (SMRSF)</b>, located between the plant site and TSF;</li> <li>• <b>East Mine Rock Storage Facility (EMRSF)</b>, located east of the open pit and north of the plant site;</li> <li>• <b>Tailings Embankment Mine Rock Storage Facility (TEMRSF)</b> located between the open pit and North Embankment; and</li> <li>• <b>In-pit Mine Rock Storage Facility (IPMRSF)</b>, within the open pit.</li> </ul>
<b>Mitigation measure</b>	A feature, procedure or other action that the Project commits to implement to avoid or reduce the magnitude of an adverse effect, or to enhance the magnitude of a positive effect.
<b>n.d.</b>	No date. Used for citing documents that do not indicate a publication date.
<b>Non-contact water</b>	Includes all natural catchment water that is diverted around the surface disturbance.
<b>Overburden</b>	The unconsolidated materials overlying the ore deposit, including but not limited to glacial deposits, sand, and sediment (adapted from Environment Canada’s Metal Mining Code of Practice).

<b>Overburden Stockpile</b>	Overburden will be stored in a designated area within the EMRSF during construction (i.e., first 18 to 24 months) for longer term storage of reclamation material needed for progressive and permanent closure later in mine life.
<b>Particulate matter</b>	Tiny pieces of solid or liquid matter associated with Earth's atmosphere. Sources of particulate matter can be human-made or natural.
<b>Periphyton</b>	Complex matrix of algae, bacteria, microbes, and detritus that attaches to submerged surfaces.
<b>Petroform</b>	Arrangements of rocks made by people.
<b>Project footprint</b>	The Project footprint refers to the area that may reasonably be expected to be physically touched by Project activities, across all phases. The Project Footprint includes land used on a temporary basis such as construction lay down areas or construction haul roads, as well as disturbed areas in transport corridors, both public and private.
<b>Reclamation</b>	The process of restoring land that has been mined to a natural or economically usable purpose. Reclamation operations are usually underway as soon as the deposit has been removed from a mine site. The process includes restoring the land to its approximate original appearance by restoring topsoil and planting native grasses and ground cover.
<b>Reclamation Stockpile</b>	If needed, designated areas adjacent to the north boundary of the open pit and areas south of the TSF will be used to store overburden and/or topsoil materials. Current material management do not include these areas; however, they are included in the assessment as alternative locations.
<b>Regional Study Area</b>	Spatial area within which direct and indirect effects are anticipated to occur.
<b>Spatial boundaries</b>	Spatial boundaries consider the potential geographic or physical extent of change generated by the project, as related to a specific assessment topic or valued component.
<b>Stage</b>	The depth of water in a watercourse or channel.
<b>Stakeholders</b>	Stakeholders are interest groups whose interests could be affected by the project and its associated activities. Stakeholders do not include treaty and non-treaty First Nations, but generally include land-user groups with interests or tenures in the project area.
<b>Tailings</b>	Waste material from the process plant that is made up of ground rock, residual chemicals and water that remains after processing of ore and generation of ore concentrate. It is discharged to a designated area adjacent to the plant location.

<b>Tailings Storage Facility (TSF)</b>	<p>The designated area for disposal of tailings that is designed, constructed, and maintained to comply with Canadian Dam Association guidelines. Tailings are contained within this area by local topography and dams:</p> <ul style="list-style-type: none"> <li>• <b>North embankment</b> – along the northwesterly area of the TSF;</li> <li>• <b>South embankment</b> – along the southern area of the TSF;</li> <li>• <b>Southeast embankment</b> – along the southeastern area of the TSF; and</li> <li>• <b>East Embankment</b> – along the northeastern area of the TSF.</li> </ul>
<b>Topography</b>	Surface configuration, including relief and position of natural and man-made features.
<b>Topsoil or Soil</b>	The uppermost layer of earth in which plants grow, a black or dark brown material typically consisting of a mixture of organic remains, clay, and rock particles.
<b>Topsoil Stockpile</b>	Topsoil will be stored in a designated area within the EMRSF during construction (i.e., first 18 to 24 months) for longer term storage of reclamation material needed for progressive and permanent closure later in mine life.
<b>Total Suspended Particulates (TSP)</b>	A measure of the mass concentration of particulate matter in air.
<b>Total Suspended Solids (TSS)</b>	A measure of the dry weight of particulate material in a water sample.
<b>Valued Components (VCs)</b>	Valued Components are environmental, social, economic, health, and heritage components that the public, scientists, government agencies, Aboriginal Groups, and stakeholders consider important. They are identified, in part, through consultation with the above and may be determined on the basis of values including First Nations' interests, cultural value, scientific and/or regulatory concern, conservation status, biodiversity, and sensitivity to proposed Project effects.
<b>Waste rock</b>	That rock that must be removed from a mine to safely and economically extract the ore, but which has no value.
<b>Wetlands</b>	Wetlands are lowland or depressional features where water saturation is the dominant factor determining the nature of soil development and the resulting vegetation communities.
<b>Zooplankton</b>	Free-swimming aquatic organisms that feed on detritus, primary producers, and other aquatic invertebrates. Zooplankton are important secondary producers in some lakes and are responsible for transferring energy to higher levels in the aquatic foodweb.