

## GLOSSARY

<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>Ah</b>	A soil horizon enriched with organic matter.
<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>Alluvial</b>	Deposited by flowing water.
<b>Alternative</b>	A functionally different design specification or component location that is technically and economically feasible for use by the Project.
<b>Ambient air quality</b>	The quality of outdoor air in our surrounding environment. It is typically measured near ground level, away from direct sources of pollution.
<b>Ammonium nitrate and fuel oil (ANFO)</b>	A mixture of ammonium nitrate and fuel oil used extensively as a blasting agent in mining and quarrying.
<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>“All Found”</b>	Includes all costs, expenses, and profit necessary for the project work being undertaken. Rate includes insurance and WorkSafeBC costs.
<b>Anion</b>	An atom or molecule with a negative charge.
<b>Anticipated subsidence zone</b>	The area on the surface predicted to experience subsidence as a result of panel cave operations.
<b>Application</b>	Application for an Environmental Assessment Certificate.
<b>Application Information Requirements (AIR)</b>	A document that 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.
<b>Archaeological Chance Find Procedure</b>	A document detailing the steps that must be followed if an archaeological site is uncovered during ground altering activities.

<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 Overview Assessment (AOA)</b>	An assessment intended to identify and assess archaeological resource potential or sensitivity within a proposed study area. Recommendations concerning the appropriate methodology and scope of work for subsequent inventory and/or impact assessment studies are also commonly included.
<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>Archaeology Branch</b>	The Archaeology Branch of the British Columbia Ministry of Forests, Lands and Natural Resource Operations that administers the <i>Heritage Conservation Act</i> (1996).
<b>Base flow</b>	The component of flow discharge that is attributed to soil moisture and groundwater drainage into a channel.
<b>Baseline condition</b>	Pre-disturbance or pre-construction environmental setting; dataset used for comparison to assess changes in the environment resulting from Project activities.
<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.
<b>Biomass</b>	The quantity of organic matter contained in organisms.
<b>Blanket</b>	A layer of unconsolidated material greater than 1 m thick deposited on the surface of the underlying material. While it conforms to the underlying topography, it masks minor irregularities in its surface.

<b>Borden Number</b>	Each archaeological site in Canada is issued a unique, site-specific alpha-numeric 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>Calcareous</b>	Refers to soils that contain calcium carbonate, often with magnesium carbonate.
<b>Canadian Council of Ministers of the Environment (CCME)</b>	CCME comprises 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, odourless 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, odourless gas emitted from combustion and respiration processes. It is an important greenhouse gas with a global warming potential value of one.
<b>Cation</b>	An atom or molecule with a positive charge (contains more protons than electrons).
<b>Contaminant of potential concern (COPC)</b>	Chemical substances identified through a screening process that may have the potential to cause adverse effects in receptors.
<b>Clay</b>	A soil description for extremely fine particles, less than 0.002 mm, exuding little or no water and forming a thread when rolled between the fingers.
<b>Climate</b>	Average weather conditions over a long time period, usually exclusive to one region or area. Climate depicts weather patterns over years, decades, or centuries, whereas meteorology measures day-to-day activities.
<b>Coarse fragments</b>	Mineral rock fragments found in the soil: gravel (2 - 64 mm), cobbles (65 - 250 mm) and boulders (> 250 mm).
<b>Colluvial</b>	Deposits formed by gravity-transported material.

<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> (2002).
<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>	Water that comes into contact with minerals in the rock being mined.
<b>Criteria Air Contaminants (CACs)</b>	A group of pollutants that 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>Crusher</b>	A machine for crushing rock to create smaller particle sizes for transportation or processing.
<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>Cut-and-fill</b>	An underground mining technique used in steeply-dipping or irregular ore zones, in particular where the hanging wall limits the use of long-hole methods.
<b>Decline ventilation system</b>	The system providing ventilation for the three proposed declines.
<b>Decommissioning</b>	The process of removing facilities from service and the dismantling of buildings.
<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>Deposit</b>	A deposit is a body of a useful mineral or an ore of sufficient extent and degree of concentration to invite mining.
<b>Drainage</b>	The process of removing surplus ground or surface water either by artificial means or by gravity flow.

<b>EA Working Group (EAWG)</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 Aboriginal Groups and provincial, federal, and local government.
<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>Edaphic</b>	Features relating to soil, especially as it affects living organisms. Edaphic characteristics include factors such as moisture, acidity, aeration, and the availability of nutrients.
<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>Environment</b>	<p>The environment includes both the natural and socio-economic environments, as defined under Paragraph 2 of the <i>Canadian Environmental Assessment Act</i> (1992).</p> <p>Earth's components, including land, water, air, and all layers of the atmosphere. The environment includes all organic and inorganic matter, other living organisms, and the interaction of natural systems of such, including cultural and social components.</p>
<b>Environmental assessment (EA) process</b>	The process of assessing the environmental, economic, social, heritage, and health effects of a proposed development.
<b>Eutrophic</b>	A body of water with high abundances of primary producers and high concentrations of nutrients.
<b>Existing access road</b>	The existing road between the ORAR and the existing KS Mine site.
<b>Existing surface disturbance</b>	The area of existing disturbance that will be used for the Project components and activities.
<b>Explosive</b>	Any rapidly combustible or expanding substance, the energy release from which can be used to break rock.
<b>Exposure</b>	The degree of contact of organisms to a chemical or physical agent.

<b>Fibric</b>	A well-preserved organic material (or horizon) identifiable as to botanical origin, of which at least 40% remains fibrous after rubbing. Fibric material usually is classified on the von Post scale of decomposition as class 1 to class 4.
<b>Fluvial</b>	Refers to sediments deposited by streams or flowing water; it does not refer to deposition by waves or mass wasting processes such as mudflows.
<b>Fossil fuel</b>	Any naturally occurring fuel of an organic nature, such as coal, oil, and natural gas.
<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>Fugitive dust</b>	Particulate matter, often sand or mineral dust, released to the atmosphere by mechanical disruption or by wind scouring.
<b>Geographic Information System (GIS)</b>	Mapping tool used to depict large amounts of information in a spatial context.
<b>Geohazard</b>	Landslide or snow avalanche process with the potential to result in some type of undesirable outcome.
<b>Geohazard risk</b>	Likelihood of a geohazard scenario occurring and resulting in a particular severity of consequence, defined in terms of economic, environmental, safety, or reputation loss.
<b>Gitanmaax</b>	Member band of Gitxsan Nation.
<b>Gitsegukla</b>	Member band of Gitxsan Nation.
<b>Gitwangak</b>	Member band of Gitxsan Nation.
<b>Gitxsan Nation</b>	Consists of five bands, each with their own Indian Reserves: Gitwangak, Gitsegukla, Gitanmaax, Kispiox, and Glen Vowell.
<b>Glaciofluvial</b>	Material moved by glaciers and subsequently deposited by streams flowing from the melting ice to form deposits and landforms. The deposits may be unsorted or sorted.
<b>Glaciolacustrine</b>	Parent materials deposited in lakes associated with glacial melting. Most lacustrine parent materials in Canada were deposited in lakes that existed during the glacial periods and are called glacio-lacustrine sediments. These sediments are typically well-sorted sands, silts, and clays. Well-sorted means that one particle size (e.g., clay) is dominant in the texture.
<b>Glen Vowell</b>	Member band of Gitxsan Nation.

<b>Gleyed soil / horizon</b>	A soil having one or more neutral gray horizons as a result of water logging and lack of oxygen. The term "gleyed" also designates gray horizons and horizons having yellow and gray mottles as a result of intermittent water logging.
<b>Gleysol</b>	Refers to soils formed under chronic reducing conditions inherent in poorly drained mineral soils and wet conditions, with a high water table and long periods of water saturation.
<b>Gneiss</b>	Coarse-grained metamorphic rock (i.e., rock altered by heat, pressure, and movement) comprised of quartz, feldspar, and mica.
<b>Granite</b>	Granite is a common and widely distributed type of igneous rock characterized by a medium to coarse grained texture. Granitic rock has been intruded into the continental crust during all geologic periods, although much of it underlies the sedimentary rocks since Precambrian age. Granitoid is a general, descriptive field term for light-colored, coarse-grained igneous rocks.
<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>Groundwater</b>	Water stored in soil or rock.
<b>Habitat</b>	Land and water surface used by wildlife. May include biotic and abiotic aspects such as vegetation, exposed bedrock, water, and topography.
<b>Heritage Conservation Act (HCA)</b>	The provincial law that authorizes and mandates British Columbia to manage heritage resources.
<b>House of Nii Kyap</b>	The closest Gitxsan wilp to the Project area.
<b>Horizon</b>	A soil horizon is a layer generally parallel to the soil crust, whose physical characteristics differ from the layers above and beneath.
<b>Human action</b>	A human action is defined as a project or activity. Projects are typically some form of commercial or industrial development that is planned, constructed, and operated (e.g., a mine or a resource access road); activities are the other actions of humans in an area, such as public highway traffic, hiking, and hunting.

<b>Human health risk assessment</b>	A process used to estimate the nature and probability of adverse health effects in humans exposed to chemicals in environmental media, now or in the future.
<b>Humic (organic material)</b>	An organic material (or horizon) characterized by an advanced stage of decomposition. It is very stable physically and chemically unless it is drained. The material's botanical origin is not identifiable and less than 10% of fiber remains after rubbing. Humic material usually is classified on the von Post scale of decomposition as class 7 or higher.
<b>Humus</b>	A mixture of organic debris in the soil; it is formed from plant and animal litter accumulated at the soil surface and roots. Dead organic material in the soil that undergoes continuous breakdown and change.
<b>Hydric (moisture regime)</b>	Water is removed from soil so slowly that water table is at or above soil surface all year. Typically results in development of organic or gleyed mineral soils.
<b>Hydrocarbon</b>	A class of compounds containing hydrogen and carbon formed by the decomposition of plant and animal remains, including coal, mineral oil, petroleum, natural gas, paraffin, fossil resins, and solid bitumens occurring in rocks.
<b>Hydrograph</b>	A graphical plot of water discharge versus time.
<b>Hydrology</b>	The movement and distribution of water.
<b>Hydro-seeding</b>	Hydro-seeding is a planting process which uses a slurry of seeds, mulch, fertilizer and tackifying agents. As an alternative to the traditional process of dry seed broadcasting, hydro-seeding promotes quick germination and inhibits soil erosion.
<b>Hygric (moisture regime)</b>	Water (usually from precipitation and seepage) removed slowly enough to keep soil wet for most of growing season. Permanent seepage and mottling are common.
<b>Illuviation</b>	Deposition of particles from one soil horizon to another, usually from an upper to a lower horizon, resulting in accumulations of clays, metals, and organic matter.
<b>Impact</b>	Any alteration of existing conditions, adverse or beneficial, caused directly or indirectly by the Project. An impact may or may not lead to one or more effects.
<b>In situ</b>	Found in its original position.
<b>Intake</b>	The passage through which fresh air is drawn or forced into a mine or to a section of a mine.



<b>Issues scoping</b>	A process of compiling and analyzing available information to identify environmental, economic, social, heritage and health issues that may be related to the Project. These Project-specific issues are generally indicative of the local and regional values held by the public, Aboriginal groups, and other stakeholders in the Project area. They also reflect issues of concern to the scientific community or to government.
<b>Kaska Dena Council</b>	Administrative branch of Kaska Nation.
<b>Kaska Nation</b>	Comprises three BC First Nations Bands (Kwadacha, Dease Lake, and Lower Post) and two Yukon First Nations (Liard First Nation and Ross River Dena Council).
<b>Kemess South project footprint</b>	The area of physical disturbance associated with the past Kemess South operations that has not been reclaimed.
<b>Kispiox</b>	Member band of Gitxsan Nation.
<b>Kwadacha Nation (KwN)</b>	Member First Nation of Tse Keh Nay.
<b>Lacustrine</b>	Related to lakes; in soils, refers to deposits associated with lake level fluctuations, e.g., benches or terraces that mark former shorelines or lakebed materials exposed by an uplifting of the land.
<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>Lentic</b>	Standing or relatively still water (e.g., lakes, ponds, and swamps).
<b>Limnology</b>	The description and study of freshwater systems, including lakes, streams, and rivers.
<b>Lithics</b>	The material created during stone tool manufacturing.
<b>Loam</b>	Soil composed of a well-balanced mixture of sand, silt, and clay.
<b>Lotic</b>	Moving water (e.g., rivers, creeks, and streams).
<b>Mesic (organic material)</b>	An organic material (or horizon) partly altered physically and biochemically. It does not meet the requirements of either a fibric or a humic material, has a rubbed fiber content ranging from 10% to less than 40%. Mesic material usually is classified on the von Post scale of decomposition as class 5 or 6.
<b>Metal leaching</b>	Metal leaching is associated with acid rock drainage due to high solubility of metals and sulphide weathering rates under acidic conditions.

<b>Métis Nation of BC</b>	The Métis Nation of BC (MNBC) is represented throughout the region including chartered community associations in Smithers, Terrace, Chetwynd, Prince George, and Fort St James.
<b>Mine rock</b>	Uneconomic rock which is removed in the mining process to provide access to the ore.
<b>Ministers, the</b>	Minister of Energy and Mines; Minister of Environment
<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>Moraine</b>	An accumulation of unconsolidated mineral debris (soil and rock), carried and deposited by glaciers.
<b>Mottle</b>	Features that occur in grey-coloured, gley soils when they are exposed to air resulting in the oxidation of iron (Fe) leaving reddish, yellow or orange patches in the soil profile.
<b>National Topographic System (NTS)</b>	A mapping system used by the Natural Resources Canada providing general purpose topographic maps of the country. NTS maps are available in 1/50,000 and 1/250,000 scales and include details on landforms and terrain, lakes and rivers, forested areas, administrative zones, populated areas, roads and railways, as well as other man-made features.
<b>n.d.</b>	No date. Used for citing documents that do not indicate a publication date.
<b>Nitrogen oxide (NO<sub>x</sub>)</b>	Formed when nitrogen (N <sub>2</sub> ) combines with oxygen (O <sub>2</sub> ) in the burning of fossil fuels, from the natural degradation of vegetation, and from the use of chemical fertilizers. It is a significant component of atmospheric acid deposition and photochemical smog. The primary source of nitrogen oxide emissions is automobile exhaust.
<b>Non-contact water</b>	Includes all natural catchment water that is diverted around the surface disturbance.
<b>Organic deposit</b>	Organic deposits have developed in place from plant residues and have been preserved by a high water table or some other factor retarding decomposition. Examples are peat (undecomposed or slightly decomposed organic matter) and muck (highly decomposed organic material).
<b>Orthic soil</b>	A category used by the Canadian System of Soil Classification to describe the central, most typical, concept of soils in a given soil subgroup.
<b>Outcrop</b>	Bedrock that appears at or near the surface.

<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>Panel cave mining</b>	A mass mining method that uses gravity to allow bulk extraction of large orebodies.
<b>Parent material</b>	The natural material (mineral or organic) from which soil is formed.
<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>Peat</b>	Peat is an accumulation of partially decayed organic matter formed under conditions of excess moisture from precipitation or slowly moving groundwater. Peat deposits form in wetlands dominated by Sphagnum and Carex species, and are distributed primarily in the temperate zone of the northern hemisphere.
<b>Periphyton</b>	Complex matrix of algae, bacteria, microbes, and detritus that attaches to submerged surfaces.
<b>Permafrost</b>	Soil at or below the freezing point of water (0°C) for two or more years. Most permafrost is located in high latitudes (i.e., land close to the North and South poles), but alpine permafrost may exist at high altitudes in much lower latitudes.
<b>Permit</b>	A document issued by a regulatory agency that gives approval for specified activities to take place.
<b>Petroform</b>	Arrangements of rocks made by people.
<b>Phytoplankton</b>	Minute, free-floating aquatic organisms that play an important role in many aquatic systems as primary producers and prey for other organisms.
<b>Polycyclic aromatic hydrocarbons (PAHs)</b>	Organic compounds comprised of two or more aromatic rings. These compounds are by-products of combustion.
<b>Portal</b>	The mouth of an adit or tunnel.
<b>Primary producers</b>	Organisms capable of using energy derived from light or a chemical substance to manufacture energy-rich organic compounds from inorganic nutrients. Primary producers form the base of many food webs.
<b>Project area</b>	The area containing all proposed and existing components and activities to be used for the Project, including the Project footprint plus a buffer of varying width around the proposed components.

<b>Project footprint</b>	The area containing all proposed surface disturbance, access tunnel and underground workings to be used for the Project. The Project footprint includes land used on a temporary basis such as construction laydown areas or construction haul roads, as well as disturbed areas in transport corridors, both public and private.
<b>Proposed access corridor</b>	The proposed corridor between the KS mill site and the decline portals, containing the proposed conveyor, access road, tunnel and utilities.
<b>Proposed access tunnel</b>	The tunnel section of the proposed access corridor (approximately 700 m).
<b>Proposed conveyor</b>	The proposed conveyor system from the underground workings to the mill stockpiles.
<b>Proposed discharge waterline</b>	The proposed water line from the KUG TSF to the discharge outlet.
<b>Proposed East Dam</b>	The dam proposed to contain the tailings within the KS Mine Pit.
<b>Proposed surface disturbance</b>	The area that will be subject to new surface disturbance for the Project components and activities. This is a subset of the Project footprint.
<b>Proposed underground workings</b>	The area containing the proposed declines, panel cave gallery and excavations to be created for underground activities. This is a subset of the Project footprint.
<b>Proposed ventilation exhaust raise</b>	The vertical shaft containing the exhaust system to extract exhaust from the underground workings.
<b>Proposed ventilation intake decline</b>	The proposed decline allocated for the intake of fresh air for ventilation of the underground workings.
<b>Public, the</b>	The public is a broad entity that includes people who are not necessarily affiliated with an interest group, although there is overlap between these groups.
<b>Quartz</b>	Quartz is the second most abundant mineral in the Earth's continental crust, after feldspar. It is made up of a continuous framework of SiO <sub>4</sub> silicon-oxygen crystals.
<b>Receptor</b>	An environmental value or feature of the social environment which may be sensitive to changes in condition as a result of the Project activities.
<b>Reclamation</b>	A process of converting disturbed land into useful landscapes that meet a variety of goals (typically, creating productive ecosystems). It includes material placement and stabilization, capping with soil/overburden, regrading, placing cover soils, and revegetation.

<b>Regional Study Area</b>	Spatial area within which direct and indirect effects are anticipated to occur.
<b>Regosol</b>	Soils that have insufficient horizon development to meet the requirements of the other soil orders.
<b>Regulatory Framework</b>	<p>The compendium of requirements with which the Project is required to, and/or has chosen to, comply. This will typically include the following:</p> <ul style="list-style-type: none"> <li>• legal requirements (laws, regulations, decrees, etc.);</li> <li>• international treaties or conventions, including those ratified by the country in which the Project will occur and potentially those non-ratified;</li> <li>• internal corporate standards (e.g., company-specific environmental performance standards, company-specific IA standards);</li> <li>• programme requirements (e.g., EHS Guidelines); and</li> <li>• policies.</li> </ul> <p>The Regulatory Framework will include two broad types of requirements:</p> <ul style="list-style-type: none"> <li>• the requirements that apply to the Project (e.g., to meet a particular emission limit); and</li> <li>• the requirements that apply to the EA process, consultation, and associated permitting process.</li> </ul>
<b>Residual effects</b>	The effects of a project that remain after mitigation and management measures are implemented. Project-specific effects are separate/differentiated from cumulative effects.
<b>Rhizosphere</b>	The layer of soil that is immediately adjacent to and affected by plant roots, where plants, soil, microorganisms, nutrients, and water interact.
<b>Richness (taxonomic)</b>	A description of the abundance of different taxa within a defined, ecologically relevant area or habitat.
<b>Rolling landscape</b>	Landscape composed of elongated rises and hollows with gentle slopes (5 to 25%) that extend in parallel forms in plan view.
<b>Schedule B Aboriginal Groups</b>	Takla Lake First Nation, Tsay Keh Dene Nation, and Kwadacha Nation.
<b>Schedule C Aboriginal Groups</b>	Gitksan Wilp Nii Kyap, Doig River First Nation, Halfway River First Nation, Prophet River First Nation, Sauteau First Nation, West Moberly First Nations, Fort Nelson First Nation, Blueberry River First Nations, McLeod Lake Indian Band, and the Métis Nation of British Columbia.
<b>Sediment quality</b>	Physical and chemical properties of sediment in streams and lakes.

<b>Seepage</b>	The movement of a liquid (e.g., water) through a porous medium (e.g., soil) beneath the ground surface. It typically occurs on slopes or if a water table is perched above a non-permeable layer.
<b>Significance</b>	Significance is defined as a measure of the degree or severity of direct and indirect effects caused to human, social, heritage, environmental, and economic components by the Project.
<b>Silt</b>	A soil description for fine particles between 0.06 and 0.002 mm.
<b>Soil horizon</b>	A layer of mineral or organic soil material approximately parallel to the land surface that has characteristics altered by processes of soil formation. It differs from adjacent horizons in properties such as color, structure, texture, and consistence and in chemical, biological, or mineralogical composition.
<b>Soil reaction</b>	An indicator of soil acidity or alkalinity measured on the pH scale; it affects the availability of nutrients and the reactivity of various substances in the soil.
<b>Soil salvage</b>	Conservation of valuable soil by stripping it off the surface when the site is first disturbed (e.g., before excavation of overburden). Salvaged soils are either stockpiled for future use or they are immediately used for covering reclaimed surfaces in a different location.
<b>Snow avalanche</b>	A sudden, drastic flow of snow down a slope.
<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>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>Stope</b>	Stoping is the process of extracting the desired ore or other mineral from an underground mine, leaving behind an open space known as a stope.
<b>Subaqueous deposition</b>	Disposal of waste rock or tailings through placement submerged below water, which is a preferred means of disposal to limit potential metal leaching and acid rock drainage (ML/ARD).
<b>Subsidence</b>	Deformation of land surface morphology and associated changes in lateral tension within the surficial deposits resulting from underground mining.

<b>Sulphur dioxide (SO<sub>2</sub>)</b>	Fossil fuel that contains a small amount of sulphur-containing organic compounds. During fuel combustion, the sulphur is oxidized and emitted as SO <sub>2</sub> gas with the engine exhaust. In the atmosphere, SO <sub>2</sub> can further oxidize to sulphate, which contributes to acid deposition.
<b>Surface expression</b>	Topography of a surficial material, which indicates the patterns of material deposition or reflect the surface configuration of the underlying material (e.g., when the surface material is draped over and owes its landform to the topography of an underlying substrate).
<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>	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.
<b>Temporal boundaries</b>	Temporal boundaries are the time periods considered in the assessment, which take into account the phases of the Kemess Underground Project and the timelines of other human actions.
<b>Temporal scope</b>	The time period over which Project activities may cause an effect.
<b>Terrestrial Ecosystem Mapping</b>	Terrestrial Ecosystem Mapping is an approach to stratifying the landscape into map units according to ecological features using a combination of manual air photo interpretation and ground sampling.
<b>Texture (of mineral soil)</b>	The solid material of mineral soil is composed of different size fractions of particles: gravel (> 2 mm in diameter), sand (2 mm to 53x10 <sup>-6</sup> m), silt (53 to 2 x10 <sup>-6</sup> m), and clay (< 2 x10 <sup>-6</sup> m). The soil texture is the particular mix of particle sizes found in any soil. In Canadian soils texture is almost entirely determined by the geomorphic processes responsible for depositing the original sediment.
<b>Till (glacial till)</b>	Till or glacial till is an unsorted, coarsely graded, and heterogeneous sediment deposited directly by the glacier. It is mostly derived from the subglacial erosion of previous unconsolidated sediments. Its content may vary from clays to mixtures of clay, sand, gravel and boulders. An accumulation of till is called moraine.
<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>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>Toxicity Reference Value (TRV)</b>	The maximum acceptable dose or concentration of a chemical that can be received by a receptor without an appreciable risk of adverse health effects during a human lifetime.
<b>Transmission line</b>	The existing BC Hydro transmission line from Kennedy Substation to the KS Mine Site.
<b>Treaty 8</b>	Treaty between Government of Canada and First Nations, signed in 1899.
<b>Treaty 8 Disputed Area</b>	The Canadian federal and BC governments dispute the western boundary of Treaty 8. Canada alleges the western boundary is the Arctic/Pacific watershed and BC takes the position that the western boundary is to the east, along the central range of the Rocky Mountains. This matter is before the BC Supreme Court. The Project is located within the disputed area.
<b>Treaty 8 First Nations (BC)</b>	Blueberry River, McLeod Lake, Fort Nelson, Saulteau, Halfway River, West Moberly, Doig River, and Prophet River First Nations.
<b>Tsay Keh</b>	A settlement also known as Ingenika Point Indian Settlement.
<b>Tsay Keh Dene Nation (TKDN)</b>	Member Nation of Tse Keh Nay.
<b>Tse Keh Nay (TKN)</b>	An alliance between the Takla Lake First Nation, Tsay Keh Dene Nation, and the Kwadacha Nation.
<b>Tunnel</b>	An excavated horizontal, or near-horizontal, underground passage that is open to the surface at both ends.
<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>VC Scoping Summary</b>	Valued Components Scoping Summary report
<b>Veneer</b>	A layer of unconsolidated material 0.1 to 1 m thick deposited on the surface of the underlying material. It conforms closely to the underlying topography and is too thin to mask irregularities in its surface.



<b>Ventilation</b>	The provision of a directed flow of fresh and return air along all underground roadways, travelling roads, workings, and service parts.
<b>Ventilation raise access road</b>	Uses part of the existing exploration road (to be upgraded) and will be extended to reach the raise location.
<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>wilp (plural <i>huwilp</i>)</b>	The basic Gitxsan kinship unit is the wilp or house. Each Gitxsan member belongs to a wilp that has a traditional territory within the broader Gitxsan territory.
<b>Xeric (moisture regime)</b>	Soil is moist only during brief periods following precipitation. Due to coarse soil texture water is removed from the soil very rapidly in relation to supply.
<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 food web.