

## **A**

### **Abandoned mine**

A mine at which exploration, development, mining, reclamation, maintenance, inspection of facilities and equipment, and other operations ceased with no evidence demonstrating that the miner intends to resume mining. Typically, no potentially responsible party exists.

### **Active mine**

The area, on and beneath land, that is currently being used for the purpose of extraction, removal, or recovery of geological material and minerals, for which a responsible entity and owner is known and where a site is operating under applicable regulatory permits.

## **B**

### **Beneficiation**

Any process, such as physical or chemical separation, that improves the economic value of ore by removing commercially non-valuable components.

## **C**

### **Chat**

A local name for coarse-sized mining waste material produced from discharges during mineral processing operations (for example, crushing, gravity separation, and concentrating processes). Typically refers to gravel- to sand-sized particles.

### **Closed mine**

A mine that has an identifiable owner or responsible entity and has successfully undergone and completed reclamation and site closure.

### **Critical mineral**

As used in the United States, any nonfuel mineral, element, substance, or material that the Secretary of Energy determines (i) has a high risk of supply chain disruption and (ii) serves an essential function in one or more energy technologies, including technologies that produce, transmit, store, and conserve energy.

## **E**

### **Economic feasibility**

Evaluation of financial costs, monetary or intangible values, and potential revenue for a particular project.

### **Environmentally sound**

Describes a substance or process that results in an acceptable equivalent or reduced environmental risk and impact compared to a prior state.

## **F**

### **Fine tailings**

Similar to tailings, but materials are very fine to clay-sized particles, less than 0.2 mm in diameter. Typically produced from mill waste discharges as a result of the gravity separation and mineral concentration processes and accumulated into settling ponds (impoundments).

## **G**

### **Gangue**

The minerals without value in an ore; that part of an ore that is not economically desirable but cannot be avoided when

mining the deposit. It is separated from the ore during mineral processing.

## **Grade**

The concentration of each ore mineral in a rock, usually given as a weight percent.

## **I**

## **Inactive mine**

A mine is inactive if there is an identifiable owner or operator of the facility, but the facility is not currently operating.

## **L**

## **Leachate**

A solution or suspension formed when liquid travels through a solid and removes some components of the solid (USGS 2015).

## **M**

## **Mineral**

A naturally occurring inorganic element or compound having an orderly internal structure and characteristic chemical composition, crystal form, and physical properties. The term "mineral" may have different meanings depending on the context. Minerals may include metals and metal-bearing ores (gold, copper, iron, nickel, zinc, etc.), nonmetallic minerals and minable rock products (limestone, gypsum, building stone, peat, sand, salt), and fossil fuels (oil, natural gas, and coal).

## **Mineral rights**

A right to extract a mineral from the earth or to receive payment, in the form of royalty, for the extraction of minerals.

## **Mining-influenced water (MIW)**

Any water affected by mining, milling, or smelting activities. This includes groundwater, surface water, acid mine drainage, acid rock drainage, and mine-impacted water.

## **Mining-influenced water (MIW) residuals**

Materials formed or accumulated from various physical processes, chemical reactions, or biological reactions, which includes natural oxidation and reduction reactions, settling of suspended solids, and chemical and biological treatment processes.

## **O**

## **Ore**

A mineral or minerals that can be extracted from a naturally occurring geologic formation.

## **Overburden**

Material of any nature, consolidated or unconsolidated, that overlies a deposit of useful and minable materials or ores, especially those deposits that are mined from the surface by open cuts or pits.

## **P**

## **Pozzolanic materials**

Materials that will react with calcium hydroxide, in the presence of water, to form compounds with cementitious properties under ordinary temperatures and pressures. Pozzolanic materials must be in a finely divided form for the reaction to occur.

## **R**

## **Rare earth elements (REEs)**

The set of 15 elements from atomic number 57 (lanthanum) to 71 (lutetium). Yttrium (atomic number 39) and scandium (atomic number 21) are commonly included in the classification due to their chemical and physical similarity. These elements have diverse energy, industrial, and military technology applications. Also known as “rare earth metals,” “rare earths,” or “lanthanides.”

### **Remining**

Further development or ore removal from a previously unmined mineral resource at a mine. Remining can include some of the technologies described herein, but activities involved with planning and operating an active mine are outside the scope of this document.

### **Reprocessing**

Further physical or chemical alteration of solid mining waste, for example, crushing, screening, leaching, concentrating, and extracting existing mining waste or other resource recovery.

### **Repurposing**

Adapting solid mining waste to a beneficial new purpose, which may or may not include reprocessing.

### **Resource recovery**

The process of extracting resources of value from waste materials for repurposing. When applied to mining waste, defined resource recovery refers to the targeted and systematic extraction of valuable materials from mining waste streams.

### **Reuse**

Using solid mining waste in a new application or product. This can include repurposing and reprocessing.

## **S**

### **Slag**

By-product of ore smelting. Main types of slag include ferrous, ferroalloy, and nonferrous.

### **Slimes**

Material of silt or clay in size; results from the washing, concentrating, or treating of ground ore and is accumulated in settling ponds.

### **Solid mining waste**

Any naturally occurring material that has been disturbed by mining, milling, or smelting activity and is not used or marketed by that activity.

### **Surface rights**

The legal rights connected to the use, management, and ownership of the land’s surface, which usually includes the ability to occupy, develop, and use the land’s surface for various purposes. If the mineral rights are owned by another person, the mineral rights are considered severed from the surface rights.

## **T**

### **Tailings**

The solid waste material (gangue and other material) resulting from the milling and mineral concentration process (washing, concentrating, or treating) applied to ground ore. This term is usually used for coarse sand to clay-sized (4.75 mm to less than 0.005 mm) refuse that is considered too low in mineral values to be treated further, as opposed to the concentrates containing valuable metal(s).