TNG LIMITED

GHD

TNG Limited

Mount Peake Project

Draft Environmental Impact Statement

Volume I

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Volume I

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Abbreviations

Abbreviation	Definition
AAPA	Aboriginal Areas Protection Authority
ABS	Australian Bureau of Statistics
Al_2O_3	Aluminium oxide
AMD	Acidic and/or Metalliferous Drainage
ANC	Acid Neutralising Capacity
ANCOLD	Australian National Committee on Large Dams
ANZECC	Australian and New Zealand Environment and Conservation Council
AS	Australian Standard
AWS	Automatic weather station
BOM	Bureau of Meteorology
BS	British Standard
BWRO	Brackish water reverse osmosis
CBP	Community Benefits Plan
CDRC	Central Desert Regional Council
CEMP	Construction environmental management plan
CEO	Chief Executive Officer
CH_4	Methane
CLC	Central Land Council
CO_2	Carbon dioxide
CO	Carbon monoxide
CMS	Cleaner Magnetic Separators
CTD	Central Thickened Discharge
dBA	Decibel A-weighting
DECC	New South Wales Department of Environment and Climate Change
DLRM	Northern Territory Department of Land Resource Management
DotE	Commonwealth Department of the Environment
DME	Northern Territory Department of Mines and Energy
DMP	Western Australian Department of Mines and Petroleum
EA Act	Northern Territory *Environmental Assessment Act 1982*
EIL	Ecological investigation levels

Abbreviation	Definition
EIS	Environmental Impact Statement
EL	Exploration Lease
EMP	Environmental Management Plan
EMR	Environmental Mining Report
EPA	Environment(al) Protection Authority
EPBC Act	Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*
ESIA	Economic and Social Impact Assessment
ESCP	Erosion and Sediment Control Plan
Fe	Iron
FeS_2	Sulphide pyrite
FIFO	Fly-in fly-out
GDE	Groundwater dependant ecosystem
GWh	Gigawatt Hours
h	Hour
H_2SO_4	Sulphuric Acid
ha	Hectares
HFC	Hydrofluorocarbons
HPGR	High Pressure Grinding Rolls
IAIA	International Principles for Social Impact Assessment
IAP2	International Association for Public Participation
ICNG	NSW Interim Construction Noise Guidelines
ILOC	Indigenous Location
INP	New South Wales Industrial Noise Policy
ISP	International Organization for Standardization
IUCN	International Union for Conservation of Nature
JORC	Joint Ore Reserves Committee
kg	Kilogram
km	Kilometre
kt	Kilotonne
kVA	Kilo volt amps
kWh	Kilowatt-hour
L	Litres

Abbreviation	Definition
LAeq	A-weighted equivalent sound pressure level in dB
LGA	Local government authority
L/s	Litres per second
m	Metres
m^2	Square metre
M^3	Cubic metre
Ma	Million years
MCP	Mine Closure Plan
Mm^3	Millions of cubic metres
mm	Millimetre
MMF	Multi-media filter
MMP	Mining Management Plan
ML	Million litres
MLA	Mineral Lease Application
MLpa	Million litres per annum
MNES	Matter of National Environmental Significance
MPA	Maximum Potential Acidity
Mt	Million tonnes
Mtpa	Million tonnes per annum
MW	Mega watts
N_2O	Nitrous oxide
NAF	Non-acid Forming
NAPP	Net Acid Producing Potential
NEPC	National Environment Protection Council
NEPM	National Environment Protection Measure
NGER Act	*National Greenhouse and Energy Reporting Act*
NO_2	Nitrogen dioxide
NO_X	Oxides of nitrogen
NPI	National Pollutant Inventory
NRETAS	Northern Territory Department of Natural Resources, Environment, the Arts and Sport
NSW	New South Wales
NT	Northern Territory

Abbreviation	Definition
NZS	New Zealand Standard
OEMP	Operations environmental management plan
PAF	Potentially acid forming
PEM	Protocol for Environmental Management
PFC	Perfluorocarbon
PJpa	Petajoules
$PM_{2.5}$	Particulate Matter up to 2.5 micrometres in size
PM_{10}	Particulate Matter up to 10 micrometres in size
PMST	Protected matters search tool
PPL	Perpetual Pastoral Lease
ppm	Parts per million
PPV	Peak particle velocity
RJCP	Remote Jobs and Communities Program
RNP	Road Noise Policy
ROM	Run of mine
S	Sulphur
s	Second
SEPP-AQM	Victorian State Environment Protection Policy (Air Quality Management)
SF_6	Sulphur hexafluoride
SiO_2	Silicon dioxide
SOCS	Sites of Conservation Significance
SSC	State suburb
t	Tonnes
TAPM	The Air Pollution Model
Ti	Titanium
TiO_2	Titanium dioxide
TJ	Terajoules
TNG	TNG Limited
tpa	Tonnes per annum
TPWC Act	*Territory Parks and Wildlife Conservation Act 2009*
TSF	Tailings storage facility
TSP	Total suspended particulates

Abbreviation	Definition
V_2O_5	Vanadium pentoxide
V	Vanadium
VDV	Vibration dose value
VOC	Volatile organic compounds
WDL	Waste Discharge Licence
WMP	Weed Management Plan/ Workforce Management Plan
WMPC Act	Northern Territory *Waste Management and Pollution Control Act*
WONS	Weeds of national environmental significance
WRD	Waste rock dump
wt%	Weight percent
w/w	Weight for weight
XRF	X-ray fluorescence
µm	Micrometre
%	Percent
%ile	Percentile
>	Greater than
°C	Celsius

Glossary

Term	Definition
Dewatering	Removal of water by pumping to allow mining below the water table
Drawdown	A lowering of groundwater level caused by pumping or the action of a pit void
Environmental pollutants	A substance or energy introduced into the environment that has undesired effects, or adversely affects the usefulness of a resource
Ephemeral	Flora with a short life cycle that germinate as a result of favourable conditions (e.g. fire, rainfall)
Evapotranspiration	The process by which water is transferred from the land to atmosphere by evaporation from the soil and other surfaces and by transpiration from plants
Flocculant	A substance which promotes the clumping of particles
Floodout	Alluvial floodplains that separate river/creek channels
Gabbro sill	A tabular sheet intrusion between older layers of sedimentary rock comprised of a course grained, dark-coloured, intrusive igneous rock

Term	Definition
Grizzly	A grating, usually constructed of steel rails, placed over the top of a chute or ore pass for the purpose of stopping large pieces of rock or ore that may hang up in the pass
Groundwater dependent ecosystem	Ecosystems which have their species composition and natural ecological processes wholly or partially determined by groundwater
Hydrocarbon	A compound of hydrogen and carbon, such as any of those which are the chief components of petroleum and natural gas
Hydrometallurgical processing	Extraction of metal from ore by preparing an aqueous solution of a salt of the metal and recovering the metal from the solution
Hydrothermal fluids	Fluids that pass through igneous rock fractures or porous spaces within the rock, altering the chemical composition
Phreatophytic	A plant, often with deep roots, that is mostly or entirely dependent on groundwater
Polymetallic ore body	An orebody of metallic minerals formed by the replacement of sedimentary, usually carbonate rock, by metal-bearing solutions in the vicinity of igneous intrusions
Magnetite	A grey-black magnetic mineral which consists of an oxide of iron and is an important form of iron ore
Mesic	Environment or habitat containing a moderate amount of moisture
Metalliferous Drainage	Refers to the outflow of acid water from metal mines
Metasediments	Sediment or sedimentary rock that has been subjected to metamorphism
Open-cut	A mine working in which excavation is performed from the surface to extract ore
Palaeovalley	Buried valley systems cut into bedrock
Peak Particle Velocity	The maximum instantaneous positive or negative peak of the vibration signal
Putrescible waste	Solid waste that contains organic matter capable of being decomposed by microorganisms and of such a character and proportion as to cause obnoxious odours and to be capable of attracting or providing food for birds or animals
Regolith	A layer of loose, unconsolidated solid material covering bedrock
Riparian	Situated on the bank of a river or other body of water
Tailings	Ground rock and process effluents that are generated due to mineral processing
Vibration Dose Value	Vibration parameter that combines the magnitude of the vibration and the time for which it occurs
Volatile Organic Compound	Carbon based chemicals that evaporate or can easily get into the air at room temperature
Wet Mess	Camp kitchen/recreation area for the provision of alcoholic beverages