

13. GLOSSARY

13.1 Units and Symbols

%	Percent
/a	Per annum
/cm	Per centimetre
/d	Per day
/h	Per hour
/L	Per litre
/s	Per second
/wk	Per week
A\$	Australian dollars
dB(A)	Decibels (A-weighted)
dB	Decibels linear
°C	Degrees Celsius
cm	Centimetres
g/m²/month	Grams per square metre per month
GL	Gigalitres
ha	Hectare
kg	Kilogram
kL	Kilolitre
km	Kilometre
km²	Square kilometre
kt	Kilo tonne
kWh	Kilowatt hour
L	Litre

µm	Micrometre
µg/m³	Microgram per cubic metre
m	Metre
m²	Square metre
m³	Cubic metre
M	Million
mg	Milligram
ML	Mega litres
mm	Millimetre
Mt	Mega tonne
MW	Megawatt
ppm	Parts per million
t	Metric tonne
t/a	Tonnes per annum
TJ	Tera joule
US\$	United States dollar
W	Watt

13.2 Abbreviations

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

AKD	Australian Kimberley Diamonds Ltd
ALA	Aircraft landing area
ALARP	As low as reasonably practicable
ANC	Acid neutralising capacity
ANZECC	Australian and New Zealand Environment Conservation Council
ARD	Acid rock drainage
ARMCANZ 2000	Agriculture and Resource Management Council of Australia and New Zealand 2000
ARI	Average recurrence interval
AS/NZS	Australian standard/New Zealand standard
ASX	Australian Stock Exchange
Be	Beryllium
BEAT	Barkly Employment and Training
bgl	Below ground level
BoM	Bureau of Meteorology
BRADAAG	Barkly Region Alcohol and Drug Abuse Advisory Group
Ca	Calcium
CB Radio	Citizens band radio
CCTV	Closed circuit television
Cd	Cadmium
CFC	Chlorofluorocarbon
CH₄	Methane
CIB	Criminal Investigation Branch
CLC	Central Land Council
Co	Cobalt

CO	Carbon monoxide
CO₂	Carbon dioxide
CO_{2-e}	Equivalent carbon dioxide
Cu	Copper
DEC	New South Wales Government Department of Environment and Conservation
DERM	Queensland Government Department of Environment and Resource Management
DEWHA	Australian Government Department of the Environment, Water, Heritage and the Arts
DNRETAS	Northern Territory Government Department of Natural Resources, Environment, the Arts and Sport
DPI	Northern Territory Government Department of Planning and Infrastructure
DRDPIFR	Northern Territory Government Department of Regional Development, Primary Industry, Fisheries and Resources
DSO	Direct shipping ore
EC	Electrical conductivity
EHA	DNRETAS Environment, Heritage and the Arts Division
EIS	Environmental Impact Statement
EL	Exploration Licence
EMP	Environmental management plan
EMS	Environmental management system
EPA	Northern Territory Environmental Protection Authority
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i>
ERP	Emergency response plan
F	Fluorine

FIFO	Fly-in, fly-out
GIS	Geographic information system
GRM	Groundwater Resource Management Pty Ltd
H₂SO₄	Sulfuric acid
HDPE	High-density polyethylene
HFCs	Hydrofluorocarbons
IMC	Industrial Minerals and Chemicals Development Corporation
ISO	International Organization for Standardization
IUCN	International Union for Conservation of Nature
JORC	Joint Ore Reserves Committee
MAK	Minemakers Australia Pty Ltd ASX code
MARP	Mining and rehabilitation program
Mg	Magnesium
MMP	Mining management plan
MSDS	Material Safety Data Sheet
N₂O	Nitrous oxide
NAF	Non-acid forming
NEPC	National Environment Protection Council
NEPM	National Environmental Protection Measure
NGA	National greenhouse accounts
NGER Act	<i>National Greenhouse and Energy Reporting Act 2007</i>
NLC	Northern Land Council
NOI	Notice of Intent
NT	Northern Territory
NTES	Northern Territory Emergency Service

OWS	Oily water separator
P	Phosphorous
P₂O₅	Phosphorite
Pb	Lead
PFCs	Perfluorocarbon
PPE	Personal protective equipment
PVC	Polyvinyl chloride
RFDS	Royal Flying Doctor Service
ROM	Run of mine
SEL	Substitute Exploration Lease
S	Sulfur
SF₆	Sulfur hexafluoride
SO₂	Sulfur dioxide
SOP	Standard operating procedure
Sr	Strontium
SWMA	Surface water management area
TC	Tropical cyclones
TDS	Total dissolved solids
TI	Thallium
TPD	Trucks per day
TPWC Act	<i>Territory Parks and Wildlife Conservation Act</i>
TSP	Total suspended particulate
TSS	Total suspended solids
TWA	Time weighted average
U	Uranium
UHF	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 ± 0.3 million years ago to 488.3 ± 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.

CO₂-equivalent: The concentration of CO₂ 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.

PM₁₀: 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_{2.5}: 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

Draft Environmental Impact Statement
Wonarah Phosphate Project