

Appendix 3

GLOSSARY

ADR

American Depositary Receipt; a security representing the right of ownership in the deposited securities of a foreign company, certified by receipts issued by a US depositary bank.

Anode

A positively charged electrode in an electrolytic tank.

Bio-oxidation (bioleaching)

The technology of dissolution of metals from ores (concentrates and rock) by naturally occurring microorganisms that oxidize sulphide minerals.

Blasting operations

Detonating explosives in natural rock formations for the purpose of controlled destruction and removal or changing its structure and form.

Cathode

A negatively charged electrode in an electrolytic tank.

Concentrate

A product resulting from ore concentration with a high grade of the extracted mineral. The concentrate is named after the prevailing metal (copper, nickel, etc.).

Concentration

Artificial improvement in the mineral grades in the rock for metallurgic purposes by removing a major portion of waste rock not containing any beneficial minerals.

Conversion

Autogenous pyrometallurgical process, where ferrous and other detrimental impurities are oxidized and residue as slag. The result of the conversion is blister copper (copper concentrate smelting) or high grade matte (copper and nickel concentrate smelting).

Cuprous ores

Ores containing from 20 to 70% sulphides. Mineralization is as follows: nickel - 0,2-2,5%, copper - 1-15%, platinum group metals - 5-50 g/t.

Deposit stripping

Permanent mining that opens access to the entire mineral deposit from the surface or its part of it, and provides for the preparatory mining necessary to support the production.

Disseminated ores

Ores containing from 5 to 50% sulphides, from 0.2 to 1.5% nickel, from 0.3 to 2% copper, from 2 to 10 g/t of platinum group metals.

Drying

Removal of moisture from concentrates, performed in designated drying furnaces (to a moisture level below 9%).

Electrolysis

A series of electrochemical oxidations through reactions at electrodes in contact with an electrolyte, by the passage of an electric current from an external source.

Filtration

The process of reducing the moisture of the concentrate by moving liquids or gases through a porous medium.

Flash smelter

An autogenous smelter for processing dry concentrates. Smelting in a furnace is done in a flow of crushed rock and gas oxidizer (air, oxygen) while retaining suspended melted metal particles. The heat generated by the oxidizing reaction is used.

Floatation

A process of concentration by selectively attaching air bubbles to mineral particles within pulp. Dry mineral particles attach poorly to the air bubbles and rise through the suspension to the top of the pulp, producing foam. The minerals that moisten well do not attach to the bubbles and remain in the pulp. Thus, the metals are separated.

Gas condensate

Products produced from natural gas fields and representing a mixture of hydrocarbon liquids.

High-grade matte

A metallurgical semi-product produced as a result of a matte conversion. Depending on the chemical composition, the following types of high-grade matte are distinguished: copper, nickel and copper-nickel.

Horizon

All workings located along a specific layer, and designated for mining.

Indicated mineral resource

An Indicated Mineral Resource is a part of a Mineral Resource for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a reasonable level of confidence. It is based on exploration, sampling and testing information, gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes. The locations are too widely or inappropriately spaced to confirm geological and/or grade continuity, but are spaced closely enough for continuity to be assumed.

Inferred Mineral Resource

An Inferred Mineral Resource is that part of a Mineral Resource for which tonnage, grade and mineral content can be estimated with a low level of confidence. It is inferred from geological evidence and has an assumed, but not verified, geological and/or grade continuity. It is based on information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes, which is limited or of uncertain quality and reliability.

Matte

Intermediate product in the form of alloys of ore sulphides and non-ferrous metals with varying chemical compositions. Matte is the main product in which precious and auxiliary metals are accumulated.

Measured mineral resource

A Measured Mineral Resource is the part of a Mineral Resource for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a high level of confidence. It is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes. The locations are spaced closely enough to confirm geological and/or grade continuity.

Metal extraction

Estimation of the completeness of extraction, defined as the ratio between the amount of extracted substance converted to an end product and its amount in the feed material (in percentage or unit fractions).

Metal grade

The ratio between the amount of metal in the material and the total gross weight of the material, expressed as percentage or grams per tonne (g/t).

Mine

A mining location for extraction of ores by open or subsurface mining.

Mineral deposit

A mass of naturally occurring mineral material near to the surface or deeper underground, which in amount, quality and conditions are suitable for economic use.

Mineral resource

A Mineral Resource is a concentration or occurrence of material of intrinsic economic interest in or on the earth's crust in such form and quantity that there are reasonable prospects for its eventual economic extraction. The location, quantity, grade, geological characteristics and continuity of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge. Mineral Resources are subdivided, in order of increasing geological confidence into Inferred, Indicated and Measured categories.

Open mining

The process of extracting minerals by surface excavations in open mining.

Ore

Natural minerals containing metals or their compounds in economically valuable amounts and forms.

Ore body

Natural occurrence of ores linked to a certain structural and geologic element or a combination of such elements.

Ore mixture

A mixture of materials in a certain proportion needed to achieve the required chemical composition in an end product. The metallurgical ore mixture may include ores, ore concentrates and agglomerates, return slag, dust from dust collecting units, metals (mostly in scrap).

Ore reserves

An Ore Reserve is the economically mineable part of a Measured or Indicated Mineral Resource. It includes diluting materials and allowances for losses, which may occur when the material is mined. Appropriate assessments, which may include feasibility studies, have been carried out, and include a consideration of and modification by realistically assumed mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors. These assessments demonstrate, at the time of the reporting, that extraction could reasonably be justified. Ore Reserves are sub-divided in order of increasing confidence into Probable Ore Reserves and Proved Ore Reserves.

Oxide

A compound of a chemical element with oxygen.

Probable ore reserves

A Probable Ore Reserve is the economically mineable part of an Indicated, and in some circumstances, a Measured Mineral Resource. It includes diluting materials and allowances for losses, which may occur when the material is mined. Appropriate assessments, which may include feasibility studies, have been carried out, and include consideration of and modification by realistically assumed mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors. These assessments demonstrate, at the time of reporting, that extraction could reasonably be justified.

Proved ore reserves

A Proved Ore Reserve is the economical-ly mineable part of a Measured Mineral Resource. It includes diluting materials and allowances for losses, which may occur when the material is mined. Appropriate assessments, which may include feasibility studies, have been carried out, and include consideration of and modification by realistically assumed mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors. These assessments demonstrate, at the time of reporting, that extraction could reasonably be justified.

Pyrometallurgical processes

Metallurgical processes performed at high temperatures. In accordance with the technological characteristics, the following types of pyrometallurgical processes are distinguished: roasting, smelting and conversion.

Refining

The processing of extracting high purity precious metals by separating and removing impurities.

Rich ores

High-sulphide grade (over 70%) ores. Mineralization is as follows: nickel – 2-5%, copper – 2-25%, platinum group metals – 5-100 g/t.

Roasting

A metallurgical process in which ores are prepared for subsequent operations (concentration, agglomeration and smelting), aimed at changing the physical features and chemical composition; conversion of beneficial minerals into an extractable form; and the removal of impurities.

Skip (Hoisting facility)

A device in the form of an automatically unloading case that is moved along the pulleys of a skip-winding machine, designed to transport minerals or rock along vertical and reclining shafts to elevate an ore mixture.

Slag

Mixed oxides that are produced from waste ore materials and fluxing substances as a result of smelting.

Slime

Powder product containing precious metals, precipitated during electrolysis of copper and other metals.

Slurry

A mixture of crushed minerals with water or a water solution.

Smelting

A pyrometallurgical process performed at temperatures enabling the complete melting of the processed metal.

Suction system

A mechanical device used to draw away (removed by force of suction) pollutant emissions and gases from workplaces and to get samples of air or gas to test its contents and dust condition.

Sulphides

A compound of metals and sulphur.

Tailing pit

A complex of hydraulic structures used to receive and store mineral waste/tailings.

Tailings

Waste materials left over after concentration operations containing primarily waste rock with a minor amount of precious metals.

Thickening

The separation of liquid (water) from solid particles within a dispersion system (pulp, suspension or colloid) based on natural precipitation of solid particles under gravity in waste basins, thickeners and centrifugally in cyclones.

Underground (sub-surface) mining

A complex of operations performed for the stripping, preparing of a deposit and extracting of the valuable minerals (ores, geological materials and coals) from the earth.

Vanukov furnace

An autogenous smelter for the processing of concentrates. Smelting is performed in a bath of liquid melted slag, which is intensively and turbulently mixed by a mixture of air and oxygen. Heat generated by the oxidizing reaction is also used.

Waste heat boiler

A heat-retrieval unit used to produce steam without a furnace using the hot by-product gas from metallurgical operations, industrial furnaces, power generators or combustion engines.

Workings

The general term for parts of a mine or quarry that have been being excavated during mining.

Abbreviations and acronyms**CHOP**

Private Security Company

CRU

Commodities Research Unit

CUSIP

An identification number assigned to all stocks and registered bonds. The Committee on Uniform Securities Identification Procedures (CUSIP) oversees the entire CUSIP system. This system is used in the US and Canada.

ESPC

Enriched Stored Pyrrhotite Concentrate

FCSM

Federal Commission on the Securities Market

FSFM

Federal Service for Financial Markets

GFMS

Gold Fields Mineral Services

IFRS

International Financial Reporting Standards

IISI

International Iron and Steel Institute

IOB

International Order Book
London Stock Exchange trading floor for the most liquid foreign stocks

ISO

International Organization for Standardization

ISIN

A 12-marking code that uniquely identifies a specific securities issue. The organization that allocates ISINs in any particular country is the country's respective National Numbering Agency (NNA).

OTC Market

Over the Counter Market in US

KPMP

Krasnoyarsk Precious Metal Plant

MICEX

Moscow Interbank Currency Exchange

MMC

Mining and Metallurgical Company

MSA

Matte Separation Area

OGK

Wholesale Generating Company

PGM

Platinum group metals in a complex or in any combination of platinum, palladium, rhodium, ruthenium, osmium and iridium

RAS

Russian Accounting Standards

RTS

Russian Trading System

SEC

US Securities and Exchange Commission

SEDOL

An identification code, consisting of seven alphanumeric characters, that is assigned to all securities trading on the London Stock Exchange and on other smaller exchanges in the UK

SPC

Stored Pyrrhotite Concentrate

TGK

Territorial Generating Company

WBMS

World Bureau of Metal Statistics

Appendix 4**CONVERSION OF MEASUREMENTS UNITS**

Length	
1 kilometer	0.6214 miles
1 meter	3.2808 feet
1 centimeter	0.3937 inches
Area	
1 square meter	10.7639 square feet
1 square kilometer	0.3861 square miles
1 hectare	2.4710 acres
Weight	
1 kilogram	2.2046 pounds
1 tonne	1,000 kilograms
1 short ton (ton)	907.18 kilograms
1 troy ounce	31.1035 grams