

## **Amendment Report**

## **Application for Licence Amendment**

#### Part V Division 3 of the Environmental Protection Act 1986

**Licence Number** L8845/2014/1

IB Operations Pty Ltd **Licence Holder** 

**ACN** 165 513 557

File Number APP-0028226

**Premises** Iron Bridge Magnetite Project

Ground Floor 256 St Georges Terrace

PERTH WA 6000

Legal description -

Mining Tenements M45/1226, M45/1244, L45/292, L45/294,

L45/359, L45/360, L45/361, L45/364 and L45/367

MARBLE BAR WA 6760

As defined by the Premises maps attached to the Revised

Licence

**Date of Report** 28 August 2025 (FINAL)

**Decision** Revised licence granted

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## 1. Decision summary

Licence L8845/2014/1 is held by IB Operations Pty Ltd (licence holder) for the Iron Bridge Magnetite Project (the Premises), located at Mining tenements M45/1226, M45/1244, L45/292, L45/294, L45/359, L45/360. L45/361, L45/364 and L45/367 Marble Bar Western Australia.

This Amendment Report documents the assessment of potential risks to the environment and public health from proposed changes to the emissions and discharges during the construction and operation of the Premises. As a result of this assessment, Revised Licence L8845/2014/1 has been granted.

The Revised Licence issued as a result of this amendment consolidates and supersedes the existing Licence previously granted in relation to the Premises. The Revised Licence has been granted in a new format with existing conditions being transferred, but not reassessed, to the new format.

### 2. Scope of assessment

#### 2.1 Regulatory framework

In completing the assessment documented in this Amendment Report, the department has considered and given due regard to its Regulatory Framework and relevant policy documents which are available at <a href="https://dwer.wa.gov.au/regulatory-documents">https://dwer.wa.gov.au/regulatory-documents</a>.

#### 2.2 Application summary

On 28 March 2025, the licence holder submitted an application to the department to amend Licence L8845/2014/1 under section 59 and 59B of the *Environmental Protection Act 1986* (EP Act). The following amendments are being sought:

- Changes to Category 5 and Category 52 capacities to reflect construction of the Ore Processing Facility (OPF) and new generator sets from works approval W6322/2019/1 and W6506/2021/1.
- Introduction of contact water network and use of contact water for dust suppression (aligning with existing approved strategy for RO reject water and treated Oily Water Separator use for dust suppression already approved on the licence).
- Transfer of key mining infrastructure (OPF, TSF2 (Stage 1A) Process Water Pond, Return Water Pond, Raw Water Pond etc) from works approval (W6322/2019/1) and (W6506/2021/1) to the licence.
- Proposed changes to infrastructure including: Japal Village WWTP design change (aeration tank), two additional generators at back-up power station (alignment with capacity approved under W6506/2021) and proposed change to the tailings deposition pipeline (to allow mining in adjacent Eastern Limb and North Star pits).
- Waste management changes to include Inert Waste Type 2 disposal (used tyres and other inert wastes) into Eastern Limb dumps and pits and dry reject landforms).
- Changes to monitoring requirements to remove redundant facilities and requirement for surface water monitoring, and close out of works approval (W6506/2021/1).

This amendment is limited only to changes to Category 5, 52, 54, 57 and 64 activities from the Existing Licence. No changes to the aspects of the existing Licence relating to Category 12, 73 and 74 have been requested by the licence holder.

Table 1 below outlines the proposed changes to the existing Licence.

Table 1: Proposed design or throughput capacity changes

Category	Current design / throughput capacity	Proposed design / throughput capacity	Description of proposed amendment				
Category 5:	Existing:	Proposed:	Ore processing facility (OPF)				
Processing or beneficiation	50,000 tonnes per	72,000,000 tonnes	Construction:				
of metallic or non-metallic ore	annual period	per annual period.	Construction of the OPF, TSF2 (Stage 1A) and OWS was carried out under works approval W6322/2019/1. Compliance Reports submitted 20 November 2024. TLO commenced on 23 November 2023.				
			Final compliance report was submitted to DWER on 18 Feb 2025.				
			Operation:				
			<ul> <li>Operation of the OPF, TSF2 (Stage 1A and OWS under the licence.</li> <li>Applicant is proposing to relocate a section of the current tailings deposition pipeline for Stage 1A to facilitate the mining of the three nearby pits (Eastern Limb North, Eastern Limb Central and North Star Pit).</li> <li>Transfer of constructed Oily Water Separator (OWS) at Light Vehicle Wash Bay (constructed under W6322/2019/1).</li> </ul>				
Category 12:	Existing:	N/A	N/A				
Screening etc. of material	5,000,000 tonnes per annual period						
Category 52:	Existing:	Proposed:	Electric Power Station increase in capacity and				
Electric power generation	12.8 Mwe per annual period	16 MW per annual period	to include the two generators at the back-up power station, constructed under works approval W6506/2021/1.				
Category 54:	Existing:	N/A	Wastewater treatment plant:				
Sewage	585 m³/day		Construction:				
facility			<ul> <li>598kL auxiliary aeration / anoxic tank</li> <li>Two 22 kW aerator that tie into the existing aeration tank.</li> </ul>				
			Operation:				
			Authorisation of the above infrastructure on the licence.				
Category 57:	<u>N/A</u>	New category:	Construction:				
Used tyre storage		5000 tyres (150 tyres approved in works approval)	Construction was carried out under works approval W6315/2021/1 with a proposed increase in capacity from 150 tyres to 5000 tyres per annual period.				
			Operation:				
			Authorisation of the used tyre storage facility on the licence.				

Category	Current design / throughput capacity	Proposed design / throughput capacity	Description of proposed amendment
Category 64: Class II putrescible landfill	Existing: 6,800 tonnes per annual period	N/A	Operation:  The applicant requests changes to the waste processing table to include the disposal of Inert Waste Type 2, namely used tyres, conveyor and rubber, untreated wood and concrete materials into the Eastern Limb Sterilisation Dumps, Eastern Limb North Pit and Dry Reject Landform areas.  The applicant is requesting removing surface water monitoring requirements from the existing licence.  The applicant requests the removal of RO reject water specification relating to dust suppression.
Category 73: Bulk storage of chemicals	Existing: 2,500m <sup>3</sup>	N/A	N/A
Category 77: Concrete batching or cement products manufacturing	Existing: 217,000 tonnes per annual period	N/A	N/A

#### 2.2.1 Contact Water Network (New Amendment)

The licence holder is proposing to use "Contact Water Network" to use process impacted water (including concentrate return water), stormwater accumulation and mine water management (including pit dewatering) for dust suppression. The proposed use of contact water on the mine site is intended to reduce the demand on the near mine and Canning Basin borefields and to provide additional raw water supply for ore processing as required.

The licence holder is proposing to repurpose some existing raw water storage ponds, turkeys nests and transfer ponds and associated water infrastructure system in addition to constructing new storage ponds to establish the Contact Water Network.

The contact water is proposed to be used for dust suppression with cleared, maintained and operational areas including but not limited to:

- Active mine areas such as pit voids, waste rock landforms, tailings storage facilities, and ore stockpiles;
- Pit development; and
- Construction and maintenance of roads.

#### Ponds to be used as part of the Contact Network:

- Up to 10 ponds including Turkey Nests, transfer ponds, and sediment ponds at various locations within the premises boundary (see Section 2.2.3).
- Process water pond (see Section 2.2.3).
- Return water pond (RtWP) (see Section 2.2.3).
- Raw Water Pond (see Section 2.2.3).

New contact water ponds.

The licence holder is also proposing to remove the Process Water Dam and the old OPF from the current licence as the dam has been decommissioned.

#### New Ponds (to be constructed):

The licence holder has advised that the new proposed contact water ponds and infrastructure will be designed appropriately (Table 2) to meet they key environmental design requirements, and therefore requests operational flexibility to construct and operate the water infrastructure (ponds, pipelines etc) at various locations within the prescribed premises boundary.

Table 2: Environmental basis of design requirements

Infrastructure	Proposed design Requirements
Flow meters	Flow meters must be installed at the following locations as a minimum and comply with any <i>Rights in Water and Irrigation Act</i> 1914 (RIWI Act) requirements:
	Bores and extraction points
	Water Standpipes
	Recycled water inputs
	Dewatering discharge points and outlets
Contaminated (low quality) and	Water storage facilities must be fenced to prevent fauna access.
Saline Water Storage Facilities: Turkeys Nests, Contaminated Ponds, evaporation Ponds and Sediment Ponds	Water storage facilities must have egress devices on the corners that are consistent with the requirements of DMIRS Environment Note (2012), that are suitably secured and extend to the base of the internal floor.
	Water storage facilities must be designed so that no inflow enters in a 5% AEP.
	All water storage facilities must be adequately sized with engineered overflow controls (level / float) switch.
	Water storage facilities must be lined with a minimum 1 mm HDPE liner that extend to the top of the facility wall.
	Prior to laying the liner, the surface must be cleared of any rocks that may pierce the liner.
Standpipes	Standpipes must be fitted with an engineered fitting to minimise the splash and excessive loss of water.
	Area under the standpipe should be constructed with clean coarse rock to avoid boggy mud. Consider earthen bunds to avoid water run-off, erosion issues and discourage fauna attraction.
Dust Suppression	Brackish or saline water cannot be directed off-road into vegetation and the use of dribble bars is required to prevent spray drift.

#### Inputs/ Outputs of Contact Water network:

 Mine pits and waste rock dump water management including but not limited to the sump and / or seepage dewatering and pit flood and rainfall accumulated water (turkey's nests, transfer pond, sediment ponds etc.).

- Process water system including TSF return water system (including the Process Water Pond and Return Water Pond).
- Raw water system (including the Raw Water Pond and other turkey's nests, transfer ponds and sediment ponds etc.).

#### Water Quality:

The licence holder has provided a comparison of samples from Return Water Pond, Process Water Pond, Raw Water Pond, North Star Pit, Eastern Limb Central Pit and compared them to ANZECC Guidelines 95% of Species Limit of Protection, ANZECC Guidelines Values: Livestock Drinking Water.

The results of the monitoring show that the water is generally within the range of the guidelines with some analytes outside of the guidelines including high in electrical conductivity, high in total dissolved solids, the North Star Pit is high in Nitrate and Nitrite as shown in Table 3 and Table 4.

The licence holder is proposing to undertake monitoring of ambient groundwater quality at the Contact Water Pond to ensure that there are no hydrocarbons nor potentially acid forming mine drainage water used for dust suppression.

#### **Waste acceptance – RO reject water (New Amendment)**

The licence holder currently uses RO reject water accepted from the RO plant via pipelines inflows for dust suppression. The licence holder is proposing to remove the quantity limit of RO reject waste on the licence for dust suppression, as part of the contact water network, rather than pumping the additional RO reject water to the irrigation field.

Total Dissolved Solids in RO Reject water is expected to be 3,492.3 mg/L (W6315/2019/1, Decision Report).

The licence holder has stated that the RO reject water output will also assist in improving efficiencies at the wastewater treatment plant especially during high camp utilisation periods and scheduled plant maintenance periods. RO reject water will continue to be monitored as per the existing approved Condition 15, table 9 on the licence.

Table 3: Iron Bridge Water Quality comparison for contact water sources

Analyte	Units	ANZECC Guidelines 95% of Species Limit of Protection	ANZECC Guideline Values: Livestock Drinking Water	Mean Site Groundwater (From MP REG: ID 118381)	Return Water Pond (From MP REG: ID 118381)	Process Water Pond (05/05/2024)	Raw Water Pond (05/05/2024)	IB_SW_Return water Pond_01 (12/05/2024)	North Star Pit (21/04/2024)	Eastern Limb Central Pit (21/04/2024)	Eastern Limb Central Pit (21/04/2024)
рН	pH units	7.5		7.8	7.10						
Yes a recognization of the transfer of	Teason .	322		1348		1000	4421		120	25.00	141815
Electrical Conductivity (EC)	µS/om	250		(Max 5420)		1500	701	1320	2210	1430	1260
				858							
Total Dissolved Solids (grav)	mo/L		<4000	(Max 3170)	1300 - 1500	682	396	808	1530	941	716
Fluoride	mg/L		<2	0.4					7		
Catclum - Dissolved	mg/L		<1,000	40.6		8	28	17	5	102	-11
Potassium - Dissolved	mg/L			4.6	15 - 25						
Magnesium - Disselved	mg/L		<500	95.2	150 - 200						
Sodium - Diesolved	mg/L			123.2	100 - 120						
Sicarbonate HCO3 as CaCO3	mg/L			403							
Carbonate CO3 2- as CaCO3	mg/L			2							
Hydroxide OH-as CaCO3	mg/L			1							
Total Alkalinity as CaCO3	mg/L			404	100 - 120						
Chloride	mg/L			202	150 - 190						
Sulphate	mg/L		<500	42	600 - 650	106	30	100	377	335	214
Hardness as CaCO3	mg/L			558							
Total Nitrogen	mg/L			0.49	20 - 30					<b> </b>	
Nitrate as N	mg/L		<100	0.45		20	2.99	13.5	408	49.2	
Nitrite as N	mg/L		<10	0.49		1.41	0.06	0.72	19	1.58	
Ammonia as N	mg/L	0.9				0.42	0.01	0.03			
Total Phosphorus	mo/L	0.01	i i			0.09	0.02	0.03			

Table 4: Iron Bridge Water Quality comparison for contact water sources

Analyte	Units	ANZECC Guidelines 95% of Species Limit of Protection	ANZECC Guideline Values: Livestock Drinking Water	Mean Site Groundwater (From MP REG: ID 118381)	Return Water Pond (From MP REG: ID 118381)	Process Water Pond (05/05/2024)	Raw Water Pond (05/05/2024)	IB_SW_Return water Pond_01 (12/05/2024)	North Star Pit (21/04/2024)	Eastern Limb Central Pit (21/04/2024)	Eastern Limi Central Pit (21/04/2024)
Silvor-Dissolved	mg/L	0.00005		0.0004	<0.0001						
Aluminium-Dissolved	mg/L	0.055	<5	0.013	<0.005	0.01	<0.01	<0.01	0.01	0.01	0.04
Arsenic-Dissolved	mg/L	0.013	<0.025	0.0097	0.0004 - 0.0010	0.004	0.009	0.004	810.0	<0.001	0.024
Boron-Dissolved	mg/L	0.37	<8	0.721	0.197 - 0.220	0.42	027	0.51	0.24	0.19	0.94
Beryllium-Dissolved	mg/L	0.00013	<0.06	0.0004	<0.001	<0.0001	<0.001	<0.001	<b>-0.001</b>	<0.001	×0.001
Cadmium-Dissolved	mg/L	0.0002	<0.01	0.0001	<0.00005	<0.0001	<0.0001	<0.0001	<0.0001	0.0014	<0.001
Cobalt-Dissolved	mg/L		ंब	0.0031	<0.0001	<0.0001	<0.0001	<0.001	0.001	0.005	<0.001
Chromium-Dissolved	mg/L	0.001	<0.05	0:0008	0.003	<0.001	0.004	<0.001	<0.001	<0.001	<0.001
Copper-Dissolved	mg/L	0.0014	্ধ	0.0035	0.0010 - 0.0015	<0.0001	<0.001	<0.001	<0.001	0.05	<0.001
Iron-Dissolved	mg/L	0.3	No GV due to low risk	0.54	0.005 - 0.010	<0.06	<0.05	<0.05	<0.05	<0.05	<0.05
Mercury-Dissolved	mg/L	0.0006	<0.002	0.00013					<0.0001	<0.0001	
Manganese-Dissolved	mg/L	1.9	<10	0.1716	0.0020 - 0.0030	0.012	<0.001	<0.001	0.005	0.801	0.013
Molybdenum-Dissolved	mg/L	0.034	<0.61	0.0026	0.0120 - 0.0130	0.017	<0.001	0.011	0.136	9.02	0.021
Nickel-Dissolved	mg/L	0.011	ব	0.0169	0.0005 - 0.0010	0.002	0.004	0.002	0.001	<0.01	<0.001
Lead-Dissolved	mg/L	0.0034	<0.1	0.0005	<0.0001	<d.001< td=""><td>&lt;0.001</td><td>&lt;0.001</td><td>&lt;0.001</td><td>&lt;0.001</td><td>&lt;0.001</td></d.001<>	<0.001	<0.001	<0.001	<0.001	<0.001
Selenium-Dissolved	mg/L	11	<0.02	0.0042	0.0115 - 0.0020	<0.01	<0.01	<0.01	0.02	<0.01	<0.01
Uranium-Dissolved	mg/L	0.0005	<0.02	0.00601	0.00020 - 0.00030	<b>≮</b> 0.901	0.001	0.001	<b>&lt;</b> 0.001	0.001	0.001
Vanadium-Dissolved	mg/L.	0.006	<0.1	0.0314	<0.0002	<0.01	0.01	<0.01	<0.01	<0.01	<0.01
Zinc-Dissolved	mg/L	0.008	<20	0.089	0.005 - 0.015	<0.006	0.011	<0.001	<0.005	0.012	<0.005

#### 2.2.2 Authorised emission point to land (W6322/2019/1)

The licence holder is proposing to amend the authorised emissions to land discharge points to transfer the emission point 'L3' from the works approval W6322/2019/1 to the licence to enable emergency stormwater discharge from Return Water Pond.

The licence holder has stated that the Return Water Pond modelling has shown a 1 in 300 chance of spillway overflow over the 20-year Life of Mine. All simulated spillway overflows results from coupled events comprising both high pond volume (above normal operating levels) and extreme rainfall events. In the event of an extreme rainfall event it is expected that all water storage locations will be at capacity and therefore requires a controlled release to drainage lines. Monitoring of the Return Water Pond (RtWP) overflow is currently required under W6322/2019/1 Table 11, and is to be undertaken during discharge, with the quality and an estimate of volume to be recorded.

# 2.2.3 Proposed Amendment – transfer of water ponds from works approval Process Water Pond (constructed under W6322/2019/1)

The Process Water Pond (PWP) was constructed under works approval W6322/2019/1 and reported via compliance report 662NS-0000-RP-EN-0066 ECR Iron Bridge Process Water Storage Pond, submitted to the department on 18 November 2022 and final compliance report 662NS-0000-RP-EN-0081 submitted to the department on 21 November 2024.

The licence holder request that the Process Water Pond Infrastructure be transferred to the licence.

#### **Return Water Pond (constructed under W6322/2019/1)**

The RtWP is designed to hold water decant water from the TSF directly adjacent as well as capture any stormwater accumulation. This water will then be fed back into the process plant, process water pond or used for dust suppression around the site.

The RtWP was constructed under works approval W6322/2019/1 and was reported through the submission of compliance report 662NS-0000-RP-EN-0056 – Iron Bridge Tailings Storage Facility and Return Water Pond Critical Containment Infrastructure Report to the department on 7 October 2022.

The licence holder request that this Return Water Pond infrastructure be transferred from the works approval to the licence.

#### **Return Water Pond and Canning Basin pipeline (New Amendment):**

The licence holder proposes to transfer up to 10 GL of water per annum from the Canning Basin pipeline to the RtWP before being returned to the OPF for use in processing water supply. This water from the Canning Basin water pipeline is required to be transferred to the RtWP when replenishment of water levels in the RtWP is required.

Water from the Canning Basin pipelines is proposed to be transferred from an existing offtake (with a take-off valve, flow meter etc) via a pipeline into the RtWP as outlined in Figure 1 below, where the Canning Basin water will be mixed with decant water and pumped back to the OPF (through existing decant return water pumps and pipeline) where the water will be used for ore processing purposes. The proposed transfer of water from the Canning Basin pipeline into the RtWP will be managed with flowmeters and shutoff valves to ensure water levels in the RtWP is maintained within the current operating levels for the pond.

There are no anticipated changes to the water quality in the RtWP from the inclusion of the Canning Basin pipeline water as the RtWP receives water from the TSF through the decant infrastructure, and the Canning Basin water is deemed to be of similar quality to the TSF decant

#### water.

The key infrastructure in the map below includes:

- Current offtake from the Canning Basin pipeline in green.
- Pipeline from the Canning Basin pipeline into Return Water Pond in red.

Figure 1: Canning Basin pipeline into RtWP



#### Raw Water Pond (constructed under W6322/2019/1)

The Raw Water Storage Pond (RaWP) has been constructed with a volume of 63,605 m³ and will hold water from both the near mind borefield and Canning Basin borefield to provide water across the site. The construction of the RaWP was reported under W6322/2019/1 ECR Iron Bridge Raw Water Storage Pond (662NS-0000-RP-EN-0059, Rev 0) submitted to the department on 28 September 2022.

The department in response noted that "infrastructure for the level sensor and high-level detection alarms has been installed however the alarms will not be operational until they're commissioned with the balance of the OPF".

The licence holder requests that this infrastructure be transferred to the licence noting that commissioning is still to be completed and an environmental commissioning report will be provided in early April.

#### **Sedimentation Basins (constructed under W6322/2019/1)**

Four sedimentation basins were constructed under works approval W6322/2019/1 and the final construction compliance report for the basins was submitted to the department on 21 November 2024 (662-NS-0000-RP-EN-0081). These sedimentation basins are earthen ponds and have been designed and managed to a 1 in 2 AEP of 1-hour duration. These basins are not part of the proposed contact water network.

The licence holder requests that this infrastructure be transferred to the licence.

#### Contaminated water storage ponds (constructed under W6322/2019/1)

Works Approval Amendment W6322/2019/1 dated 04/01/2024) required up to 5 ponds up to 4

kL in size, un-lined ponds with freeboard of 1 in 2 AEP of 1-hour duration, with any overflow contained within the sump (apron) catchment.

The licence holder has constructed drive-in concrete lined sumps with 4 kL capacity and freeboard of 1 in 2 AEP of 1-hour duration, installed at 10 locations as outlined in Figure 2. The details of these ponds has been provided in the Compliance Report to the department on 21 November 2024 (662S-0000-RP-EN-0081).

As a result, the contaminated water storage ponds are proposed to be transferred to the containment infrastructure table. These storage ponds are not part of the proposed contact water network.

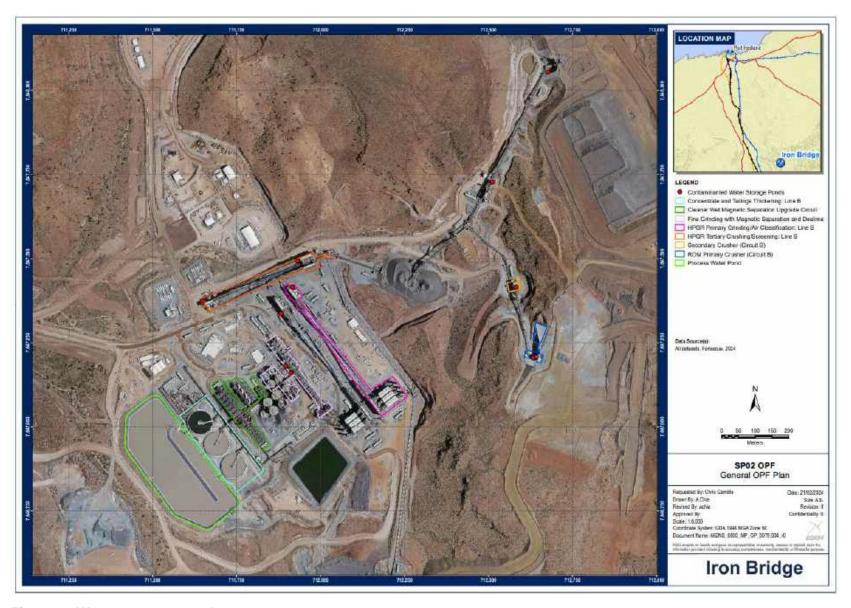


Figure 2: Water storage ponds

#### 2.2.4 Proposed changes to Infrastructure and equipment

#### Category 52 - Backup Power Station (constructed under W6506/2021/1)

The licence holder is part of the Fortescue Metals Group Limited (FMG) group of companies. The FMG group of companies are connected by a 257 km electricity transmission infrastructure corridor (Pilbara Energy Connect (PEC) Project). The PEC Project enables the electricity to be distributed between a number of FMG sites including the Solomon Power Station, the Pilbara Energy Generation (PEG) Power Station, a proposed renewable energy solar and wind plant and a proposed large scale battery system.

The licence holder was granted works approval W6506/2021/1 on 17 April 2025 for Category 52: Electric power generation with a design capacity of 44.8 Mwe per year (using diesel fuel). This power station is to be used as a prime back-up generation plant, rather than for standard or emergency back-up power generation, to supplement energy requirements for the Premises during periods when the sites main source of electricity, the PEG Power Station is unable to meet the energy demands of the site over the short term. The PEC Power Station will not generate enough energy to supply the Premises when it is operating at full capacity. The shortfall in energy requirements will be sourced from a combination of other but linked off-site FMG group owner power plants from the PEC networks of companies.

The licence holder submitted the Environmental Compliance Report (ECR) on 11 November 2022, however only 8 of the 10, 1.6 Mwe diesel generators were installed with a total capacity not greater than 12.8 Mwe per annual period. The diesel generators were included in the amended licence dated 29 August 2023. A second ECR was submitted on 7 June 2024 for the two additional generators, time limited operations commenced on 10 June 2024 and finishes on 9 May 2026.

The licence holder has requested that the additional two 1.6 Mwe containerised diesel generators, G9 and G10 that were constructed under works approval W6506/2021/1, be included on the licence. There is also an increase to the total design capacity for all 10 generators from 12.8 Mwe to 16 Mwe per annual period to align with W6506/2021/1.

#### **Category 54 – Japal Village WWTP (New Amendment)**

Results from the existing Japal Village WWTP have identified that the biological oxygen demand (BOD) and Total Nitrogen (TN) influent concentrations at the Japal village wastewater treatment plant (WWTP) are higher than initially projected and materially higher than what is acceptable for municipal sewage. This is commonly referred to as overloading the treatment process of the WWTP.

The analysis of the influent concentrations found that influent concentration of BOD is 350mg/L (17% higher than original forecast of 300mg/L) and TN is 100mg/L (42% higher than original forecast of 70mg/L). In addition to the above, these concentrations are also materially higher than what is accepted of municipal sewage.

This overloading causes a low dissolved oxygen (DO) level, as the digesting organisms require more oxygen to consume the surge of BOD. The licence holder has stated that the solution to overloading, is to increase organic treatment capacity by increasing the aeration capacity and ability.

Design change to Japal Village WWTP under category 54 to include new aeration tank and aerators to improve treatment efficiency of existing plant. The additional proposed infrastructure that is required to assist with improving the treatment aeration process includes the following:

- A 598 kL auxiliary aeration/ anoxic tank.
- Two 22 kW aerators that tie into the existing aeration tank.

The licence holder confirms that there are no changes to any of the following key parameters including:

- Camp population.
- Influent volumes and quality.
- Effluent volumes.
- Irrigation field infrastructure, design and sizing.

#### New Category 57 – Used tyre Storage (constructed under W6315/2019/1)

The licence holder was granted works approval W6315/2019/1 on 24 March 2020 to construct a used Tyre Storage Facility with a storage capacity of 150 used tyres. Construction was completed on 29 April 2023 and a compliance report submitted to the department on 5 May 2023.

As part of this amendment, the licence holder is proposing to include the new prescribed premises category 57 (used tyre storage) on the licence with a proposed increase to used tyre storage capacity from 150 tyres (originally assessed under the works approval W6315/2019/1) up to 5000 tyres to accommodate operational expansion requirements at the mine.

There is no proposed changes to the management strategies for the used tyre storage and tyre storage facilities will be managed and operated in alignment with the design requirements below:

- Not more than 5,000 tyres will be stored within the premises at any one time;
- Used tyre stacks shall not exceed 500 tyres per stack and 5 m in height;
- Used tyres stacks are to be stored no less than 6 m from any other tyres stacks; and
- The waste tyres stockpiles shall not exceed 1,000 m³ in each area.

## 2.2.5 Category 5 increase and transfer of OPF (constructed under W6322/2019/1)

The licence holder was issued works approval W6322/2019/1 on 24 April 2020 for Stage 2 of the Project for mining above the water table. The works approval included the following prescribed activities:

- Ore Processing Facility (OPF); Category 5 proposed to replace the facility licensed under Licence L8845/2014/1 (this licence); and
- Tailings Storage Facility (TSF): Category 5.

The licence holder is requesting that the Category 5 capacity increase from 50,000 tonnes per year to 72 million tonnes per year as a result of the completion of the construction of the OPF and the capacity of the facility under works approval W6322/2019/1. The construction compliance reports have been submitted and the licence holder is requesting that the following infrastructure be included on the licence:

- Oily water separator
- Ore Processing Facility (OPF)
- Scout pits 1 and 4

#### 2.2.6 Transfer of TSF2 (Stage 1A) (constructed under W6322/2019/1)

Tailings storage facility (TSF) 2, Stage 1 was divided into Stage 1A and Stage 1B to reduce the start-up costs. Stage 1A deposition is confined to the northern arm of the TSF, reducing the start-up construction activities to the northern component of the main TSF embankments (referred to as TSF Main Embankments A and B), the north decant and a small sacrificial bund (designed to be ultimately overtopped) portioning the northern and southern valley.

The TSF2 (Stage 1A) was constructed under W6322/2019/1 and reported via the following compliance reports:

- Iron Bridge Tailings Storage Facility and Return Water Pond Critical Containment Infrastructure Report (662NS-0000-RP-EN-0056), submitted to DWER on 7 October 2022.
- Supporting infrastructure including the distribution pipeline and flow measurement infrastructure was reported under Iron Bridge FOOS Milestone Construction Report (662NS-0000-RP-EN-0075), Table 1, Item L, received by the Department of Water and Environmental Regulation (the department) on 12 April 2023.
- Final distribution pipeline and flow monitoring equipment compliance report (66NS-0000-RP-EN-0056) submitted to the department on 21 November 2024.

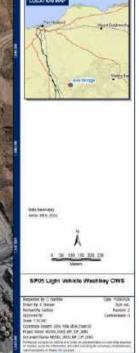
The licence holder is requesting that Tailing Storage Facility 2 (Stage 1A) now be included on this licence.

#### 2.2.7 Transfer of Oily water separator (constructed under W6322/2019/1)

The Oily Water Separator (OWS) was constructed under works approval W6322/2019 at the Light Vehicle Wash Bay (see Figure 3) and the licence holder submitted a construction compliance report to the department on 21 November 2024 (66NS-0000-RP-RP-EN-0056). The licence holder requests that this infrastructure is transferred from the works approval to the licence.

In addition to the above, the emission point to land 'L2" was updated in Section 3.2 and Table 7 above to reflect the inclusion of the new OWS and discharge of OWS treated water in the event of a major storm event at the Light Vehicle Wash Bay.

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#### 2.2.8 Proposed relocation of tailings deposition pipeline (New Amendment)

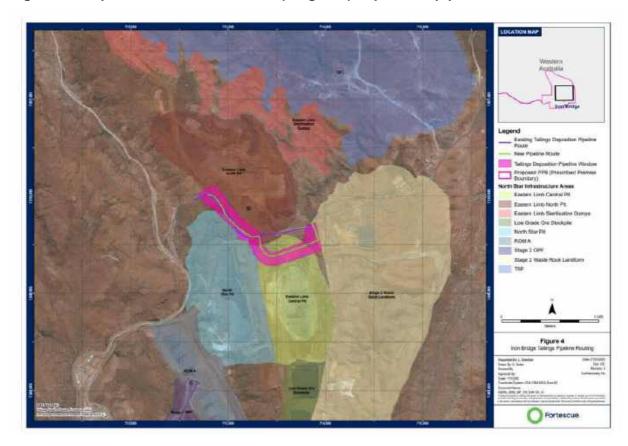
#### Amendment to TSF2 Stage 1A:

As part of this amendment, the licence holder is proposing to relocate a section of the current tailings deposition pipeline from Stage 1A to facilitate mining of the three nearby pits (Eastern Limb North, Eastern Limb Central and North Star Pit). The deposition pipelines will be relocated on numerous occasions to support the existing and future tailings delivery within an indicative proposed pipeline window as the mine voids and waste rock landforms progress. The licence holder request that the relocation of these pipelines have operational flexibility to move within the mine area and pipeline window area and any changes in location may be requested through minor deviations in the construction compliance reports (as required) under the operating licence.

Figure 4 below details the key tailings pipeline infrastructures include:

- The existing tailings deposition pipeline (blue).
- Proposed new tailings pipelines (green).
- Proposed new tailings pipeline window (pink).

Figure 4: Proposed relocation of TSF2 (Stage 1A) deposition pipeline



## 2.2.9 Proposed waste management change to inert waste disposal (New Amendment)

The licence holder is proposing to amend the waste processing table to include the disposal of Inert Wastes Tye 2 names used tyres, conveyor and sand rubber such as sued screening matter, untreated wood and concrete material into the Eastern Limb Sterilisation Dumps, Eastern Limb North Pit and Dry Reject Landform areas. All of these proposed disposal areas are not within a public drinking water source area.

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The location of the proposed waste disposal areas provided in this application will ensure that the inert wastes will be entirely contained and encapsulated as the dumps and landforms develop over time. The proposed waste disposal location is shown in Figure 5.

LOCATION MAP Australia Marble Bar Iron Bridge Proposed PPB (Prescribed Premise Boundary) North Star Infrastructure Areas Eastern Limb Central Pit Eastern Limb North Pif Eastern Limb Sterillsation Dumps Low Grade Ore Stockpile North Star Pit OPF Power Station Process Water Pond ROMA ROM B Return Water Pond Stage 2 Dry Rejects Landform Stage 2 OPF Stage 2 Waste Rock Landform TSF2 Stage 1A Raw Water Pond North Raw Water Pond South FMG Clearing Areas Current North Star Figure 4 PRESCRIBED PREMISES BOUNDARY (PPB) AND ASSOCIATED INFRASTRUCTURE. Requested By J. Secure Reputed By J. Dobar Bases by 1.00 bar Revisit by 5. Batter Approved By: Double 140,000 Countries System 004 (194 MOAZine 98 Deturned from HONG ORD, HP, FH, CHI CO., 4

**Figure 5: North Star Infrastructure Areas** 

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#### 2.2.10 Other changes

#### **Monitoring of ambient groundwater quality – (New Amendment)**

The licence holder requests to amend the monitoring of ambient groundwater monitoring quality with the removal or parameter Acrylamid. The licence holder has undertaken two quarterly compliance sampling events as well as several additional monitoring events and have not detected any Acrylamide.

#### **Proposed removal of surface water monitoring requirements – (New Amendment)**

The licence holder states that the current surface water monitoring and monitoring locations on the licence are no longer relevant to the current operations. The Stage 1 OPF and associated infrastructure has been decommissioned and removed, thereby eliminating any potential surface water impacts and negating the need for surface water monitoring from these locations. In addition to this the surface water monitoring locations defined in the Licence have been removed or are inaccessible as the Stage 2 mining pit development has progressed through this area.

The licence holder has requested the removal of surface water monitoring licence Condition 16 and Table 17 and Table 18. The licence holder has stated that surface water on the Iron Bridge mine will continue to be managed under Part IV of the *Environmental Protection Act* and in line with their Surface Water Management Plan.

#### Part IV: Ministerial Statement 993 Condition 12-7:

'In the event that monitoring required by condition 12-3 (iii), indicates that the trigger levels developed pursuant to condition 12-3 (iv) are exceeded, or likely to be exceeded due to surface or groundwater run-off from within the Mine Development Envelope, the proponent shall;

- i) Investigate to determine the likely cause(s) of the trigger levels required by condition 12-3 (iv) being exceeded; and
- ii) If the exceedance is likely to be the result of activities undertaken in implementing the proposal, implement management and / or contingency measures required by condition 12-3 (v) and continue implementation until trigger levels required by condition 12-3 (iv) are met, or until otherwise agreed by the CEO; and
- iii) Provide a report that describes the investigation required by condition 12-7 (i) and measures required by condition 12-3 (v) to the CEO within 21 days of identification that criteria required by condition 12-3 (iv) has been exceeded.

#### Proposed close out of works approval W6506/2021/1

- Licence holder requests the authorised emissions to land discharge points to transfer the emissions point L3 from the works approval W6322/2019/1 to the licence to allow for emergency stormwater discharge from Return Water Pond.
- L2 discharge point to include a new Oily Water Separator that was constructed at the Light Vehicle Wash Bay in 2024. L2 has been updated to reflect the two OWS discharge points
- Removal of one monitoring parameter from the ambient groundwater monitoring suite (see section 3.8.1)
- Removal of surface water monitoring for removed and decommissioned facilities such as the Stage 1 OPF facility. (see section 3.8.2)

#### 2.3 Part IV of the EP Act

The EPA report (Assessment 1946) assessed impacts from an open cut iron ore mine (above ground), tailings storage facility, waste rock dump and borefield (located in the Canning Basin,

160 km north-east of the mine area), water pipeline infrastructure and a slurry pipeline connecting the mine facilities in Port Hedland. The EPA report considered the proposal mine of life of 45 years to generate 15 Mtpa of product. The proposal abstraction was 14 GL/a of water from the confined Wallal Aguifer located within the Canning Basin borefield.

The EPA considered the following key environmental factors in their assessment:

- Flora and Vegetation;
- Terrestrial Fauna;
- Subterranean Fauna;
- Hydrological Processes and Inland Waters Environmental Quality; and
- Offsets integrating factor.

Ministerial Statement (MS) 993 was set based on the outcome of the assessment of the above factors. Conditions within MS 993 involve management of the mine, borefield and linear infrastructure to avoid rare and priority flora species, fauna species and threatened ecological communities and to rescue fauna trapped in trenches associated with the construction of linear infrastructure. Conditions also relate to ensuring no detrimental impact to the water quality or hydrological regime of Site 12 Pool, which is Pilbara Olive Python habitat.

Several attachments to MS 993 exist and Attachment 2 (approved on 8 March 2019) relates to the increase in abstraction from the borefield from 14 GL/a up to 20 GL/a. This increase allowed for augmented ore production from 14 Mtpa to 25 Mtpa. An Acid Mine Drainage (AMD) Plan will also be developed.

Therefore, management of impacts from clearing or flora/vegetation and fauna, and from groundwater abstraction are not discussed in this assessment. General impacts to vegetation relating to dust emission, groundwater impacts related to tailings storage, and management of contaminated stormwater will be discussed, as these were not considered to be key environmental factors requiring evaluation by the EPA.

#### 3. Risk assessment

The department assesses the risks of emissions from prescribed premises and identifies the potential source, pathway and impact to receptors in accordance with the *Guideline: Risk assessments* (DWER 2020).

To establish a Risk Event there must be an emission, a receptor which may be exposed to that emission through an identified actual or likely pathway, and a potential adverse effect to the receptor from exposure to that emission.

## 3.1 Source-pathways and receptors

#### 3.1.1 Receptors

In accordance with the *Guideline: Risk assessments* (DWER 2020), the Delegated Officer has excluded employees, visitors and contractors of the licence holder's from its assessment. Protection of these parties often involves different exposure risks and prevention strategies, and is provided for under other state legislation.

Table 5 below provides a summary of potential human and environmental receptors that may be impacted as a result of activities upon or emission and discharges from the prescribed premises (*Guideline: Environmental siting* (DWER 2020)).

Table 5: Sensitive human and environmental receptors and distance from prescribed

### activity

Sensitive Receptors	Distance from prescribed activity
Other mining areas	
Atlas Iron Limited Abydos Ore project	7 km north east
BHP Billiton Iron Ore Pty Ltd – Truner Camp	16 km south west
Altura Lithium Operations Pty Ltd –	21 km north west
Pilgangoora Lithium Project	32 km west
Wodgina Lithium Pty Ltd – Wodgina Operations	
Environmental receptors	Distance from prescribed activity
Threatened and/or priority flora	Pilbara Foxgrove Quoya zonalis, Threatened, mapped within the premises boundary.
	Bulbostylis burbidgeae, Priority 4 flora surveyed.
Fauna	MS993 places conditions on the Project in relation to the management of significant fauna species.
	Pilbara Leaf-nosed Bat is recorded within the premises boundary.
	Cave 13 Located toward the southern boundary of the Premises.
	Cave 13 is a maternal roost cave for a large colony of approximately 200-250 individuals of Pilbara Leafnosed Bat and is located within the Mine Development Envelope. All natural known roost caves in the Pilbara region are habitat critical to the viability of the Pilbara Leaf-nosed Bat and a Mine Exclusion Zone of 100 m from the predicated lateral extent of Cave 13 has been imposed (Source: EPA Report 1514).
	Site 12 Pool: Located outside the eastern boundary of the Premises, four individuals of the Pilbara Olive Python recorded which is an unusually high number of individuals for this species and suggests that this pool is particularly important habitat for this species (Source: EPA Report 1514).
Underlying groundwater (non-potable	Underlying groundwater (non-potable purposes).
purposes)	Groundwater is generally neutral to slightly alkaline in pH and fresh to slightly brackish with recorded total dissolved solids (TDS) in the range of 300mg/L to 3,500 mg/L.
	Groundwater in the valley floor area of the TSF occurs at depths typically ranging from 2.3 m to 6.6 m with an inferred hydraulic gradient of 1:100 towards the north-west.
Surface water:	The main ephemeral drainage lines in the area are:
Drainage lines in the region are ephemeral in nature and only flow for short duration in the wet season with long periods without	Lost Boys creek to the north of the proposed mine pit, within the area required for the TSF, which ultimately flows into the Turner River

flows during the dry season.  Numerous ephemeral drainage lines are found across the Premises.	(20km away) via Cinnamon Creek (to the north of the premises); and  • An unnamed creek which roughly parallels the mine access road and flows into the Turner River just south of Picunah Waterhole.  The landfill is located approximately 570 m from a mapped 250k dataset watercourse.  There are no permanent watercourses within the premises boundary.
Cultural receptors	Distance from prescribed activity
Aboriginal heritage site	Archaeological Place KAR057-01 mapped within the premises boundary  Honey Eater Creek 1km south of premises boundary

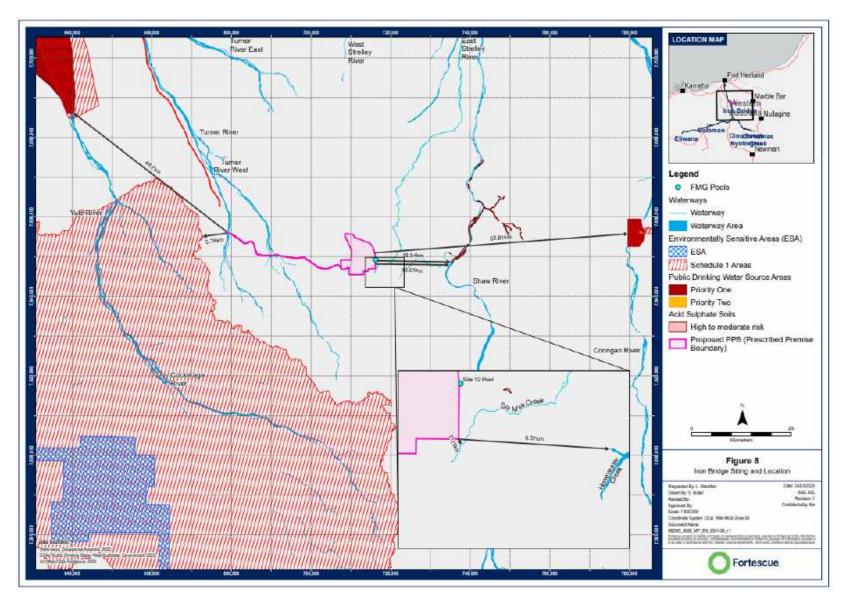


Figure 6: Distance to sensitive receptors

#### 3.2 Risk ratings

Risk ratings have been assessed in accordance with the *Guideline: Risk Assessments* (DWER 2020) for those emission sources which are proposed to change and takes into account potential source-pathway and receptor linkages as identified in Section 3.1. Where linkages are in-complete they have not been considered further in the risk assessment.

Where the Licence Holder has proposed mitigation measures/controls (as detailed in Section 3.1), these have been considered when determining the final risk rating. Where the Delegated Officer considers the Licence Holder's proposed controls to be critical to maintaining an acceptable level of risk, these will be incorporated into the licence as regulatory controls.

Additional regulatory controls may be imposed where the Licence Holder's controls are not deemed sufficient. Where this is the case the need for additional controls will be documented and justified in Table 6.

The Revised Licence L8845/2014/1 that accompanies this Amendment Report authorises emissions associated with the operation of the Premises.

The conditions in the Revised Licence have been determined in accordance with *Guidance Statement: Setting Conditions* (DER 2015).

## Table 6. Risk assessment of potential emissions and discharges from the Premises during construction, commissioning and operation

Risk Event					Risk rating C = consequence L = likelihood	Applicant controls sufficient?	Conditions of licence	Justification for additional regulatory controls
Source/Activities	Potential emissions	Potential pathways and impact	Receptors	Applicant controls				
Construction	,		,					
Category 54:  Japal WWTP – construction of 598kL auxiliary aeration / anoxic tank and Two 22kW aerator that tie into the existing aeration tank.  (New amendment)  Category 5:  Relocation of tailings deposition pipelines  (New amendment)  Construction of new additional storage ponds to establish 'Contact Water' network.  (New amendment)	Dust	Air/ windborne pathway causing impacts to health and amenity.  Potential impact to vegetation health and impacts to surface water quality.	Nearby vegetation Threatened and priority flora. Surface water nearby creeks	No additional controls proposed during construction.	C = Slight L = Possible Low Risk	Y	Condition 8 Condition 9 and 10 - ECR	The delegated officer considers there is sufficient separation from sensitive receptors and specified ecosystems to mitigate the risk of dust impacts.  Construction is within the existing mine / processing area and for a finite period of time.  The licence holder has requested 'operational flexibility' in relation to where the infrastructure / equipment is constructed, therefore a condition has been included to submit an Environmental Compliance Report (ECR to be submitted once construction has been completed and confirm the location of the equipment / infrastructure constructed.
Operation (Cat 5)								
Contact water network storage (new amendment)	Process water transport and storage (high in heavy metals and TDS)	Rupture / failure of decant pipelines, overtopping of process water pond resulting in discharge to land.	Soil. Surface water – nearby creeks. Nearby vegetation Threatened and priority flora.	Flow metres must will be installed at the following locations as a minimum and comply with any RIWI requirements:  Bores and extraction points  Water Standpipes  Recycled water input points  Dewatering discharge points and outlets  Water storage facilities must be fenced to prevent fauna access.  Water storage facilities must have egress devices on the corners that are consistent with the requirements of DMIRS Environment Note – Fauna Egress Matting and Ramps (2012) that are suitably secured and extend to the base of the internal floor.  All water storage facilities must be adequately sized with engineered overflow controls (level/ float switch).  Water storage facilities must be lined with a minimum of 1 mm HDPE liner that extend to the top of the facility wall.  Prior to the laying the liner, the surface must be cleared of any rocks that may pierce the liner.  Standpipes must be fitted with an engineered fitting to minimise splash and excessive loss of water.	C = Moderate L = Possible Medium Risk	Y	Table 1 – Containment updated to include 'Contact water network' requirements Condition 8 Condition 9 and 10 - ECR	Delegated officer has considered the licence holder's proposed controls to manage leaks / ruptures of ponds as sufficient and has included these control on the licence.  The licence holder has requested 'operational flexibility' in relation to where the infrastructure / equipment is constructed, therefore a condition has been included to submit an Environmental Compliance Report (ECR to be submitted once construction has been completed and confirm the location of the equipment / infrastructure constructed.

Licence: L8845/2014/1

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Risk Event					Risk rating C = consequence L = likelihood	Applicant controls sufficient?	Conditions of licence	Justification for additional regulatory controls
Source/Activities	Potential emissions	Potential pathways and impact	Receptors	Applicant controls				
				coarse rock to avoid boggy mud. Consider earthen bunds to avoid water run-off, erosion issues and discourage fauna attraction.  Regular inspections for leaks and pipeline infrastructure integrity.				
Contact water network - used for dust suppression (new amendment)	Process water (high in heavy metals and TDS)	Direct discharge to land potential impact to vegetation and threatened/ priority flora.	Soil.  Surface water – nearby creeks.  Nearby vegetation  Threatened and priority flora.	Water cart operators will be trained and competent in the use of water carts, including sprays to monitor for over spray and reduce the fan width to ensure that spray is applied within delineated windrows and cleared areas.  Spray dribble bars will be used to ensure that contact water is controlled and easily directed to the required area.  Windrows and bunding around cleared/ operational work areas and access roads will be maintained where required to prevent runoff from these areas.  Monitoring proposed for contact water network ponds to ensure there are no hydrocarbons and not potentially acid forming mine drainage water used for dust suppression.  Brackish or saline water cannot be directed off-road into vegetation and the use of dribble bars is required to prevent spray drift.	C = Moderate L = Possible <b>Medium Risk</b>	Y	Condition 7, Table 6	The delegated officer has considered the licence's holder proposed controls to manage the potential process water emissions and considers that the potential emissions can be adequately managed. The licence holder's proposed controls have been included on the licence.
Operation of Ore Processing Facility (W6322/2019/1)	Dust	Air/ windborne pathway causing impacts to health and amenity.  Potential impact to vegetation health and impacts to surface water quality.	Soil.  Surface water – nearby creeks.  Nearby vegetation  Threatened and priority flora.	Water fogging sprays at key transfer points.  A baghouse dust collection system connected to the crushing rollers.  Feed and discharge transfer points are enclosed (covered by metal framework with rubber aprons attached to the inlet and outlet chutes).  Coarse material from the Air Classifiers is fed along a skirted conveyor into a down chute.  Use of trouser leg chutes to reduce potential dust lift off.  Vegetation Health Monitoring and Management Program.  Water trucks will be available to wet down the stockpiles and prevent dust lift off as required.	C = Slight L = Unlikely <b>Low Risk</b>	Y	Condition 7 and Table 6	The delegated officer has considered the licence's holder proposed controls to manage the potential dust emissions, and considers that the potential dust emissions can be adequately managed. The licence holder's proposed controls have been included on the licence.
Operation of Ore Processing Facility – Oily Water Separator at Light Vehicle Wash Bay (W6322/2019/1)	Contaminated stormwater (hydrocarbons and sediment) contaminated water storage ponds	Direct discharge to land potential impact to vegetation and threatened/ priority flora.	Soil.  Surface water – nearby creeks.  Nearby vegetation  Threatened and priority flora.	An OWS was constructed by the applicant at the Light Vehicle Wash Bay at the mine in accordance with the construction report.  The emission point to land 'L2' was updated in Section 32 and Table 7 to reflect the inclusion of the new OWS and discharge of OWS treated water in the event of a major storm event at the Light Vehicle Wash Bay.	C = Slight L = Unlikely Low Risk	Υ	Condition 7, Table 6	Design requirements from the works approval have been included in the licence. Authorised discharge points have been.

Risk Event					Risk rating C = consequence L = likelihood	Applicant controls sufficient?	Conditions of licence	Justification for additional regulatory controls
Source/Activities	Potential emissions	Potential pathways and impact	Receptors	Applicant controls				
Operation of TSF2 (Stage 1A) Tailings surface dust lift-off (W6322/2019/1)	Dust lift-off from TSF transporting contaminants	Air/ windborne pathway causing impacts to health and amenity.  Potential impact to vegetation health and impacts to surface water quality.	Nearby vegetation Surface water nearby creeks Nearby fauna	The applicant has committed to the following management measures:  • Maintain beaching locations to ensure crust forms, minimising dust and lift off.  The applicant has stated that tailings have been reported as NAF and do not contain contaminants.	C = Moderate L = Possible Medium Risk	Y	Condition 2, Table 1	The delegated officer has considered the controls proposed by the licence holder as acceptable to manage the potential risks of dust lift off during operation of the TSF2, Stage 1A.  These controls have been included as conditions on the licence.
Operation of TSF2 (Stage 1A) Discharge of tailings and return water from pipeline leak / rupture (W6322/2019/1)	Tailings and decant return water	Direct discharges to land and overland flow  Potential impact to vegetation health due to increased chemicals, metals from tailings.  Impacts to soil from contamination and erosion (sedimentation and scouring).	Soil.  Surface water – nearby creeks.  Nearby vegetation Threatened and priority flora.	Low toxicity flocculent and coagulant are to be used in the process, which are not expected to pose a significant risk to surface waters.  Scour pits located at intervals to contain material in the event of a failure.	C = Minor L = Possible <b>Medium Risk</b>	Υ	Condition 1 Condition 3, Table 2 Condition 7, Table 6	The delegated officer has considered the controls proposed by the licence holder as acceptable to manage the potential risks of discharge of tailings from a pipeline leak or rupture during operation of the TSF2, Stage 1A. Existing condition 1 will be sufficient in managing these risks.  Condition 7, Table 6 has been updated to include the construction and operational requirements for the scour pits.
Operation of TSF2 (Stage 1A) Increased capacity at TSF2 for the storage of tailings material. (W6322/2019/1)	Increased seepage of tailings material through the TSF2 embankment foundation and base.	Infiltration via soil to groundwater causing impacts on groundwater quality and levels.  Impacts on vegetation due to waterlogging and increased chemical, metals, nutrients from tailings.  Impacts on surface water due to discharge into nearby creeks.	Soil Surface water – nearby creeks Groundwater Nearby vegetation Threatened and priority flora	Any lateral seepage through the foundations of the TSF embankment will be collected in the downstream RtWP.  Groundwater monitoring bores installed downstream of the TSF and RtWP with the potential to convert to recovery bores should there be any significant rates of seepage detected.	C = Moderate L = Possible Medium Risk	Y	Condition 2, Table 1 Condition 18, Table 11	Inclusion of operational requirements for TSF2 Stage 1A  Operational requirements have been included from the works approval including freeboard, tailings deposition and volumes recorded.
Operation of TSF2 (Stage 1A) Increased capacity at TSF2 for the storage of tailings material. (W6322/2019/1)	Tailings	Direct discharge from overtopping of the TSF2 embankment Detrimental impacts on nearby surface water / groundwater and impacts to vegetation health. Impacts to soil from contamination and erosion (sedimentation and scouring).	Soil Surface water – nearby creeks Groundwater Nearby vegetation Threatened and priority flora	Water balance submitted (at works approval application) the RWP is expected to provide the required storage for capacity. Any stormwater over the 1:100 AEP event volume will drain via the emergency spillway to RtWP. The spillway capacity is designed to handle 1:100,000 AEP event.  Visual inspections daily of the TSF and Return Water ponds and following significant rainfall events to check freeboard capacity.	C = Moderate L = Possible Medium Risk	Y	Condition 2, Table 1 – Condition 3, Table 2 Condition 7, Table 6 – Condition 8, Table 7 Condition 18, Table 11	Operational requirements for TSF2 Stage 1A have been added to the licence from W6322/2019/1 including controls for freeboard, recording volumes, water balance and to maintain beaching.  The inspection table has been updated to include tailings delivery pipeline, RWP water pipelines and tailings storage facility embankment freeboard.

Risk Event					Risk rating C = consequence L = likelihood	Applicant controls sufficient?	Conditions of licence	Justification for additional regulatory controls
Source/Activities	Potential emissions	Potential pathways and impact	Receptors	Applicant controls				
Operation of TSF2 (Stage 1A) Use of scour pits (W6322/2019/1)	Tailings	Direct discharge and overland flow from overtopping of the scour pits.  Detrimental impacts on nearby surface water / groundwater and impacts to vegetation health.  Impacts to soil from contamination and erosion (sedimentation and scouring).	Soil Surface water – nearby creeks Groundwater Nearby vegetation Threatened and priority flora	The pits will contain any tailings spillage until it has dried out for the material to be relocated back into the TSF.  Scour pits have been constructed to have sufficient capacity to contain tailings where possibly from contingency discharge.  External bunds constructed to reduce interaction.  Maintain the integrity of the external bunds to reduce surface water interaction.  Tailings once dried out must be removed from the scour pits following a scouring event as soon as practicable.  Any tailings spill that occurs on undisturbed ground in the process of a scouring must be cleaned-up.	C = Minor L= Unlikely <b>Medium Risk</b>	Y	Condition 7, Table 6	The operational requirements have been included on the licence.
Proposed relocation of tailings deposition pipeline for TSF2 (Stage 1A)  (New amendment)	Pipeline failure / Leakage causing tailings discharge to the environment.	Direct discharge and overland flow from overtopping of the scour pits.  Detrimental impacts on nearby surface water / groundwater and impacts to vegetation health.  Impacts to soil from contamination and erosion (sedimentation and scouring).	Soil Surface water – nearby creeks Groundwater Nearby vegetation Threatened and priority flora	Pipeline will be constructed within current cleared or approved operational areas and will not be constructed within drainage lines that drain outside of the prescribed premises boundary.  Pipeline will be made of nominally 800mm steel adapted into polyethylene pipework.  TSF pipelines to have installed with flow measurement at the start (Tailings Transfer Tank at OPF) and at the end of the pipeline (at the TSF), and continuous monitoring of pipeline pressure and pump performance.  Pipelines will not be constructed within 200m of Site 12 Pool.	C = Minor L= Unlikely <b>Medium Risk</b>	Y	Condition 8, Table 7 Condition 9 and 10 - ECR	The licence holder's proposed controls for the construction of the new pipelines for tailings deposition has been included on the licence.  The licence holder has requested 'operational flexibility' in relation to where the infrastructure / equipment is constructed, therefore a condition has been included to submit an Environmental Compliance Report (ECR) to be submitted once construction has been completed and confirm the location of the equipment / infrastructure constructed.
Category 52:  Operation of back up diesel generators 16 MW Electric power station  (W6506/2021/1)	Gases from Combustion emissions from diesel fuel NOx, SOx, PM and CO <sub>2</sub>	Air / wind dispersion	Closest sensitive receptors are approximately 7km northeast of the premises	The backup power station will only be operated for backup purposes in the event the main power supply is out of action.  Generators have been emission tested to ensure performance parameters meet emissions specifications.  Equipment prioritised for usage in high fuel loading low emission configuration.  Equipment inspected maintained and serviced regularly.  Air emissions managed in accordance with the Greenhouse Gas Emissions and Energy Reporting Management Plan.	C = Moderate L = Possible Medium Risk	Y	Condition 4, Table 3, premises production or design capacity limit Table 8	Emission stack No. 9 and No. 10 have been transferred from W6506/2021/1 to licence – Table 8 Point Source Emissions to air.  The design capacity for Category 52 has been increased on the licence from 12.8 Mwe to 16 Mwe per annual period.
Category 52:  Operation of back-up diesel generators. Storage and use of diesel, fuel coolant and transformer oils for operation of back-up diesel generator  Operation of 16 MW Electric power station  (W6506/2021/1)	Accidental release of contaminated material	Direct discharge / run off causing detrimental impacts on nearby surface water / groundwater and impacts to vegetation health.	Soil Surface water – nearby creeks Groundwater Nearby vegetation Threatened and priority flora	Containment and storage infrastructure constructed to meet requirements of AS1940:2004; AS/NZS 3933-1998 and the latest version of the Hydrocarbon Storage procedure.  All generator units are containerized self-bunded to contain 110% volume of on-board engine fluids.  Generator diesel day tanks are of double-walled design.  Site roads designed to divert stormwater away from operational areas.  The site has a 2% gradient slope across the operational area leading to a large stormwater drain to the western side of the site.  Potentially contaminated stormwater managed in accordance	C = Moderate L = Possible <b>Medium Risk</b>	Y	Condition 7, Table 6	The delegated officer has considered the applicant's commitment to manage and store infrastructure in compliance with Australian Standards. Secondary containment infrastructure in the unlikely event that primary containment is compromised will contain spills, discharges and breach containment.  The applicant's controls have been included in the licence.

Risk Event					Risk rating C = consequence L = likelihood	Applicant controls sufficient?	Conditions of licence	Justification for additional regulatory controls
Source/Activities	Potential emissions	Potential pathways and impact	Receptors	Applicant controls				
				with the Chemical and Hydrocarbon Management Plan.  Spill management in accordance with Chemical and hydrocarbon spill procedure.  Spill incidents are managed in accordance with the Incident Event Management Procedure.				
Category 54:  Design change to Japal WWTP to include new aeration tank and aerators.  Operation of 598 kL auxiliary aeration anoxic tank  Operation of two 22 kW aerators that tie into existing aeration tank  (New amendment)	Effluent irrigated to land	Direct discharge / run off causing detrimental impacts on nearby surface water / groundwater and impacts to vegetation health.	Soil, vegetation and groundwater. Surface water receptors.	No additional controls are proposed.	C = Slight L = Possible Low Risk	Y	Condition 7, Table 6	The delegated officer has determined that the additional aeration anoxic tank is likely to improve the quality of the wastewater. The delegated officer has considered that there are no changes to the key parameters of the WWTP such as camp population or influent volumes, effluent volumes etc.  Given there are no additional chances to the increase in capacity or production, no further risk assessment has been done. This infrastructure has been included on the licence.
Category 57:  Operation of used tyre storage facility.  Fire – upset conditions  (W6315/2019/1)	Contaminated fire water and burnt materials, smoke	Direct discharge	Soil  Vegetation and groundwater.  Surface water receptors.	Low toxicity fire suppressants will be used where available.  Not more than 5000 tyres will be stored within the premises at any one time.  Used tyres stacks shall not exceed 500 tyres per stack and 5m in height.  Used tyre stacks are to be stored no less than 6m from any other tyre stack.  The waste tyres stockpiles shall not exceed 1,000m³ in each area.	C = Slight L = Possible Low Risk	Y	Condition 6, Table 5	The licence holder is proposing to include Category 57 on this licence, the construction of the used tyre facility was completed under works approval W6315/2019/1 for 150 tyres. This amendment includes the increase the number of tyres to 5,000 tyres.  The delegated officer considers the proposed controls sufficient in managing the potential risks from fire. The controls have been included on the licence.
Category 57: Operation of used tyre storage Stormwater runoff from storage areas (W6315/2019/1)	Contaminated fire water	Direct discharge	Soil, vegetation and groundwater. Surface water receptors.	Stormwater will drain into the broader (already existing) drainage system, which diverts stormwater to settlement basins prior to discharge into the environment.  Any fire suppressants captured within the settlement basins will be taken to a licensed facility after a fire.	C = Slight L = Possible Low Risk	Υ	Condition 6, Table 5	The delegated officer considers the proposed controls sufficient in managing the potential risks from fire and contaminated stormwater runoff. The controls have been included on the licence.

Risk Event					Risk rating C = consequence L = likelihood	Applicant controls sufficient?	Conditions of licence	Justification for additional regulatory controls
Source/Activities	Potential emissions	Potential pathways and impact	Receptors	Applicant controls				
Amendment to monitoring of ambient groundwater quality – removal of Acrylamide	Infiltration via soil to groundwater causing impacts on groundwater quality and levels.  Impacts on vegetation due to waterlogging and increased chemical, metals, nutrients from tailings.  Impacts on surface water due to discharge into nearby creeks.	groundwater causing impacts on	Soil	y creeks dwater No additional controls proposed.  y vegetation tened and	C = Moderate L = Possible <b>Medium Risk</b>	N	Condition 18, Table 11	The licence holder requests to amend the monitoring of ambient groundwater monitoring quality with the removal or parameter Acrylamide. The licence holder has undertaken two quarterly compliance sampling events as well as several additional monitoring events and have not detected any Acrylamide.  Acrylamide can be found in the use of
		and levels.  Impacts on vegetation due to waterlogging	Surface water – nearby creeks Groundwater					tailings thickening where polyacrylamide is used. This is a chemical compound that can be toxic to aquatic organisms and persistent under certain conditions.
		chemical, metals, nutrients from tailings.	emical, metals, rients from tailings.  Nearby vegetation  Threatened and					The current licence requires monitoring of ambient groundwater quality on a sixmonthly basis.
							The licence holder has not provided sufficient evidence to support the removal of this parameter at this stage. While it has not been observed in monitoring to-date, DWER considers that ongoing monitoring for this parameter is retained in licence conditions as it could still be observed in groundwater in years to come.	
Amendment to surface water monitoring requirements.	On site operations  On site operations  Impacts on vegetation due to waterlogging and increased chemical, metals,	groundwater causing impacts on groundwater quality and levels.  Impacts on vegetation	Surface water – nearby creeks On Groundwater	No additional controls proposed. Surface water to be managed under Part IV and in line with Fortescue's Surface Water Management Plan (100-PL-EN-1015), North Star Surface	C = Moderate L = Possible	Y	N/A	The surface water monitoring requirements have been removed from the licence as they are no longer relevant to the site operations. Stage 1 OPF and associated infrastructure has been decommissioned and removed. The surface water monitoring locations have been removed or no longer accessible.
		Nearby vegetation Threatened and priority flora	Pool Water Quality and Quantity Monitoring Plan (662MI-5700- PL-VM-0001).				The existing requirements on the Ministerial Statement are sufficient in monitoring surface water.  Monitoring of groundwater will remain in licence conditions.	

Note 1: Consequence ratings, likelihood ratings and risk descriptions are detailed in the Guideline: Risk assessments (DWER 2020).

Note 2: Proposed Licence Holder's controls are depicted by standard text. Bold and underline text depicts additional regulatory controls imposed by department.

#### 4. Consultation

Table 7 provides a summary of the consultation undertaken by the department.

**Table 7: Consultation** 

Consultation method	Comments received	Department response
Licence Holder was provided with draft amendment on (01/08/2025)	The licence holder provided a response to the draft amendment on 20 August 2025, see Appendix 1	Refer to Appendix 1

#### 5. Conclusion

Based on the assessment in this Amendment Report, the Delegated Officer has determined that a Revised Licence will be granted, subject to conditions commensurate with the determined controls and necessary for administration and reporting requirements.

## 5.1 Summary of amendments

Table 8 provides a summary of the proposed amendments and will act as record of implemented changes. All proposed changes have been incorporated into the Revised Licence as part of the amendment process.

**Table 8: Summary of licence amendments** 

Condition no.	Proposed amendments
Cover page	Assessed premises production or design capacity changes:
Prescribed premises category	Category 5: Processing or beneficiation of metallic or non metallic ore has been amended to 72 million tonnes per annual period.
description	Category 52: Electric power generation has been amended to 16 Mwe per annual period
	Category 57: Used tyre facility has been included on the licence.
Licence history	This amendment description has been included on the licence history.
Condition 2	The following amendments have been made:
Table 1:	Removal of reference to Process water dam at the old OPF
Containment infrastructure	<ul> <li>Inclusion of up to 10 ponds including turkeys nests, transfer ponds and sediments ponds.</li> </ul>
	Inclusion of Process water ponds
	Inclusion of Return Water Pond
	Inclusion of Sediment Bains
	Inclusion of Contaminated Water Storage Ponds
	Amend TSF1 to TSF2 (Stage 1A)
Condition 3	Table 2: Inspections of Infrastructure has been amended:
Table 2:	Removal of TSF1 reference and replaced with Tailings delivery pipelines
Inspections of Infrastructure	Removal of TSF1 reference and replaced with RWP water return pipelines
	Removal of TSF1 reference and replaced with Tailings Storage embankment freeboard

Condition 4	Premises production or design capacity limit:				
Table 3: Production or	Category 5: Processing or beneficiation of metallic or non-metallic ore has been amended to 72 million tonnes per annual period				
design capacity limits	Category 52: Electric power generation has been amended to 16 Mwe per annual period				
	Category 57: Used tyre facility has been included on the licence with a capacity of 5,000 tyres				
Condition 5	Table 4: Waste acceptance has been amended as follows:				
Table 4: Waste acceptance	RO Reject water – reference to the quantity limit of RO reject water accepted from the RO plant via pipeline inflows to the RO reject storage tank with standpipe for dust suppression removed.				
	RO Reject water – accepted from the RO plant via pipeline inflows to the RO Reject storage tank with standpipe for dust suppression.				
Condition 6	Table 5: Waste processing has been amended as follows:				
Table 5: Waste	Removed reference to 'Inert waste type 2 (not including tyres).				
Processing	Included 'Inert Waste Tye 2' – untreated wood, tyres, conveyor, steel, rubber and concrete.				
Condition 7 Table 6:	Table 6: Infrastructure and equipment operational requirements table has been amended as follows:				
Infrastructure and	Included Oily Water Separator requirements				
equipment operational	Included Ore Processing Facility requirements				
requirements	Include Scour Pits operational requirements				
	Include 10 x 1.6 Mwe containerized 3516B diesel generator units and diesel storage				
Removal of Condition 8	Security conditions not relating to emissions or discharges.				
Addition of	Condition 8 Construction Requirements has been included for the following infrastructure:				
Condition 8	Additional WWTP infrastructure and equipment				
	Scour pits				
	Tailings deposition pipelines; and				
	Ponds for Contact Network.				
Addition of Condition 9 and 10	Environmental Compliance Report and submission requirements.				
Condition 11, Table 8	Table 8: Authorised discharge points (was previously Table 7) has been amended as follows:				
(Previously Condition 9, Table	Emission stack No. 9 and No. 10 have been transferred from W6506/2021/1 to licence – Table 7 Point Source Emissions to air.				
7)	Inclusion of - Discharge from OWS treated from Heavy Vehicle Wash Bay OWS & Light Vehicle Wash Bay OWS				
	Inclusion or RtWP emergency stormwater overflow.				
	Inclusion of contact water used for dust suppression.				
Condition 12, Table 9	Previous numbering Condition 10 Table 8				

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Monitoring: Condition 13 -16	Previous numbering Condition 11 - 14
Discharge point monitoring Condition 17, Table 10	Previous numbering Condition 15, Table 9  Emission and discharge monitoring has been updated to include:  L1: Sedimentation Basin / traps  L3: RWP emergency spillway.
Ambient environmental quality monitoring Condition 18, Table 11	Previous numbering Condition 16 Table 10  Deletion of Table 11 reference to surface water monitoring
Records and Reporting Condition 19-21	Previous numbering Condition 17 -19  Table 12  Remove reference to Surface water monitoring
Condition 22 -24	Previous numbering Condition 20 -22
Schedule 1: Maps	All maps and Figure numbers have been updated as required.

### References

- 1. Department of Environment Regulation (DER) 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.
- 2. Department of Water and Environmental Regulation (DWER) 2020, *Guideline: Environmental Siting*, Perth, Western Australia.
- 3. DWER 2020, Guideline: Risk Assessments, Perth, Western Australia.

# **Appendix 1: Summary of Licence Holder's comments on risk assessment and draft conditions**

Condition	Summary of Licence Holder's comment	Department's response
Condition 2 (Table 1)  Row 1  Row 4	IBO has reviewed the condition wording and the reference to the figure is incorrect, it should read as follows:  Up to 10 ponds including Turkey Nests, transfer ponds and sediment ponds at various locations within the prescribed premises boundary.  As shown in Schedule 1 Figure—5-6  Return Water Pond  As shown in Schedule 1 Figure 5-6	References to the Figures have been updated as required.
Condition 2 (Table 1) Row 6	The reference in the condition should refer to Figure 2 instead of Figure 5 as follows:  Contaminated Water Storage Ponds  As shown in Schedule 1, Figure 5-2	References to the Figures have been updated as required.
Condition 2 (Table 1) Row 7	IBO propose to remove part c) to k) of the TSF2 Stage 1A row as the TSF has been constructed and this construction detail is not required in the storage vessel and compound table (Table 1)  c) to k) - construction requirements for TSF2 Stage 1A	The licence holder has requested that all requirements relating to the construction of TSF2 Stage 1A be removed c) to k). All construction requirements have been removed. However, requirements j) (now item c)) relating to recording volumes of wet tailings during operation. and k) (now item d)) maintain beaching locations to ensure a crust forms, have been kept on the licence as they are operational requirements.
Condition 3 (Table 2) Row 2	This row should refer to the pipelines from the Return Water Pond (RtWP). Minor change to include the letter 't' in the correct RtWP acronym instead of RWP.  RtWP water pipelines	This correction to the acronym has been made as requested.
Condition 3 (Table 2) Row 3	Remove 'electric power generation' as this is not relevant to the type of inspection for the TSF. Replace type of inspection text with 'to confirm required freeboard capacity is available'.  Tailings storage facility embankment freeboard.	Condition 3, Table 2 references Tailings storage facility embankment freeboard.

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Condition	Summary of Licence Holder's comment	Department's response
	Electric power generation	
	To confirm required freeboard capacity is available.	
Condition 6 (Table 5) Row 1	As outlined in Table 15 of the supporting document submitted with the licence amendment, IBO requested the change in column titles to align with the waste processing table on other Fortescue operational licences. IBO requests to remove the work 'processes' and replace with 'management strategy' and remove the 'process limits and/or specifications' and replace with 'requirements'.	The wording of this condition been changed to align this licence with other Fortescue operational licences as requested.
	Processes	
	Management Strategy	
	Process limits and/or specifications	
	Requirements	
Condition 6 (Table 5) Row 4	As the column heading is changing from 'processes' to 'management strategy' for Inert Waste Type 2 (see change in Row 1 above), IBO requests that the 'landfilling' text be removed and replaced with 'disposal into Eastern Limb Sterilisation Dumps, Eastern Limb North Pit and Dry Reject Landforms (DRL)'. This disposal area was requested and addressed in the application.	The wording of this condition has been changed as requested.
	Inert Waste Type 2	
	Management Strategy	
	Receipt, handling and disposal of waste by landfilling	
	Disposal into Eastern Limb Sterilisation Dumps, Eastern Limb North Pit and Dry Reject Landforms (DRL)	
Condition 7 (Table 6)	IBO requests for the CHF and all associated infrastructure to be removed from Table 6 as the CHF has been decommissioned.	This condition and all references to the CHF have been removed as requested as it has been decommissioned.
	Ore Processing Facility	
	m) Concentrate Handling Facility (CHF) located on a raised pad	
	Comprises the following infrastructure equipment:	
	i) 4500 tonne day feed stockpile	

Condition	Summary of Licence Holder's comment	Department's response
	<del>ii) Ore feed hopper</del>	
	<del>iii) Feed conveyor</del>	
	<del>iv) Head chute (new infrastructure)</del>	
	v) Slurry tank (modified) and slurry pump	
	<mark>vi) Process water pipelines</mark> -	
	<mark>vii) Sturry pipeline</mark>	
	viii) Two 2MVA diesel fuelled gensets	
	ix) 2 <del>,000L self-bunded diesel fuel tank</del>	
Condition 7 (Table 6)	The number of enclosed conveyors and unenclosed conveyors is incorrect.	The number of enclosed and unenclosed conveyors has been corrected.
Row 10	Note the Environmental Compliance Reports for the conveyors (662NS-0000-RP-EN-0081 (Rev 1) & 662NS-0000-RP-EN-0081 (Rev 2)) were submitted to DWER on 21 November 2024 and 18 February 2025, respectively. The compliance reports identified that 15 enclosed conveyors and 10 unenclosed conveyors had been constructed.  Ore Processing Facility	
	k) Conveyors (15 19 enclosed, 10 6 unenclosed) and enclosed transfer stations	
Condition 7 (Table 6) Row 10	A permanent mobile conveyor and dry rejects stacker was constructed.  IBO requests that the stacker wording be revised to reference the correct terminology for the stacker that was constructed e.g. 'dry rejects stacker'.  Ore Processing Facility	Reference to the correct dry-rejects stacker has been made.
	l) Mobile conveyor and dry-rejects stacker on a raised pad	
Condition 7 (Table 6) Row 12	Further to the compliance not demonstrated compliance report (662NS-0000-RP-EN-0081 (Rev 2)) submitted to DWER on 18 February 2025, the wording in the licence needs to be updated to reflect that all discharges are contained within the stormwater infrastructure on site.	The wording of this condition has been changed to the new requirements for stormwater management as requested.
	All tanks to be maintained <mark>on concrete ring beams, with concrete bunding</mark> and discharges contained within the stormwater	

Condition	Summary of Licence Holder's comment	Department's response
	infrastructure on site. sump system around spillage points (including pump suctions and tank overflows).	
Condition 7 (Table 6) Row 16	Minor change to the term TWP to refer to the Raw Water Pond with the addition of letter 'a' (RaWP).  Site infrastructure and equipment - RaWP	The wording of this condition has been updated to 'RaWP'.
Condition 7 (Table 6) Row 17	Minor change to conditions wording to remove the term 'already constructed' as only 2 of the 5 pits have bee constructed to date with the remaining 3 planned to be constructed.  5 Scour Pits (already constructed) must be maintained to be meet the following specifications:	References to the 'already constructed' scour pits has been amended as requested.  Condition 9, Table 7, Row 1 still has construction requirements for the additional 3 Scour Pits.
Condition 7 (Table 6) Row 20	Minor change to conditions to define that the dribble bars are on the 'water carts' for this activity as part of the contact water network.  Contact water network  Spray dribble bars on water carts will be used to ensure that contact water is controlled and easily directed to the required area  Brackish or saline water cannot be directed off-road into vegetation and the use of dribble bars on water carts is required to prevent spray drift.	The wording of this condition has been updated to include 'on water carts'.
Condition 7 (Table 6) Row 18 and 19	IBO provides a map attached to this letter that satisfies the request with gensets and tanks shown on one map.	The map has been included on the licence (Figure 12).
Condition 8	This condition to implement security measures on site and undertake regular inspections in inconsistent with other Fortescue Ltd Operational Licences.  There are no emissions or discharges associated with these measures and therefore the condition is not required.  IBO requests for the removal of Condition 8 from the draft licence, as outlined in bold text below.	Condition 8 has been removed from the licence.

Condition	Summary of Licence Holder's comment	Department's response
	The licence holder must:  a) Implement security measures at the site to prevent as far asis practicable unauthorised access to the site; and  b) Undertake regular inspections of all security measures and repair damage as soon as practicable.	
Condition 9 (Table 7) Row 1	Minor condition change to reflect 3 remaining scour pits to be constructed and removal of a duplicate sub part to the condition.  Remaining 3 Scour Pits must be designed and constructed to meet the following design requirements:  • Construct scour pits to have sufficient capacity to contain tailings, where possible from contingency discharge.  Construct scour pits to have sufficient capacity to contain tailings,	Now Condition 8:  The wording of this condition has been updated as requested, and the duplication removed.
Condition 9 (Table 7) Row 3	where possible from contingency discharge.  Query on second bullet point which refers to water and standpipes – it appears as if a word is missing after 'Water'. Fortescue requests review and addition of appropriate word in condition.	Now Condition 8:  The requirements has been reviewed and amended to 'water standpipes'.
Condition 12 (Table 8) Row 2	Reference to figure is incorrect and should refer to Figure 8 instead of Figure 4.  As shown in Schedule 1, Figure 4 Figure 8 as '7.2 hectare spray field' and '7.9 hectare spray field'.	Now Condition 11, Table 8:  The reference has been updated to the correct Figure 8.
Condition 12 (Table 8) Row 3	Reference to figure is incorrect and should refer to Figure 19 instead of Figure 11.  Within the areas depicted in Schedule 1, Figure 11 Figure 19.	Now Condition 11, Table 8:  The reference has been updated to the correct Figure 19.
Condition 12 (Table 8) Row 5	Reference to figure is incorrect and should refer to Figure 5 instead of Figure 15. Note to also remove Figure 15 from licence and all reference in conditions as it is old and obsolete.  Within the areas depicted in Schedule 1, Figure 15 Figure 5.	Now Condition 11, Table 8:  The reference has been updated to the correct Figure 5.  Former Figure 15 has also been removed.
Condition 12 (Table 8)	Reference to figure is incorrect and should refer to Figure 4 and Figure 5	Now Condition 11, Table 8:

Condition	Summary of Licence Holder's comment	Department's response
Row 6	instead of Figure 9.  As shown in Schedule 1, Figure 9 Figure 4 and Figure 5 as 'L2 Emission Points'.	The reference has been updated to the correct Figures 4 and 5.
Condition 12 (Table 8) Row 9	Proposed to remove this row (Row 9) and emission point (L5), as this RtWP emergency spillway is already covered by emission point (L3) in row 7 of Table 8 of licence.  RWP emergency spillway - L5	Now Condition 11, Table 8:  Reference to RWP emergency spillway has been removed and updated with RtWP emergency spillway L3.
Condition 18 (Table 10) Row 4	Condition should refer to 'Sedimentation' basins to align with other conditions and the frequency of monitoring should state 'when overflowing' to align with other monitoring conditions.  Sedimentation Basins / traps  During discharge (when overflowing)	Now Condition 17, Table 10:  The wording of this condition has been updated as requested.
Condition 18 (Table 10) Row 5	Propose to remove the entire row for the 'OPF sediment pond indicative location' L3 emission point as this emission point is not shown as emission point to land in Table 8.  L3: OPF sediment pond indicative location	Now Condition 17, Table 10:  L3: OPF sediment pond indicative location removed from licence.
Condition 18 (Table 10) Row 6	Change condition text to reference 'Return Water Pond Emergency Spillway' and update emission point from L5 to L3 to align with terminology and emission points in Table 8. Also need to remove 'flow metering device' as method as this is not an appropriate measurement method for a spillway. Proposed to include AS instead of flow meter.  L5-L3: RWP Return Water Pond Emergency Spillway  Flow metering device  AS/NZS 5667.1, AS/NZS 5667.10	Now Condition 17, Table 10:  The wording of this condition has been updated as requested.
Definitions (Table 13)	Minor change to term to reflect correct spelling.  VWP (Vibrating Wire Piezometreers).	The definition has been updated in the licence as required.
Definitions (Table 13)	Minor change to change term to 'RtWP' to align with wording throughput licence for the Return Water Pond.	The definition has been updated in the licence as requested.

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Condition	Summary of Licence Holder's comment	Department's response
	R <mark>at</mark> WP (Return Water Pond)	
Definitions (Table 13)	Add in a new definition for the Raw Water Pond (RaWP) to clearly differentiate with RtWP (Return Water Pond) and aligns with all other mentions of RaWP in the licence conditions.  RaWP (Raw Water Pond)	The definition has been included in the updated licence as requested.
Amendment Report Premises Name	IBO confirms that the name of the Premises in alignment with previous works approvals etc is 'Iron Bridge Magnetite Project'.  'Iron Bridge Magnetite Project'	This licence name has been updated as required.
Amendment Report  (Page 29) Map of downstream monitoring bores	IBO confirms that Figure 20 in the draft licence is the correct map to refer to for the downstream monitoring bores from the TSF and RtWP.	The Department notes this information.