



Environmental Protection Act 1986, Part V

Licence Holder: IB Operations Pty Ltd

Licence: L8845/2014/1

Registered office: Level 2
Hyatt Centre
87 Adelaide Terrace
EAST PERTH WA 6004

ACN: 165 513 557

Premises address: Iron Bridge Magnetite Project
Mining Tenements M45/1226, L45/293, L45/294, L45/359, L45/360,
L45/361, L45/364 and L45/367
MARBLE BAR WA 6760
As depicted in Schedule 1

Issue date: Thursday, 4 June 2015

Commencement date: Monday, 8 June 2015

Amendment date: 13 February 2020

Expiry date: Saturday, 7 June 2036

Prescribed premises category

Schedule 1 of the *Environmental Protection Regulations 1987*

Category number	Category description	Category production or design capacity	Assessed premises production or design capacity
5	Processing or beneficiation of metallic or non-metallic ore	50,000 tonnes or more per year	50,000 tonnes per annual period
52	Electric power generation	≥ 20 MWe in aggregate (using natural gas) or ≥ 10 MWe in aggregate (using a fuel other than natural gas)	14 MWe per annual period
54	Sewage facility	100 cubic metres or more per day	205 cubic metres per day

Conditions

This Licence is subject to the conditions set out in the attached pages.

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Alana Kidd
Manager, Resource Industries
Officer delegated under section 20 of the *Environmental Protection Act 1986*

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Introduction

This Introduction is not part of the Licence conditions.

DWER's industry licensing role

The Department of Water and Environmental Regulation (DWER) is a government department for the state of Western Australia in the portfolio of the Minister for Environment. DWER's purpose is to advise on and implement strategies for a healthy environment for the benefit of all current and future Western Australians.

DWER has responsibilities under Part V of the *Environmental Protection Act 1986* (the Act) for the licensing of prescribed premises. Through this process DWER regulates to prevent, control and abate pollution and environmental harm to conserve and protect the environment. DWER also monitors and audits compliance with works approvals and licence conditions, takes enforcement action as appropriate and develops and implements licensing and industry regulation policy.

Licence requirements

This licence is issued under Part V of the Act. Conditions contained within the licence relate to the prevention, reduction or control of emissions and discharges to the environment and to the monitoring and reporting of them.

Where other statutory instruments impose obligations on the premises/licence holder the intention is not to replicate them in the licence conditions. You should therefore ensure that you are aware of all your statutory obligations under the Act and any other statutory instrument. Legislation can be accessed through the State Law Publisher website using the following link:

<http://www.slp.wa.gov.au/legislation/statutes.nsf/default.html>

For your premises relevant statutory instruments include but are not limited to obligations under the:

- *Environmental Protection (Unauthorised Discharges) Regulations 2004* – these Regulations make it an offence to discharge certain materials such as contaminated stormwater into the environment other than in the circumstances set out in the Regulations.
- *Environmental Protection (Controlled Waste) Regulations 2004* - these Regulations place obligations on you if you produce, accept, transport or dispose of controlled waste.
- *Environmental Protection (Noise) Regulations 1997* – these Regulations require noise emissions from the Premises to comply with the assigned noise levels set out in the Regulations.

You must comply with your licence. Non-compliance with your licence is an offence and strict penalties exist for those who do not comply.

Licence holders are also reminded of the requirements of section 53 of the Act which places restrictions on making certain changes to prescribed premises unless the changes are in accordance with a works approval, licence, closure notice or environmental protection notice.

Licence fees

If you have a licence that is issued for more than one year, you are required to pay an annual licence fee prior to the anniversary date of issue of your licence. Non payment of annual licence fees will result in your licence ceasing to have effect meaning that it will no longer be valid and you will need to apply for a new licence for your premises.

Ministerial conditions

If your premises has been assessed under Part IV of the Act you may have had conditions imposed by the Minister for Environment. You are required to comply with any conditions imposed by the Minister.

Premises description and Licence summary

IB Operations Pty Ltd (IBO) operates the Iron Bridge Magnetite Project, (formerly known as the North Star Project) located approximately 110 kilometres (km) south of Port Hedland in the Pilbara region of Western Australia. IBO is a joint venture between FMG Iron Bridge (Aust) Pty Ltd and Formosa Steel IB Pty Ltd. The Iron Bridge Magnetite Project will be further developed to mine approximately 22 million tonnes per annum (Mtpa) of waste and ore to produce approximately 2 Mtpa of product, to be trucked to Port Hedland for export.

The Iron Bridge Magnetite Project has been assessed as a prescribed premise as it meets the requirements of categories 5, 52 and 54 under Schedule 1 of the *Environmental Protection Regulations 1987*.

Category 5 – An ore processing facility (OPF) crushes, screens and processes magnetite ore by dry and wet magnetic separation. The OPF produces a wet tailings waste stream, which is stored in the tailings storage facility (TSF) and a dry tailings waste stream, which is stored in the Dry Rejects Landform. Magnetite slurry is conveyed from the OPF to the concentrate handling facility and processed through a belt filtration plant to remove excess water. The magnetite concentrate product is then discharged from a conveyor to an open conical stockpile from where it is stored for transport to Port Hedland.

The category 5 approved production capacity was previously reduced from 10,000,000 tonnes per annum to no more than 50,000 tonnes per annum, to reflect the site entering care and maintenance.

Category 52 – The Iron Bridge Magnetite Project power station comprises 6 x 1 megawatt (MW) diesel generators and 5 x 1.6 MW diesel generators (total 14 MW), contained with sea containers. Fuel is stored in 4 x 150 kL fuel tanks and waste oil is stored in a 20 foot sea container.

Category 54 – An existing Wastewater Treatment Plant (WWTP) has a treatment capacity of up to 160 m³ per day. Treated effluent is discharged to a designated 4 hectare (ha) irrigation area. This amendment is for the installation and operation of an additional and temporary WWTP (capacity 45 m³/day) for a premises total of 205 m³/day capacity until a permanent WWTP is constructed and commissioned.

The significant emissions associated with the operation of the Iron Bridge Magnetite Project are:

- Deposition of wet tailings to the TSF;
- Air emissions from the diesel powered power station; and
- Discharge of treated wastewater to land.

The significant risks associated with the North Star Project are:

- Potential impacts to groundwater quality and levels due to seepage from the TSF;
- Potential impacts to surface water from the discharge of potentially contaminated and/or sediment laden stormwater to creek lines; and

- Potential impacts to groundwater and surface water quality from discharge of treated wastewater from the WWTP.

The licences and works approvals issued for the Premises since 16/04/2014 are:

Instrument log		
Instrument	Issued	Description
W5607/2014/1	16/04/2014	New works approval application for construction of the North Star Ore Processing Facility
W5623/2014/1	28/07/2014	New works approval application for construction of a category 52 power station (20MWe)
L8825/2014/1	4/09/2014	Licence for North Star WWTP issued.
W5607/2014/1	30/10/2014	Amendment to change components of the ore processing circuit and include a tailings storage facility
W5607/2014/1	21/05/2015	Amendment to extend commissioning period
L8845/2014/1	04/06/2015	New licence application for operation of a category 52 power station (13MWe)
W5607/2014/1	6/08/2015	Amendment to extend commissioning period
L8845/2014/1	07/01/2016	Amendment to include category 5
L8825/2014/1	07/06/2016	Licence for WWTP surrendered because WWTP included in L8845/2014/1.
L8845/2014/1	02/06/2016	Amendment to include category 54, decrease category 5 approved production capacity for care and maintenance. Increase category 52 approved production capacity and include conditions for care and maintenance.
L8845/2014/1	24/05/2017	Amendment Notice 1 for Category 54 activities during care and maintenance, general stormwater management and administrative changes.
L8845/2014/1	03/10/2018	Amendment Notice 2 to amend the TSF inspection requirements.
L8845/2014/1	13/02/2020	This amendment to include a temporary 45 m ³ /day WWTP and to consolidate the licence to incorporate Amendment Notices 1 and 2. Premises name changed to Iron Bridge Magnetite Project.

Severance

It is the intent of these licence conditions that they shall operate so that, if a condition or a part of a condition is beyond the power of this licence to impose, or is otherwise *ultra vires* or invalid, that condition or part of a condition shall be severed and the remainder of these conditions shall nevertheless be valid to the extent that they are within the power of this licence to impose and are not otherwise *ultra vires* or invalid.

END OF INTRODUCTION

Licence conditions

1 General

1.1 Interpretation

1.1.1 In the licence, definitions from the *Environmental Protection Act 1986* apply unless the contrary intention appears.

1.1.2 For the purposes of this licence, unless the contrary intention appears:

'Act' means the *Environmental Protection Act 1986*;

'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' means a 12 month period commencing from 1 January until 31 December in the same year;

'AS/NZS 5667.1' means the Australian Standard AS/NZS 5667.1 *Water Quality – Sampling – Guidance of the Design of sampling programs, sampling techniques and the preservation and handling of samples*;

'AS/NZS 5667.6' means the Australian Standard AS/NZS 5667.6 *Water Quality – Sampling – Guidance on sampling of rivers and streams*;

'AS/NZS 5667.10' means the Australian Standard AS/NZS 5667.10 *Water Quality – Sampling – Guidance on sampling of waste waters*;

'AS/NZS 5667.11' means the Australian Standard AS/NZS 5667.11 *Water Quality – Sampling – Guidance on sampling of groundwaters*;

'averaging period' means the time over which a limit or target is measured or a monitoring result is obtained;

'CEO' means Chief Executive Officer of the Department of Environment Regulation;

'CEO' for the purpose of correspondence means:

Director General
Department administering the *Environmental Protection Act 1986*
Locked Bag 10
Joondalup DC WA 6919
Email: info@dwer.wa.gov.au

'controlled waste' has the definition in *Environmental Protection (Controlled Waste) Regulations 2004*;

'freeboard' means the distance between the maximum water surface elevations and the top of retaining banks or structures at their lowest point;

'HDPE' means high density polyethylene;

'licence' means this Licence numbered L8845/2014/1 and issued under the Act;

'licence holder' means the person or organisation named as Licence Holder on page 1 of the Licence;

'mbgl' means metres below ground level;

'mg/L' means milligrams per litre;

'µS/cm' means microSiemens per centimetre;

'MWe' means power output (electricity generated) in megawatts;

'NATA' means the National Association of Testing Authorities, Australia;

'NATA accredited' means in relation to the analysis of a sample that the laboratory is NATA accredited for the specified analysis at the time of the analysis;

'NTU' means Nephelometric Turbidity Units;

'Premises' means the area defined in the Premises map in Schedule 1 and listed as the Premises address on page 1 of the Licence;

'process equipment' means any wastewater or sludge containment infrastructure or wastewater treatment vessel;

'Schedule 1' means Schedule 1 of this Licence unless otherwise stated;

'Schedule 2' means Schedule 2 of this Licence unless otherwise stated;

'spot sample' means a discrete sample representative at the time and place at which the sample is taken;

'usual working day' means 0800 – 1700 hours, Monday to Friday excluding public holidays in Western Australia; and

'WWTP' means wastewater treatment plant.

1.1.3 Any reference to an Australian or other standard in the licence means the relevant parts of the standard in force from time to time during the term of this licence.

1.1.4 Any reference to a guideline or code of practice in the licence means the current version of the guideline or code of practice in force from time to time, and shall include any amendments or replacements to that guideline or code of practice made during the term of this licence.

1.2 General conditions

1.2.1 The licence holder shall ensure that all pipelines or sections of pipelines containing tailings materials are either:

- (a) equipped with telemetry; or
- (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.

1.2.2 The licence holder shall ensure that waste material is only stored and/or treated within vessels or compounds listed in Table 1.2.1 and identified on the map of containment infrastructure in Schedule 1 in accordance with the requirements specified within Table 1.2.1.

Table 1.2.1: Containment infrastructure		
Storage vessel or compound	Material	Requirements
Process water dam	Process water from the Concentrate and Tailings Thickener Tanks	Minimum freeboard of 300 mm; HDPE lined to achieve a permeability of at least $<10^{-9}$ metres per second
Tailings storage facility	Tailings	Maintain a minimum freeboard of 1000 mm
Return water holding tank	Water produced from the dewatering of magnetite slurry	Maintain a minimum freeboard of 300 mm

1.2.3 The licence holder shall:

- (a) undertake inspections as detailed in Table 1.2.2;
- (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 1.2.2: Inspection of infrastructure		
Scope of inspection	Type of inspection	Frequency of inspection
Tailings delivery pipelines	Visual integrity	Daily whilst operational
Tailings storage facility return water pipelines	Visual integrity	Daily whilst operational
Tailings storage facility embankment freeboard	Visual to confirm required freeboard capacity is available	Daily whilst operational. Fortnightly whilst in care and maintenance.

1.2.4 The licence holder shall ensure the limits specified in Table 1.2.3 are not exceeded.

Table 1.2.3 Production or design capacity limits		
Category ¹	Category description ¹	Premises production or design capacity limit
5	Processing or beneficiation of metallic or non-metallic ore	50,000 tonnes of ore per annual period
52	Electric power generation	14 MWe per annual period

Note 1: *Environmental Protection Regulations 1987*, Schedule 1.

1.3 Premises operation

1.3.1 The licence holder shall record and investigate the exceedance of any descriptive or numerical limit in this section.

1.3.2 The licence holder shall only allow waste to be accepted on to the premises if:

- (a) it is of a type listed in Table 1.3.1; and
- (b) the quantity accepted is below any limit listed in Table 1.3.1; and
- (c) it meets any specification listed in Table 1.3.1.

Table 1.3.1: Waste acceptance		
Waste	Quantity Limit	Specification ¹
Sewage	160 m ³ /day, then 205 m ³ /day after submission of construction compliance documents as required by condition 5.1.2.	Accepted through sewer inflow(s) only

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

- 1.3.3 The licence holder shall ensure that the wastes accepted onto the premises are only subjected to the processes set out in Table 1.3.2 and in accordance with any process requirements described in that table.

Table 1.3.2: Waste processing		
Waste type	Process	Process requirements
Sewage (excluding septage)	Physical, biological and chemical treatment	Treatment of sewage waste shall be at or below the treatment capacity of 160m ³ /day, then 205 m ³ /day following submission of construction compliance documents as required by condition 5.1.2.

- 1.3.4 The licence holder shall manage the irrigation of treated wastewater such that:
- (a) no irrigation generated run-off, spray drift or discharge occurs beyond the boundary of the defined irrigation area);
 - (b) treated wastewater is evenly distributed over the irrigation area;
 - (c) no soil erosion occurs;
 - (d) irrigation does not occur on land that is waterlogged; and
 - (e) vegetation cover is maintained over the irrigation area.
- 1.3.5 The licence holder shall manage the wastewater treatment vessels such that:
- (a) overtopping of the vessels does not occur;
 - (b) stormwater runoff is prevented from entering the vessels; and
 - (c) vegetation and floating debris (emergent or otherwise) is prevented from growing or accumulating in the vessels.
- 1.3.6 The licence holder shall:
- (a) implement security measures at the site to prevent as far as is practical unauthorised access to the site; and
 - (b) undertake regular inspections of all security measures and repair damage as soon as practicable.

2 Emissions

2.1 Point source emissions to air

- 2.1.1 The licence holder shall ensure that where waste is emitted to air from the emission points in Table 2.1.1 and identified on the map of emission points in Schedule 1, it is done so in accordance with the conditions of this licence.

Table 2.1.1: Emission points to air			
Emission point reference and location on Map of emission points	Emission Point	Emission point height (m)	Source, including any abatement
A1	Diesel Generator 1	2.9 m	1.6MW diesel generator
A2	Diesel Generator 2	2.9 m	1.6MW diesel generator
A3	Diesel Generator 3	2.9 m	1.6MW diesel generator

A4	Diesel Generator 4	2.9 m	1.6MW diesel generator
A5	Diesel Generator 5	2.9 m	1.6MW diesel generator
A6	Diesel Generator 6	2.9 m	1MW diesel generator
A7	Diesel Generator 7	2.9 m	1MW diesel generator
A8	Diesel Generator 8	2.9 m	1MW diesel generator
A9	Diesel Generator 9	2.9 m	1MW diesel generator
A10	Diesel Generator 10	2.9 m	1MW diesel generator
A11	Diesel Generator 11	2.9 m	1MW diesel generator

2.2 Emissions to land

2.2.1 The licence holder shall ensure that where waste is emitted to land from the emission points in Table 2.2.1 and identified on the maps of emission points in Schedule 1, it is done so in accordance with the conditions of this licence.

Table 2.2.1: Emissions to land		
Emission point reference on Map of emission points	Description	Source including abatement
L1 - Irrigation area	Discharge from WWTP final tank to irrigation area	Treated wastewater pumped from final storage or treatment tank
Stage 2 Irrigation Field (following submission of construction compliance documents required by condition 5.1.2.	Discharge from WWTP final tank to irrigation area	Treated wastewater pumped from final storage or treatment tank

2.2.2 The licence holder shall ensure that where waste is emitted to surface water from the emission points in Table 2.2.2 and identified on the map of emission points in Schedule 1 it is done so in accordance with the conditions of this licence.

Table 2.2.2: Emissions to surface water			
Emission point reference	Emission point reference on Map of emission points	Description	Source including abatement
S1	Emergency Stormwater Discharge Location	Emergency stormwater discharge from TSF	Supernatant stormwater from TSF using a floating pump

3 Monitoring

3.1 General monitoring

3.1.1 The licence holder shall ensure that:

- all water samples are collected and preserved in accordance with AS/NZS 5667.1;
- all surface water sampling is conducted in accordance with AS/NZS 5667.6;
- all wastewater sampling is conducted in accordance with AS/NZS 5667.10;
- all groundwater sampling is conducted in accordance with AS/NZS 5667.11; and
- all laboratory samples are submitted to and tested by a laboratory with current NATA accreditation for the parameters being measured unless indicated otherwise in the relevant table.

- 3.1.2 The licence holder shall ensure that:
- (a) monthly monitoring is undertaken at least 15 days apart; and
 - (b) six monthly monitoring is undertaken at least 5 months apart.
- 3.1.3 The licence holder shall ensure that all monitoring equipment used on the premises to comply with the conditions of this Licence is calibrated in accordance with the manufacturer's specifications.
- 3.1.4 The licence holder shall, where the requirements for calibration cannot be practicably met, or a discrepancy exists in the interpretation of the requirements, bring these issues to the attention of the CEO accompanied with a report comprising details of any modifications to the methods.

3.2 Monitoring of emissions to land

- 3.2.1 The licence holder shall undertake the monitoring in Table 3.2.1 according to the specifications in that table.

Table 3.2.1: Monitoring of emissions to land					
Emission point reference	Monitoring point reference	Parameter	Units	Averaging Period	Frequency
L1 and Stage 2 Irrigation Field (following submission of the commissioning report required by condition 5.2.4.	Flow meter to irrigation area	Volumetric flow rate (cumulative)	m³/day	Monthly	Continuous when irrigating
	Outfall pipe to irrigation area	pH ¹	pH units	Spot Sample	Monthly when irrigating
		Biochemical Oxygen Demand	mg/L		
		Total Suspended Solids			
		Total Dissolved Solids			
		Total Nitrogen			
		Total Phosphorus			
		<i>E.coli</i>	cfu/100 mL		
		Load of Total Nitrogen	kg/ha/day	Annually	Annually when irrigating
Load of Total Phosphorus	kg/ha/day	Annually	Annually when irrigating		

Note 1: In-field non-NATA accredited analysis permitted.

3.3 Ambient environmental quality monitoring

3.3.1 The licence holder shall undertake the monitoring in Tables 3.3.1 and 3.3.2 according to the specifications in those tables and record the results.

Table 3.3.1: Monitoring of ambient surface water quality				
Monitoring point reference and location	Parameter	Units	Averaging period	Frequency
NS_ST_SW_S01 NS_ST_SW_S02 NS_ST_SW_S03	pH ¹	-	Spot sample	Monthly when flowing
	Electrical conductivity ¹	µS/cm		
	Temperature ¹	°C		
	Turbidity ¹	NTU		
	Total Dissolved Solids	mg/L		
	Total Nitrogen			
	Total Phosphorus			
	Sulfate			
	Aluminium			
	Iron			
	Manganese			

Note 1: In-field non-NATA accredited analysis permitted.

Table 3.3.2: Monitoring of ambient groundwater quality				
Monitoring point reference and location	Parameter	Units	Averaging period	Frequency
NS-0624 NS-0663	Standing water level	mbgl	Spot sample	Monthly
	pH ¹	-		
	Electrical conductivity	µS/cm	Spot sample	Six monthly
	Total Dissolved Solids	mg/L		
	Aluminium			
	Arsenic			
	Beryllium			
	Boron			
	Cadmium			
	Chromium			
	Cobalt			
	Copper			
	Fluoride			
	Iron			
	Lead			
	Manganese			
	Mercury			
	Molybdenum			
	Nickel			
	Selenium			
	Uranium			
	Vanadium			
	Zinc			

Note 1: In-field non-NATA accredited analysis permitted.

4 Information

4.1 Records

- 4.1.1 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 4.1.1(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.
- 4.1.2 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 Act for the premises for the previous annual period.
- 4.1.3 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.

4.2 Reporting

- 4.2.1 The licence holder shall submit to the CEO an Annual Environmental Report by 31 March each year. The report shall contain the information listed in Table 4.2.1 in the format or form specified in that table.

Table 4.2.1: Annual Environmental Report		
Condition or table (if relevant)	Parameter	Format or form ¹
-	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 1.2.4	Limit exceedances	N1
Table 1.3.1	Summary of any treatment capacity limit exceedances and any action taken	None specified
Table 3.2.1	Emissions to land monitoring results and an assessment of results against previous monitoring results and licence limits	None specified
Table 3.3.1	Surface water monitoring results and a comparison of results against the trigger values specified in the document 'Surface Water Monitoring Guidelines' (FMG, December 2014, 100-GU-EN-0037). Details of investigations conducted, including outcomes, environmental impacts and remedial actions, in relation to trigger exceedances.	None specified
Table 3.3.2	Groundwater monitoring results and a comparison of results against the trigger values specified in the document 'North Star Groundwater Operating Strategy' (FMG, 20 February 2015, 661MI-0000-PL-HY-0001).	None specified

	Details of investigations conducted, including outcomes, environmental impacts and remedial actions, in relation to trigger exceedances.	
4.1.2	Compliance	Annual Audit Compliance Report (AACR)
4.1.3	Complaints summary	None specified

Note 1: Forms are in Schedule 2

- 4.2.2 The licence holder shall ensure that the Annual Environmental Report also contains information to demonstrate conformance with the manufacturer's environmental emission specifications, including, but not limited to, any emissions testing results and a description of generator servicing regime(s).

4.3 Notification

- 4.3.1 The licence holder shall ensure that the parameters listed in Table 4.3.1 are notified to the CEO in accordance with the notification requirements of the table.

Table 4.3.1: Notification requirements			
Condition or table (if relevant)	Parameter	Notification requirement ¹	Format or form ²
-	Recommencing normal operations after a period of care and maintenance	At least 60 days prior to recommencing production	None specified
3.1.4	Calibration report	As soon as practicable.	None specified

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

Note 2: Forms are in Schedule 2

5 Works

5.1 Construction and construction compliance

- 5.1.1 The licence holder must:
- (a) construct and/or install the infrastructure and/or equipment;
 - (b) in accordance with the corresponding design and construction / installation requirements; and
 - (c) at the corresponding infrastructure location, as set out in Table 5.1.1.

Table 5.1.1: Infrastructure and equipment requirements for Works		
Works - Infrastructure /Equipment	Requirements (design and construction)	Site plan reference
Sewage treatment system (WWS 130EP Mobile Treatment Plant)	<p>All sewage storage and treatment tanks above ground and located on a bunded hardstand.</p> <p>All sewage storage and treatment tanks, vessels, transfer pipelines and conveyance infrastructure must be free of leaks or defects.</p> <p>Extended Aeration Activated Sludge treatment plant able to receive and treat a sewage inflow of</p>	Located as shown in Schedule 1: Map of emission points. Labelled as 'Indicative Stage 2 WWS Plant'.

	<p>up to 45 m³/ day to the following emission standards:</p> <ul style="list-style-type: none"> • Biochemical oxygen demand ≤20 mg/L; • Total suspended solids ≤30 mg/L; • pH ≥6.5 and ≤8.5; • Total nitrogen ≤30 mg/L; • Total phosphorus ≤8 mg/L; and • <i>Escherichia coli</i> <1000cfu/100 mL • Free Chlorine 0.2 - 2 mg/L <p>All tanks (Balance, Anoxic, Aeration and Effluent) fitted with high-high alarms so that in the event of an excessive level in a tank, the feed source to the overfilled tank is automatically inhibited.</p> <p>Have a sealed connection point for pumping-out tank sludge for offsite disposal to a licensed waste facility.</p>	
Stage 2 Irrigation Field	<p>Treated effluent discharged by above ground sprinklers.</p> <p>Sprinklers distributed so that:</p> <ul style="list-style-type: none"> • ponding or pooling of treated wastewater within the spray irrigation field is minimised; and • no treated effluent enters any surface water drainage line. 	<p>Located as shown in Schedule 1: Map of emission points. Labelled as 'Stage 2 Irrigation Field'.</p>

- 5.1.2 The licence holder must within 28 calendar days of the infrastructure or equipment required by condition 5.1.1 being constructed and/or installed:
- undertake an audit of their compliance with the requirements of condition 5.1.1; and
 - prepare and submit to the CEO an Environmental Compliance Report on that compliance.

- 5.1.3 The Environmental Compliance Report required by condition 5.1.2, must include as a minimum the following:
- certification by a suitably qualified engineer that the items of infrastructure or components thereof, as specified in condition 5.1.1 have or have not, been constructed in accordance with the relevant requirements specified in condition 5.1.1;
 - as constructed plans and a detailed site plan for each item of infrastructure or component of infrastructure specified in condition 5.1.1; and
 - be signed by a person authorised to represent the works approval holder and contains the printed name and position of that person.

5.2 Commissioning

- 5.2.1 The licence holder must notify the CEO within one week of commencement of commissioning of the Works.
- 5.2.2 Commissioning must not exceed a period of 12 weeks from the date of commencement of the commissioning.

5.2.3 The licence holder must undertake treated wastewater monitoring during commissioning according to the requirements of Table 5.2.1 and General monitoring condition 3.1.1.

Table 5.2.1: Monitoring of emissions to land (commissioning)				
Emission point reference (Schedule 1).	Parameter	Units	Averaging Period	Frequency
Treated waste water from 'Stage 2 WWS Plant' discharged to the 'Stage 2 Irrigation Field'.	Volumetric flow rate (cumulative)	m³/day	Weekly	Continuous
	pH ¹	pH units	Spot Sample	Weekly
	Biochemical Oxygen Demand	mg/L		
	Total Suspended Solids			
	Total Nitrogen			
	Total Phosphorus			
	<i>E.coli</i>	cfu/100 mL		

Note 1: In-field non-NATA accredited analysis permitted.

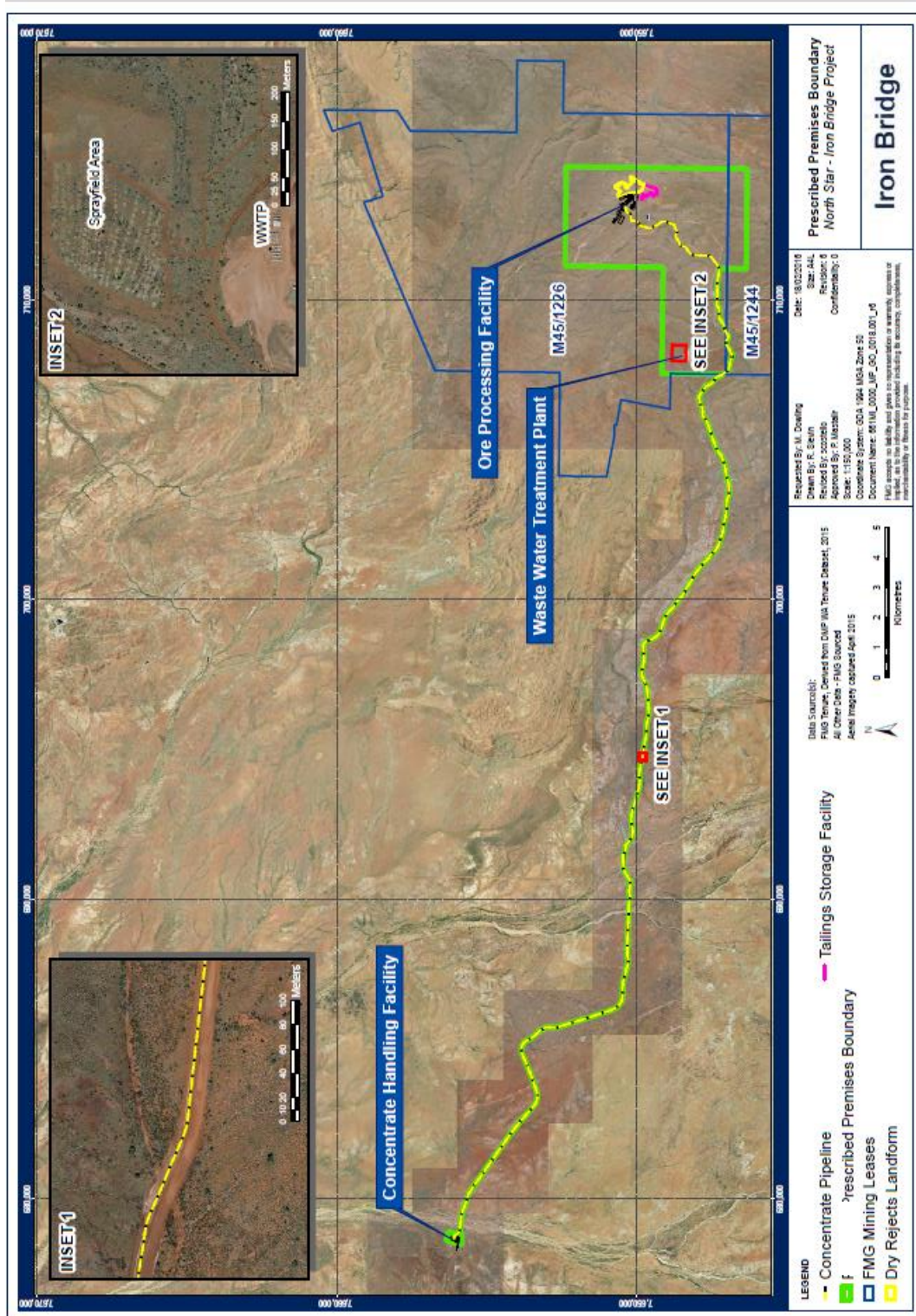
5.2.4 The licence holder must provide to the CEO a commissioning report within one month of the completion of the commissioning including:

- a summary of monitoring results recorded under Condition 5.2.3;
- the original monitoring reports submitted to the Licence Holder from third parties for the commissioning period;
- a summary of the environmental performance of the plant as installed, against the design specification set out in Table 5.1.1;
- where they have not been met, measures proposed to meet the design specification, together with timescales for implementing the proposed measures.

Schedule 1: Maps

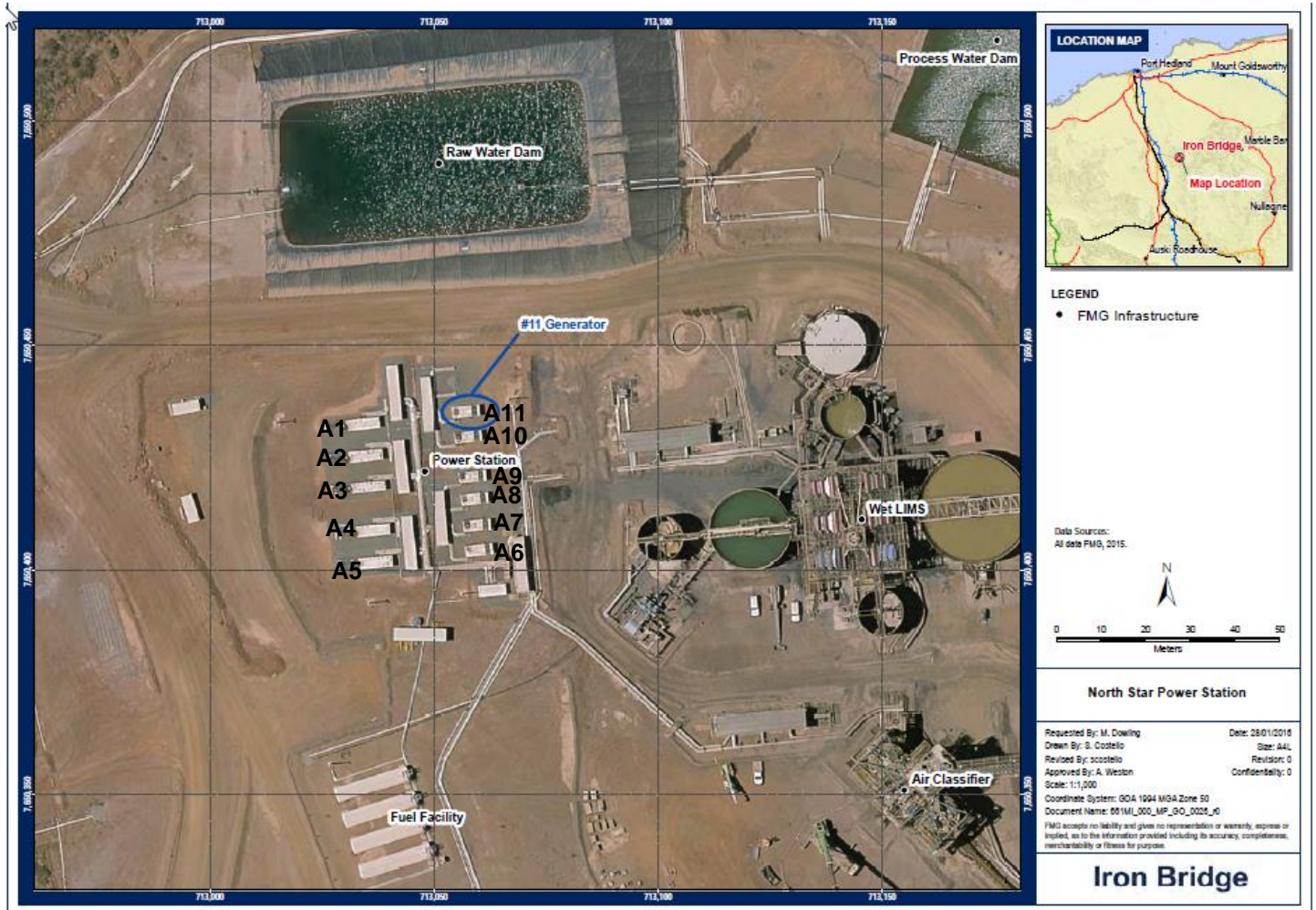
Premises map

The Premises is shown in the map below. The green line depicts the Premises boundary.

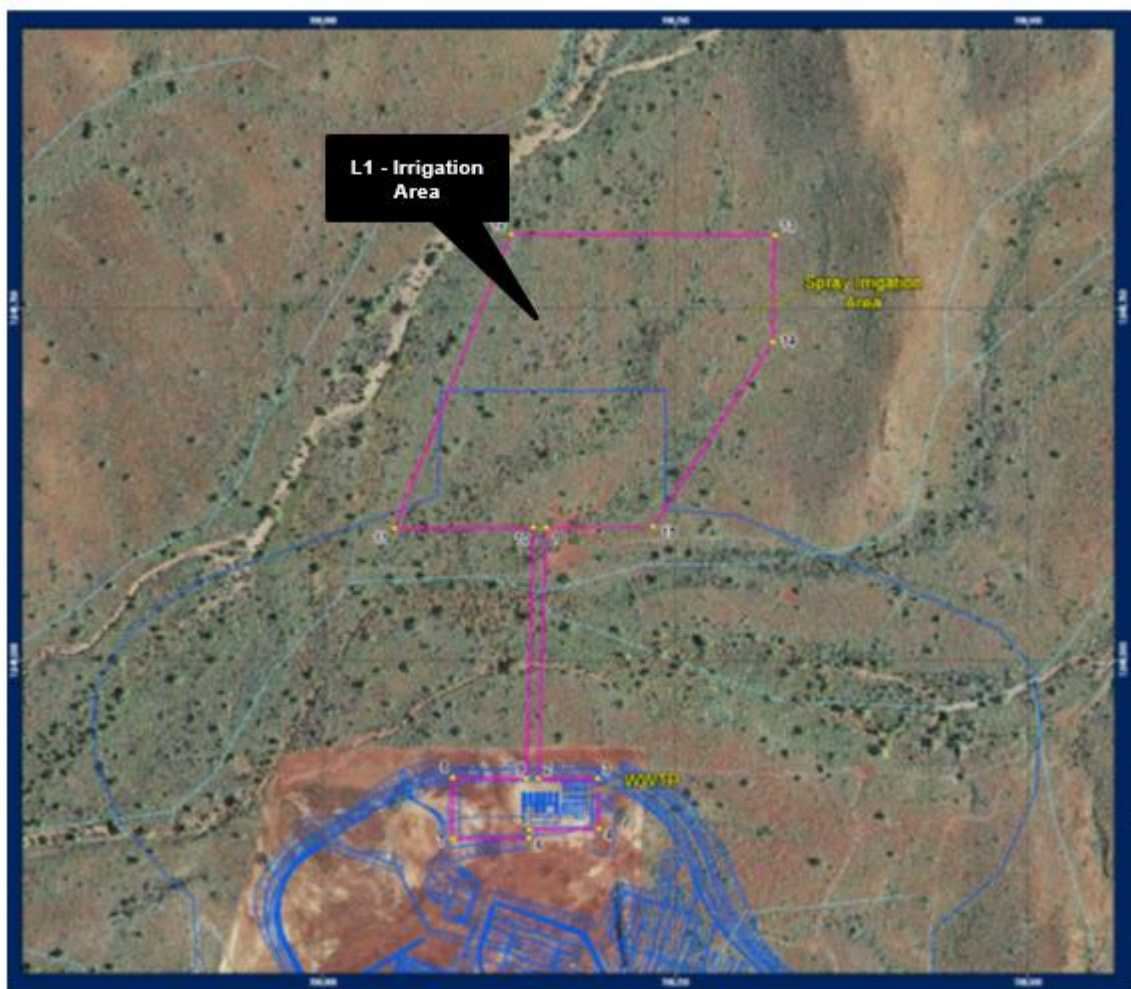


Map of emission points

The locations of the emission points defined in Table 2.1.1 are shown below.



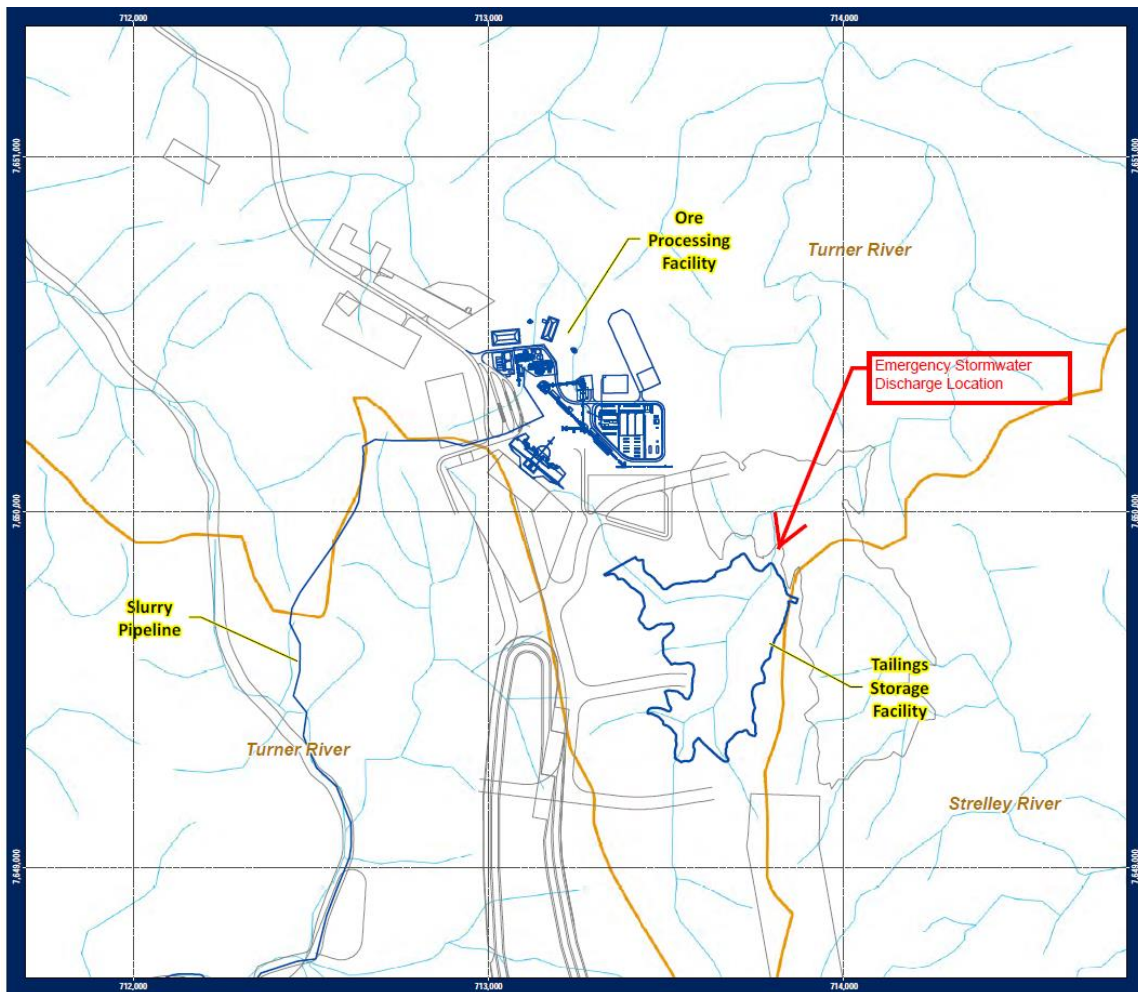
The location of the emission point L1 as defined in Table 2.2.2 is shown below.



The location of the emission point 'Stage 2 Irrigation Field' as defined in Table 2.2.2 and Table 5.1.1 are shown below.



The locations of the emission points defined in Table 2.2.2 is shown in the map below.

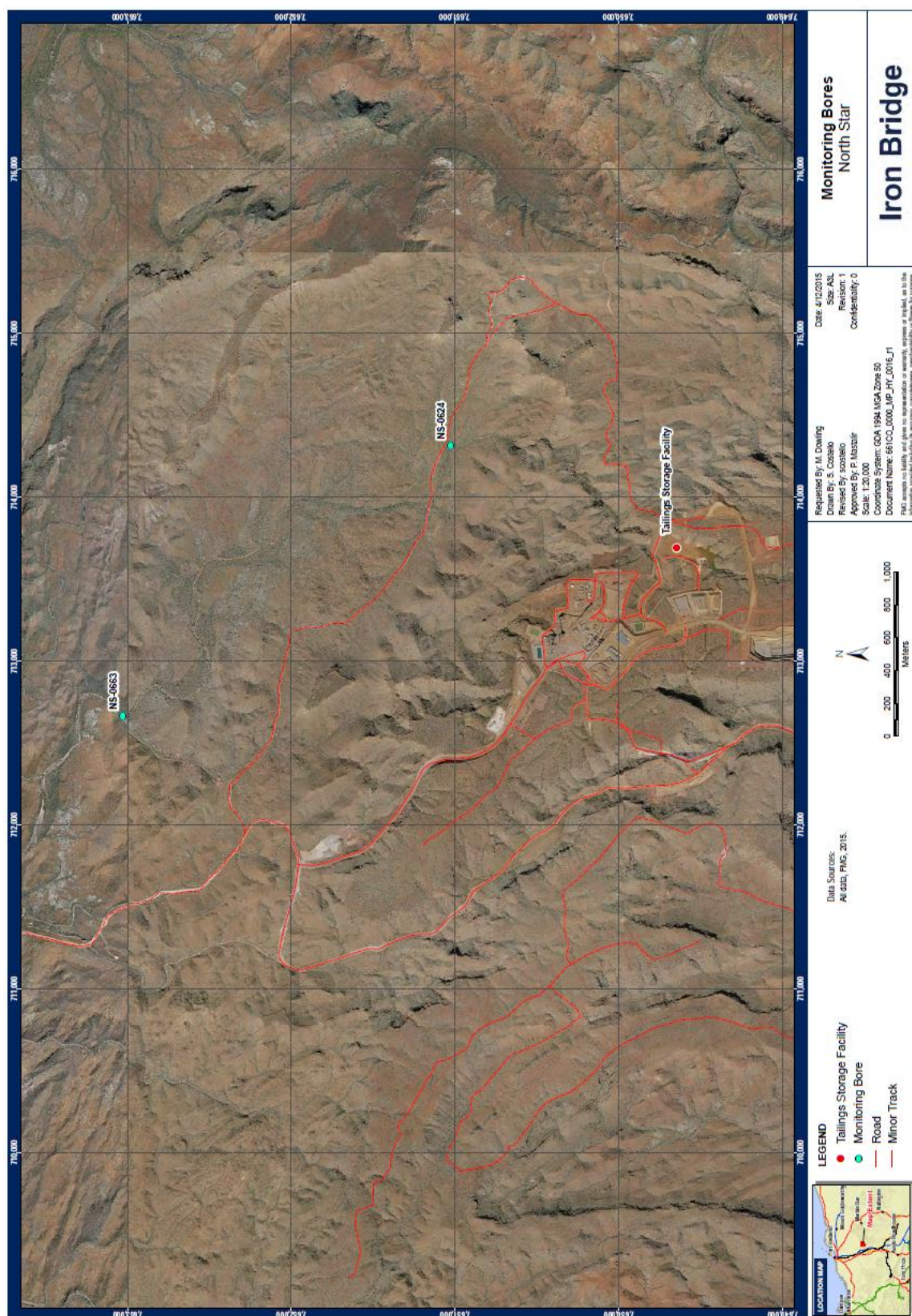


Map of monitoring points and containment infrastructure

The locations of the monitoring points defined in Table 3.3.1 are shown in the Figure below.

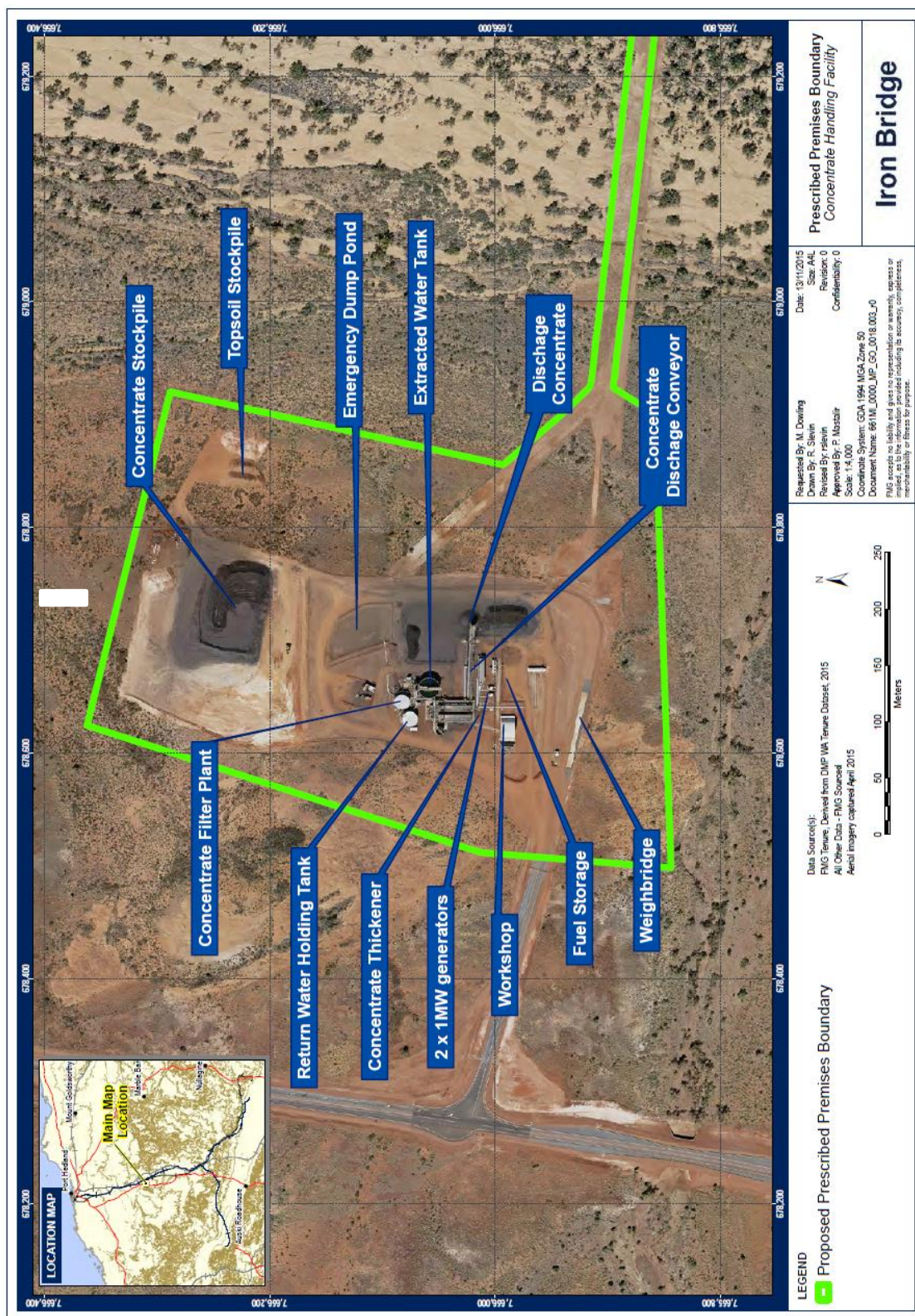


The location of the monitoring point defined in Tables 3.3.2 is shown below.



The locations of the containment infrastructure defined in Table 1.2.1 are shown in the figures below.





Schedule 2: Reporting & notification forms

These forms are provided for the proponent to report monitoring and other data required by the Licence. They can be requested in an electronic format.

Licence: L8845/2014/1
Form: N1

Licence Holder: IB Operations Pty Ltd
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 IB Operations Pty Ltd	
Date	