TNG LIMITED

DRAFT ENVIRONMENTAL IMPACT STATEMENT

DARWIN PROCESSING FACILITY

TABLE OF CONTENTS AND GLOSSARY

TABLE OF CONTENTS

LIST OF APPENDICES

LIST OF FIGURES

LIST OF TABLES

GLOSSARY 1 – PROJECT TERMINOLOGY

Term	Meaning
The Project, Darwin Processing Facility, Processing Facility	The proposed construction and operation of the Darwin TIVAN® Processing Facility.
The Project area, can also be referred to as the Site	Lot 1817, Hundred of Ayers, Middle Arm Industrial Precinct, Wickham, NT. The Project area is approximately 507 hectares (ha) of which 40 ha is mangrove forest and intertidal zone, and 467 ha is terrestrial land.
Concentrate	Magnetite concentrate from the Mount Peake mine site.
Development Envelope	That part of the Project area that will be impacted by any development activities. The envelope, in hectares, includes the proposed buildings, infrastructure, associated access roads and services. The Development Envelope is approximately 264 ha.
Direct Environmental Impact	Impact caused by direct interaction of the Project with the Environment, at the same time and in the same place as construction and/ or operation activities are occurring.
Environmental Aspect	Element of an organisation's activities, products or services that can interact with the environment.
Indirect Environmental Impact	Impact which is not a direct result of construction and/or operation activities. Generally occurs outside of the Development Envelope and may be realised through relatively complex pathways. Sometimes referred to as second or third level impacts, or secondary impacts.
Proponent	TNG Limited.
Northern peninsula	Northern part of Lot 1817, location of support infrastructure for the Processing Facility.
Southern peninsula	Southern part of Lot 1817, location of the major parts of the Processing Facility, along with some support infrastructure.

GLOSSARY 2 – ACRONYMS, ABBREVIATIONS AND DEFINITIONS

Abbreviation	Meaning
AAPA	Aboriginal Areas Protection Authority
AASS	Actual Acid Sulfate Soils
ABS	Australian Bureau of Statistics
AHD	Australian Height Datum
ANZG	Australian and New Zealand Guideline
ASS	Acid Sulfate Soils
BCF	Burrell Creek Formation
BHC	Benthic Habitat and Communities
BMP	Biodiversity Management Plan
BoM	Bureau of Meteorology
BU	Beneficial Use
CBD	Central Business District
CH_4	Methane
Cl_2	Chlorine gas
CO	Carbon monoxide
CO_2	Carbon dioxide

Abbreviation	Meaning
$CO_{2\ eq}$	Carbon dioxide equivalent
CoPC	Contaminant of Particular Concern
CR	Critically Endangered
CSM	Conceptual Site Model
DD	Data Deficient
DENR	Department the Environment and Natural Resources
DLRM	Department of Land Resource Management
DO	Dissolved Oxygen
DoEE	Department of the Environment and Energy
DPIR	Department of Primary Industry and Resources
DVG	Default Value Guideline
EA Act	Environmental Assessment Act 1982
EC	Electrical Conductivity
EIA	Environmental Impact Assessment
EIS	Environmental Impact Statement, comprises: • Draft EIS (subject to public exhibition), • Supplement (addressing written comments of the Draft EIS) • Further info requested by NT EPA
EMP	Environment Management Plan
EN	Endangered
Environmental Factors	Aspects of the environment as defined by the NT EPA
EP Act	Environment Protection Act 2019
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999
EPBC Regulations	Environment Protection and Biodiversity Conservation Regulations 2000
EQC	Environmental Quality Criteria
EQG	Environmental Quality Guideline
EQI	Environmental Quality Indicators
EQO	Environmental Quality Objectives
EQS	Environmental Quality Standard
ESCP	Erosion and Sediment Control Plan
ESD	Ecologically sustainable development as defined in Australia's National Strategy for ESD (1992)
Fe	Iron
Fe_2O_3	Iron (III) oxide / Ferric oxide
FMP	Fire Management Plan
GHG	Greenhouse gas
GSD	Gross Domestic Product
GSP	Gross State Product
HAT	Highest Astronomical Tide
HCl	Hydrochloric acid
HD	Highly Disturbed
HEV	High Ecological Value

Abbreviation	Meaning
IBC	Intermediate Bulk Container
IBRA	Interim Biogeographic Regionalisation for Australia
LAT	Lowest Astronomical Tide
LEP	Level of Ecological Protection
LGA	Local Government Area
LNG	Liquid Natural Gas
Ma	Marine
MAH	Monocyclic Aromatic Hydrocarbons
Mi	Migratory
MNES	Matters of National Environmental Significance, as listed under the EPBC Act
MSDS	Material Safety Data Sheet
NAG	Net Acid Generation
NEPC	National Environment Protection Council
NEPM	National Environment Protection Measure
NES	(matters of) National Environmental Significance,
NHMRC	National Health and Medical Research Council
NO_2	Nitrogen dioxide
NOI	Notice of Intent
NPUG	Non-potable Groundwater Use Guidelines
NRETAS	NT Department of Natural Resources, Environment, The Arts and Sport
NT	Northern Territory
NT EPA	Northern Territory Environmental Protection Authority
NTG	Northern Territory Government
NTU	Nephelometeric Turbidity Unit
NWQMS	National Water Quality Monitoring Strategy
N_2O	Nitrous oxide
MEQMMP	Marine Environmental Quality Monitoring and Management Plan
O_3	Ozone
O2M	O2 Marine Consultants
PAH	Polynuclear Aromatic Hydrocarbons
PASS	Potential Acid Sulfate Soils
POL	Petrol, oil and lubricants
PV	Photovoltaic
ROV	Remotely operated vehicle
SEIA	Socio-Economic Impact Assessment
ESIMP	Economic and Social Impact Management Plan
SMD	Slightly to Moderately Disturbed
SO_2	Sulfur dioxide
SO_3	Sulfur trioxide
SoCS	Sites of Conservation Significance
TDS	Total Dissolved Solids

Abbreviation	Meaning
TiO_2	Titanium dioxide
TOR	Terms of Reference; as prepared by the NT EPA for the proposed Project identifying the matters to be addressed in the EIS
TDS	Total dissolved solids
TIVAN®	TIVAN® leach circuit – TNG's proprietary TIVAN® Process is a hydro-extraction process designed to produce very high-purity vanadium pentoxide, titanium dioxide and iron oxide
TNG	TNG Limited
TPH	Total Petroleum Hydrocarbons
TPWC Act	Territory Parks and Wildlife Conservation Act 2000 (NT)
TRH	Total Recoverable Hydrocarbons
TSF	Tailings Storage Facility
UTM	Universal Transverse Mercator
VA	Vegetation Association
V_2O_5	Vanadium pentoxide
VU	Vulnerable
WQO	Water Quality Objective
WQPP	Darwin Harbour Water Quality Protection Plan

GLOSSARY 3 – LIST OF UNITS

Unit	Meaning
%	Percentage
$^o/_{oo}$	Per-mile
°	Degree
GL	Gigalitre
GL/yr	Gigalitres per year
ha	Hectare
kL/h	Kilolitre per hour
km	Kilometre
kPa	Kilopascals
kW	Kilowatt
L/s	Litres per second
m	Metre
mbgl	Metres below ground level
mg/L	Milligram per litre
mm	Millimetre
ML	Megalitre – million litres
m/d	Metre per day
m/m	Metre per metre
Mt	Million tonnes

Unit	Meaning
MWh	Megawatt hour
mv	millivolts
m/y	Metre per year
m^3/hr	Metres cubed per hour
PJ/y	Petajoules per year
µg/L	Micrograms per litre
µS/cm	Microseconds per centimetre
t	Tonne (1 t = 1000kg)
tpa	Tonnes per annum
tpd	Tonnes per day
tph	Tonnes per hour
vpd	Vehicles per day