Government of Western Australia
Department of Water and Environmental Regulation

Amendment Report

Application for Licence Amendment

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

Licence Number	L8454/2010/2
Licence Holder	Chichester Metals Pty Ltd
ACN	109 264 262
File Number	APP-0026542
Premises	Christmas Creek Mine Site Tenements E46/610, E46/612, M46/320, M46/321, M46/322, M46/323, M46/324, M46/325, M46/326, M46/327, M46/328, M46/329, M46/330, M46/331, M46/332, M46/333, M46/334, M46/335, M46/336, M46/337, M46/338, M46/339, M46/340, M46/341, M46/342, M46/343, M46/344, M46/345, M46/346, M46/347, M46/348, M46/349, M46/350, M46/351, M46/352, M46/353, M46/354, M46/355, M46/403, M46/406, M46/412, M46/413, M46/414, M46/415, M46/416, M46/417, M46/418, M46/419, M46/420, M46/421, M46/422, M46/423, M46/424, G46/7, L46/49, L46/56, L46/58, L46/86, L46/87, L46/106, L46/111, E46/566 and L46/66 MULGA DOWNS WA 6751 As defined by the coordinates in Schedule 2 of the Revised Licence As defined by the Premises maps attached to the Revised Licence
Date of Report	02/07/2025 (FINAL)
Decision	Revised licence granted

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1. Decision summary

Licence L8454/2010/2 is held by Chichester Metals Pty Ltd (licence holder) for the Christmas Creek Mine Site (the Premises), located across multiple tenements at Mulga Downs, 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 on the Premises. As a result of this assessment, revised Licence L8454/2010/2 has been granted.

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 https://dwer.wa.gov.au/regulatory-documents.

2.2 Application summary

On 15 November 2024, the licence holder submitted an application to the department to amend L8454/2010/2 under section 59 and 59B of the *Environmental Protection Act 1986* (EP Act). The following amendments are being sought:

- Administrative removal of the Windich TSF1 and TSF2 (Windich TSF Complex) and Vasse TSF and associated infrastructure from the Christmas Creek Mine Site Licence L8454/2010/2;
- Transfer of the existing Christmas Creek (hall overland conveyor, primary ore crushing plant, and ore processing facility infeed) from Works Approval W6787/2023/1 to the Christmas Creek Mine Site Licence L8454/2010/2 following compliance with the requirements specified in Table 1 of Condition 1, Condition 2 and Condition 3 of the Works Approval;
- Increase in groundwater abstraction and reinjection at the Christmas Creek Mine Site from the existing 43 gigalitres per annum (GL/annum) to the proposed 110 GL/annum in accordance with Ministerial Statement (MS) 1033 under section 45C of the EP Act. No additional changes are required, as the existing infrastructure is deemed sufficient to support the projected increase. An amendment is required to only increase the production capacity of Category 6 of the prescribed premises category;
- Construction and operation of the new Flinders In-Pit TSF3 (IPTSF3), associated pipelines and infrastructure due to the existing Flinders IPTSF2 reaching full capacity; and
- Minor administrative amendment to Schedule 1: Maps in Figure 9, 10, and 11.

2.2.1 Application scope changes

It should be noted that a separate Environmental Compliance Report for the hydrocarbons / chemical storage areas was submitted to the department on 20 November 2024, after the submission of the licence amendment application. However, the department has assessed this infrastructure for compliance and this aspect can also be transferred to the Licence L8454/2010/2 from Works Approval W6787/2023/1.

On 06 June 2025 Fortescue and DWER agreed to exclude the amendment for the increase in groundwater abstraction and reinjection from the existing 43 GL/annum to the proposed 110

GL/annum. This aspect will now be captured in a separate licence amendment for the L8454 (APP-0028500) to allow further time for reinjection related aspects to be considered by both parties while also allowing for the timely approval for the construction and operation of Flinders IPTSF3, as the existing Flinders IPTSF2 is nearing storage capacity.

Consequently, this amendment is limited only to changes to Categories 5 activities from the Existing Licence. No changes to the aspects of the existing Licence relating to Categories 6, 31, 44, 52, 54, 57, 64, 73 and 77 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
5 Processing or beneficiation of metallic or non-metallic ore	77,000,000 tonnes per annual period	77,000,000 tonnes per annual period	Transfer of the existing Christmas Creek (hall overland conveyor, primary ore crushing plant, ore processing facility infeed, and hydrocarbons / chemical storage areas) from Works Approval W6787/2023/1 to the Licence. Construction and operation of the new Flinders IPTSF3, associated pipelines and infrastructure due to the existing Flinders IPTSF2 reaching full capacity.
6 Mine dewatering	43,000,000 tonnes per annual period (reinjected)	43,000,000 tonnes per annual period (reinjected)	N/A
31 Chemical manufacturing	195 tonnes per annual period	195 tonnes per annual period	N/A
44 Metal melting or refining	5,000 tonnes per annual period (output of 2,500 tonnes of pig iron per annual period)	5,000 tonnes per annual period (output of 2,500 tonnes of pig iron per annual period)	N/A
52 Electric power generation	63.6 MWe per annual period	63.6 MWe per annual period	N/A
54 Sewage facility	1,040 cubic metres per day	1,040 cubic metres per day	N/A
57 Used tyre storage	2,000 tyres	2,000 tyres	N/A

Category	Current design throughput capacity	Proposed design throughput capacity	Description of proposed amendment
64 Class II putrescible landfill	10,000 tonnes per annual period	10,000 tonnes per annual period	N/A
73 Bulk storage of chemicals	15,183.10 cubic metres in aggregate	15,183.10 cubic metres in aggregate	N/A
77 Concrete batching or cement products manufacturing	100,000 tonnes per annual period	100,000 tonnes per annual period	N/A

2.2.2 Administrative removal of Windich TSF1 and TSF2 and Vasse TSF

Windich TSF1 and TSF2 and Vasse TSF have been decommissioned and are no longer operational. The licence holder has requested the removal of operational and monitoring requirements associated with Windich TSF 1 and TSF2 and Vasse TSF.

2.2.3 Transfer of the Hall Hub Works Approval W6787/2023/1

The Christmas Creek Mine Site Hall Hub Works Approval W6787/2023/1 was granted on 20 June 2023. This Works Approval enabled the construction, commissioning, and time-limited operations of the hall overland conveyor, primary ore crushing plant, ore processing facility infeed, and hydrocarbons / chemical storage areas.

Compliance documentation for the construction of the facility was submitted to the department on 17 May 2024 to demonstrate that the infrastructure was constructed and can be operated in accordance with the Works Approval conditions under the Christmas Creek Mine Site Works Approval W6787/2023/1. The department assessed the Environmental Compliance Report received and determined that compliance was demonstrated for the hall overland conveyor, primary ore crushing plant, and ore processing facility infeed as per the requirements of conditions 1, 2, and 3 of the Works Approval.

A separate Environmental Compliance Report (ECR) was submitted to DWER on 20 November 2024 for the hydrocarbons / chemical storage areas. Compliance was only demonstrated for the construction of the infrastructure; however, administrative non-compliance was noted due to the late submission of the report. No further action was required from the works approval holder. Although the ECR was submitted after the submission of the Licence Amendment Application, the department has included the infrastructure to be transferred to the Licence to ensure a streamlined approvals approach.

On 08 November 2024 the Works Approval W6787/2023/1 was amended to extend the time limited operational period, while the infrastructure is transferred across to the Licence L8454/2010/2.

2.2.4 Construction and Operation of the Flinders IPTSF3

The existing Flinders IPTSF2 began tailings deposition in October 2022, designed with a storage capacity of approximately 36.5 million tonnes (Mt) for an operational life of approximately three years, which is estimated to reach capacity in October 2025. The licence holder proposes to construct and operate a new in-pit TSF, Flinders IPTSF3 to allow for continued tailings deposition at the Christmas Creek Mine Site.

The Flinders IPTSF3 design is comprised of two independent components, namely Stage 1 and Stage 2 that are divided by an Open Unlined Drain (OUD) (Klohn Crippen Berger, 2024) (Figure 1). The proposed OUD will be positioned in the natural ground along the western boundary of the Flinders (FLI) 52 Pit. The OUD will be approximately more than 200 metres (m) wide at the pit crest. The purpose of the OUD is to act as an in-situ 'landbridge' to convey the Marillana Creek southwards through the Flinders Pits and the Flinders IPTSF3.

Stage 1 is located to the east of the OUD and is proposed to be formed from the exhausted and merged mine pits, Flinders (FLI) Strip 51, FLI Strip 52, Mokare (MOK) Strip 43, and MOK Strip 44. Stage 2 is located to the west of the OUD, between the existing Flinders IPTSF2 and the OUD and is proposed to be formed from the exhausted mine pit, FLI54. Flinders IPTSF3 does not require construction of embankments or other structures that retain tailings or water. As Flinders IPTSF3 is an in-pit facility, the benches and batters of the pit walls will be left in-situ.

The Flinders IPTSF3 design will provide a storage capacity of approximately 53 million cubic metres (Mm^3) (assuming an in-situ density of 1.5 tonnes per cubic metres [t/m^3]). The storage capacity is estimated to be sufficient for 75 months of tailings production from Ore Processing Facility (OPF) 1 and OPF2 (Klohn Crippen Berger, 2024). Stage 1 is estimated to provide tailings storage of approximately 31.6 Mm^3, whilst for Stage 2 it is estimated to be 21.5 Mm^3. A beach slope of 0.5 % was adopted for the baseline capacity modelling of Flinders IPTSF3. The estimated storage capacity is dependent on several parameters including, but not limited to tailings production rate, beach slope, and achieved in-situ density that will require ongoing evaluation during operations.

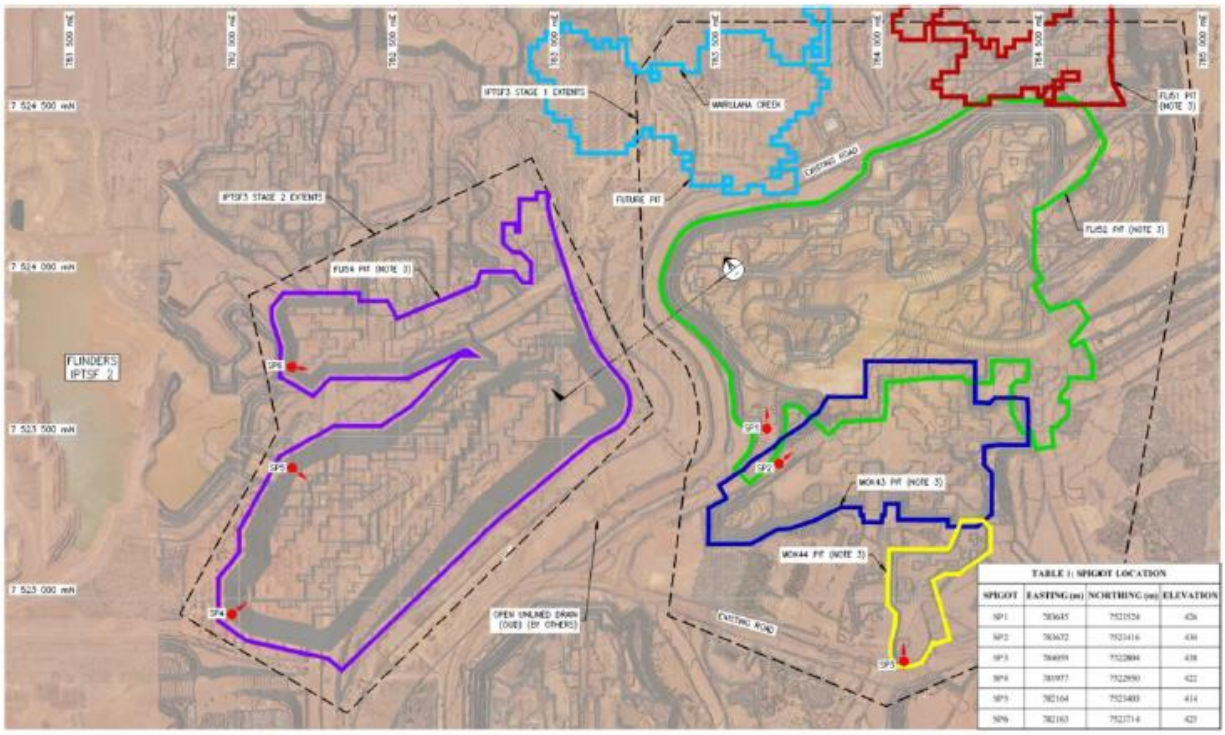

Figure 1: Flinders IPTSF3 general arrangement

Tailings deposition and delivery

The tailings will be deposited from three deposition points at each stage. One deposition point at each stage is expected to be permanently associated with each OPF, and the third deposition location to be able to deposit tailings from both the OPF1 and OPF2. Spigots are proposed to be constructed and operated to support the tailings deposition into Flinders IPTSF3. The licence holder has requested to allow for operational flexibility regarding number of spigots and spigot locations. The department has no objection to the flexibility of the number of spigots and

locations at Flinders IPTSF3 and will take this into consideration when amending the Licence.

Stage 1 deposition locations

The licence holder has indicated that two scenarios have been modelled for Stage 1, due to tailings pumping capacity constraints at the OPFs (Figure 2).

Scenario 1 looked at the deposition from the whole perimeter of Stage 1 with the intent of maximising the mass of tailings stored within the available pit volume. This would require a booster pump station to permit pumping at a greater distance from the OPFs. Scenario 2 would have deposition limited to the west and southern boundary of Stage 1, where deposition would not require a booster pump station. Based on the modelling undertaken, Scenario 1 showed that greater storage volumes would be achieved as opposed to Scenario 2. Despite this, the difference is approximately 5% or two months of storage capacity, where the licence holder has indicated the extra storage being costly to undertake. The licence holder has determined to proceed with Scenario 2 as the baseline design for Stage 1 of the Flinders IPTSF3.

Under Scenario 2, the decant pond is assumed to form at the northern boundary of Stage 1; a ramp will allow the pump access to remove decant with water not expected to pond against the OUD under normal operational conditions. The lowest level the decant pond is expected to be pumped out of Stage 1 is about 400 m RL.

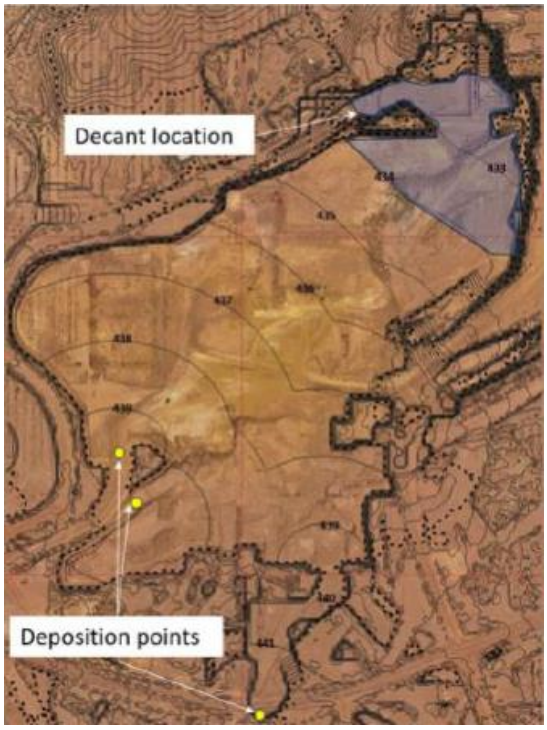

Figure 2: Indicative Stage 1 deposition scenario

Stage 2 deposition locations

Stage 2 is located closer to the OPFs, where tailings pumping capacity is not considered a constraint for deposition locations. Three deposition locations have been modelled around the perimeter of Stage 2 (Figure 3). The Stage 2 decant pond is expected to develop at the north-eastern boundary of the facility, with the ramp located at the same area to allow access to the skid or trailer mounted decant pump(s). The lowest level the decant is expected to be pumped out of Stage 2 is estimated to be at 390 m RL.

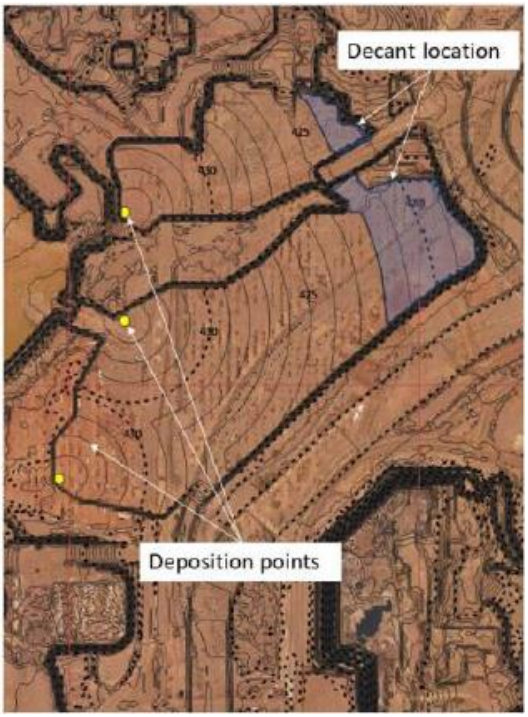

Figure 3: Indicative Stage 2 deposition scenario

Tailings delivery into the Flinders IPTSF3 will generally utilise the following methodologies:

- Lined steel and High-Density Polyethylene (HDPE) pipeline with an offtake of the tailings delivery line ending at an open-ended pipe or spigot. The open-ended pipeline may at times be elevated above the local topography to avoid backflow.
- If spigots are installed on deposition ramps, spigots will be installed with slots, as the tailings level rises, the lower slots become blocked, and tailings flow out of the upper slots.

Surface water runoff

A hydrology model (using PCSMM software) was developed to estimate the stormwater runoff into and towards Stage 1 and Stage 2 of the Flinders IPTSF3. Stormwater runoff was estimated for two separate purposes, to inform the water balance and to estimate the volume of reserve storage needed for single extreme events, over and above normal operations.

A large-sized external catchment is situated to the north and east of Flinders IPTSF3, where runoff in these catchments naturally flow to the south, in the Marillana Creek, towards the Flinders IPTSF3. The likely streamflow runoff to Flinders IPTSF3 occurs over mainly hilly catchments to the north-east of the facility (Figure 4). Boundaries of twenty catchments, shown as blue lines, have the potential for surface water runoff to travel towards Flinders IPTSF3. The magenta lines if the hydraulic centre of the OUD, whilst the green hatching identifies Stage 1 and Stage 2 of Flinders IPTSF3.

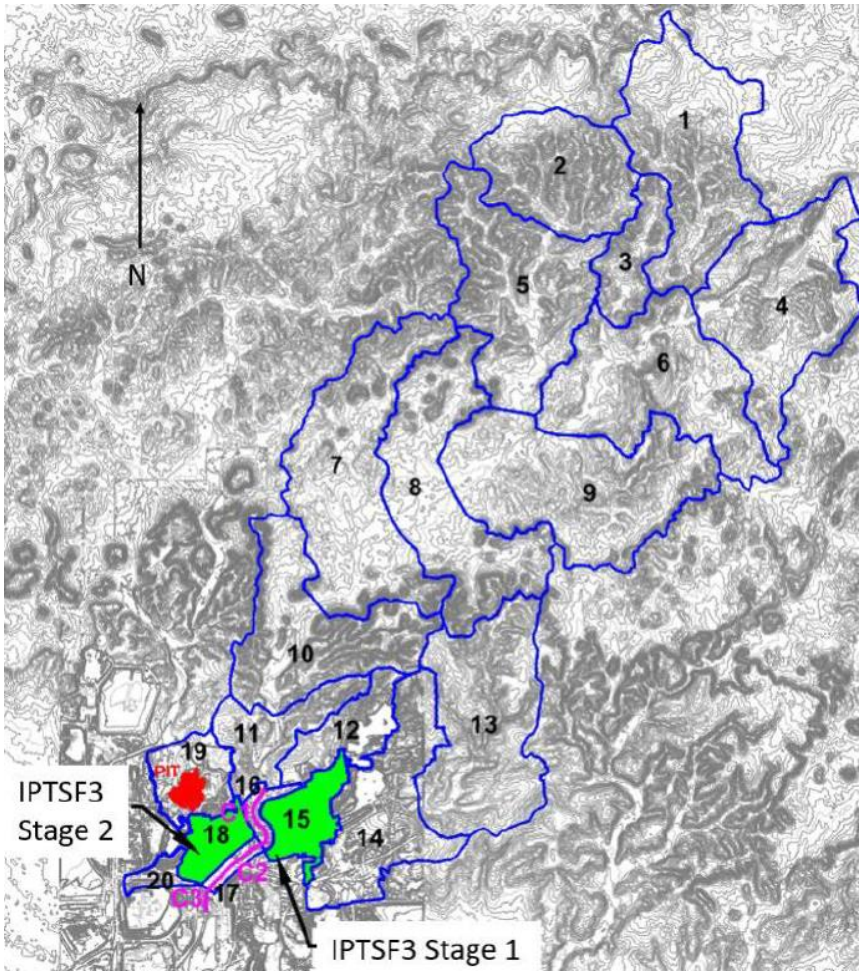

Figure 4: Catchments contributing to stormwater runoff to the Flinders IPTSF3

The OUD has a significant effect on the estimated volume of surface water runoff into the Flinders IPTSF3, where the hydrological design criterion for the OUD is to ensure it will pass the 1:200 Annual Exceedance Probability (AEP), 6-hour flood. During an event that is greater than the design AEP event, the OUD has been assumed to overtop with floodwater subsequently entering the Flinders IPTSF3. If the OUD fails, additional runoff may enter Stage 1 and Stage 2 of Flinders IPTSF3.

Freeboard capacity

ANCOLD (2019) states that "*freeboard is a vertical distance between a water level within a dam and a critical design level. For tailings dams there are various freeboards provided for different purposed."* A summary of constraints applied Stage 1 and Stage 2, regarding freeboard limits for the Flinders IPTSF3 is provided in Table 2.

Table 2: Stage 1 and Stage 2 Flinders IPTSF3 freeboard summary

Element	Definition	Stage 1 constraint	Stage 2 constraint
Pit rim elevation	Lowest elevation of the design shell pit rim (overflow level).	440 m RL	431 m RL
Operating freeboard	Vertical distance between pit rim and tailings elevation at point of deposition.	0.3 m	0.3 m
Total freeboard	Vertical distance between pit rim and	1.0	1.0 m

Element	Definition	Stage 1 constraint	Stage 2 constraint
(DEMIRS) Contingency freeboard (ANCOLD)	pond after design storm event.	439.0 m RL	430.0 m RL
Operational pond volume	Allow for normal pond resulting from operation of TSF.	Varies, with the mean as 460,000 m^3	Varies, with the mean as 250,000 m^3
GISTM extreme storage allowance (200-year AEP)[1]	Estimated inflow volume from design storm.	2,225,020 m^3	Not applicable
	Contingency freeboard limit.	0.5 m 439.5 m RL	Not applicable
DEMIRS extreme storage allowance (100-year AEP, 72-hour storm)[1]	Estimated inflow volume from design storm.	1,680,270 m^3	Not applicable
	Contingency freeboard limit.	1.0 m 439.0 m RL	Not applicable

Note 1: Assumes OUD diverts a large catchment from IPTSF during normal operations, as the design intends.

Tailings Characterisation

The tailings that will be deposited into the Flinders IPTSF3 will be produced from two discrete sources, from the OPF1 and OPF2. OPF1 typically produces 55 to 60 % of the total tailings mass. OPF1 has tailings slurry concentration of 45.7 % weight by weight (w/w) and OPF2 has tailings slurry concentration of 42.9 % (w/w). The licence holder does not anticipate any significant changes to the tailings properties over the life of Flinders IPTSF3.

Hydrogeological assessment

Klohn Crippen Berger (2024) undertook a hydrogeological assessment in support of the Flinders IPTSF3 and to take into consideration the potential impacts to the surrounding groundwater environment. The assessment identified that it's estimated that low seepage rates will occur and the location of seepage expression to groundwater is dependent on the groundwater gradient. The seepage is likely to move towards the south initially (downgradient), aligned with the regional flow direction, and then radially from the tailings as the head in the tailings increases.

The tailings supernatant water quality is within the range of naturally occurring values and lower in some areas where hypersaline water is found. Total dissolved solids (TDS) / electrical conductivity (EC) may increase with time due to the evaporation of the tailings pond water. The estimated salinity levels (TDS) for the water balance had a median TDS of 25,800 milligrams per litre (mg/L) for Stage 1 and 9,900 mg/L for Stage 2. The licence holder anticipates that there would not be any adverse impacts to the groundwater systems from seepage of Flinders IPTSF3, taking into consideration the salinity levels and potentially low seepage rates.

Further details on water recovery, groundwater monitoring, seepage rates, and seepage management identified in the hydrogeological assessment are discussed below.

Water recovery and seepage management

As Flinders IPTSF3 is an existing in-pit, the TSF design does not require the installation of seepage control features like those of an above-ground TSF, apart from the tailings and decant return pipelines. Seepage management measures the licence holder has proposed includes the following:

- Maintain and operate a minimum total freeboard of 1.0 m;

- Installation of additional monitoring bores in suitable locations around Flinders IPTSF3 and ongoing groundwater monitoring around the IPTSF.
- Tailings pumped as per the design basis solids concentration to reduce the volume of water being discharged into the IPTSF.
- Supernatant water will be pumped out of Flinders IPTSF3 as required. It is expected that pit dewatering and seepage recovery downstream will occur as required for mining in the Flinders Domain whilst the IPTSF is in operation.
- Maintain the supernatant pond, free from the tailings slurry and at a small size will help reduce the seepage from the surface of the pond. This will also assist in increasing the tailings density and maximising the water recovery.

Water balance and water quality

A water balance analysis has been undertaken by (Klohn Crippen Berger, 2024) by building a model using the software *GoldSim* (version 13.0 R2) to estimate the size of the decant pond for Stage 1 and Stage 2, and to simulate potential changes in the decant pond and nearby groundwater salinity from tailings deposition. The main parameters that were considered for the water balance model include:

- direct precipitation (to the decant pond and beach);
- runoff (catchment and pitwall);
- tailings slurry water;
- decant recovery pumping; and
- groundwater (inflow and seepage).

The seepages rates for Flinders IPTSF3 have been estimated using the groundwater assessment 'low permeability' parameters ($1x10^{-4}$ metres per day [m/day]). The seepage rates for Stage 1 and Stage 2 are presented in Table 3.

Table 3: Estimated seepage rates

	Stage 1 (m^3/day)	**Stage 2 (m^3/day)**
Minimum	0.02	<0.001
25 percentiles	0.40	0.07
75 percentiles	0.92	0.27
Maximum	0.93	0.41
Mean	0.66	0.17
Median	0.83	0.16

Groundwater Monitoring

Some existing groundwater monitoring bores occur within the footprint of the Flinders IPTSF3 that will have to be decommissioned, prior to works and operation of Flinders IPTSF3. The licence holder has advised that these bores were drilled into the Marra Mamba aquifer that is the same aquifer that surrounds the Flinders IPTSF3. The licence holder determines, by taking into account the degree of hydraulic connection existing in natural geology, there is no risk of new seepage pathways in the even that these bores aren't decommissioned.

The licence holder has constructed four additional monitoring bores, namely FLM37, FLM38, FLM39, and FLM40, along the perimeter and distal to Flinders IPTSF3, to supplement the existing monitoring bore network. Baseline groundwater data will be obtained for the new

additional monitoring bores to confirm the hydrogeological conceptual model and anticipated conditions related with TSF deposition and storage. The additional monitoring bores and existing monitoring bore network will provide monitoring data for early indication of seepage groundwater contamination in the groundwater before any offsite migration eventuates.

Groundwater monitoring for the additional monitoring bores will be undertaken in accordance with the Licence L8454/2010/2 conditional requirements.

2.3 Part IV of the EP Act

The Christmas Creek Iron Ore Mine Expansion was approved on 08 August 2016 by MS 1033, which authorised the expansion of the existing mining footprint, permanent waste landforms, tailings disposal, conveyors, roads, drainage and other associated mine infrastructure.

The Environmental Protection Authority (EPA) identified in its Report No: 1567 the following factors as the key environmental factors during its assessment of the proposal and set the conditions relevant to this assessment:

- **Hydrological Processes / Inland Waters Environmental Quality** – potential impacts from drawdown and mounding of groundwater, potential changes in surface flow regimes and potential changes in water quality;
- **Flora and Vegetation** – direct impacts from the clearing of flora and vegetation and indirect impacts on vegetation from groundwater drawdown and mounding, and changes to surface water flows;
- **Subterranean Fauna** – potential impacts from loss of habitat due to dewatering and excavation of mine pits;
- **Rehabilitation and Decommissioning (Integrating Factor)** – potential long-term impacts to vegetation and fauna habitat if rehabilitation is unsuccessful, and potential long-term impacts to aquifer water quality once dewatering and injection ceases; and
- **Offsets (Integrating Factor)** – to counterbalance the significant residual impacts to native in 'Good to Excellent' condition, including habitat for conservation significant fauna species; and vegetation in the proposed Fortescue Marsh Conservation Reserve and Fortescue Marsh management zone 1a.

Based on the risk assessment undertaken in section 3.1, Table 3 of this document, for the prescribed premises activities impacts to the above environmental factors is low to medium risk. The licence holder advised that potential impacts to conservation significant flora species and fauna species, and vegetation are regulated under MS 1033 including the implementation of several environmental management plans to further mitigate against potential impacts.

2.4 Department of Energy, Mines, Industry Regulation, and Safety environmental and geotechnical advice

Environmental and geotechnical advice was sought from Department of Energy, Mines, Industry Regulation, and Safety (DEMIRS) on the construction and operations of Flinders IPTSF3. In summary, DEMIRS has provided advice on geotechnical, stability, and safety aspects of the Flinders IPTSF3, and recommendations and other considerations that may be relevant to the licence amendment application:

- Flinders IPTSF3 is proposed to be an in-pit facility, however the licence holder has not specified a minimum storage criterion or lifespan. Storage and capacity purpose is to store as mush tailings as reasonably practicable within the pit, consistent with operational constraints and dam safety obligations.
- Geotechnical review of the stability of the Open Unlined Drain (OUD) shows that failure is non-credible, with a factory of safety against greater than 3.0 and the major risks

associated with IPTSF3 that have been identified, with design measures. Surface water runoff is required to be diverted from Flinders IPTSF3 up to a 1:200 AEP storm event.

- DEMIRS states that *"if the Open Unlined Drained (OUD) overtops, freeboard in Stage 1 and/or Stage 2 may be insufficient to contain the inflow. The hydraulic design of the OUD, including armouring and scour protection. Currently there are two pit overflow locations; however, IPTSF3 has no practical location for construction of a spillway and will therefore effectively be a "no-spill" facility."*
- The FLI54 pit with be mined at the same time deposition begins into Stage 1 of Flinders IPTSF3 and the stability of the OUD is a potential major risk. The geotechnical evaluation as part of the design indicated the instability is a non-credible risk.
- DEMIRS states "*quarterly and annual inspections and reviews, undertaken by the Engineer of Record (EoR) for annual inspections, and the Responsible Tailings Facility Engineer (RTFE) for quarterly or more frequent events. Comprehensive monitoring, undertaken on multiple-year intervals by the EoR for the facility. These infrequent tasks also capture Dam Safety Reviews and other significant activities."*

Recommendations

- The pit is based on the licence holder's design and currently being mine that will create the proposed Flinders IPTSF3. Any mining out or variation to the design should be amended and be risk assessed for pit stability and any potential impact from the adjacent Waste Rock Dump.
- The in-situ land bridge left unmined (OUD) to convey the Marillana Creek across the pits and requires monitoring for seepage, degradation and design performance in all aspects of mining and as part of the Flinders IPTSF3.
- Tertiary Detritals are generally more erodible than the adjacent Nammuldi Member. A risk assessment and geotechnical aspects should be considered regarding the Detritals impacting geotechnical structures includes the Flinders IPTSF3 and OUD.
- Provide third-party reports including comprehensive reports from the EoR for the facility and Dam Safety Reviews.
- Ensure pumping capacity from the Flinders IPTSF3 is relative to the expected storm surge capacity.

It should be noted that a revised Mining Proposal has not been submitted to DEMIRS, however DEMIRS reviewed the draft proposal provided to the Department of Jobs, Tourism, Science and Innovation (JTSI).

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 2020a).

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 Emissions and controls

The key emissions and associated actual or likely pathway during premises construction and operation which have been considered in this Amendment Report are detailed in Table 4

below. Table 4 also details the proposed control measures the licence holder has proposed to assist in controlling these emissions, where necessary.

Table 4: Licence holder controls

Sources	Emission	Potential pathways	Proposed controls
Construction			
Construction of the Flinders IPTSF3 (Category 5)			
Construction of Flinders IPTSF3 infrastructure (pipelines and spigots) Vehicle and mobile equipment movement	Dust	Air / windborne pathway	Implementation of the *Dust Management Plan (IO-PL-EN-0001).*
	Noise	No pathway / impact	No controls imposed. No risk assessment will be undertaken as there is no nearby sensitive receptors or pathway / impact from noise.
	Hydrocarbons / chemicals	Direct discharge to land	Implementation of the *Chemicals and Hydrocarbon Management Plan (100-PL-EN-0011).* Spills are to be managed in accordance with the measures in the *Environmental Spills Procedure (IO-PR-EN-0003).*
	Sediment laden stormwater	Direct discharge to land	Implementation of the *Surface Water Management Plan (100-PL-EN-1015).*
Operations			
Transfer of Works Approval W6787/2023/1 Infrastructure (Category 5)			
Operation of hall overland conveyor, primary ore crushing plant, OPF infeed, and hydrocarbons / chemical storage areas	Dust	Air / windborne pathway	Existing controls under condition 10 of Works Approval W6787/2023/1 to be transferred to the Licence L8454/2010/2.
	Sediment laden stormwater	Direct discharge to land	Existing controls under condition 10 of Works Approval W6787/2023/1 to be transferred to the Licence L8454/2010/2.
	Hydrocarbons / chemicals	Direct discharge to land	Existing controls under condition 10 of Works Approval W6787/2023/1 to be transferred to the Licence L8454/2010/2. Implementation of the *Chemicals and Hydrocarbon Management Plan (100-PL-EN-0011).* Spills are to be managed in accordance with the measures in the *Environmental Spills Procedure (IO-PR-EN-0003).*
Operation of the Flinders IPTSF3 (Category 5)			
Operation of Flinders	Dust lift-off	Air / windborne	Dust management measures as outlined in the *Dust Management Plan (IO-PL-EN-*

Sources	Emission	Potential pathways	Proposed controls
IPTSF3		pathway	*0001).*
	Tailings / supernatant potentially containing higher salinity water (TDS / EC)	Seepage / infiltration through the base	Existing controls apply under the following conditions of the Licence L8454/2010/2: • Condition 3 (containment infrastructure requirements); • Condition 4 (inspection of infrastructure); • Condition 5 (undertake water balance monitoring); • Condition 10 (operation of infrastructure); and • Condition 24 (ambient groundwater quality monitoring). Maintain and operate a total freeboard of 1.0 m.
		Seepage / infiltration through the embankment	
		Overtopping	
	Tailings / supernatant potentially containing higher salinity water (TDS / EC) and return	Pipeline leaks / spills	Existing controls apply under the following conditions of the Licence L8454/2010/2: • Condition 2 (pipeline requirements); and • Condition 4 (inspection of infrastructure).
	Sediment laden stormwater	Direct discharge to land	Implementation of the *Surface Water Management Plan (100-PL-EN-1015).*

3.1.2 Receptors

In accordance with the *Guideline: Risk assessments* (DWER 2020a), 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 2020b)).

Table 5: Sensitive human and environmental receptors

Human receptors	Distance from prescribed activity
Townsites and Homesteads	Nullagine is the nearest town, located over 60 km away from the prescribed premises boundary. Roy Hill Station is located 30 km away. Marillana Homestead is located more than 40 km away. These potential receptors have been screened out from the assessment given the distance is considered sufficient to avoid impacts from emissions and discharges from the premises.

Environmental receptors	Distance from prescribed activity
Fortescue Marsh	Fortescue Marsh intersects the premises southern boundary and is about 1 km from the nearest proposed injection bore (e.g. proposed bores SAI45-47). Fortescue Marsh is nationally important and the largest ephemeral wetland in the Pilbara region, a Priority Ecological Community, and is listed on the Directory of Important Wetlands of Australia as a wetland of national significance.
Flora and Vegetation	There is no threatened flora species listed under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), or Declared Rare Flora (DRF) listed under the *Biodiversity Conservation Act 2016* (BC Act) recorded within the premises boundary. Groundwater sensitive vegetation within or near the premises includes Mulga, Samphire and Coolibah / River Red Gum.
Environmental Receptors	**Distance from prescribed activity**
Livestock bores	Three livestock bores are located within the premises boundary, 22 Mile Bore, Rick's Bore and Gorge Bore. A fourth bore is over 3 km outside of the premises.
Surface water	Numerous surface water lines are present throughout the mine dewater injection area (DWER Geocortex). Premises is located within the Pilbara Surface Water Area proclaimed under *Rights in Water and Irrigation Act 1914* (RiWI Act).
Groundwater	Premises is located within the Pilbara Groundwater Area proclaimed under RiWI Act. Groundwater is considered marginal to brackish with a total dissolved solids (TDS) concentration ranging from 500 to 6,000 mg/L within the shallow aquifer zones of the Marra Mamba Formation. Saline to hypersaline (6,000 – 150,000 mg/L) groundwater is encountered further south within the premises and at greater depth. The aquifer within the Oakover Formation, which overlies the MMF to the south of the resource area, is entirely of saline quality (monitored up to 150,000 mg/L). Groundwater in the project area is generally brackish (>1,000 mg/L TDS) and becomes increasingly saline towards the Fortescue Marsh and with depth (>100,000 mg/L TDS). The Premises sits over three main connected aquifers, the fresh brackish Tertiary Detritals, brackish Marra Mamba formation and the hypersaline Oakover formation. The Oakover Formation is approximately 20 m thick and is confined to semi-confined by overlying clays and silts. Current injection at Christmas Creek has confirmed hydraulic disconnection between the Oakover Formation and overlying watertable.
Fauna	Significant fauna identified as potentially occurring within the premises are the Northern Quoll, Night Parrot and Greater Bilby, Pilbara Leaf nosed Bat and Pilbara Olive Python. These receptors have been screened out as the proposed amendment is not expected to alter the risks to fauna species outside that addressed within MS 1033.

Environmental Receptors	Distance from prescribed activity
Native vegetation	There is native vegetation in the vicinity of the proposed activities. Priority 1 flora (conservation status under the *Biodiversity Conservation Act 2016*) is mapped within the prescribed premises boundary. Native vegetation identified throughout the proposed new injection bores is pre-European vegetation with sparse low woodland; mulga, discontinuous in scattered groups. Priority 1 flora surveyed: *Calotis squamigera* and *Eremophila spongiocarpa*. Priority 4 flora surveyed: *Eremophila youngii subsp. lepidota*

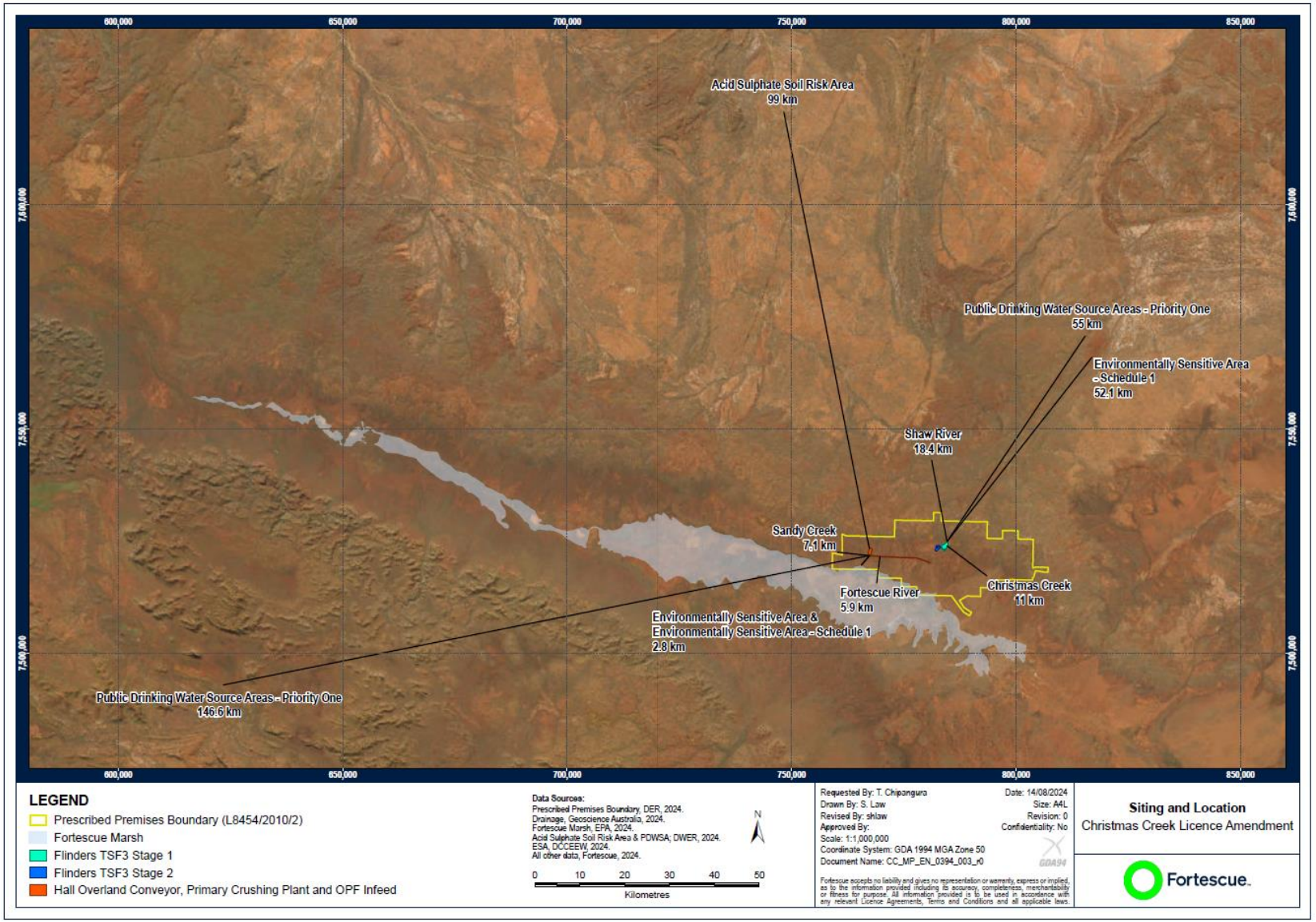

Figure 5: Distance to sensitive receptors

Licence: L8454/2010/2

3.2 Risk ratings

Risk ratings have been assessed in accordance with the *Guideline: Risk Assessments* (DWER 2020a) 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 incomplete 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 L8454/2010/2 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

Risk Event					Risk rating[1] C = consequence L = likelihood	Licence holder's controls sufficient?	Conditions[2] of licence	Justification for additional regulatory controls /DWER comments
Source/Activities	**Potential emission**	**Potential pathways and impact**	**Receptors**	**Licence holder's controls**				
Construction								
Construction of the Flinders IPTSF3 (Category 5)								
Construction of Flinders IPTSF3 infrastructure (pipelines and spigots) Vehicle and mobile equipment movement	Dust	**Pathway:** Air / windborne pathway **Impact:** Potential impact to vegetation health and native fauna health	Native fauna Native vegetation – mulga, samphire and coolabah / river red gum within or near the premises	Refer to Section 3.1	C = Slight L = Possible **Low Risk**	Y	No conditions imposed as risk to any nearby receptors is low	The *Dust Management Plan (IO-PL-EN-0001)* will be implemented but the Licence Holder.
	Hydrocarbons / chemicals	**Pathway:** Direct discharge to land **Impact:** Possible contamination to soil, groundwater and surface water	Soil Groundwater Surface water	Refer to Section 3.1	C = Slight L = Rare **Low Risk**	Y	No conditions imposed as risk to any nearby receptors is low	The *Chemicals and Hydrocarbon Management Plan (100-PL-EN-0011)* and *Environmental Spills Procedure (IO-PR-EN-0003)* will be implemented by the Licence Holder.
	Sediment laden stormwater	**Pathway:** Direct discharge to land **Impact:** Possible contamination to soil and surface water, and sedimentation buildup	Soil Surface water	Refer to Section 3.1	C = Slight L = Unlikely **Low Risk**	Y	No conditions imposed as risk to any nearby receptors is low	The *Surface Water Management Plan (100-PL-EN-1015)* will be implemented by the Licence Holder
Operation								
Transfer of the Hall Hub Works Approval W6787/2023/1 (Category 5)								

Risk Event					Risk rating[1] C = consequence L = likelihood	Licence holder's controls sufficient?	Conditions[2] of licence	Justification for additional regulatory controls /DWER comments
Source/Activities	**Potential emission**	**Potential pathways and impact**	**Receptors**	**Licence holder's controls**				
Operation of hall overland conveyor, primary ore crushing plant, and OPF infeed.	Dust	**Pathway:** Air / windborne pathway **Impact:** Potential impacts to vegetation and native fauna health	Native fauna Native vegetation – mulga, samphire and coolibah / river red gum within or near the premises	Refer to Section 3.1	C = Slight L = Possible **Low Risk**	Y	No conditions imposed as risk to any nearby receptors is low	The *Dust Management Plan (IO-PL-EN-0001)* will be implemented but the Licence Holder.
	Sediment laden stormwater	**Pathway:** Direct discharge to land **Impact:** Possible contamination to soil and surface water, and sedimentation buildup	Soil Surface water	Refer to Section 3.1	C = Minor L = Unlikely **Medium Risk**	Y	Condition 2 – operational requirements that includes stormwater / surface water runoff controls and management.	The *Surface Water Management Plan (100-PL-EN-1015)* will also be implemented by the Licence Holder
	Hydrocarbons / chemicals	**Pathway:** Direct discharge to land **Impact:** Possible contamination to soil, groundwater and surface water	Soil Groundwater Surface water	Refer to Section 3.1	C = Minor L = Unlikely **Medium Risk**	Y	Condition 2 – operational requirements for hydrocarbons / chemicals controls and management. In addition, the *Chemicals and Hydrocarbon Management Plan (100-PL-EN-0011)* and *Environmental Spills Procedure (IO-PR-EN-0003)* will be implemented but no condition will be imposed for the management plan.	The *Chemicals and Hydrocarbon Management Plan (100-PL-EN-0011)* and *Environmental Spills Procedure (IO-PR-EN-0003)* will also be implemented by the Licence Holder.
Operation of hydrocarbon / chemical storage areas	Dust	**Pathway:** Air / windborne pathway **Impact:** Potential impacts to vegetation and native fauna health	Native fauna Native vegetation – mulga, samphire and coolibah / river red gum within or near the premises	Refer to Section 3.1	C = Slight L = Possible **Low Risk**	Y	No conditions imposed as risk to any nearby receptors is low	The *Dust Management Plan (IO-PL-EN-0001)* will be implemented but the Licence Holder.

Risk Event					Risk rating[1] C = consequence L = likelihood	Licence holder's controls sufficient?	Conditions[2] of licence	Justification for additional regulatory controls /DWER comments
Source/Activities	**Potential emission**	**Potential pathways and impact**	**Receptors**	**Licence holder's controls**				
	Sediment laden stormwater	**Pathway:** Direct discharge to land **Impact:** Possible contamination to soil and surface water, and sedimentation buildup	Soil Surface water	Refer to Section 3.1	C = Minor L = Unlikely **Medium Risk**	Y	Condition 2 – operational requirements that includes stormwater / surface water runoff controls and management.	The *Surface Water Management Plan (100-PL-EN-1015)* will also be implemented by the Licence Holder
	Hydrocarbons / chemicals	**Pathway:** Direct discharge to land **Impact:** Possible contamination to soil, groundwater and surface water	Soil Groundwater Surface water	Refer to Section 3.1	C = Minor L = Unlikely **Medium Risk**	Y	Condition 2 – operational requirements for hydrocarbons / chemicals controls and management.	The *Chemicals and Hydrocarbon Management Plan (100-PL-EN-0011)* and *Environmental Spills Procedure (IO-PR-EN-0003)* will also be implemented by the Licence Holder.
Operation of the Flinders IPTSF3 (Category 5)								
Operation of Flinders IPTSF3	Dust lift-off	**Pathway:** Air / windborne pathway **Impact:** Potential impacts to vegetation and native fauna health	Native fauna Native vegetation – mulga, samphire and coolibah / river red gum within or near the premises	Refer to Section 3.1	C = Slight L = Possible **Low Risk**	Y	Condition 4 – inclusion of Flinders IPTSF3 to containment infrastructure operational requirements. Condition 5 – visual inspections of infrastructure.	The *Dust Management Plan (IO-PL-EN-0001)* will also be implemented but the Licence Holder.
	Tailings / supernatant potentially containing higher salinity water (TDS / EC)	**Pathway:** Seepage / infiltration through the base **Impact:** Potential impact to the aquifer system by altering the groundwater quality	Groundwater	Refer to Section 3.1	C = Moderate L = Possible **Medium Risk**	Y	Condition 4 – inclusion of Flinders IPTSF3 to containment infrastructure operational requirements. Condition 5 – visual inspections of infrastructure. Condition 6 – annual water balance to be undertaken. Condition 25 – ambient	No additional regulatory controls.
		Pathway: Seepage / infiltration through the	Groundwater Surface water	Refer to Section	C = Moderate	Y		No additional

Risk Event					Risk rating[1] C = consequence L = likelihood	Licence holder's controls sufficient?	Conditions[2] of licence	Justification for additional regulatory controls /DWER comments
Source/Activities	**Potential emission**	**Potential pathways and impact**	**Receptors**	**Licence holder's controls**				
		embankment **Impact:** Potential to impact the aquifer system by altering the groundwater quality and groundwater mounding. Potentially impacting nearby surface water and vegetation.	Soils Native vegetation – mulga, samphire and coolibah / river red gum within or near the premises	3.1	L = Possible **Medium Risk**		ground water monitoring around the TSF.	regulatory controls.
		Pathway: Overtopping **Impact:** Potential to impact nearby vegetation (health), and contamination of soils and surface water.	Surface water Soils Native vegetation – mulga, samphire and coolibah / river red gum within or near the premises	Refer to Section 3.1	C = Moderate L = Possible **Medium Risk**	Y	Condition 4 – inclusion of Flinders IPTSF3 to containment infrastructure operational requirements. Condition 5 – visual inspections of infrastructure. Condition 6 – annual water balance to be undertaken.	No additional regulatory controls.
	Tailings / supernatant potentially containing higher salinity water (TDS / EC)	**Pathway:** Pipeline leaks and / or spills **Impact:** Potential impact to nearby vegetation (health), and contamination of soils and surface water.	Surface water Soils Native vegetation – mulga, samphire and coolibah / river red gum within or near the premises	Refer to Section 3.1	C = Slight L = Possible **Low Risk**	Y	Condition 3 – pipeline construction and operational requirements. Condition 5 – visual inspections of infrastructure.	No additional regulatory controls.
	Sediment laden stormwater	**Pathway:** Direct discharge to land **Impact:** Possible contamination to soil	Soil Surface water	Refer to Section 3.1	C = Slight L = Possible **Low Risk**	Y	Condition 3 – pipeline construction and operational requirements. Condition 5 – visual	No additional regulatory controls.

Risk Event					Risk rating[1] C = consequence L = likelihood	Licence holder's controls sufficient?	Conditions[2] of licence	Justification for additional regulatory controls /DWER comments
Source/Activities	**Potential emission**	**Potential pathways and impact**	**Receptors**	**Licence holder's controls**				
		and surface water, and sedimentation buildup.					inspections of infrastructure. In addition, the *Surface Water Management Plan (100-PL-EN-1015)* will be implemented but no condition will be imposed for the management plan.	

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

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
DEMIRS was advised of proposal on 31 January 2025	Comments were provided on 21 March 2025 and summarised in section 2.4 of this amendment report.	The department notes DEMIRS advice and recommendations. The licence holder should take into consideration the advice and recommendations provided in section 2.4.
Department of Jobs, Tourism, Science and Innovation (JTSI) was advised of proposal on 31 January 2025	No response was provided.	Not applicable
Licence holder was provided with draft amendment on 09 June 2025	Comments were received on 25 June 2025 and are provided in Appendix 1.	The department's response to the comments have been detailed in 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 a 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
Licence history	Inclusion of this licence amendment.
2, Table 2	New condition and table for the operational requirements of the hall overland conveyor, primary ore crushing plant, ore processing facility infeed, and hydrocarbons / chemicals storage areas.
Table 3 to 22	Renumbering of table numbers, previously tables 2 to 21 with the inclusion of the new condition 2 and Table 2. Table numbers have been amended throughout the licence to reflect the renumbering, where required.
3 to 31	Renumbering of condition numbers, previously conditions 2 to 30 with the inclusion of the new condition 2 and Table 2. Condition numbers have been amended throughout the licence to reflect the renumbering, where required.
4, Table 3	Removal of Windich TSF 1, Windich TSF 2, and Vasse TSF as the TSFs have been decommissioned and no longer operational.

Condition no.	Proposed amendments
	Inclusion of Flinders In-Pit TSF3 and containment infrastructure requirements.
7, Table 5	Amended reject stream from 'Reverse Osmosis (RO) Reject Stream' to 'RO Reject Stream'.
10, Table 7	Removal of the design and construction requirements for Windich Above Ground TSF as the TSF has been decommissioned and no longer operational. Inclusion of design and construction requirements for Flinders In-Pit TSF3.
25, Table 17	Removal of Windich Above Ground TSF monitoring requirements as the TSF has been decommissioned and no longer operational. Inclusion of Flinders In-Pit TSF3 monitoring bores for ambient groundwater monitoring. Reformatting of Table 17.
31, Table 19	Amended the condition wording with the current condition wording for environmental reporting requirements. Removal of Windich TSF and Vasse TSF in Table 19. Inclusion of Flinders In-Pit TSF3 in Table 19.
Figure 9	Updated figure.
Figure 10	Updated figure.
Figure 11	Updated figure.
Figure 19	New figure – Flinders In-Pit TSF3, indicative tailings line and decant water return line and existing groundwater monitoring bores.
Figure 20	New figure – Flinders In-Pit TSF3 General arrangement plan including indicative tailings deposition locations.
Figure 21	New figure – Flinders In-Pit TSF3 Stage 1 development.
Figure 22	New figure – Flinders In-Pit TSF3 Stage 2 development.

References

1. Australian National Committee On Large Dams (ANCOLD) 2019, *Guidelines on Tailings Dams – Planning, Design, Construction, Operation and Closure.*
2. Department of Environment Regulation (DER) 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.
3. Department of Water and Environmental Regulation (DWER) 2020a, *Guideline: Risk Assessments*, Perth, Western Australia.
4. DWER 2020b, *Guideline: Environmental Siting*, Perth, Western Australia.
5. Klohn Crippen Berger Ltd 2024, *Fortescue Flinders IPTSF3 Detailed Design – Design Report Rev 0,* West Perth, Western Australia.
6. Negev, I., Guttman, J. and Kloppmann, W., 2017. The use of stable water isotopes as tracers in soil aquifer treatment (SAT) and in regional water systems. *Water*, **9**, 73. Available from: https://www.mdpi.com/2073-4441/9/2/73.

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 2 Operational requirement Hydrocarbons / chemical storage areas	The Licence Holder has reviewed Condition 2 of the draft licence and requests that the wording regarding the storage of portable storage bunding be rephrased to ensure consistency with other Licence Holder's Operational Licences. The Licence Holder requests that the wording in the condition be amended to provide some operational flexibility, whilst still achieving the department's intended purpose and outcome. The Licence Holder acknowledges that portable bunding units will only be utilised for the temporary storage of chemicals and hydrocarbons and will comply with the *Chemical and Hydrocarbon Storage Procedure* (45-PR-EN-0041). The Licence Holder requests for an amendment to the wording in Condition 2, as highlighted in **bold** text below: • Chemicals and hydrocarbons stored within bunds of appropriate capacity; • Any leakage and spills from chemical and hydrocarbon storage facilities must be contained to prevent contamination of surrounding soil, watercourses, and drainage systems; • Suitable spill response equipment must be available and maintained in close proximity to the chemical and hydrocarbon storage location; • All chemicals and hydrocarbons appropriately segregated from potential ignition sources; • Storage Data Sheets readily available for all stored chemicals and hydrocarbons. These must be in close proximity to the chemical and hydrocarbon storage location; • Spillage and/or collected and potentially contaminated rainfall recovery should occur when needed to ensure optimal availability of bund capacity; • Discharge of any spillage and/or rainfall from within a bund is not permitted; and • Portable bunding units are ~~the least preferred method of chemical and hydrocarbon storage. These are intended to be~~ **only to be** utilised ~~as~~ **for the** temporary storage ~~only~~ **of chemicals and hydrocarbons**. ~~This includes instances where goods are in transit or are within handling areas.~~	The department has amended the requested wording.
Condition 4, Table 3	The Licence Holder has reviewed Condition 4, Table 3 of the draft licence and requests that the wording be revised to ensure alignment with other Licence Holder's Operational Licences.	The department has amended the requested wording.

Condition	Summary of Licence Holder's comment	Department's response
Requirements Flinders In-Pit TSF1 Complex Flinders In-Pit TSF2 Complex Flinders In-Pit TSF3	The Licence Holder has identified duplication within the freeboard requirements and requests the removal of the requirement to maintain and operate a total freeboard of 1.0 m to avoid ambiguity with the existing requirement to maintain a minimum freeboard sufficient to contain a 1 in 100-year storm event over 72 hours. The Licence Holder confirms that the freeboard obligations are adequately addressed by the requirement to maintain a minimum freeboard equivalent to that required to contain a 1 in 100-year storm event over 72 hours from the operational pond surface to lowest elevation of perimeter embankment. The Licence Holder requests for an amendment to the wording in Condition 4, Table 3, as highlighted in **bold** text below: • Maintain **and operate** a minimum freeboard equivalent to that required to contain a 1 in 100-year storm event over 72 hours from the operational pond surface to lowest elevation of perimeter embankment; • ~~Maintain and operate a total freeboard of 1.0 m;~~ • Visual markers installed to adequately monitor freeboard; • Install, maintain and operate a supernatant water collection and return system only when a recoverable volume of water is present; • Flinders In-Pit TSF1 Complex maximum tailings elevation level of Relative Level 437.0 m; • Flinders In-Pit TSF2 Complex maximum tailings elevation level of Relative Level 437.0 m; • Flinders In-Pit TSF3 maximum tailings elevation level of Relative Level 444.0 m (Stage 1) and; • Flinders In-Pit TSF3 maximum tailings elevation level of Relative Level 433.0 m (Stage 2).	
Condition 5	The Licence Holder has reviewed Condition 5 of the draft licence and requests that the wording be rephrased to provide additional clarity and remove any ambiguity. The Licence Holder notes that the use of the word 'consequences' in Condition 5(b) may not be the most appropriate use of the word, as the condition is referring to the use of corrective action when an inspection identifies that an appropriate level of environmental protection is not being maintained. Considering the above context, the most appropriate word to assess whether there are any adverse environmental concerns (and what corrective actions are required) is 'impact'. Therefore, the Licence Holder requests for an amendment to the wording to provide clarity and ensure that the condition is appropriate, fit for purpose and will achieve better compliance outcomes. The amendment to the wording will not change the department's intended purpose and outcome of the condition. The Licence Holder request for an amendment to the wording in Condition 5, as highlighted in **bold** text below: The licence holder must: (a) undertake inspections as detailed in Table 4; (b) where any inspection identifies that an appropriate level of environmental protection is not being	The department accepts the word change from 'consequences' to 'impact' for condition 5(b).

Condition	Summary of Licence Holder's comment	Department's response
	maintained, take corrective action to mitigate adverse environmental ~~consequences~~ **impact** as soon as practicable; and (c) maintain a record of all inspections undertaken.	
Condition 10, Table 7 Requirements (Design and construction) Flinders In-Pit TSF3	Due to the advancement and finalised tailings pipeline, the Licence Holder requests that the requirements of the tailings pipeline in Condition 3 be amended to reflect the material with which the tailings pipeline is to be constructed. The proposed change will provide better compliance and align with the Project requirements. The Licence Holder notes that the tailings pipeline will be designed and constructed in accordance with the requirements of Condition 3. Additionally, Fortescue has noted that the maximum level of tailings volume for Stage 1 of the Flinders In-Pit TSF3 in Condition 10, Table 7, is identified as 440.0 mRL, which is incorrect. The correct volume for the maximum tailings levels of Stage 1 of the Flinders In-Pit TSF3 should be 444.0 mRL, as stated in the Flinders In-Pit TSF3 requirements set in Condition 4, Table 3. Fortescue requests that the maximum level of tailings for Stage 1 be amended to 444.0 mRL. Fortescue requests for an amendment to the wording in Condition 10, as highlighted in **bold** text below: • Tailings pipeline **will be constructed with below material/pipe types or equivalent:** ○ **HDPE Lined Steel** ○ **PU Lined Steel** ○ **HDPE** ○ **UHMWPE** and meet the requirements in Condition 3; • Stage 1 to provide tailings storage of approximately 31.6 Mm^3 to the maximum tailings level of ~~440.0~~ **444.0** mRL; and • Stage 2 to provide tailings storage of approximately 21.5 Mm^3 to the maximum tailings level of 433.0 mRL.	The department accepts the requested revision to the construction of the tailings pipelines and corrected the typographical error.
Condition 25, Table 17	The Licence Holder has reviewed our RFI response (30 April 2025) and the comments made by the Department and confirms that the bores *CCFMM series are regulated under Part IV, not Part V, of the EP Act. The Licence Holder requests that these be removed from Condition 25, Table 17 of the Licence, to ensure that there is dual regulation between the RIWI Act and Part V of the EP Act. This will also ensure better compliance outcomes and clarity with the monitoring requirements of the mine dewater reinjection. Furthermore, the Licence Holder has updated Figure 7 of the Licence to clearly articulate and depict the bores which are regulated under Part V of the EP Act. The Licence Holder confirms that the list of bores in Condition 25, Table 17 of the Licence, is aligned with Figure 7 of the Licence.	The department accepts the removal of the requested bores to be removed to avoid duplication with other regulatory approvals.

Condition	Summary of Licence Holder's comment	Department's response
	The Licence Holder requests for an amendment to the wording in Condition 25, Table 17, as highlighted in **bold** text below: ~~**CCFMM01_S**~~ ~~**CCFMM01_D**~~ ~~**CCFMM02_S**~~ ~~**CCFMM02_D**~~ ~~**CCFMM03_S**~~ ~~**CCFMM03_D**~~ ~~**CCFMM04_S**~~ ~~**CCFMM04_D**~~ HSMB29_D HSMB29_S SAM59_D SAM59_S……	
Condition 31	Fortescue has reviewed condition 31 of the draft licence and therefore requests for additional wording to provide further clarity. Fortescue notes that the current wording does not specifically state the timeframe (annual period) for the provision of data for the Environmental Report. This has made the meaning of the condition unclear. Therefore, to ensure that there is no misinterpretation in the condition and achieve better compliance outcomes, Fortescue requests that this timeframe period be specified. Fortescue requests for an amendment to the wording in Condition 31, as highlighted in **bold** text below: The licence holder must: (a) prepare an Environmental Report that provides information in accordance with Table 19 **for the annual period**, (b) submit that Environmental Report to the CEO by 31 March each year**, after the end of the annual period**.	The department accepts the inclusion of the additional wording to condition 31.
Condition 33, Table 20 Condition or table (if relevant)	The Licence Holder has noticed a minor error and requests that the reference to Table 5 be amended to refer to Condition 7. The Licence Holder requests for an amendment to correct the condition reference to Table 5, as highlighted in **bold** text below: Condition 1, Table 1 Condition 4 ~~3~~, Table 3 ~~2~~ Condition **7** ~~0~~ ~~6~~, Table 5 ~~4~~ Condition 21 ~~20~~, Table 13 ~~12~~	The department has amended the typographical error.

Condition	Summary of Licence Holder's comment	Department's response
Figure 7: The locations of the emissions points	The Licence Holder has updated **Figure 7 of the Licence** to clearly show the locations of the emissions points. This is provided as Attachment 2 to this letter.	The department has included the updated Figure 7 of the Licence.