

ABBREVIATIONS AND GLOSSARY

I. Abbreviations

Common Terminology

DFS	Definitive Feasibility Study
DME	Department of Mines and Energy
EIA	Environmental Impact Assessment
EIS	Environmental Impact Statement
EL	Exploration Licence
EMP	Environmental Management Plan
EPA	Environment Protection Authority
JBMP	Jervois Base Metal Project
ML	Mineral Lease
MLA	Mineral Lease Application
NOI	Notice of Intent
NT	Northern Territory
NT EPA	Northern Territory Environment Protection Authority
PFS	Pre-Feasibility Study
ToR	Terms of Reference
TSF	Tailings Storage Facility

Abbreviations

AA	Access Authority
AADT	Annual Average Daily Traffic
AAPA	Aboriginal Areas Protection Authority
AASA	Aboriginal Sacred Sites Act 1989
ABS	Australian Bureau of Statistics
ALEC	Arid Lands Environment Centre
ALRA	Aboriginal Land Rights (Northern Territory) Act 1976
AMD	Acid mine drainage
ANZECC	Australian and New Zealand Environment and Conservation Council
ARD	Acid rock drainage
ARI	Average Recurrence Interval
AS/NZS	Australia and New Zealand Standards
ASC	Australian Soil Classification
AusRivAs	Australian Rivers Assessment System
BFMP	Bushfire Management Plan
BIBO	Bus in Bus Out
BMP	Biodiversity Management Plan
CDRC	Central Desert Regional Council
CHMP	Cultural Heritage Management Plan

CLC	Central Land Council
CO₂	Carbon Dioxide
COD	Chemical oxygen demand
DEE	Commonwealth Department of Environment and Energy
DENR	NT Department of Environment and Natural Resources
DFS	Definitive Feasibility Study
DHCS	Department of Health and Community Services
DHEM	Down hole electromagnetic (exploration surveying)
DIDO	Drive in Drive Out
DLPE	Department of Lands Planning and Environment
DME	Department of Mines and Energy
DO	Dissolved Oxygen
DSEWPC	Department of Sustainability, Environment, Water, Population and Communities
EA Act	Environmental Assessment Act 1982
EAAP	Environmental Assessment Administrative Procedures 1984
EAU	Environmental Assessment Unit
ECEC	Effective Cation Exchange Capacity
EIA	Environmental Impact Assessment
EIS	Environmental Impact Statement
EL	Exploration Licence
ELDO	European Launcher Development Organisation
ELR	Exploration Licence in Retention
EMEL	Extractive Mineral Exploration Licence
EML	Extractive Mineral Lease
EMP	Environmental Management Plan
EOP	Environmental Offset Policy
EPA	Environment Protection Authority
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999
EPBC PMST	EPBC Protected Matters Search Tool
EPBC Regulation	Environmental Protection and Biodiversity Conservation Regulations 2000
ERA	Environmental Risk Assessment
ESCP	Erosion and Sediment Control Plan
ESD	Ecologically Sustainable Development
ESIA	Economic and Social Impact Assessment
ESP	Exchangeable Sodium Percentage
EVs	Environmental Values
FIFO	Fly-in Fly-out
FTE	Full Time Equivalent
GDE	Groundwater Dependent Ecosystems
GHG	Greenhouse Gas
GIS	Geographic information system
GL	Gigalitres

GWP	Global Warming Potential
IAP2	International Association for Public Participation
IBRA	Interim Biogeographical Regionalisation for Australia
ICN	Industry Capability Network
ILUA	Indigenous Land Use Agreement
ISO	International Organization for Standardization
JBMP	Jervois Base Metal Project
JORC	Joint Ore Reserves Committee
KCI	Potassium Chloride
LGA	Local Government Area
LOM	Life of Mine
LoS	Level of Service
MA	Mineral Authority
MC	Mineral Claim
MIA	Mine Infrastructure area
ML	Mineral Lease
MLA	Mineral Lease Application
MM Act	Mining Management Act 2001
MM Regs	Mining Management Regulations
MMP	Mining Management Plan
MNES	Matters of National Environmental Significance
MOU	Memorandum of Understanding
MRCP	Mine Rehabilitation and Closure Plan
MSDS	Material Safety Data Sheet
MT Act	Mineral Titles Act
MT Regs	Mineral Titles Regulations
NAF	Non-Acid Forming
NAFI	North Australia Fire Information
NAG	Net Acid Generation (test)
NAG_(pH4.5)	NAG acidity titrated to pH 4.5 in kg H ₂ SO ₄ /t
NAG_(pH7.0)	NAG acidity titrated to pH 7.0 in kg H ₂ SO ₄ /t
NAGpH	pH of NAG solution before titration
NARP	Northern Australia Roads Program
NEPC	National Environment Protection Council
NEPM	National Environment Protection Measure
NGA	The National Greenhouse Accounts
NGER	National Greenhouse and Energy Reporting Act 2007
NGGERA	National Greenhouse Gas and Energy Reporting Act 2007
NGO	Non-Government Organisation
NNTT	National Native Title Tribunal
NOI	Notice of Intent
NPI	National Pollution Inventory
NT EPA	Northern Territory Environment Protection Authority

NTCA	Northern Territory Cattlemen’s Association
NTDIPL	NT Department of Infrastructure, Planning and Logistics
PAF	Potentially acid forming
PER	Public Environmental Report
PFA	Project Facilitation Agreement (major project status)
PFS	Pre-Feasibility Study
PM₁₀	Particulate Matter 10 micrometres or less in diameter
PM_{2.5}	Particles Matter less than 2.5 µm (0.0025 mm) in diameter
PWC	Power and Water Corporation
REDC	Regional Economic Development Committee
ROM	Run of Mine
S	Sulphur
SAG	Semi-Autogenous Grinding
SEWPAC	Department of Sustainability, Environment, Water, Population and Communities
SIA	Social Impact Assessment
SIMP	Social Impact Management Plan
SO₄	Sulphate
SOBS	Sites of Botanical Significance
SoCs	Sites of Conservation Significance
TDS	Total Dissolved Solids
TECs	Threatened Ecological Communities
ToR	Terms of Reference
TPWC Act	Territory Parks and Wildlife Conservation Act 2000
TPWC Regs	Territory Parks and Wildlife Conservation Regulations xxxx
TSF	Tailings Storage Facility
TSSC	Threatened Species Scientific Committee
UC	Uncertain
UNFCCC	United Nations Framework Convention on Climate Change
WHS Act	Work Health and Safety (National Uniform Legislation) Act
WHS Regulations	Work Health and Safety (National Uniform Legislation) Regulations
WM Act	Weeds Management Act 2001
WM Regs	Weeds Management Regulations
WMPCA	Waste Management and Pollution Control Act
WoNS	Weeds of National Significance
WRD	Waste Rock Dump

II. Units of Measurement

%	Percentage
°C	Degrees Celsius
µm	Micrometre
dS	Deci Siemen
g	Gram
ha	Hectare
kg	Kilogram
kL	kilolitre (10 ³ litres)
km	kilometre
km/h	kilometres per hour
km²	square kilometre
ktpa	Kilo tonnes per annum
L	Litre
L/s	litres per second
m	Metre
m²/d	metres squared per day
m³	cubic metre
m³/d	cubic metres per day
m³/s	cubic metres per second
mAHD	metres above Australian Height Datum
mBGL	metres Below Ground Level
mg	Milligram
ML	megalitre (10 ⁶ litres)
ml	Millilitre
ML/a	megalitre per year
mm	Millimetre
mm/d	millimetre per day
mt	million tonnes
MW	Mega Watt
t	Tonne
pF	log scale for representing soil matric potential

III. Glossary

Term	Description
Acidity	Latent acidity is a hidden stock of potential or future acid generation, based on a range of factors including local environmental geochemical conditions
AMD	A result of the exposure of some sulfide minerals to oxygen and water, resulting in drainage waters that can be acidic and/or have high concentrations of dissolved metals. The drainage produced from the oxidation process may be acidic or neutral, with or without dissolved heavy metals, but always contains sulfate.
Anthropogenic	Produced by humans or human-related activity
Aquifer	A subsurface feature containing permeable water-bearing material which will yield a usable volume of groundwater. If yields are unsustainable or the water quality is not suitable for its desired use then it would be referred to as a water bearing zone.
Bund	An embankment that is constructed around an area and/or structure that is designed to prevent inflow or outflow of various liquid types. Can also be referred to as “a bund wall” or “bundling”.
Catchment	A structure or topographic land feature which collects water.
Capping	To cover waste rock/overburden with a sealant (low permeable) material such as clay in order to prohibit (or reduce) the ingress of water and/or air.
Corrective Action	Management strategies that are to be implemented in the event that targets and objectives are not being achieved.
Curtilage	The area of land occupied by a dwelling and its yard and outbuildings, is enclosed or considered as enclosed
dB(A)	Frequency weighting filter used to measure ‘A-weighted’ sound pressure levels, which conforms approximately to the human ear response, as our hearing is less sensitive at very low and very high frequencies
Decibel	The unit used for expressing the sound pressure level (SPL) or power level (SWL) in acoustics
Endorheic basin	Closed drainage basin retains water and allows no outflow
Emissions	The release of material into the environment (dust or gas)
Equivalent sound pressure level	The steady sound level that, over a specified period, would produce the same energy equivalence as the fluctuating sound level occurring
Embankment	A ridge constructed of earth, fill, rocks or gravel and used most commonly to retain water. The length of an embankment exceeds both its width and its height.
Ephemeral	Watercourse flows that are short-lived and often reliant upon direct precipitation input.
Evapotranspiration	The movement of water to the air from sources such as soil, plants and water bodies.
Exploration	The task of identifying areas that may contain viable mineral resources. This can include such activities as surface mapping, remote sensing, exploratory drilling, geophysical testing, geochemical testing and other activities.
Decommissioning	The process of shutting a mine after cessation of mining activities. This involves the removal of buildings, equipment and other redundant

	infrastructure. Upon completion of decommissioning activities, the site will then be rehabilitated (refer separate definition).
Freeboard	The vertical distance between the surface level of the water in a storage facility and the upper surface of the storage facility. In the case of this Project, such facilities include dams or other related facilities such as the tailings storage facility.
Greenhouse Gases	Gases that accumulated within the Earth's atmosphere which contribute to global climatic change/global warming
Geochemistry	The science which uses the tools and principles of chemistry to explain the mechanisms behind major geological systems.
Hazardous Substance	A chemical, substance or material used in the workplace, which has the potential to cause injury or have an adverse effect on a person's health. Hazardous substances are listed in the code of practice for managing risks of Hazardous Chemicals in the workplace and classified only based on immediate or long-term health effects.
Hierarchy of controls	A defined order which is based on the effectiveness for implementing controls to mitigate risk (e.g. elimination, substitution, isolation, engineering, administration and personal protective equipment)
Hydraulic conductivity	The rate (or ability) which water can move through pore spaces or fractures. Such rate depends on the intrinsic permeability of the material and on the degree of saturation.
Impermeable Layer	An impermeable layer of rock, sediment, soil or manmade material that does not allow water to pass through it. Also referred to as an aquiclude.
Indigenous land use agreement.	A formal agreement under the Native Title Act that contemplates access to land for the purposes of mining, mineral processing, and the placement of associated infrastructure
JORC Code	Guidelines for public reporting of Exploration Results, Mineral Resources and Ore Reserves
Long term stockpile	Stockpiled ore scheduled for processing during life of mine
Mineral Resources	Defined under the JORC Code as concentration of solid material of economic interest in such form, quality and quantity that there are reasonable prospects of economic extraction
Mineral Titles Act	Legislation that regulates mineral exploration and mining titles in the Northern Territory
Monitoring Programs	Programs implemented to allow early detection of adverse environmental impacts (includes analysing, assessing, examining, inspecting, measuring, modelling and/or reporting).
Net acid producing potential	Indicates if a material has the potential to generate acid rock drainage. It represents the balance between the capacity of a sample to generate acid (TAPP) and its capacity to neutralise acid (ANC). The NAPP is also expressed in units of kg of H ₂ SO ₄ per tonne of ore and is calculated as follows: NAPP = TAPP-ANC.
Non – Acid forming	A description for material not expected to produce acid
Jervois Project or the project	Comprises the development of the proposed Jervois site

Jervois site	The collective term refers to the project site including all components - mine site, processing site, borefield area, accommodation village, access roads, utilities corridors (potable water pipeline, water supply pipeline, power lines)
Ore	Ore used in the context of this document is a generic term for mineralisation, or metal-bearing mineral or rock
Ore Reserves	Defined under the JORC Code as the economically mineable part of Measured and/or Indicated Mineral Resources
Ore Processing	Crushing and separating ore into valuable substances or waste by any of a variety of techniques
Overburden	Non-ore bearing material overlying and surrounding the ore.
Oxidation	A chemical reaction in which substances combine with oxygen.
Peak Flow	The maximum instantaneous discharge of a stream or other form of water course at a specific location.
Performance Indicators	Measures by which all anticipated and potential impacts can be measured.
Permeability	A measure of how well a material can transmit water. Materials such as gravel, that transmit water quickly, have high permeability values. Permeability is primarily determined by the size of the pore spaces and their degree of interconnection.
pH	A measure of the acidity (pH<7) or alkalinity (pH>7) of water based upon a scale that ranges between 0 and 14, with 7 representing neutral conditions.
Relevant Legislation, Guidelines and Standards	Applicable NT and/or Commonwealth Acts, Regulations or supporting guidelines which prescribe performance standards for planning approvals and permits; and mine construction, operations and closure phases. Industry standards that either prescribe (via legislation) required performance standards or provide guidance on desired performance.
Risk	A function of the likelihood and severity of an impact (positive or negative) on public health, safety or the environment
Spontaneous Combustion	A natural process which occurs when certain rock types can undergo chemical reactions when exposed to air or water. The result of the reaction can release smoke and sulphur dioxide.
Spillway	A weir, channel, conduit, tunnel, gate or other structure designed to permit discharges from the reservoir when pondage levels rise above freeboard storage levels. These can include secondary, auxiliary, or emergency spillways or fuse plugs.
Section	A section reference within the report
Topography	The land forms or surface configuration of a region.
The project	Jervois Base Metal Project