KARARA
MINING LIMITED

Karara Mining Limited

Dust Management Plan

CORP-EN-PLN-1010

20 Oct 2023

SYNOPSIS

"This document forms part of Karara Mining Limited (KML) Corporate Standards and details the management system that is required to be implemented in order to minimise adverse impacts from KML's dust generating activities."

Disclaimer

CORP-EN-PLN-1010 - KARARA CORPORATE STANDARD

REV	DESCRIPTION	ORIG	REVIEW	APPROVER	DATE
4	Issued for use	A Marais	T Ennis-John	G Oliver	08-Jun-20
5	Issued for use	A Marais	M Chen	G Trench	02-May-22
6	Issued for use	O Marino	M Chen	G Trench	20-Oct-23

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1 PURPOSE AND SCOPE

The purpose of this document (the Plan) is to ensure that air quality, in particular dust emissions, at the Greater Karara Iron Ore Project (the Project) meets legal and community requirements and does not impact the health or amenity of any person, wildlife or vegetation.

The Project consists of all Karara Mining Limited (KML) mining and processing activities along with associated infrastructure including haul roads, the railway line, the 330kV power line and the below ground raw water pipeline or any areas disturbed during mining operations, including post closure.

Dust emissions associated with KML's operations at the Geraldton Port, are managed under the Mid-West Port Authority's License to Operate approved under Part V of the *Environmental Protection Act 1986 (WA)*.

This plan supports the Environmental Management Plan – EMP (CORP-EN-PLN-1020), Environmental Plan – Flora and Vegetation Health Monitoring Plan (CORP-EN-PLN-1012), and the Dust Monitoring Procedure (CORP-EN-PRO-1005).

Occupational exposure to airborne particulates and other atmospheric contaminants will be managed as an occupational health and safety matter by the KML Safety Department.

Compliance with this plan is mandatory and applies to all KML employees and contractors.

1.1 Objectives

The objectives of this plan are to;

- Manage legal obligations and approval commitments made in relation to dust management by the relevant roles and responsibilities within KML;
- Detail dust generating activities and the control measures that shall be implemented in order to minimise these risks and potential environmental impacts; and
- Outline the incident, reporting, audits and inspection process to continuously improve KML's dust management.

2 DEFINITIONS

The following definitions in Table 1 relate to terminology used in this management plan.

Table 1: Definitions

Term	Definition
AER	Annual Environmental Report
ACAR	Annual Compliant Assessment Report
CV	Conveyor
DBCA	Department of Biodiversity Conservation and Attractions
DEM	Dust Extinction Moisture
DMIRS	Department of Mines, Industry Regulation and Safety
DSO	Direct Shipping Ore
DWER	Department of Water and Environmental Regulation
DWT	Dual Wagon Tipper
EMP	Environmental Management Plan
GIS	Geographic Information Systems
HIOP	Hinge Iron Ore Project
INX, InControl	Incident Management System
KIOP	Karara Iron Ore Project
KET	Karara Export Terminal
km	Kilometer
KMG	Kimberley Metals Group
KML	Karara Mining Limited

Term	Definition
KPI	Key Performance Indicators
kV	Kilovolt
LIC	Linear Infrastructure Corridor
MIOP	Mungada Iron Ore Project
Mtpa	Million Tons per year
MWPA	Mid-West Port Authority
NEPM	National Environment Protection Measure
PEC	Priority Ecological Community
the Plan	Dust Management Plan CORP-EN-PLN-1010
the Project	Greater Karara Iron Ore Project (KIOP, MIOP and HIOP)
SDS	Safety Data Sheet
SMP	Stakeholder Management Plan
TLO	Train Load Out
TML	Transportable Moisture Limit
TSF	Tailings Storage Facility
TVS	Train Veneering System
WA	Western Australia
WRD	Waste Rock Dump
$\mu g/m^3$	microgram / cubic meter

3 PLANNING

3.1 Legal and Other

KML shall manage dust emissions in accordance with the requirements of Ministerial Statements 805, 806 and 986 (Karara, Mungada and Hinge Iron Ore Projects, respectively) and the Environmental Licence (L8721/2013/2) for the Beneficiation Plant. In addition, the following acts and associated approvals are also to be complied with;

- *Environment Protection and Biodiversity Conservation Act 1999 (Commonwealth)*
- *Environmental Protection Act 1986 (WA)*
- *Mining Act 1978 (WA)*
- *Conservation and Land Management Act 1984 (WA)*
- *Biodiversity Conservation Act 2016 (WA)*
- *National Environment Protection (National Pollutant Inventory) Measure (Commonwealth)*
- *Environmental Protection (NEPM-NPI) Regulations 1998 (WA)*
- *NEPM: Ambient Air Quality 2003 (Commonwealth)*

Note that Karara Export Terminal operates under the Mid-West Port Authority's (MWPA) Licence to Operate (L4275/1982/15).

For a detailed explanation of how each of the above acts relates to the Project, refer to the Environmental Legal Register, or contact the KML Environment Department.

3.2 Roles and Responsibilities

All KML employees and Contractors are required to comply with this Plan through its implementation at all times. The main body of this Plan should be referred to where clarification is required. Table 2 provides a summary of the relevant roles and responsibilities that are required to implement this plan.

Table 2: Roles & Responsibilities

Role	Responsibility
KML General and Area Managers	• Accountable for all life of mine related dust matters • Ensure the requirements of this plan are implemented by all employees and contractors within their area • Ensure personnel are trained and inducted in accordance with this plan's requirements prior to commencement of works
KML General Manager – HSEC	• Overall responsibility for development, implementation, maintenance and compliance with this plan • Provide advice and support to the Area Managers to ensure compliance with this plan • Overall responsibility to ensure risks and impacts relating to dust are regularly assessed and effective control measures implemented • Overall responsibility to ensure that KML meets its legal obligations, objectives, targets and KPI's in relation to dust management • Facilitate environmental auditing and compliance monitoring • Regularly review effectiveness and implementation of this plan • Report to Senior Management on matters that may result in potential non-compliances to this plan
KML Environment Department	• Overall responsibility to provide environmental advice and assistance to personnel to ensure compliance to this plan • Liaise with Area Managers and Supervisors to identify potential dust sources associated with day-to-day operations and implementing effective dust controls to minimise dust generation • Co-ordinate the delivery of environmental training and toolboxes relating to dust management to key personnel • Co-ordinate and facilitate onsite environmental personnel to undertake environmental compliance activities including implementing dust controls and dust monitoring • Assist with investigation of environmental dust hazards and incidents and co-ordination of corrective and preventative actions, as required • Implement environmental inspections and audit schedule, oversee closeout of associated corrective and preventative actions from incidents • Co-ordinate reporting requirements, internal and external, of performance against this plan, dust objectives and targets and KPI's

Role	Responsibility
KML Employees and Contractors	• Full compliance with this plan and directions given by the KML Environment Department • Aware of responsibilities with respect to dust management actions and contingency measures outlined in this plan • Identify and risk assess potential dust sources within work areas and implement relevant dust control measures to minimize dust generated • Complete regular environmental training and toolboxes in relation to dust management • Report observed hazards and incidents relating to dust and non-compliances with this plan • Assist in audits and inspections to monitor compliance with this plan

3.3 Competence, Training and Awareness

All KML Personnel, Contractors and Sub-Contractors must undertake mandatory inductions prior to commencing work on site. Information on the management of dust and on site reporting requirements are detailed in KML's online and site specific inductions.

All KML employees and contractors shall undergo annual awareness training for dust management that details the management actions to be implemented to control dust emissions, the risks when management controls are not in place, performance of dust management over time and the integration of dust management into work practices.

Awareness training and toolboxes provide a forum at which personnel can raise issues regarding air quality and dust emissions, with attendance records submitted to the KML Environment Department. Dust awareness programs will also be displayed in key viewing areas (e.g. kitchen mess areas and workshops).

4 IMPLEMENTATION AND OPERATION

4.1 Context

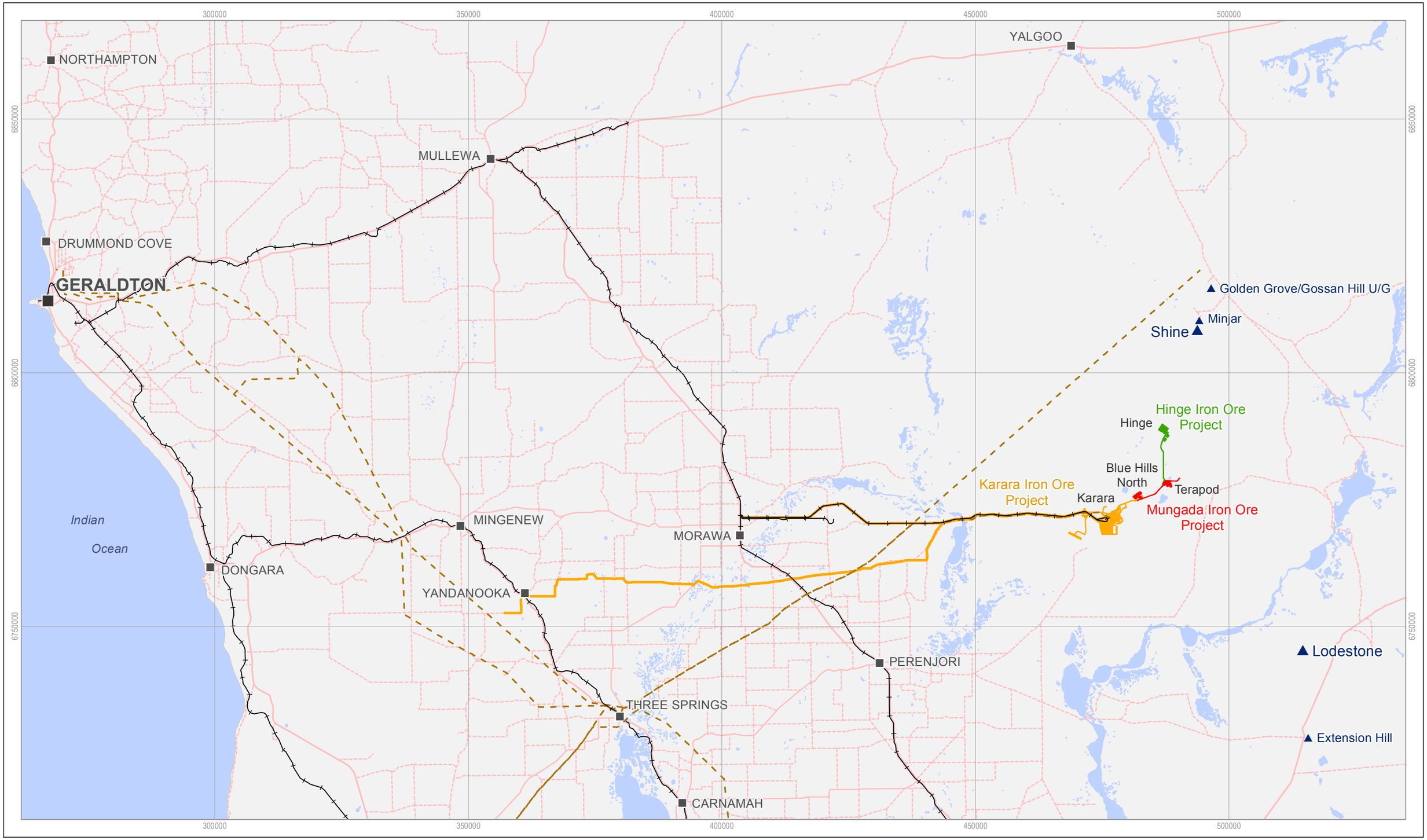
The Project is located in the Mid-West region of Western Australia, approximately 225 km east-southeast of Geraldton and 320 km north-northeast of Perth (Figure 1). The Project is situated on unallocated crown land (formerly pastoral leases) that are managed for the purpose of conservation by the Department of Biodiversity, Conservation and Attractions (DBCA).

The Project consists of the Karara Iron Ore Project (KIOP), being the Karara magnetite deposit and its associated mining and processing facility, linear infrastructure corridor and port infrastructure to process iron ore. KML also manage satellite mines, these include the Mungada Iron Ore Project (MIOP), and the Hinge Iron Ore Project (HIOP). The MIOP consists of the Blue Hills North and Terapod deposits. Both MIOP and HIOP projects are no longer operational and have entered their closure phase.

The Project's magnetite ore is mined from KIOP then undergoes a beneficiation process, which includes crushing, grinding and magnetic separation, to produce final magnetite concentrate. Concentrate is transported via rail to the Karara Export Terminal (KET) at Geraldton Port for export. A schematic of the process is provided as Figure 2 below.

The Project allows for a minimum operating lifespan of 40 years with opportunity to increase mine life as additional satellite projects are developed and approved over time.

Figure 1: Project Location



19 April 2017

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FIGURE 1

Project Location

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Legend

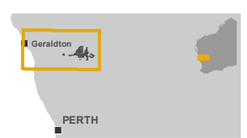
- Locality
- Prospect/Mine
- Waterbody
- Karara Iron Ore Project (KIOP)
- Mungada Iron Ore Project (MIOP)
- Hinge Iron Ore Project (HIOP)
- Railway
- Powerline
- Principal Road
- Secondary Road
- Minor Road

NORTH

0 kilometres 20

1:700,000

GDA 1994 MGA Zone 50



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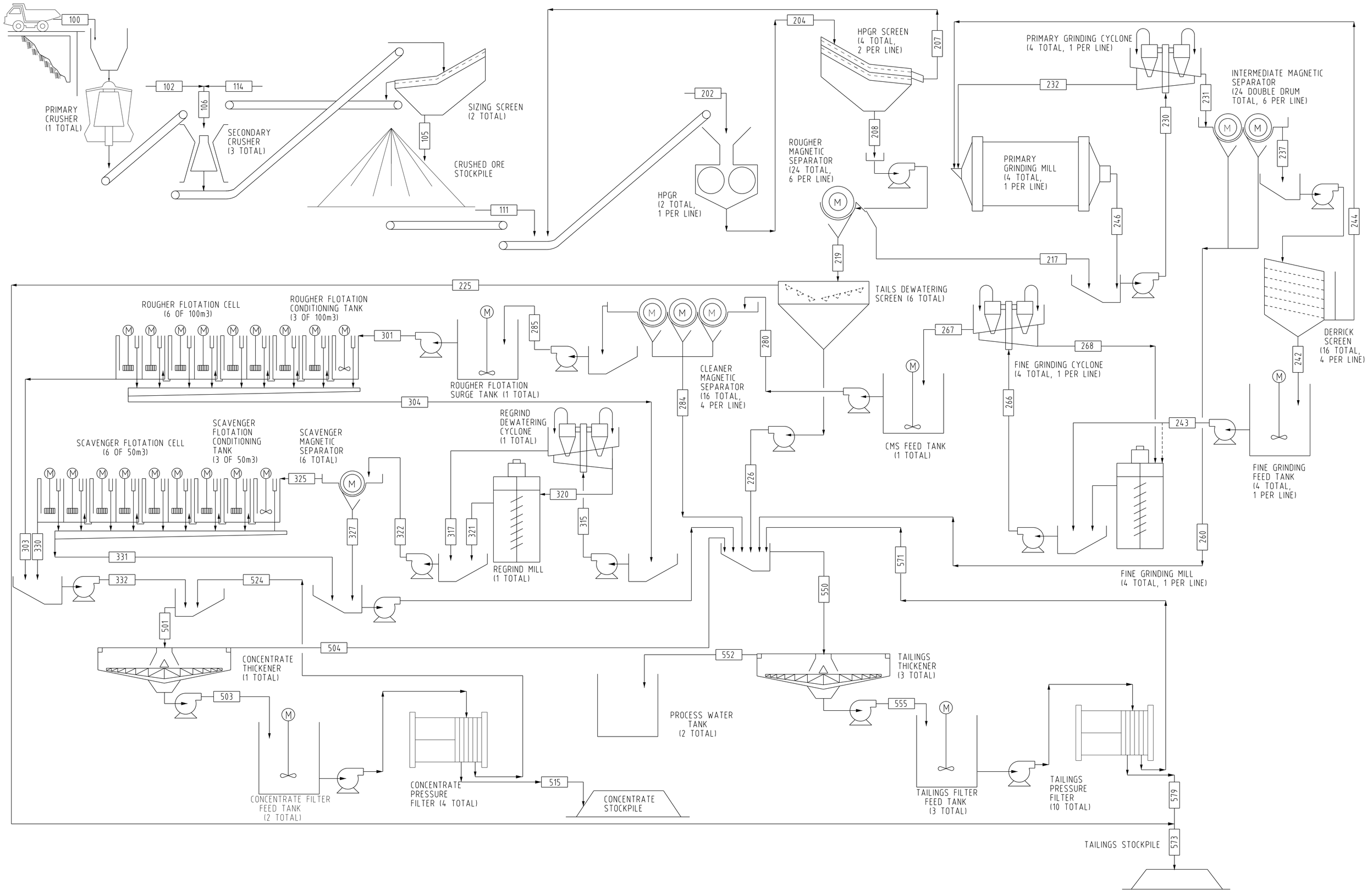
TS-ENV-Dust MP_Project Overview KIOP MIOP HIOP-JB-19Apr2017

Figure 2: Project Schematic


100
PRIMARY CRUSHER (1 TOTAL)
102
106
114
SECONDARY CRUSHER (3 TOTAL)
105
SIZING SCREEN (2 TOTAL)
CRUSHED ORE STOCKPILE
111
202
HPGR (2 TOTAL, 1 PER LINE)
204
HPGR SCREEN (4 TOTAL, 2 PER LINE)
207
208
ROUGHER MAGNETIC SEPARATOR (24 TOTAL, 6 PER LINE)
PRIMARY GRINDING CYCLONE (4 TOTAL, 1 PER LINE)
232
230
231
INTERMEDIATE MAGNETIC SEPARATOR (24 DOUBLE DRUM TOTAL, 6 PER LINE)
237
PRIMARY GRINDING MILL (4 TOTAL, 1 PER LINE)
246
244
219
217
225
TAILS DEWATERING SCREEN (6 TOTAL)
ROUGHER FLOTATION CELL (6 OF 100m3)
ROUGHER FLOTATION CONDITIONING TANK (3 OF 100m3)
301
285
ROUGHER FLOTATION SURGE TANK (1 TOTAL)
280
CLEANER MAGNETIC SEPARATOR (16 TOTAL, 4 PER LINE)
267
268
FINE GRINDING CYCLONE (4 TOTAL, 1 PER LINE)
DERRICK SCREEN (16 TOTAL, 4 PER LINE)
242
304
284
266
243
CMS FEED TANK (1 TOTAL)
FINE GRINDING FEED TANK (4 TOTAL, 1 PER LINE)
SCAVENGER FLOTATION CELL (6 OF 50m3)
SCAVENGER FLOTATION CONDITIONING TANK (3 OF 50m3)
SCAVENGER MAGNETIC SEPARATOR (6 TOTAL)
325
REGRIND DEWATERING CYCLONE (1 TOTAL)
320
315
317
321
322
327
REGRIND MILL (1 TOTAL)
226
303
330
331
332
524
571
550
260
FINE GRINDING MILL (4 TOTAL, 1 PER LINE)
501
504
552
CONCENTRATE THICKENER (1 TOTAL)
TAILINGS THICKENER (3 TOTAL)
503
555
PROCESS WATER TANK (2 TOTAL)
CONCENTRATE FILTER FEED TANK (2 TOTAL)
CONCENTRATE PRESSURE FILTER (4 TOTAL)
515
CONCENTRATE STOCKPILE
TAILINGS FILTER FEED TANK (3 TOTAL)
TAILINGS PRESSURE FILTER (10 TOTAL)
579
573
TAILINGS STOCKPILE

4.1.1 Existing Dust

Ambient air quality is influenced by climatic conditions (including rainfall and wind strength and direction) and nearby agricultural activities. The Project is located in relatively undisturbed, remote environments within which natural sources of particulate matter include windblown dust from existing exposed surfaces. Other sources of dust include unsealed roads and existing mines which may contribute to regional particulate levels.

The Karara Export Terminal (KET) is located within the built up urban environment of the City of Geraldton, approximately 220km west of the Karara mine site. Existing sources of dust include ship loading, roads and rail associated with port operations (including third parties).

4.1.2 Climate

Wind speed and direction have the potential to influence the extent of dust emissions and needs to be considered prior to undertaking any works within the Project. The Project's location is influenced by the following seasonal wind patterns:

- In Summer, dominant wind direction is from South-East to North-East
- In Autumn, the dominant wind direction is from the East
- In Winter, the dominant wind direction is from the South-West and North-West
- In Spring, the dominant wind direction is from the South

4.1.3 Sources of Dust Emissions

Mining related activities have the potential to generate dust and other particulate emissions that have the potential to deteriorate air quality. A full risk assessment, completed annually, has been completed to identify the Project's activities that have the potential to generate dust. These sources of dust emissions include:

- Mining activities (blasting, loading, hauling, and dumping);
- Crushing and screening plants and product stockpiles;
- Processing plant activities;
- Disposal of tailings at the tailings storage facility;
- Rail load out/transport, access roads and linear infrastructure corridor; and
- Handling and export of ore from the KET at Geraldton Port.

Predicted air and dust quality modelling at the KIOP was undertaken by Heggies Pty Ltd in 2018 and are detailed in Figure 3 and Figure 4, respectively.

For a detailed outline of the potential risks, impacts and control measures relating to dust management at the Project, refer to the Environmental Risk Register, or contact the KML Environment Department.

4.2 Potential Dust Impacts on Sensitive and Ecological Receptors

KML has developed its management measures in relation to dust based on the Project's potential impact on sensitive and ecological receptors in and around the Project's footprint. This section specifically outlines identified sensitive and ecological receptors identified.

4.2.1 Mine site and Premise Boundary

Karara operates under the requirements of both its ministerial statements as well as the Licence to Operate L8721/2013/2 (the Licence). The Licence identifies a Premise Boundary (Figure 1) that dictates the extent of KML's operations. Discharges, including fugitive dust emissions, outside of the boundary shall be considered as discharges to the environment and may be required to be reported to the Department of Water and Environment Regulation (DWER).

Given the remoteness of the Project, there is low risk of any significant impact to air quality for any person that is not directly involved. The nearest sensitive receptors to the Project include the Karara Village, (approximately 6km West of the Karara Mine) and the Karara homestead (approximately 10km southwest of the Karara Mine).

The prevailing winds at the mine site indicate the potential for dust impact is greatest to the south or west of the mine pit and dry-stacked tailings storage facility, depending on the season.

The Project's flora and vegetation are consistent with disturbances as a result of historical pastoral activities, where several relatively large discrete areas of over-grazing are present with no evidence of regeneration. Although majority of the footprint will be cleared for the Project, any remaining areas of significant vegetation such as at the Karara and Blue Hills North pits and the linear infrastructure corridor (LIC) have the potential to be impacted by mining related fugitive dust. With reference to mining activities, the following specific ecological receptors have the potential to be impacted by the Project's activities:

- The Blue Hills vegetation complex Priority Ecological Community (PEC) located within the Project area; and

- Priority flora species within the Karara, Blue Hills North, Terapod and Hinge mine sites (in particular, *Acacia woodmaniorum, Acacia karina* and *Lepidosperma* sp. Blue Hills).

4.2.2 Karara Export Terminal

KML operates under the MWPA's Licence to Operate (L4275/1982/15) at the export terminal, KET's operations area is shown as Figure 5 below. Processed magnetite ore and a small volume of direct shipping ore (DSO) produced at neighbouring KMG Blue Hills site, are stockpiled at the TLO area at Karara mine site. A dedicated rail line transports the iron ore from the mine to a dedicated export terminal (KET) at Geraldton Port.

The KET is capable of handling up to 16Mtpa of magnetite concentrate or hematite DSO exports from a dedicated Berth (Berth 7) with associated rail and unloading infrastructure consisting of:

- A dedicated 4th railway line inside the Port;
- A twin-car rotary dumper (or train unloader – 'Dual Wagon Tipper') which is also capable of bottom dumping;
- A fully enclosed 297m long storage facility with a capacity of 250,000Ton which houses stockpiles of magnetite concentrate and hematite DSO delivered to port;
- A dedicated berth (Berth 7) which can accommodate a range of vessel sizes including Panamax (loaded to approximately 60,000Ton) and Post-Panamax vessels (loaded to approximately 75,000Ton); and a 5,000Tph ship loader, with a long-travel, luffing and slewing mechanism; and
- Workshops for heavy vehicle maintenance as well as general maintenance including boilermaker's workshop.
- Conveyor system transporting product from DWT to the storage shed and the storage shed to the ship loader.

The unloading infrastructure and storage facility including all conveyors at the KET are all enclosed to minimise dust emissions during operations. The adjacent Fishing Boat Harbour is identified as the nearest sensitive receptor to the KML operations at the KET.

The person responsible for the dust control at the KET is the Operations Supervisor (Phone: 0448 013 559).

4.2.2.1 Product Characterisation

The magnetite concentrate is a black powder with most particles less than 75µm (85% particle passing 45µm) with a specific gravity of approximately 2.58 and is insoluble in water. During iron ore mining, processing and transport, respirable dust composed of iron ore minerals may be generated, including quartz and a range of different compounds. Magnetite concentrate characterization is shown in Table 3.

Table 3: Magnetite Concentrate Composition (Magnetite Concentrate SDS, Jan 2022)

Parameter	Content (wt%)
Iron Ore (% as Iron) (Fe)	65 - 66%
Quartz (Silica Crystalline) (SiO_2)[1]	4%
Total Silica	7.2%
Moisture (H_2O)	7 -11%
DEM (Dust Extinction Moisture)	5.8%
Phosphorus Pentoxide (P)	0.03%
Aluminum Oxide (Al_2O_3)	0.14%
Manganese Oxide (MnO)	~0.02%
Calcium Oxide (CaO)	0.49%
Sulphur (S)	0.04%
Magnesium Oxide (MgO)	0.39%
Potassium Oxide (K_2O)	0.35%
Sodium Oxide (Na_2O)	<0.001%
Titanium Dioxide (TiO_2)	<0.014%
Arsenic (As)	0.0004%
Lead (Pb)	0.0004%

The magnetite concentrate product safety data sheet (SDS) is provided in Appendix 1.

There is a low risk and impact to air quality for persons that are not directly involved at the KET, with fugitive emissions from ore handling the primary risk. All dust monitoring parameters and complaints are managed and monitored by the Mid-West Port Authority (MWPA).

[1] Refer Section 4.3.4 for management measures for SiO_2 (respirable silica).

4.2.3 Karara to Tilley Rail

There are no occupied residential dwellings located in close proximity to the rail corridor. The risk of any significant impact to air quality for any person not directly involved in the Project is considered nil.

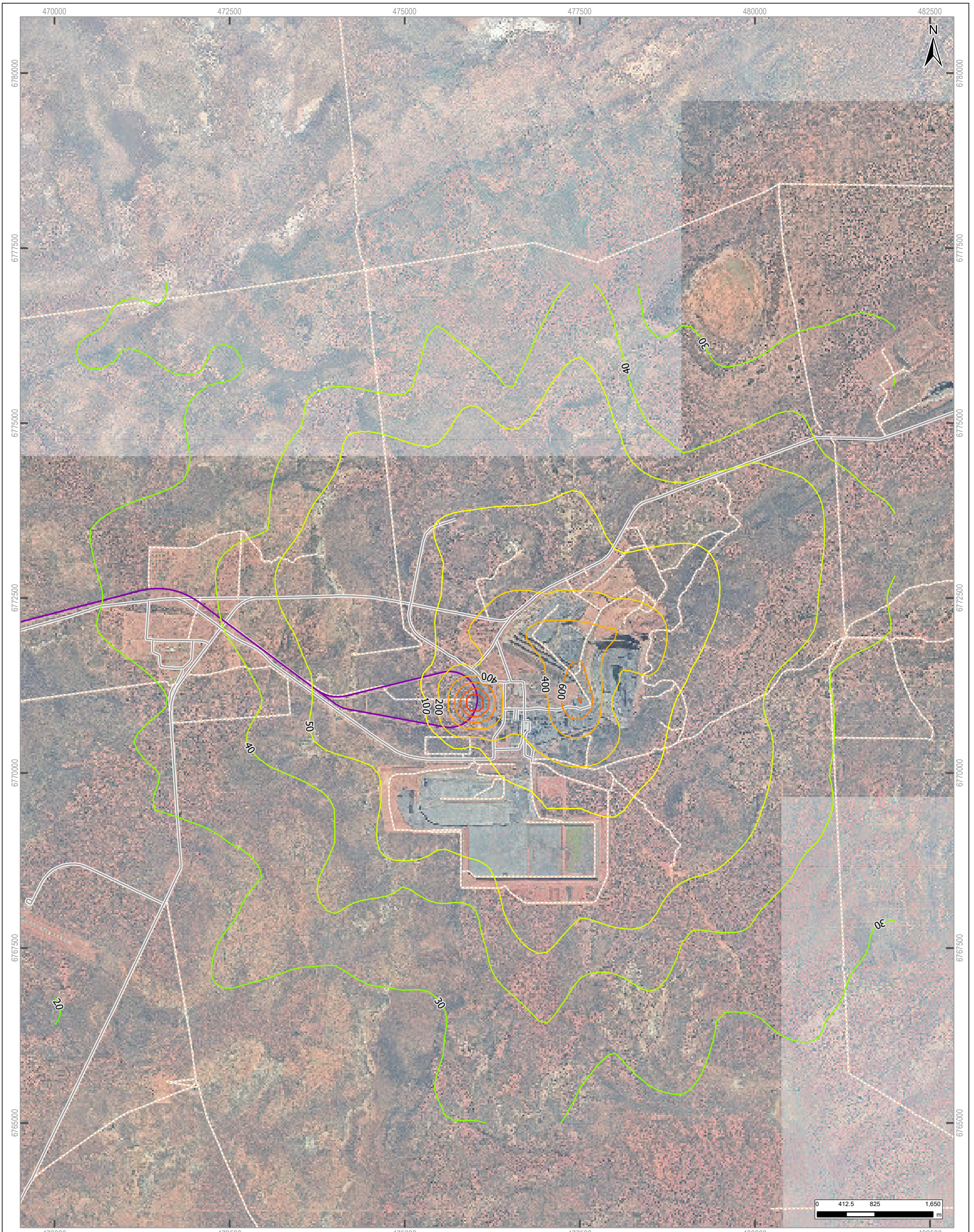
During construction, the rail siding (3km North of Morawa) and the LIC contained several potential sensitive receptors, however dust monitoring conducted since 2009 has indicated that relevant air quality criteria have been consistently met. The siding and LIC thus does not represent a nuisance to nearby residents and is no longer required to be managed, unless operations recommence.

Transportation of iron ore product may result in excessive levels of fugitive dust, if appropriate management measures are not implemented. Potentially sensitive receptors for the project are one Threatened Flora and two priority flora taxa identified within 50m from the centre line of the rail (refer Figure 6).

These are:

- *Tecticornia bulbosa* (Threatened Flora) (70 KP)
- *Stenanthemum poicilum* (P3) (10 KP)
- *Persoonia pentasticha* (P3) (at rail loop end)

Figure 3: Predicted Air Quality Impact (PM_{10}) at the Mine Site



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Dust Management Plan - FIGURE 3

Predicted Air Quality Impact

Predicted Air Quality Impact

AQI

- 20
- 30
- 40
- 50
- 100
- 200
- 400
- 600
- 800
- 1000

GDA 1994 MGA Zone 50

SCALE: 1:50,000

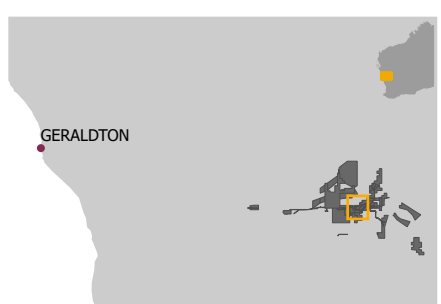

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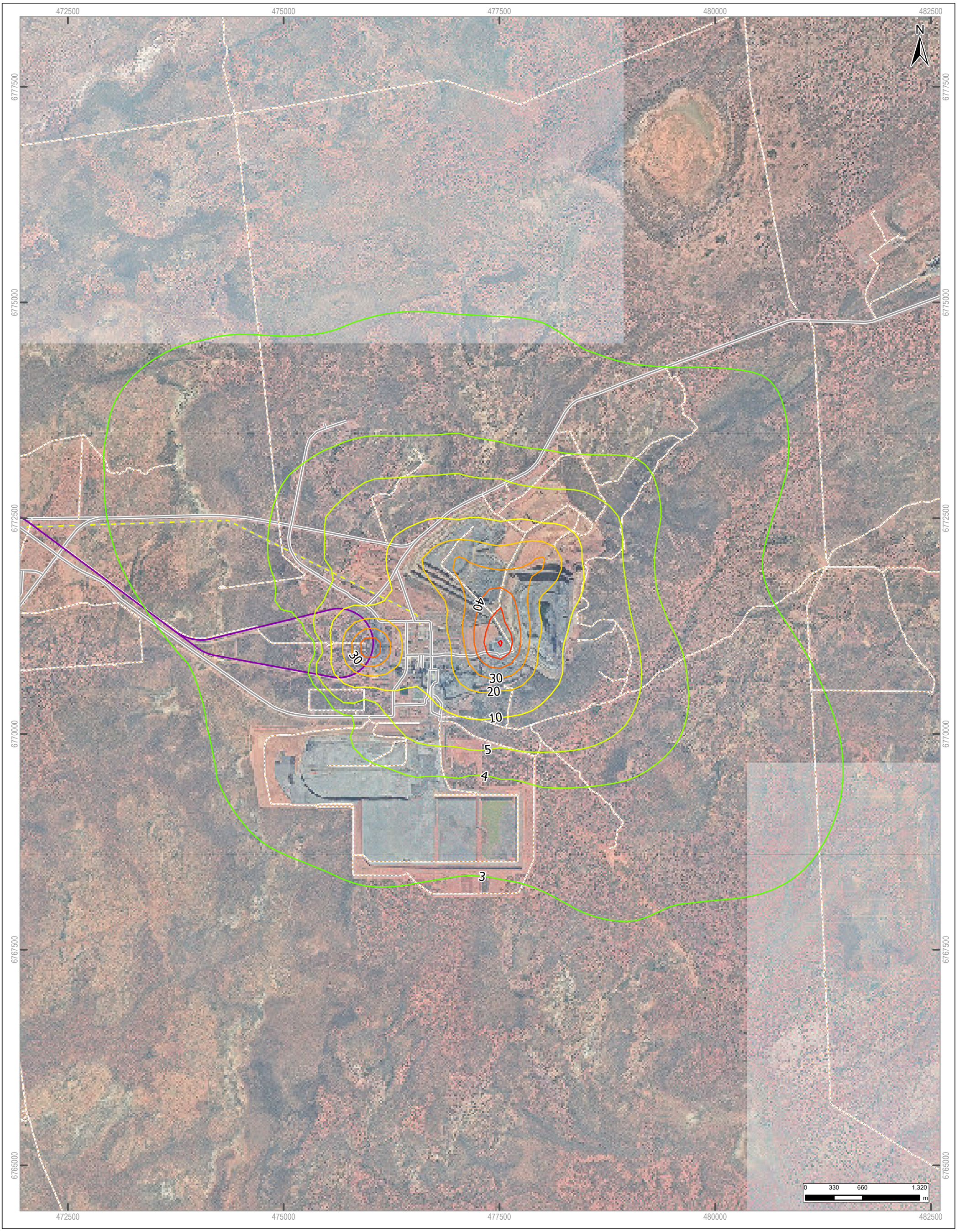
Figure 4: Predicted Dust Deposition



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Dust Management Plan - FIGURE 4

Predicted Dust Deposition

Predicted Dust Deposition
g/m2/month

- 3
- 4
- 5
- 10
- 20
- 30
- 40
- 50
- 60

GDA 1994 MGA Zone 50

SCALE: 1:40,000

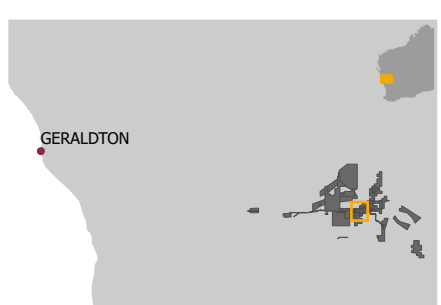

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Figure 5: Geraldton Port - Karara Export Terminal Infrastructure

Karara Mine Iron Ore Project

KET Overview Areas

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KET Overview Area

Karara Export Terminal Infrastructure Area

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16 October 2023

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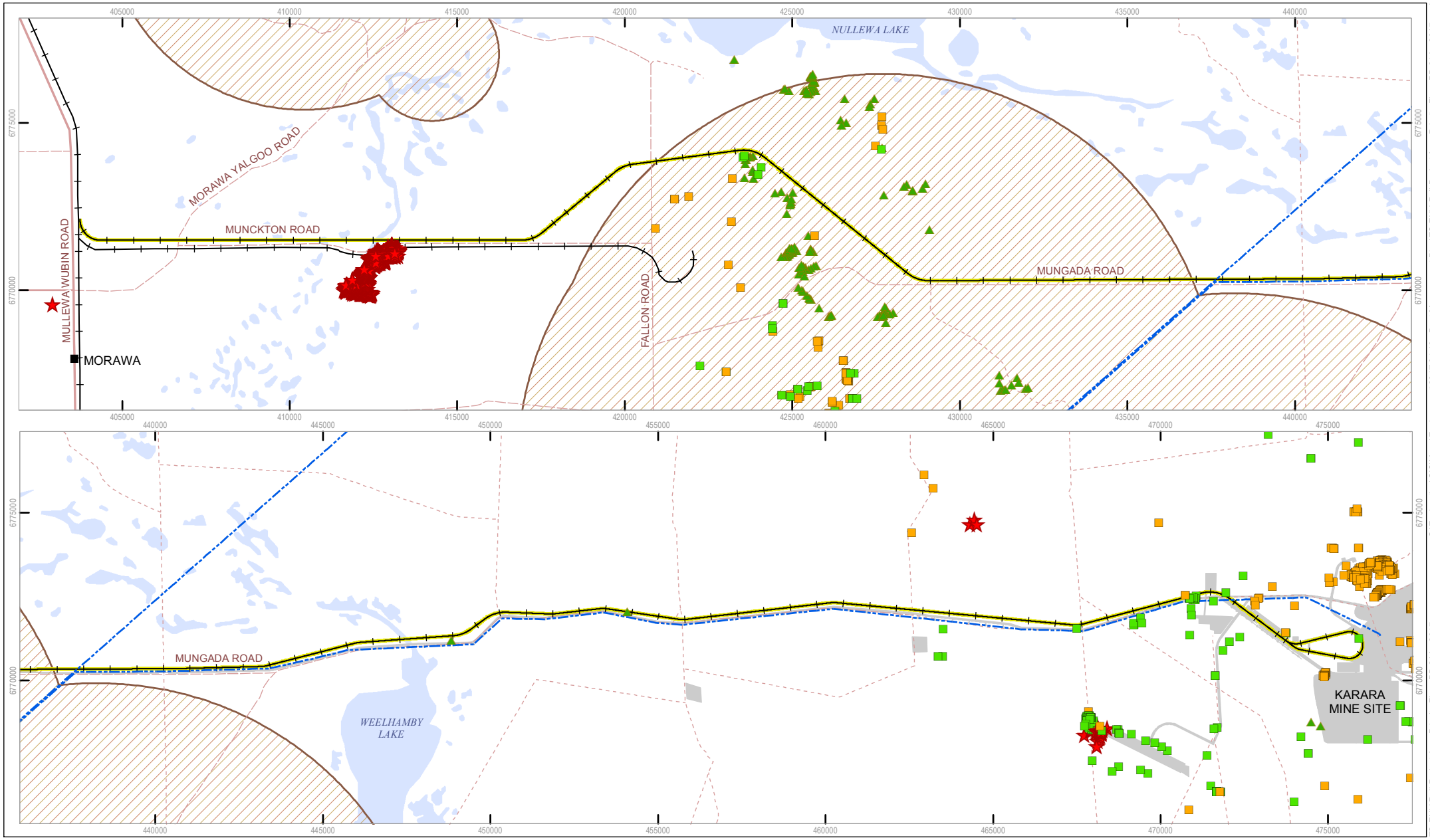
Figure 6: Location of Priority Flora and Threatened Flora in Rail Project Area



5 May 2017

Version: A

Size: A4

Karara Iron Ore Project

Figure 6

Rail Project Area Priority Flora

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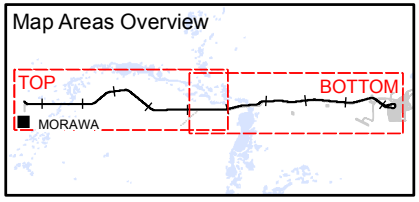
Legend

- Sandalwood
- Priority Flora Species
  - T
  - P1
  - P3
- Principal Road
- Secondary Road
- Minor Road
- Track
- Project Footprint
- Town
- Karara Rail
- Railway
- Power Transmission Route
- DPaW Environmentally Sensitive Area
- Waterbody

Map Areas Overview



NORTH

0 kilometers 5

1:150,000

GDA 1994 MGA Zone 50

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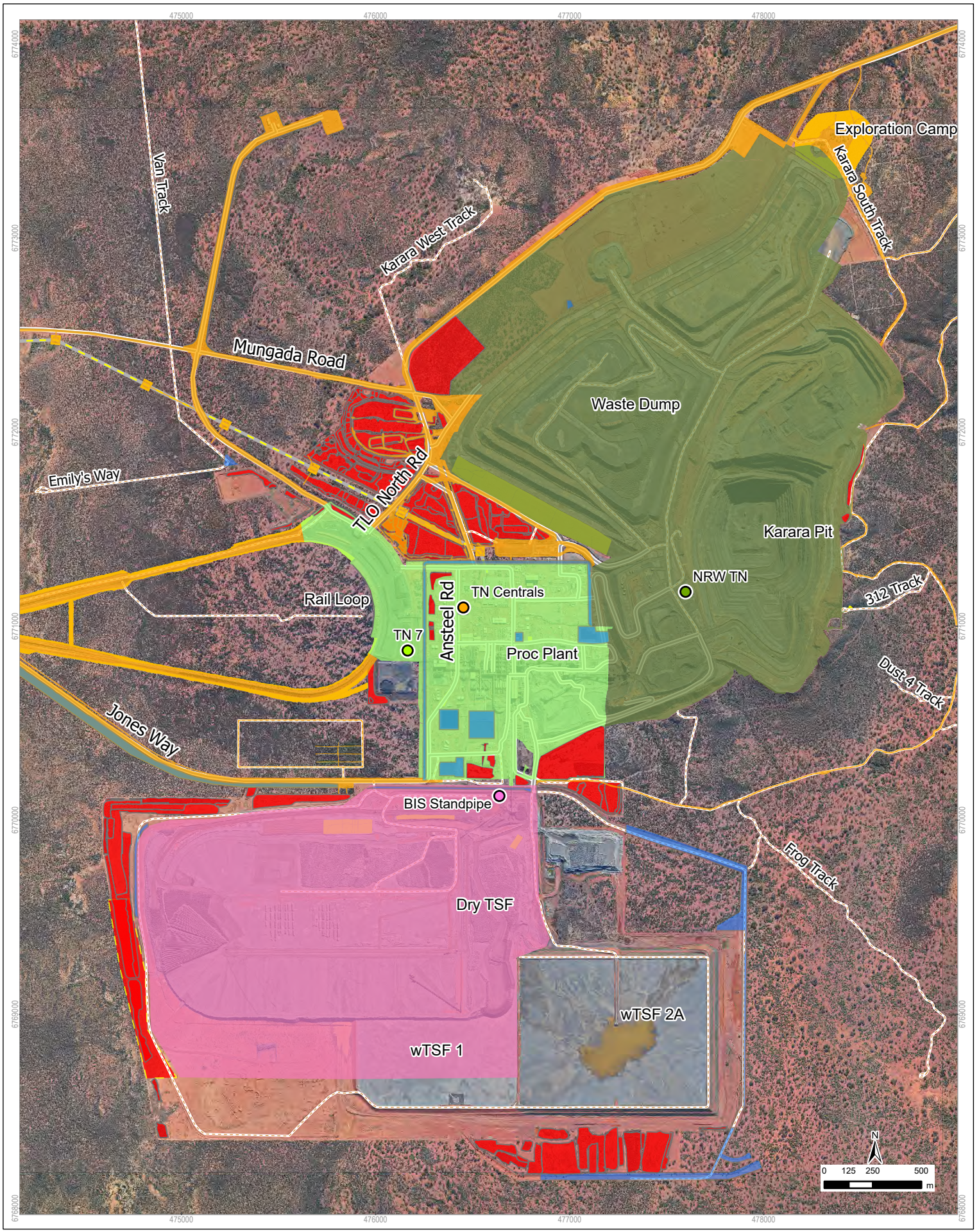
TS-ENV-Rail Project Area Priority Flora-PB-21Apr2017

Figure 7: Water Usage Area



Dust Management Plan

Water Usage Areas

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Turkeys Nests

- BIS Standpipe (>15000 TDS)
- NRW TN (>15000 TDS)
- TN 7 (>15000 TDS)
- TN Centrals (<15000 TDS)
- (KIOP) Water Infrastructure
- Ground Disturbance CLOSED

Usage

- BIS standpipe
- Central Turkey's Nest Water Usage Area
- NRW Turkey's Nest
- Turkey's Nest 7
- Topsoil

Ref: K0058 F1
Version: C
9 February 2023

Proj: GDA94 MGAZ50
Scale: 1:25,000
Size: A4

4.3 Dust Management Measures

KML shall take all reasonable measures to prevent or minimise the generation of dust from all materials handling operations, stockpiles, open areas and transport activities. Appropriate dust management measures, relating to equipment design and during the construction of the Project have been implemented as per the Public Environmental Review (PER) requirements. The operational dust management controls are detailed below and shall be implemented at the Project as a minimum.

4.3.1 Mining Operations and Processing

Dust management controls within the Project Mining Operations and Processing areas shall include but will not be limited to:

- Operational activities, including mining, blasting, and haulage to be monitored for excessive dust emissions and suitable controls implemented during high wind conditions [i.e. >30km/h]. Where practicable these activities should be scheduled in conjunction with prevailing climatic conditions, which are obtained from the daily Pre Start Information reports.
- Water trucks are to be fitted with either sprays or trickle bar systems to prevent saline water or dust suppressant overspray affecting surrounding ecosystems. Water trucks shall be used in heavy traffic areas, on unsealed and haul roads (Refer Figure 7).
- Material drop heights between loaders and trucks and from trucks or other machinery to stockpiles will be reduced, as far as practicable within operating limits, to minimise dust creation.
- High intensity mist curtain water sprays shall be operational when the primary crusher feed hopper is in use.
- Belt scrapers and water sprays shall be operational on conveyer transport points, CV5, CV7 and the mobile crusher when they are in use.
- Dust extraction systems shall be operational at the; primary crusher (CV1), secondary crusher (CV2), secondary screens (CV3 and CV5), crushed ore stockpile tunnel (CV11), and the HPGRS (CV 9 and 10) when in use.
- Dust surfactant shall be applied to the crushed ore stockpile conveyer feed system (CV5) and the mobile crusher when in use.
- Crusher feedstock shall be sprayed prior to manual feed into mobile crushers when operational.

- Vehicle speeds and movements to be managed through the Safety Plan - Traffic Management Plan (CORP-HS-PLN-1008) that controls traffic speeds, restriction to designated roads with off road driving prohibited on site.
- Roads shall be maintained and graded as required to minimise dust generation.
- Native vegetation shall be retained as far as practicable, to minimize dust lift-off and be used as a wind break.
- Undertake progressive rehabilitation of available areas to stabilise dust emissions in accordance with the Environmental Procedure – Land Rehabilitation (CORP-EN-PRO-1002).

4.3.2 Tailings Storage Facility

The Project Tailings Storage Facility (TSF) is operated by BIS Industries as a contractor to KML. Subsequently, BIS maintain its own Dust Control Procedure (BIS Doc # 26787) that is aligned to this Plan.

Dust management methods within the Project TSF footprint shall include but not be limited to:

- Vehicles shall be restricted to driving on constructed roads where possible. Vehicles shall be restricted from access within the wet TSF areas.
- Constructed roads shall be sheeted to provide a sound surface for traffic and a barrier to the tailings.
- Constructed roads shall be maintained and graded as required to minimise dust generation.
- All other exposed dry stack and wet TSF areas shall be restricted from access and shall be appropriately managed to minimise dust lift-off where required (e.g. dust surfactant, saline water or similar).
- Water trucks, fitted with either sprays or trickle bar systems to prevent saline water or dust suppressant overspray affecting the surrounding ecosystems. Water trucks shall be used in heavy traffic areas, such as access and haul roads (Refer Figure 7).
- Vehicle speeds and movements managed through the Safety Plan - Traffic Management Plan (CORP-HS-PLN-1008) that controls traffic speeds, restriction to designated roads with off road driving prohibited on site.
- The wet TSF area will be kept moist during operations.

- Undertake progressive rehabilitation of available areas of the TSF to reduce potential dust emissions in accordance with the Environmental Procedure – Land Rehabilitation (CORP-EN-PRO-1002).

4.3.3 Train Load Out

Dust management methods within the Project TLO area shall include but will not be limited to:

- Water trucks, fitted with either sprays or trickle bar systems to prevent saline water or dust suppressant overspray affecting the surrounding ecosystems. Water shall be applied to both the train loading area, as well as the material stockpiles to prevent dust lift-off (Refer Figure 7).
- Vehicle access is restricted by the Rail Operations Team, minimising the potential for dust lift-off.
- Automated dust suppression system shall be operational when rail cars are in use.
- Rate of dust surfactant shall be adjusted depending on seasonal conditions.
- Moisture levels of magnetite concentrate stockpiles at an upper limit of around 9.7% for shipping and where practicable, above 5% moisture content.
- The product loaded on the trains are sprayed by the Train Veneering System (TVS) at all times except during the wet periods (generally between mid-June to end of September) prior to departing mine site with a dust suppressant (Gluon®) to minimise dust lift off from the trains whilst in transit.

4.3.4 Port Operations - KET

Dust management measures are undertaken at the KET infrastructure area as shown in Figure 5 (blue hatched area), and shall include but will not be limited to:

- Employees and contractors are aware of their environmental obligations under the MWPA licence to operate.
- The air extraction system shall be interlocked with the out-loading conveyor system so that it is operational whenever the out-loading system is in use.
- The air extraction system should be operational whenever mobile equipment is in use within the storage shed.
- Monitoring of respirable silica (SiO_2 crystalline silica) in the ambient air quality with portable devices over an 8-hour period once a week.

- A dedicated ventilation officer is appointed at the KET to be responsible for dust monitoring and management.
- Dust suppression controls to be used include water sprays at all transfer chutes (CV701 - CV702, CV702 – CV703, CV703 – CV704) discharges, active stockpile management and tripper control functions to limit drop height.
- All conveyors and transfer points shall be contained or enclosed.
- During ship loading, the loading point (Gimbal) shall be located entirely within the vessel with sprayers/fogger to be operational at all times when loading Hematite.
- Dust Extinction Moisture (DEM) of magnetite concentrate is periodically measured.
- Out-loading circuit spray locations, CV730 – CV731, CV701 – CV732 as well as the gimbal (Sprays / Fogger) and the dust suppression sprays at the KET are only used when in loading / out loading Hematite. No sprays are to be used when in loading / out loading Magnetite due to the contractual Transportable Moisture Limit (TML), which is currently capped at 10.08% with an average of 8% in Q1, 2023.
- All gallery access points are closed when plant is operating.
- Traffic speeds, movement, restrictions and road maintenance of all mobile plant and vehicle operations are managed through the Traffic Management Plan - KET (CORP-PT-PLN-1005).
- Emergency Response Plan including prevention, control, mitigation and recovery measures of product spills are implemented at the rail corridor (i.e. the KET infrastructure area west of the DWT shown in Figure 5).
- Workplace inspections focusing on eliminating product build up in open areas.

4.3.4.1 Product Moisture Management

KML implements the following measures to manage the magnetite concentrate's moisture prior to being loaded onto the train at TLO:

- Water is added to the DSO Hematite (i.e. fine product) before it is transported to the TLO.
- Magnetite concentrate stockpiles are allowed to dry at TLO so that it meets the moisture levels (at an upper limit of around 9.7% moisture for shipping) as advised by the KET (i.e. after processing at the Wet Concentrations Dam or after rainfall events).

- In the event that excessive dust is emitted during train loading, the train operation stops and the stockpile will be watered.
- All the trains are sprayed by the Train Veneering System (TVS) prior to departing for the KET with a dust suppressant (Gluon®) to minimise dust emission from the trains whilst in transit. Gluon is sprayed on the trains at all times except during the wet periods (generally between mid-June to end of September).

4.3.5 Ground Disturbance

Any vegetation clearance will be undertaken progressively, limited to the approved clearance footprint, restricted to the minimum area needed at the time to facilitate ongoing production. The Environmental Procedure – Approvals Request and Ground Disturbance (CORP-EN-PRO-1004) and Environmental Procedure – Soil Resource Management (CORP-EN-PRO-1015) shall be reviewed and implemented prior to all ground or soil disturbing activities.

4.4 Dust Emission Monitoring

Monitoring of dust emissions within the Project area is conducted in accordance with the Environmental Procedure – Dust Monitoring (CORP-EN-PRO-1005) and impact onto vegetation health is monitored in accordance with the Environmental Plan – Flora and Vegetation Health Monitoring Plan (CORP-EN-PLN-1012). These documents detail the dust monitoring methodology, trigger and threshold criteria's that provide an indication of adverse trends that requires appropriate response actions to be implemented. The KML Environment Department manages dust emission monitoring at the Project.

At the Geraldton Port, the MWPA maintains a 24-hour ambient concentration target of 50µg/m³ (as set in the Mid-West Port Authority, Category 58 Environmental Licence L4275/1982/15). All dust monitoring parameters are directly managed and monitored by the MWPA.

4.5 Dust Suppressants and Water Sources

Water and/or dust suppressants shall be used to minimise dust generation from cleared areas where fugitive dust is identified as a potential issue. Dust suppressants shall be used sparingly and delivered in the most efficient manner. Dust suppressants may only be used following written advice from the KML Environment Department.

The KML Environment Department shall be contacted for a current approved list of all water supply sources and standpipe locations prior to any operations being undertaken. Treated wash bay water that meets the requirements of Environmental Procedure – Surface Water

Management (CORP-EN-PRO-1011) may be used for dust suppression purposes following written advice from the KML Environment Department.

Two classes of water will be supplied for dust suppression use at standpipes within the Project, as detailed in Table 4. These water quality restrictions shall be adhered to as far as practicable.

Table 4: Dust suppression water general use guidelines

TDS (mg/L)	Approximate EC (µS/cm*)	Water Description	Dust Suppression Application	General Environmental Restrictions
< 15,000	< 25,000	Low Salinity Source: Central Turkey Nest	Acceptable for general dust suppression use on roads, waste rock or ore stockpiles.	Avoid spraying directly on vegetation and generating runoff. Not to be used on topsoil stockpiles or any material used for rehabilitation.
> 15,000	> 25,000	High Salinity Sources: All others except Central Turkey Nest	Dust suppression in mine pit, TSF, Waste Rock Landform, Rail Loop, plant site, and ore conditioning.	Not to be used on any areas requiring land rehabilitation.

**TDS (mg/L) ≈ EC (µS/cm) x 0.6 at 25°C*

4.5.1 Air Quality Criteria

The air quality criteria to be maintained for the Project's sensitive receptors are detailed and managed in the Environmental Procedure – Dust Monitoring (CORP-EN-PRO-1005).

4.6 Stakeholder Management

The Stakeholder Engagement Plan (CORP-CH-PLN-1002) will be followed to implement, record, investigate and report on all community concerns relating to dust issues. Any complaints received will trigger the Feedback Management / Grievance Procedure (Section 5 of the Stakeholder Engagement Plan), which will trigger appropriate management; this can include a review of the relevant dust management strategy. It should be noted that MWPA is the first point of contact for any dust complaint about the KET operations at the Geraldton Port.

MWPA will notify KML of any complaints associated with its operations at the KET for prompt response and implementation of appropriate mitigation measures.

If modification of management strategies is required, this will be determined by the General Manager HSEC.

5 CHECKING

5.1 Hazard and Incident Reporting

Table 5 below provides a summary of trigger and threshold criteria associated with operational visual dust.

Table 5: Visual Dust - Trigger and Threshold Criteria

Type	Event	Criteria	Data Collection Method	Response Action
Trigger	Excessive airborne dust from all operational activities	Observed in operational areas	Visual observation	Contact relevant supervisor; raise INX hazard ID
Threshold	Continuous excessive, airborne dust from all operational activities	Observed at premise boundary	Visual observation	Contact responsible area manager, raise INX incident

In the event that the trigger criteria have been breached, contingency actions shall be implemented immediately. This is to minimise any potential for escalation and loss of dust management controls. All hazards and incidents shall be documented and investigated in accordance with the KML Safety Procedure – Incident Management Procedure (CORP-HS-PRO-1046) and documented in INX for tracking and completion of remedial actions.

5.2 Contingency Actions

Where a hazard or incident report is required for non-compliances, it should at a minimum detail corrective actions and preventative actions, not limited to the following:

- Investigate failed management measures;
- Reduce dust levels through prevention and management measures as outlined in Section 4.3 of this plan;
- Identify alternative sources of dust suppression;
- Minimise / reduce access to high dust areas; or

- Cease work during adverse weather conditions (that is moderate to heavy winds in the direction of the sensitive receptor).

5.3 Control of Records

The following records and data, relating to dust management, is maintained by KML:

- Monitoring and calibration data - stored on the KML Environment Department's EMS Filesite electronic filing for reporting and auditing purposes (Dust Monitoring Folder 7.0).
- Monitoring equipment locations - displayed spatially in the KML GIS system.
- Hazards and incident reports - recorded in INX reporting software.

Monitoring results will be reported to the Department of Mines, Industry Regulation and Safety (DMIRS), and the Department of Water and Environmental Regulation (DWER) annually as part of the Annual Compliant Assessment Report (ACAR) and Annual Environmental Report (AER).

5.4 Audits and Inspection

This plan and its outcomes and commitments will be audited biannually as per the Environmental Procedure - Compliance Auditing (CORP-EN-PRO-1006). The audits will include:

- Compliance audits against regulatory approvals and legislation
- EMS audits to assess the effectiveness of the management systems in planning, implementing the control measures and reviewing dust management at the Project.

6 DOCUMENTS LIST

Document Title	KML Document Number
Environmental Plan - Flora and Vegetation Health Monitoring Plan	CORP-EN-PLN-1012
Environmental Plan - Environmental Management Plan	CORP-EN-PLN-1020
Stakeholder Engagement Plan	CORP-CH-PLN-1002
Environmental Plan - Mine Closure Manual	CORP-EN-PLN-1038
Environmental Procedure - Land Rehabilitation	CORP-EN-PRO-1002
Environmental Procedure - Approvals Request and Ground Disturbance	CORP-EN-PRO-1004
Environment Procedure - Dust Monitoring	CORP-EN-PRO-1005
Environmental Procedure - Compliance Auditing	CORP-EN-PRO-1006
Environmental Procedure - Soil Resource Management	CORP-EN-PRO-1015
Safety Plan - Traffic Management Plan	CORP-HS-PLN-1008
Safety Procedure - Training and Induction	CORP-HS-PRO-1001
Safety Procedure - Incident Management Procedure	CORP-HS-PRO-1046
Health and Hygiene Management Plan - KET	CORP-PT-PLN-1003
Emergency Response Plan - KET	CORP-PT-PLN-1001
Traffic Management Plan - KET	CORP-PT-PLN-1005
Mineral Concentrates – Iron Concentrate Moisture Control Standard – KET	CORP-PT-STD-1002
Mid-West Port Storage and Handling Facilities and Ventilation Report	1600-ME-REP-0004

7 REFERENCES

Department of Environment and Conservation (2011). Department of Environment and Conservation's Guideline for managing the impacts of dust and associated contaminants from land development sites, contaminated sites remediation and other related activities (March 2011). Department of Environment and Conservation, Western Australia.

Department of Environment (2005) Draft. A guideline for the preparation of Environmental Management Plans. Department of Environment, 2005.

ETA – Environmental Technologies & Analysis. Air Quality Impact Assessment Stage 4. June 23, 2018. Unpublished report for Karara Mining Ltd, Perth, Western Australia.

Mid-West Port Authority, Category 58 Environmental Licence (L4275/1982/14)).

NEPM (2003) *National Environment Protection (Ambient Air Quality) Measure.* National Environment Protection Council, Government of Australia, ACT.

APPENDIX 1 – MAGNETITE CONCENTRATE SDS (2022)

KARARA MINING LTD

SAFETY DATA SHEET

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

1.1 Product identifier

Product name **MAGNETITE CONCENTRATE**

Synonyms IRON ORE FE ● KARARA MINING MAGNETITE

1.2 Uses and uses advised against

Uses MANUFACTURE OF STEEL

1.3 Details of the supplier of the product

Supplier name **KARARA MINING LTD**

Address Level 8, 216 St Georges Terrace, Perth, WA, 6000, AUSTRALIA

Telephone (08) 9268 2400

Email hsekarara@kararamining.com.au

1.4 Emergency telephone numbers

Emergency +61 (8) 6298 2222 or +61 (0) 488 078 025

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

NOT CLASSIFIED AS HAZARDOUS ACCORDING TO SAFE WORK AUSTRALIA CRITERIA

2.2 GHS Label elements

No signal word, pictograms, hazard or precautionary statements have been allocated.

2.3 Other hazards

No information provided.

3. COMPOSITION/ INFORMATION ON INGREDIENTS

3.1 Substances / Mixtures

Ingredient	CAS Number	EC Number	Content
MAGNETITE	1309-38-2	215-169-8	91%
IRON	7439-89-6	231-096-4	65.5%
QUARTZ (CRYSTALLINE SILICA)	14808-60-7	238-878-4	4%
CALCIUM OXIDE	1305-78-8	215-138-9	0.49%
MAGNESIUM OXIDE	1309-48-4	215-171-9	0.39%
POTASSIUM OXIDE	12136-45-7	235-227-6	0.35%
ALUMINIUM OXIDE	1344-28-1	215-691-6	0.14%
SULPHUR	7704-34-9	231-722-6	0.04%
PHOSPHORUS	7723-14-0	231-768-7	0.03%
TITANIUM DIOXIDE	13463-67-7	236-675-5	<0.014%
SODIUM OXIDE	1313-59-3	215-208-9	<0.001%
ARSENIC	7440-38-2	231-148-6	0.0004%
LEAD	7439-92-1	231-100-4	0.0004%

SILICA, TOTAL	-	-	7.2%

4. FIRST AID MEASURES

4.1 Description of first aid measures

Eye If in eyes, hold eyelids apart and flush the eye continuously with running water. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 20 minutes.

Inhalation If inhaled and breathing becomes restricted, remove from contaminated area. Apply artificial respiration if not breathing.

Skin If skin irritation occurs, remove contaminated clothing and flush skin and hair with running water.

Ingestion For advice, contact a Poisons Information Centre on 13 11 26 (Australia Wide) or a doctor (at once). Due to product form and application, ingestion is considered unlikely.

First aid facilities None allocated.

4.2 Most important symptoms and effects, both acute and delayed

See Section 11 for more detailed information on health effects and symptoms.

4.3 Immediate medical attention and special treatment needed

Treat symptomatically.

5. FIRE FIGHTING MEASURES

5.1 Extinguishing media

Use an extinguishing agent suitable for the surrounding fire.

5.2 Special hazards arising from the substance or mixture

Non flammable. May evolve iron oxides when heated to decomposition.

5.3 Advice for firefighters

Evacuate area and contact emergency services. Toxic gases may be evolved in a fire situation. Remain upwind and notify those downwind of hazard. Wear full protective equipment including Self Contained Breathing Apparatus (SCBA) when combating fire. Use waterfog to cool intact containers and nearby storage areas.

5.4 Hazchem code

None allocated.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Wear Personal Protective Equipment (PPE) as detailed in section 8 of the SDS.

6.2 Environmental precautions

Prevent product from entering drains and waterways.

6.3 Methods of cleaning up

Contain spillage, then collect and place in suitable containers for reuse or disposal. Avoid generating dust.

6.4 Reference to other sections

See Sections 8 and 13 for exposure controls and disposal.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Observe good personal hygiene, including washing hands before eating.

7.2 Conditions for safe storage, including any incompatibilities

Store in cool, dry, well ventilated area, removed from acids (e.g. hydrofluoric acid) and foodstuffs.

7.3 Specific end uses
No information provided.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters
Exposure standards

Ingredient	Reference	TWA		STEL	
		ppm	mg/m³	ppm	mg/m³
Aluminium & compounds	SWA [Proposed]	--	1	--	--
Aluminium oxide (a)	SWA [AUS]	--	10	--	--
Arsenic & soluble compounds	SWA [Proposed]	--	0.01	--	--
Arsenic & soluble compounds (as As)	SWA [AUS]	--	0.05	--	--
Calcium oxide	SWA [AUS]	--	2	--	--
Calcium oxide	SWA [Proposed]	--	1	--	--
Iron oxide fume (Fe2O3) (as Fe)	SWA [AUS]	--	5	--	--
Iron salts, soluble, as Fe	SWA [AUS]	--	1	--	--
Lead, inorganic dusts & fumes (as Pb)	SWA [AUS]	--	0.05	--	--
Magnesium oxide (fume)	SWA [AUS]	--	10	--	--
Phosphorus (yellow)	SWA [AUS]	--	0.1	--	--
Phosphorus (yellow)	SWA [Proposed]	--	0.01	--	--
Quartz (respirable dust)	SWA [AUS]	--	0.05	--	--
Quartz (respirable dust) (Precautionary advice)	WorkSafe VIC	--	0.02	--	--
Titanium dioxide (a)	SWA [AUS]	--	10	--	--
Titanium dioxide (inhalable)	SWA [Proposed]	--	1	--	--

Biological limits

Ingredient	Determinant	Sampling Time	BEI
ARSENIC	Inorganic arsenic plus methylated metabolites in urine	End of workweek	35 µg As/L
LEAD	Lead in blood	Not critical	200 µg/L
	Lead in blood (women of child bearing potential)	Not critical	10 µg/100ml
	Lead in blood	Not critical	30 µg/dL
	Lead in blood (women of child bearing potential)	Not critical	10 µg/dL

Reference: ACGIH Biological Exposure Indices

8.2 Exposure controls
Engineering controls Do not inhale dust/powder. Use with adequate natural ventilation. Where a dust inhalation hazard exists, mechanical extraction ventilation or dampening with water is recommended.

PPE

Eye / Face Wear dust-proof goggles.

Hands Wear PVC or rubber gloves.

Body When using large quantities or where heavy contamination is likely, wear coveralls.

Respiratory Where an inhalation risk exists, wear a Class P1 (Particulate) respirator.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	BLACK POWDER
Odour	ODOURLESS
Flammability	NON FLAMMABLE
Flash point	NOT RELEVANT
Boiling point	NOT AVAILABLE
Melting point	NOT AVAILABLE
Evaporation rate	NOT AVAILABLE
pH	NOT AVAILABLE
Vapour density	NOT AVAILABLE
Solubility (water)	INSOLUBLE
Vapour pressure	NOT AVAILABLE
Upper explosion limit	NOT RELEVANT
Lower explosion limit	NOT RELEVANT
Partition coefficient	NOT AVAILABLE
Autoignition temperature	NOT AVAILABLE
Decomposition temperature	NOT AVAILABLE
Viscosity	NOT AVAILABLE
Explosive properties	NOT AVAILABLE
Oxidising properties	NOT AVAILABLE
Odour threshold	NOT AVAILABLE

9.2 Other information

Particle Size	80 % (Passing 45 µm)

10. STABILITY AND REACTIVITY

10.1 Reactivity

Carefully review all information provided in sections 10.2 to 10.6.

10.2 Chemical stability

Stable under recommended conditions of storage.

10.3 Possibility of hazardous reactions

Polymerization is not expected to occur.

10.4 Conditions to avoid

Avoid heat, sparks, open flames and other ignition sources.

10.5 Incompatible materials

Incompatible with oxidising agents (e.g. hypochlorites), acids (e.g. nitric acid) and carbon monoxide.

10.6 Hazardous decomposition products

May evolve iron oxides when heated to decomposition.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity This product is expected to be of low toxicity. Based on available data, the classification criteria are not met.

Information available for the ingredients:

Ingredient	Oral LD50	Dermal LD50	Inhalation LC50
IRON	30000 mg/kg (rat)	--	--
ALUMINIUM OXIDE	> 5000 mg/kg (rat)	--	--
SULPHUR	> 3,000 mg/kg (rat)	> 2,000 mg/kg (rabbit)	> 9.23 mg/L/4 hours (rat)
PHOSPHORUS	> 2,000 mg/kg (rat)	--	> 5.75 mg/L/4hrs (rat)
TITANIUM DIOXIDE	5000 mg/kg (rat)	--	3.43 - 6.82 mg/L air (rat)
ARSENIC	145 mg/kg (mice)	--	--
LEAD	50 mg/kg to 600 mg/kg (calf)	--	--

Skin Mechanical irritant. Prolonged or repeated contact may result in mild irritation due to mechanical action.

Eye Due to product form and nature of use, an eye hazard is not anticipated. Product may only present a hazard if rocks are cut or drilled with dust generation, which may result in mechanical irritation.

Sensitisation Not classified as causing skin or respiratory sensitisation.

Mutagenicity Not classified as a mutagen.

Carcinogenicity Adverse health effects, usually associated with long term exposure to high respirable crystalline silica quartz dust levels are not anticipated due to product form. This product may only present a hazard if rocks are cut or drilled with dust generation. Respirable crystalline silica quartz is classified as carcinogenic to humans (IARC Group 1).

Reproductive Whilst there is sufficient data to indicate that lead compounds may damage fertility or the unborn child, the concentration of lead in this product is below that to require classification.

STOT - single exposure Exposure considered unlikely. An inhalation hazard is not anticipated unless this material is cut, drilled or sanded with dust generation, which may result in mucous membrane irritation of the upper respiratory tract with over exposure.

STOT - repeated exposure Adverse health effects, usually associated with long term exposure to high crystalline silica dust levels are not anticipated due to the product form. This product may only present a hazard if rocks are cut or drilled with dust generation. Chronic exposure to dust may cause lung fibrosis (silicosis).
Contains low levels of lead and arsenic which are cumulative poisons, and symptoms are often delayed. Repeated exposure may result in blood, kidney and central nervous system/brain damage.

Aspiration Not applicable for solids.

12. ECOLOGICAL INFORMATION

12.1 Toxicity
No information provided.

12.2 Persistence and degradability
No information provided.

12.3 Bioaccumulative potential
No information provided.

12.4 Mobility in soil
No information provided.

12.5 Other adverse effects
The main component/s of this product occur naturally in the earth's crust. It is not anticipated to cause any adverse effects to plants or animals.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods
Waste disposal Reuse where possible. No special precautions are normally required when handling this product.

Legislation Dispose of in accordance with relevant local legislation.

14. TRANSPORT INFORMATION

NOT CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE, IMDG OR IATA

	LAND TRANSPORT (ADG)	SEA TRANSPORT (IMDG / IMO)	AIR TRANSPORT (IATA / ICAO)
14.1 UN Number	None allocated.	None allocated.	None allocated.
14.2 Proper Shipping Name	None allocated.	None allocated.	None allocated.
14.3 Transport hazard class	None allocated.	None allocated.	None allocated.
14.4 Packing Group	None allocated.	None allocated.	None allocated.

14.5 Environmental hazards

No information provided.

14.6 Special precautions for user

Hazchem code None allocated.

15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Poison schedule A poison schedule number has not been allocated to this product using the criteria in the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).

Classifications Safe Work Australia criteria is based on the Globally Harmonised System (GHS) of Classification and Labelling of Chemicals (GHS Revision 7).

Inventory listings **AUSTRALIA: AIIC (Australian Inventory of Industrial Chemicals)**
All components are listed on AIIC, or are exempt.

16. OTHER INFORMATION

Additional information

RESPIRATORS: In general the use of respirators should be limited and engineering controls employed to avoid exposure. If respiratory equipment must be worn ensure correct respirator selection and training is undertaken. Remember that some respirators may be extremely uncomfortable when used for long periods. The use of air powered or air supplied respirators should be considered where prolonged or repeated use is necessary.

EXPOSURE STANDARDS - TIME WEIGHTED AVERAGE (TWA) or WES (WORKPLACE EXPOSURE STANDARD) (NZ): Exposure standards are established on the premise of an 8 hour work period of normal intensity, under normal climatic conditions and where a 16 hour break between shifts exists to enable the body to eliminate absorbed contaminants. In the following circumstances, exposure standards must be reduced: Strenuous work conditions; hot, humid climates; high altitude conditions; extended shifts (which increase the exposure period and shorten the period of recuperation).

PERSONAL PROTECTIVE EQUIPMENT GUIDELINES:
The recommendation for protective equipment contained within this report is provided as a guide only. Factors such as form of product, method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before final selection of personal protective equipment is made.

HEALTH EFFECTS FROM EXPOSURE:
It should be noted that the effects from exposure to this product will depend on several factors including: form of product; frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare a report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

Abbreviations

ACGIH	American Conference of Governmental Industrial Hygienists
CAS #	Chemical Abstract Service number - used to uniquely identify chemical compounds
CNS	Central Nervous System
EC No.	EC No - European Community Number
EMS	Emergency Schedules (Emergency Procedures for Ships Carrying Dangerous Goods)
GHS	Globally Harmonized System
GTEPG	Group Text Emergency Procedure Guide
IARC	International Agency for Research on Cancer
LC50	Lethal Concentration, 50% / Median Lethal Concentration
LD50	Lethal Dose, 50% / Median Lethal Dose
mg/m³	Milligrams per Cubic Metre
OEL	Occupational Exposure Limit
pH	relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline).
ppm	Parts Per Million
STEL	Short-Term Exposure Limit
STOT-RE	Specific target organ toxicity (repeated exposure)
STOT-SE	Specific target organ toxicity (single exposure)
SUSMP	Standard for the Uniform Scheduling of Medicines and Poisons
SWA	Safe Work Australia
TLV	Threshold Limit Value
TWA	Time Weighted Average

Report status

This document has been compiled by RMT on behalf of the manufacturer, importer or supplier of the product and serves as their Safety Data Sheet ('SDS').

It is based on information concerning the product which has been provided to RMT by the manufacturer, importer or supplier or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer, importer or supplier.

While RMT has taken all due care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, RMT accepts no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS.

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[End of SDS]