

## 13. GLOSSARY

### 13.1 Units and Symbols

<b>%</b>	Percent
<b>/a</b>	Per annum
<b>/cm</b>	Per centimetre
<b>/d</b>	Per day
<b>/h</b>	Per hour
<b>/L</b>	Per litre
<b>/s</b>	Per second
<b>/wk</b>	Per week
<b>A\$</b>	Australian dollars
<b>dB(A)</b>	Decibels (A-weighted)
<b>dB</b>	Decibels linear
<b>°C</b>	Degrees Celsius
<b>cm</b>	Centimetres
<b>g/m<sup>2</sup>/month</b>	Grams per square metre per month
<b>GL</b>	Gigalitres
<b>ha</b>	Hectare
<b>kg</b>	Kilogram
<b>kL</b>	Kilolitre
<b>km</b>	Kilometre
<b>km<sup>2</sup></b>	Square kilometre
<b>kt</b>	Kilo tonne
<b>kWh</b>	Kilowatt hour
<b>L</b>	Litre

<b>µm</b>	Micrometre
<b>µg/m<sup>3</sup></b>	Microgram per cubic metre
<b>m</b>	Metre
<b>m<sup>2</sup></b>	Square metre
<b>m<sup>3</sup></b>	Cubic metre
<b>M</b>	Million
<b>mg</b>	Milligram
<b>ML</b>	Mega litres
<b>mm</b>	Millimetre
<b>Mt</b>	Mega tonne
<b>MW</b>	Megawatt
<b>ppm</b>	Parts per million
<b>t</b>	Metric tonne
<b>t/a</b>	Tonnes per annum
<b>TJ</b>	Tera joule
<b>US\$</b>	United States dollar
<b>W</b>	Watt

## 13.2 Abbreviations

<b>AADT</b>	Annualised average daily traffic
<b>AAPA</b>	Aboriginal Areas Protection Authority
<b>ABS</b>	Australian Bureau of Statistics
<b>ABS</b>	Acrylonitrile-butadiene-styrene
<b>ADSCA</b>	Alcohol and Other Drugs Services Central Australia
<b>Ag</b>	Silver

<b>AKD</b>	Australian Kimberley Diamonds Ltd
<b>ALA</b>	Aircraft landing area
<b>ALARP</b>	As low as reasonably practicable
<b>ANC</b>	Acid neutralising capacity
<b>ANZECC</b>	Australian and New Zealand Environment Conservation Council
<b>ARD</b>	Acid rock drainage
<b>ARMCANZ 2000</b>	Agriculture and Resource Management Council of Australia and New Zealand 2000
<b>ARI</b>	Average recurrence interval
<b>AS/NZS</b>	Australian standard/New Zealand standard
<b>ASX</b>	Australian Stock Exchange
<b>Be</b>	Beryllium
<b>BEAT</b>	Barkly Employment and Training
<b>bgl</b>	Below ground level
<b>BoM</b>	Bureau of Meteorology
<b>BRADAAG</b>	Barkly Region Alcohol and Drug Abuse Advisory Group
<b>Ca</b>	Calcium
<b>CB Radio</b>	Citizens band radio
<b>CCTV</b>	Closed circuit television
<b>Cd</b>	Cadmium
<b>CFC</b>	Chlorofluorocarbon
<b>CH<sub>4</sub></b>	Methane
<b>CIB</b>	Criminal Investigation Branch
<b>CLC</b>	Central Land Council
<b>Co</b>	Cobalt

<b>CO</b>	Carbon monoxide
<b>CO<sub>2</sub></b>	Carbon dioxide
<b>CO<sub>2-e</sub></b>	Equivalent carbon dioxide
<b>Cu</b>	Copper
<b>DEC</b>	New South Wales Government Department of Environment and Conservation
<b>DERM</b>	Queensland Government Department of Environment and Resource Management
<b>DEWHA</b>	Australian Government Department of the Environment, Water, Heritage and the Arts
<b>DNRETAS</b>	Northern Territory Government Department of Natural Resources, Environment, the Arts and Sport
<b>DPI</b>	Northern Territory Government Department of Planning and Infrastructure
<b>DRDPIFR</b>	Northern Territory Government Department of Regional Development, Primary Industry, Fisheries and Resources
<b>DSO</b>	Direct shipping ore
<b>EC</b>	Electrical conductivity
<b>EHA</b>	DNRETAS Environment, Heritage and the Arts Division
<b>EIS</b>	Environmental Impact Statement
<b>EL</b>	Exploration Licence
<b>EMP</b>	Environmental management plan
<b>EMS</b>	Environmental management system
<b>EPA</b>	Northern Territory Environmental Protection Authority
<b>EPBC Act</b>	<i>Environment Protection and Biodiversity Conservation Act 1999</i>
<b>ERP</b>	Emergency response plan
<b>F</b>	Fluorine

<b>FIFO</b>	Fly-in, fly-out
<b>GIS</b>	Geographic information system
<b>GRM</b>	Groundwater Resource Management Pty Ltd
<b>H<sub>2</sub>SO<sub>4</sub></b>	Sulfuric acid
<b>HDPE</b>	High-density polyethylene
<b>HFCs</b>	Hydrofluorocarbons
<b>IMC</b>	Industrial Minerals and Chemicals Development Corporation
<b>ISO</b>	International Organization for Standardization
<b>IUCN</b>	International Union for Conservation of Nature
<b>JORC</b>	Joint Ore Reserves Committee
<b>MAK</b>	Minemakers Australia Pty Ltd ASX code
<b>MARP</b>	Mining and rehabilitation program
<b>Mg</b>	Magnesium
<b>MMP</b>	Mining management plan
<b>MSDS</b>	Material Safety Data Sheet
<b>N<sub>2</sub>O</b>	Nitrous oxide
<b>NAF</b>	Non-acid forming
<b>NEPC</b>	National Environment Protection Council
<b>NEPM</b>	National Environmental Protection Measure
<b>NGA</b>	National greenhouse accounts
<b>NGER Act</b>	<i>National Greenhouse and Energy Reporting Act 2007</i>
<b>NLC</b>	Northern Land Council
<b>NOI</b>	Notice of Intent
<b>NT</b>	Northern Territory
<b>NTES</b>	Northern Territory Emergency Service

<b>OWS</b>	Oily water separator
<b>P</b>	Phosphorous
<b>P<sub>2</sub>O<sub>5</sub></b>	Phosphorite
<b>Pb</b>	Lead
<b>PFCs</b>	Perfluorocarbon
<b>PPE</b>	Personal protective equipment
<b>PVC</b>	Polyvinyl chloride
<b>RFDS</b>	Royal Flying Doctor Service
<b>ROM</b>	Run of mine
<b>SEL</b>	Substitute Exploration Lease
<b>S</b>	Sulfur
<b>SF<sub>6</sub></b>	Sulfur hexafluoride
<b>SO<sub>2</sub></b>	Sulfur dioxide
<b>SOP</b>	Standard operating procedure
<b>Sr</b>	Strontium
<b>SWMA</b>	Surface water management area
<b>TC</b>	Tropical cyclones
<b>TDS</b>	Total dissolved solids
<b>TI</b>	Thallium
<b>TPD</b>	Trucks per day
<b>TPWC Act</b>	<i>Territory Parks and Wildlife Conservation Act</i>
<b>TSP</b>	Total suspended particulate
<b>TSS</b>	Total suspended solids
<b>TWA</b>	Time weighted average
<b>U</b>	Uranium
<b>UHF</b>	Ultra high frequency

VET	Vocational education and training
U	Uranium

## 13.3 Words

### A

**Aboriginal:** Of or pertaining to members of the Indigenous people of Australia.

**Airlift testing:** Used to determine what a well is yielding during the time period of the test, and to predict what the well will continue to yield in the future. Performed by using compressed air to lift water flowing into a well to the surface, when it gets there, it is trapped and measured as a function of time.

**Air sheds:** A geographical area that shares the same air mass due to topography, meteorology and/or climate. As such, pollutants emitted into this area may interact or increase in concentration. It typically forms an analytical or management unit, used to discuss air pollution management in the same way that catchments or watersheds are used to discuss pollution in rivers.

**Anthropocentric:** Interpreting or regarding the world in terms of human values and experiences.

**Anthropogenic:** Relating to or resulting from the influence that humans have on the natural world.

**Aquifer:** A water-bearing layer of sediment or rock.

**Archaeological site:** Cultural heritage site with physical evidence of past cultural activity visible on or in the ground.

**Artefact:** Anything made by human workmanship, particularly by previous cultures.

### B

**Backfill:** 1. *v.* To refill an excavation with the material previously removed from that excavation. 2. *n.* The material used in that backfilling.

**Best practice:** A process, technique, or use of technology, equipment or resource that has a proven record of success.

**Bore:** A well, usually less than 20 cm diameter, sunk into the ground and from which water is pumped.

**Bund:** An embankment constructed around an area to prevent the inflow or outflow of liquids.

## C

**Calcareous:** Resembling or containing calcium carbonate or limestone.

**Calcarosols:** Soils with calcium carbonate often formed on limestone. Restricted to small pockets in Central Australia, Victoria River District including Gregory National Park and Katherine and Mataranka Districts.

**Cambrian:** The first geological period of the Paleozoic era, lasting from  $542 \pm 0.3$  million years ago to  $488.3 \pm 1.7$  million years ago

**Catchment:** The entire land area from which water (e.g., rainfall) drains to a specific water course or waterbody.

**Controlled burn:** Controlled application of fire under specified environmental conditions to a predetermined area, often used to reduce fuel loads.

**CO<sub>2</sub>-equivalent:** The concentration of CO<sub>2</sub> that would cause the same level of radiative forcing as a given type and concentration of greenhouse gas.

**Cultural Heritage:** The cultural history of a region or of a people; the engagement of people with their customary practices (particularly through specific sites) in the past and in the present.

## D

**dB(A):** decibels, A-weighted scale; unit used for most measurements of environmental noise; the scale is based upon typical responses of the human ear to sounds of different frequencies.

**Dewater:** To remove water from (e.g., a mine pit or an aquifer).

**Disturbed ground:** An area of ground that has been disturbed by construction or operations activities for the project.

## E

**Emission:** A discharge of a substance (e.g., dust) into the environment.

**Ephemeral:** Having an intermittent flow, especially said of a watercourse.

**Erosion:** The wearing away of the land surface (whether natural or artificial).

## F

**Freeboard:** The vertical distance between the top of the water container and the full supply level on the container.

## G

**Ground disturbance:** Any activity that causes ground to be disturbed, i.e., excavating, trenching, traversing, or clearing ground to provide access for construction or operation of the project.



**Groundwater:** Water naturally stored beneath the surface of the earth, which saturates the pores and fractures of sand, gravel and rock formations.

## H

**Hazard:** An agent or situation capable of potentially injuring or compromising the health and safety of a person or causing damage to plant or premises.

**Hydraulic conductivity:** The volume of water that will flow in a unit time under a unit hydraulic gradient through a unit area.

## I

**Incident:** An event on site that has the potential to cause an adverse effect on:

- The safety or health of a person.
- The environment on a mining site.
- The plant or equipment on a mining site.

**Indigenous:** Persons of Australian Aboriginal and Torres Strait Islander origin.

**IUCN Red List:** The 1994 International Union for Conservation of Nature (IUCN) Red List, compiled by the World Conservation Monitoring Centre, includes more than 6,000 animal species known to be at risk and threatened with extinction.

## J

## K

**Kandosols:** Soils that are massive and earthy (formerly red, yellow and brown earths). Throughout the Northern Territory; widespread across the Top End, Sturt plateau, Tennant Creek regions and Central Australia.

**Karst:** The characteristic landform of limestone regions, typically including underground streams, sinkholes, and steep-sided gorges.

## L

## M

**Monitoring:** Systematic sampling and, if appropriate, sample analysis to record changes over time caused by impacts associated with development such as mining.

## N

## O

**Ore:** a mineral or mixture of minerals containing an element or compound in sufficient amounts for its extraction to be profitable.

## P

**Palaeozoic:** The earliest of three geologic eras of the Phanerozoic eon. The Paleozoic spanned from roughly 542 to 251 million years ago, and is subdivided into six geologic periods; from oldest to youngest they are: the Cambrian, Ordovician, Silurian, Devonian, Carboniferous and Permian.

**Particulate matter:** Material 10 microns or less in size and capable of being breathed deep into the lungs, the amount of particulate matter in the air is used as an indicator of health risk.

**PM<sub>10</sub>:** The fraction of dust with a particle size of 10 µm or less; a health indicator for the fine particles of respirable dust capable of being inhaled into the lungs.

**PM<sub>2.5</sub>:** The fraction of dust with a particle size of 2.5 µm or less; a health indicator for the very fine particles of respirable dust capable of deep penetration into the lungs and alveoli.

## Q

## R

**Rehabilitation:** The measures taken to stabilise disturbed land, such as recontouring, drainage and topsoil respreading.

**Revegetation:** The natural or active re-establishment and development of plant cover; natural revegetation (also called passive revegetation) takes place without intervention and active revegetation takes place with intervention using artificial means, such as ground preparation, fertilisation, seeding or seedling planting.

**Reverse osmosis:** The filtration process in which pressure is used to force a solution through a membrane, retaining the solute on one side and allowing the pure solvent to pass to the other. Commonly used to purify drinking water.

**Right of Way:** The prepared surface from which the pipeline construction crew can carry out the pipeline installation work.

**Rudosols:** Very shallow soils or those with minimal soil development. Includes very shallow rocky and gravelly soils across rugged terrain such as the Arnhem Plateau and also the sands of the Simpson Desert.

**Runoff:** That portion of precipitation (rain, hail and snow) that flows from a specific area as water.

## S

**Seepage:** Subsurface movement of water.

**Stockpile:** A pile used to store material (such as low-grade ore) for future use.

**Surface Water:** All water flowing over, or contained on, a landscape (e.g., runoff, streams, lakes).

## T

**Total suspended solids (TSS):** A common measure used to determine suspended solids concentrations in a waterbody and expressed in terms of mass per unit of volume (e.g., milligrams per litre).

**Traditional Owner:** A descendent of the tribe or ethnic group that occupied a particular region before European settlement.

## U

## V

**Vegetation clearing:** The removal, destruction or lopping of vegetation.

**Vertosols:** Cracking clay soils which may or may not be poorly drained. Common across coastal floodplains of the Top End, the Barkly Tableland and alluvial plains of the Victoria River District.

## W

## X

## Y

## Z

