Licence number L8945/2016/2

**Licence holder** Polaris Metals Pty Ltd

**ACN** 085 223 570

Registered business address 1 Sleat Road

**APPLECROSS WA 6153** 

**DWER file number** DER2016/000036-1

**Duration** 7/03/2021 to 6/03/2026

**Date of issue** 24/02/2021

Premises details J4 Iron Ore Project

MOUNT JACKSON WA 6426

Mining tenements M77/1270-I, L77/250, L77/252,

L77/254, Part of L15/305 As shown in Schedule 1

Prescribed premises category description (Schedule 1, Environmental Protection Regulations 1987)	Assessed production / design capacity
Category 6 Mine dewatering: premises on which water is extracted and discharged into the environment to allow mining of ore.	450,000 tonnes per annual period
Category 12 Screening etc. of material: premises (other than premises within category 5 or 8) on which material extracted from the ground is screened, washed, crushed, ground, milled, sized or separated.	100,000 tonnes per annual period
Category 57 Used tyre storage (general): premises (other than premises within category 56) on which used tyres are stored	1,000 tyres
Category 64 Class II or III putrescible landfill site: premises (other than clean fill premises) on which waste of a type permitted for disposal for this category of prescribed premises, in accordance with the Landfill Waste Classification and Waste Definitions 1996, is accepted for burial.	780 tonnes per annual period

This licence is granted to the licence holder, subject to the attached conditions, on 24 February 2021, by:

# A/MANGER, RESOURCE INDUSTRIES REGULATORY SERVICES

an officer delegated under section 20 of the Environmental Protection Act 1986 (WA)

## **Licence history**

Date	Reference number	Summary of changes
26/02/2015	W5798/2015/1	Works Approval to construct and commission a camp wastewater treatment plant
07/05/2015	W5816/2015/1	Works Approval to construct and commission a camp landfill
03/03/2016	L8945/2016/1	New Licence
24/02/2021	L8945/2016/2	Licence Renewed

## Interpretation

#### In this licence:

- (a) the words 'including', 'includes' and 'include' in conditions mean "including but not limited to", and similar, as appropriate;
- (b) where any word or phrase is given a defined meaning, any other part of speech or other grammatical form of that word or phrase has a corresponding meaning;
- (c) where tables are used in a condition, each row in a table constitutes a separate condition;
- (d) any reference to an Australian or other standard, guideline, or code of practice in this licence:
  - (i) if dated, refers to that particular version; and
  - (ii) if not dated, refers to the latest version and therefore may be subject to change over time;
- (e) unless specified otherwise, any reference to a section of an Act refers to that section of the EP Act: and
- (f) unless specified otherwise, all definitions are in accordance with the EP Act.

**NOTE:** This licence requires specific conditions to be met but does not provide any implied authorisation for other emissions, discharges, or activities not specified in this licence.

## **Licence conditions**

The licence holder must ensure that the following conditions are complied with:

### 1 General

#### 1.1 Premises operation

- 1.1.1 The Licence Holder shall ensure that all pipelines containing saline water are either:
  - (a) equipped with telemetry systems and pressure sensors along pipelines to allow the detection of leaks and failures;
  - (b) equipped with automatic cut-outs in the event of a pipe failure; or
  - (c) provided with secondary containment sufficient to contain any spill for a period equal to the time between routine inspections.
- 1.1.2 The Licence Holder shall ensure that dewatering water is only discharged to the authorised discharge point as shown in Schedule 1, Figure 5.
- 1.1.3 The Licence Holder shall:
  - (a) undertake inspections as detailed in Table 1.1.1;
  - (b) where any inspection identifies that an appropriate level of environmental protection is not being maintained, take corrective action to mitigate adverse environmental consequences as soon as practicable; and
  - (c) maintain a record of all inspections undertaken.

Table 1.1.1: Inspection of infrastructure		
Scope of inspection	Type of inspection	Frequency of inspection
Dewatering water pipelines	Visual integrity	Daily

- 1.1.4 The Licence Holder shall only accept waste on to the landfill if:
  - (a) it is of a type listed in Table 1.1.2;
  - (b) the quantity accepted is below any quantity limit listed in Table 1.1.2; and
  - (c) it meets any specification listed in Table 1.1.2.

Table 1.1.2: Waste acceptance			
Waste	Quantity Limit	Specification <sup>1</sup>	
Inert Waste Type 1		None specified	
Putrescible waste	780 tpa	None specified	
Inert Waste Type 2		Tyres and plastic only	
Clean fill	None specified	None specified	

Note 1: Additional requirements for the acceptance of controlled waste (including asbestos and tyres) are set out in the Environmental Protection (Controlled Waste) Regulations 2004.

1.1.5 The Licence Holder shall ensure that where waste does not meet the waste acceptance criteria set out in condition 1.1.6, waste is stored in a quarantined storage area or container and removed from the Premises to an appropriately authorised facility as soon as practicable.

1.1.6 The Licence Holder shall ensure that wastes accepted onto the landfill are only subjected to the process(es) set out in Table 1.1.3 and in accordance with any process limits described in Table 1.1.3.

Table 1.1.3: Waste processing		
Waste type(s)	Process	Process limits 1,2
All	Disposal of waste by landfilling	Shall only take place within the landfill area shown in Schedule 1, Figure 1.  No waste shall be temporarily stored or landfilled within 35 m from the boundary of the Premises.  The separation distance between the base of the landfill and the highest groundwater level shall not be less than 2 m.
Hydrocarbon contaminated waste <sup>3</sup>	Bioremediation	All bioremediation areas are located:  (a) at least 50 m from surface water bodies;  (b) at least 50 m from any odour sensitive receptors; and  (c) in an area where groundwater is at a depth of greater than 3 m below ground surface.  Ensure waste is bioremediated by aerating soil at least monthly when the facility is in use.
Inert Waste Type 2 - Tyres	Receipt, handling, storage prior to re- use or disposal by landfilling	No more than 1,000 tyres are to be stored at the Premises at any one time. Individual tyre stacks shall; (a) be separated at least 6 m from each other; (b) not exceed 100 square metres in area; and (c) not exceed 3 m in height.
Putrescible Waste Clean Fill Inert Waste Type 1	Receipt, handling and disposal by landfilling	None specified

Note 1: Requirements for landfilling tyres are set out in Part 6 of the *Environmental Protection Regulations 1987*.

Note 2: Additional requirements for the acceptance and landfilling of controlled waste (including asbestos and tyres) are set out in the *Environmental Protection (Controlled Waste) Regulations 2004*.

Note 3: Bioremediated soil will be required to meet specifications for Class II landfills as outlined in the Landfill Waste Classification and Waste Definitions 1996 (as amended December 2019) before being landfilled.

- 1.1.7 The Licence Holder shall ensure that all leachate runoff at the bioremediation pad is directed to, and contained within, an impermeable leachate collection sump with capacity to contain a 1 in 100 year, 72 hour duration rainfall event.
- 1.1.8 The Licence Holder shall manage the landfilling activities to ensure:
  - (a) the size of the tipping face is kept to a minimum and not larger than 30 m in length and 2 m above ground level in height; and
  - (b) waste is placed and compacted to ensure all faces are stable and capable of retaining cover material.

1.1.9 The Licence Holder shall ensure that cover is applied to waste in accordance with Table 1.1.4 and that sufficient stockpiles of cover are maintained on site at all times.

Table 1.1.4: Cover requirements			
Waste Type	Material	Depth	Timescales
Putrescible Wastes Inert Waste Type 1	Inert and incombustible material	Sufficient to ensure the waste is completely covered and that no waste is exposed	Fortnightly or as soon as practicable after deposit and prior to compaction
Inert Waste Type 2	Inert waste type 1 or soil	500 mm	As soon as practicable after deposit

Note 1: Additional requirements for the covering of tyres are set out in Part 6 of the *Environmental Protection Regulations* 1987.

- 1.1.10 The Licence Holder shall ensure that no waste is burnt on the premises.
- 1.1.11 The Licence Holder shall implement the following measures for managing the risk of fires:
  - (a) ensure that fire fighting equipment, stored onsite, is capable of controlling and extinguishing a tyre fire; and
  - (b) ensure that tyre stacks do not obscure fire protection equipment (including fire hydrants and fire hoses) or any related signage.
- 1.1.12 The Licence Holder shall ensure that wind-blown waste is contained within the boundary of the landfill and that wind-blown waste is returned to the tipping area on at least a monthly basis.

## 2 Monitoring

### 2.1 Monitoring of inputs and outputs

2.1.1 The Licence Holder shall undertake the monitoring in Table 2.1.1 according to the specifications in that table.

Table 2.1.1: l	Monitoring of inputs and c	outputs		
Input/	Parameter	Units	Averaging	Frequency
Output			period	
Dewatering	Cumulative volume of	kL	Month	Monthly
water	water dewatered from pit			
	Cumulative volume of	kL	Month	Monthly
	water discharged to the			
	authorised discharge			
	point as shown in			
	Schedule 1 Figure 5			
Waste Inputs	Inert Waste Type 1	Tonnes or (where no weighbridge is	N/A	Each load
	Inert Waste Type 2			arriving at
		present) m <sup>3</sup>		the landfill
	Putrescible Waste			

### 3 Information

#### 3.1 Records

- 3.1.1 All information and records required by the Licence shall:
  - (a) be legible;
  - (b) if amended, be amended in such a way that the original and subsequent amendments remain legible or are capable of retrieval;
  - (c) except for records listed in 3.1.1(d), be retained for at least 6 years from the date the records were made or until the expiry of the Licence or any subsequent licence: and
  - (d) for those following records, be retained until the expiry of the Licence and any subsequent licence:
    - (i) off-site environmental effects; or
    - (ii) matters which affect the condition of the land or waters.
- 3.1.2 The Licence Holder shall complete an Annual Audit Compliance Report indicating the extent to which the Licence Holder has complied with the conditions of the Licence, and any previous licence issued under Part V of the EP Act for the Premises for the previous annual period.
- 3.1.3 The Licence Holder shall implement a complaints management system that as a minimum records the number and details of complaints received concerning the environmental impact of the activities undertaken at the Premises and any action taken in response to the complaint.

#### 3.2 Reporting

3.2.1 The Licence Holder shall submit to the CEO an Annual Environmental Report within 28 calendar days after the end of the annual period. The report shall contain the information listed in Table 3.2.1 in the format or form specified in that table.

Table 3.2.1: Annu	ual Environmental Report	
Condition or table (if relevant)	Parameter	Format or form
-	Summary of any failure or malfunction of any pollution control equipment and any environmental incidents that have occurred during the annual period and any action taken	None specified
Table 2.1.1	Monitoring of inputs and outputs	
3.1.2	Compliance	Annual Audit Compliance Report (AACR)
3.1.3	Complaints summary	None specified

### 3.3 Notification

3.3.1 The Licence Holder shall ensure that the parameters listed in Table 3.3.1 are notified to the CEO in accordance with the notification requirements of the table.

Table 3.3.1: Notification requirements			
Condition or table (if relevant)	Parameter	Notification requirement <sup>1</sup>	Format or form <sup>2</sup>
-	Breach of any limit specified in the Licence	Part A: As soon as practicable but no later than 5pm of the next working day.	N1
		Part B: As soon as practicable	

Note 1: Notification requirements in the Licence shall not negate the requirement to comply with s72 of the EP Act

Note 2: Forms are in Schedule 2

## **Definitions**

In this licence, the terms in Table 1 have the meanings defined.

**Table 1: Definitions** 

Term	Definition
ACN	Australian Company Number
Annual Audit Compliance Report (AACR)	means a report submitted in a format approved by the CEO (relevant guidelines and templates may be available on the Department's website).
annual period	a 12 month period commencing from 1 April until 31 March of the immediately following year.
bioremediation	means the above-ground remediation of soils to reduce the concentrations of hydrocarbons through biodegradation.
CEO	means Chief Executive Officer of the Department.
	"submit to / notify the CEO" (or similar), means either:
	Director General Department administering the Environmental Protection Act 1986 Locked Bag 10 Joondalup DC WA 6919
	or:
	info@dwer.wa.gov.au
controlled waste	has the definition in Environmental Protection (Controlled Waste) Regulations 2004.
Department	means the department established under section 35 of the <i>Public Sector Management Act 1994</i> (WA) and designated as responsible for the administration of the EP Act, which includes Part V Division 3.
discharge	has the same meaning given to that term under the EP Act.
emission	has the same meaning given to that term under the EP Act.
EP Act	Environmental Protection Act 1986 (WA)
licence	refers to this document, which evidences the grant of a licence by the CEO under section 57 of the EP Act, subject to the specified conditions contained within.
licence holder	refers to the occupier of the premises, being the person specified on the front of the licence as the person to whom this licence has been granted.

Term	Definition
premises	refers to the premises to which this licence applies, as specified at the front of this licence and as shown on the premises map (Figure 1) in Schedule 1 to this licence.
prescribed premises	has the same meaning given to that term under the EP Act.
Schedule 1	means Schedule 1 of this Licence unless otherwise stated.
Schedule 2	means Schedule 2 of this Licence unless otherwise stated.
waste	has the same meaning given to that term under the EP Act.

## **END OF CONDITIONS**

# **Schedule 1: Maps**

## **Premises map**

The Premises is shown in the maps below. The orange line depicts the Premises boundary.

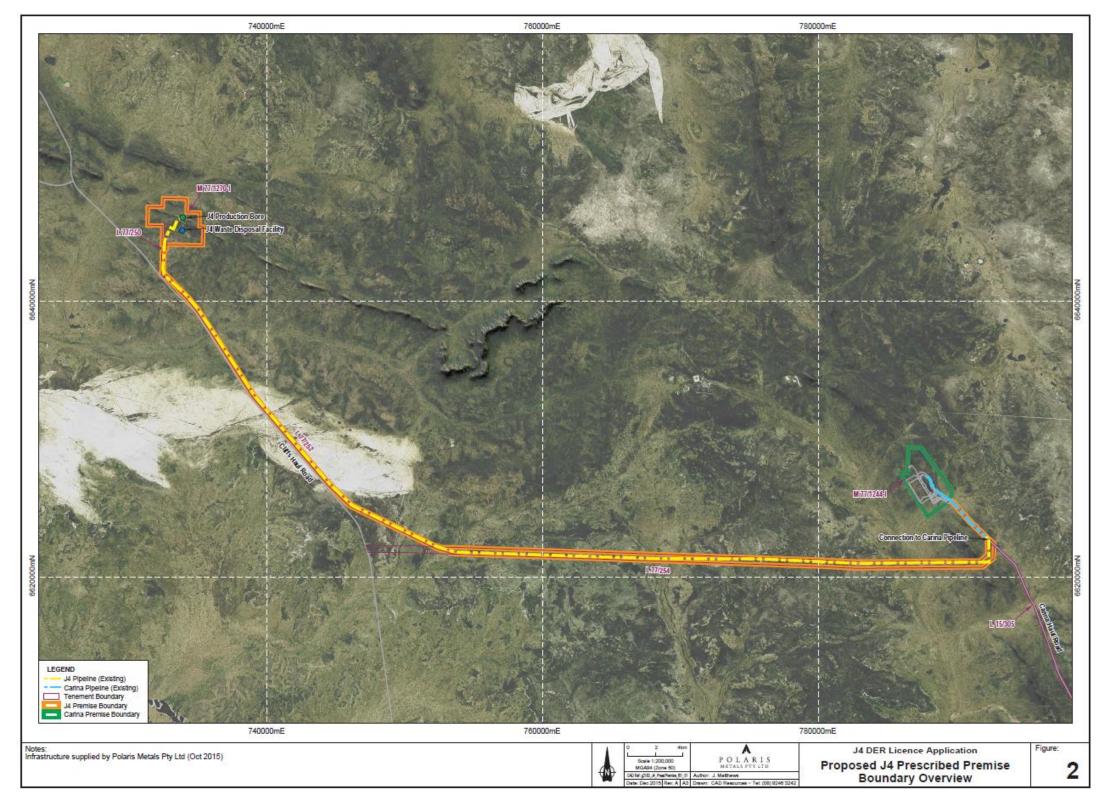


Figure 1: Map of the boundary of the prescribed premises

### Premises map and landfill location

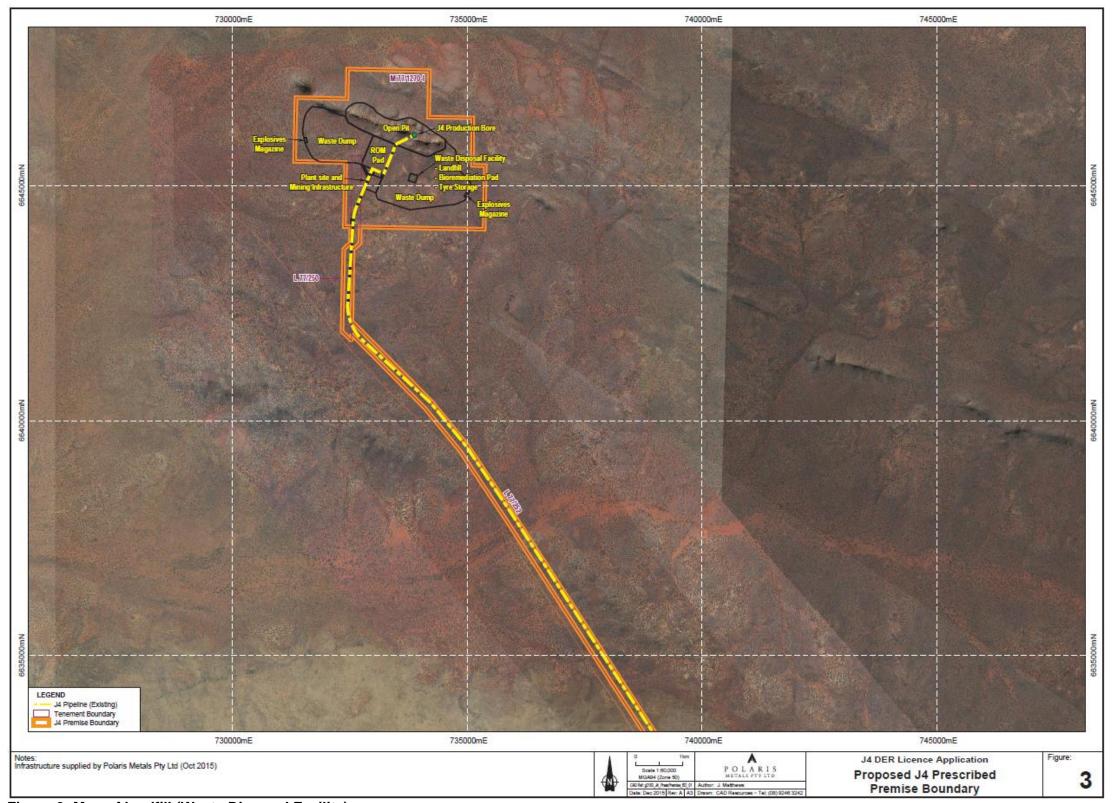


Figure 2: Map of landfill (Waste Disposal Facility)

### Premises map

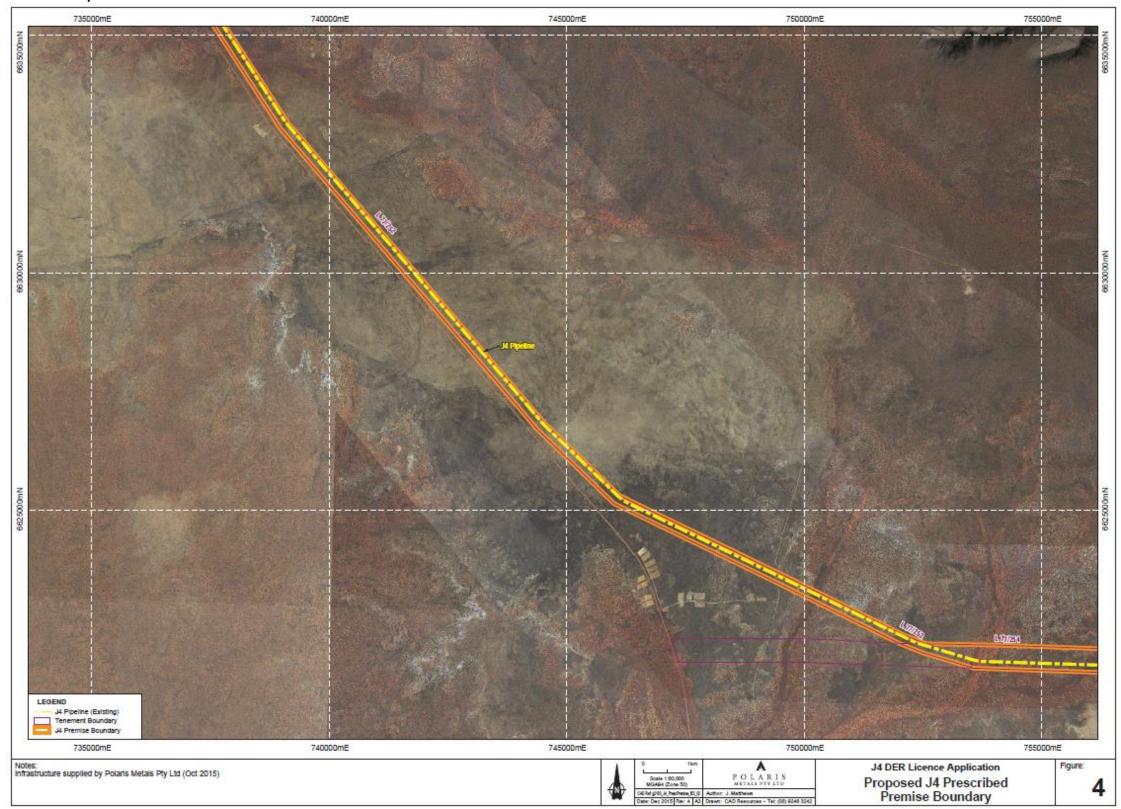


Figure 3: Map of J4 pipeline (1)

### Premises map

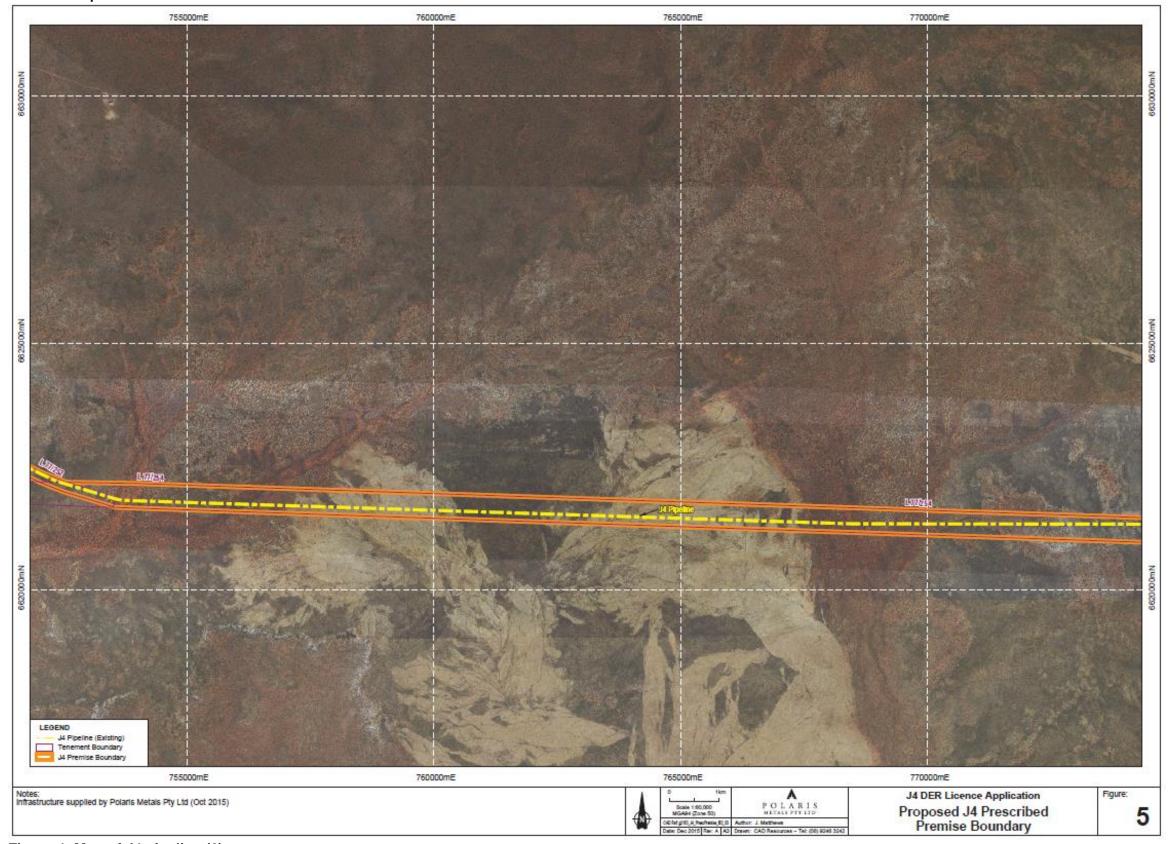


Figure 4: Map of J4 pipeline (2)

### Map of emission point

The locations of the emission point defined in condition 1.1.2 is shown below.

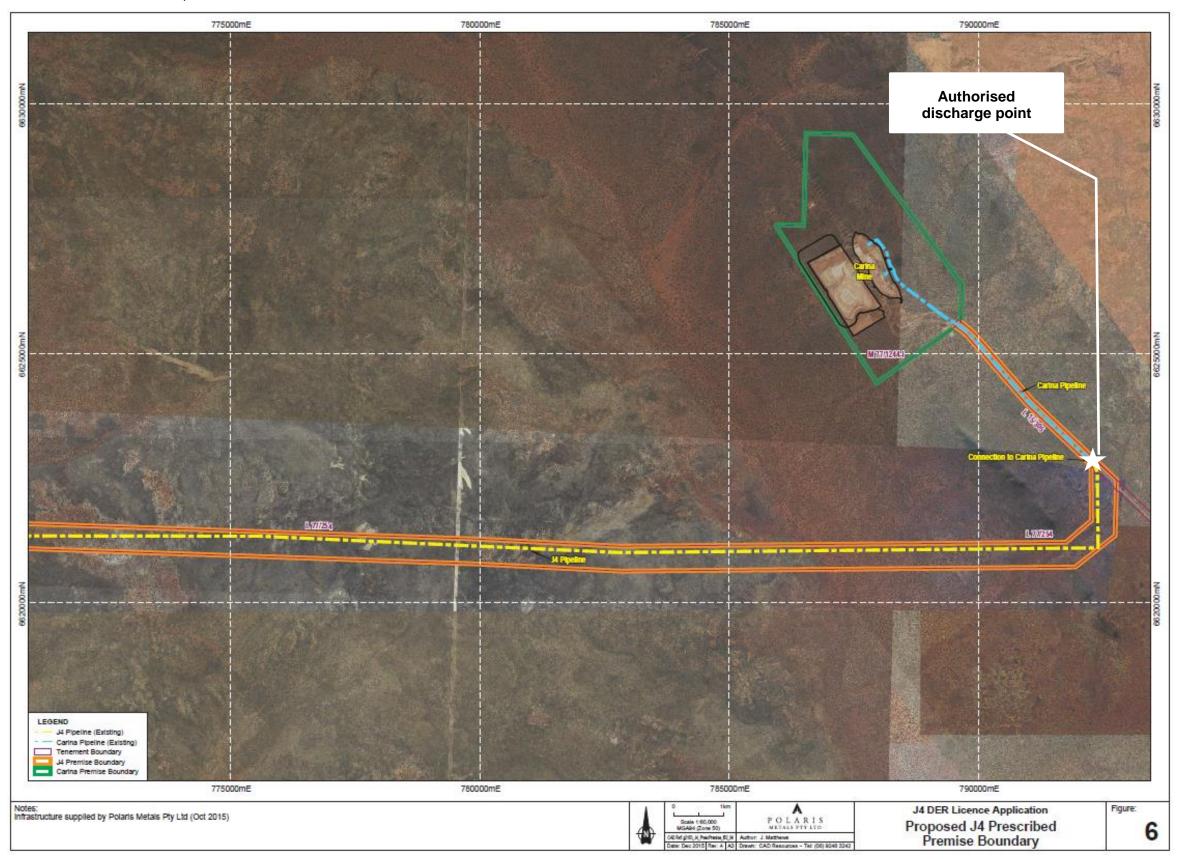


Figure 5: Map of J4 pipeline connection to Carina Pipeline

L8945/2016/2 (24/02/2021)

IR-T06 Licence template (v7.0) (February 2020)

## **Schedule 2: Reporting & notification**

Licence: L8945/2016/2 Licence Holder: Polaris Metals Pty Ltd Form: N1 Date of breach:

#### Notification of detection of the breach of a limit.

These pages outline the information that the operator must provide.

Units of measurement used in information supplied under Part A and B requirements shall be appropriate to the circumstances of the emission. Where appropriate, a comparison should be made of actual emissions and authorised emission limits.

### Part A

Licence number	
Name of operator	
Location of premises	
Time and date of the detection	

Notification requirements for the breach of a limit	
Emission point reference/source	
Parameter(s)	
Limit	
Measured value	
Date and time of monitoring	
Measures taken, or intended to be taken, to stop the emission	

## Part B

Any more accurate information on the matters for notification under Part A.	
Measures taken, or intended to be taken, to prevent a recurrence of the incident.	
Measures taken, or intended to be taken, to rectify, limit or prevent any pollution of the environment which has been or may be caused by the emission.	
The dates of any previous N1 notifications for the Premises in the preceding 24 months.	
Name	
Post	
Signature on behalf of licence holder	
Date	