

APPENDIX I

LIST OF TERMS OR TERMINOLOGIES USED

The following are the terms or concepts used in this research analysis.

OPEN PIT MINING refers to a mining activity that extracts ore from the ground surface.

ORE refers to the sum total of ore minerals and gangue minerals and country rocks which constitute the material worked for the purpose of extracting a metal from the ore minerals. The term ore is often used loosely to include such non metallic minerals as fluorite and gypsum minerals of little or no value, which occur with ore minerals called gangue.

CONCENTRATE - is defined as metallic minerals (copper, gold, silver) which is the final output recovered from the ore.

ORE BODY - a mass of ore which is economically capable of being worked.

ORE DEPOSITS - are naturally occurring geologic bodies that may be worked for one or more metals. The metals may be present as native elements, or more commonly as oxides, sulfides, sulfates, silicates or other compounds.

PORPHYRY COPPER DEPOSIT refers to rock names usually applied to hypabyssal rocks containing phenocrysts, in the strictest sense, alkali - feldspar phenocrysts. In practice, the terms are used for any medium-grained rock containing phenocrysts of any minerals.

ADAMELLITE PORPHYRY - a variety of granite containing a calcium-bearing plagioclase, usually oligoclase, and potassium feldspar, in roughly equal amounts.

ULTRABASIC ROCKS - igneous rocks consisting essentially of ferromagnesian minerals to the virtual exclusion of quartz, feldspar and feldspathoids. Originally defined as rocks containing less than 45% silica, minerals chromium, and platinum group elements, are almost confined to ultrabasic rocks.

GRANODIORITE DYKES - a coarse grained acid igneous rock consisting of quartz (20-40 per cent), calc-alkali feldspar, and various ferromagnesian minerals, dominantly horn blende and biotite.

GANGUE MINERALS - part of an ore deposit from which metal or metals is not extracted. The term is also loosely used for the waste materials from the

process of separation and concentration of ores. Common gangue minerals include quartz, calcite, fluorite, siderite and pyrite.

SERPENTINITE ROCKS - a layer-lattice mineral, $Mg_6 Si_4 O_{10}(OH)_8$, of which two forms occur, a fibrous one known as chrysotile, and a lamellar one, antigorite. Serpentine is the main alteration product of olivines and pyroxenes. Cleavage flakes and fibres of serpentine are flexible but not elastic. Nickel-bearing serpentine is garnierite, while iron-rich serpentine is greenalite-both are ore minerals.

TAILING DISPOSAL refers to the disposal of waste that has been chemically separated from the concentrate. The tailing goes to the dam for final settlement

METAL refers to copper, gold, and silver.

PIT refers to the area where ore are extracted.

SKILLED WORKER refers to a worker who has undergone at least one year of formal technical training in the respective field prior to being employed OR a worker who has been promoted from labourer after being worked for at least a minimum of three years of service.

UNSKILLED WORKER refers to a worker who has not received formal training and is paid daily.

VALUE ADDED is obtained by deducting the cost of sales or input from the total gross sales.

SALES REVENUE OR VALUE OF OUTPUT is defined to include value of goods produced, income from sale of concentrate in the context of mining industry.

COST OF INPUTS is defined to include value of materials and supplies consumed, and electricity etc. as used in the mining process.

SALARIES AND WAGES refer to all salaries and wages, leave-pay, bonuses, commissions etc paid to the employees before the deductions for income tax, EPF contributions or SOCSO.

MAJOR SHAREHOLDING - an individual holds 51 per cent or more of the total shares or paid up capital, or relatively the largest shareholder among the other shareholders in their personal capacity.