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	2010/003105-4
Premises	Christmas Creek Mine Site MULGA DOWNS WA 6751 As depicted in Schedule 1 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
Date of Report	28 September 2023
Decision	Revised licence granted

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A/MANAGER, RESOURCE INDUSTRIES
REGULATORY SERVICES
an officer delegated under section 20 of the *Environmental Protection Act 1986* (WA)

Table of Contents

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 on multiple mining tenements1[1] in 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 of 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 Amendment application summary

On 17 November 2022, the licence holder submitted an application to the department to amend licence L8454/2010/2 under section 59 and 59B of the *Environmental Protection Act 1986* (EP Act). The following amendments are being sought:

- Category 6 (mine dewatering) - Construction and operation of dewatering infrastructure, including:
  - 108 saline injection bores (SAI43 – SAI151) drilled into the Oakover aquifer (25 within the existing saline and transfer system and 83 in the undeveloped Hall, Bull and Cue mine areas);
  - 21 high-density polyethylene (HDPE) lined turkeys nests/transfer ponds with pump stations (8 within the existing saline and transfer system and 13 in the undeveloped Hall, Bull and Cue mine areas); and
  - 151 kilometres (km) of pipeline corridors (~66 km to the existing saline and transfer system and ~85 km from the proposed undeveloped Hall, Bull and Cue mine areas);
- Construction and operation of three settlement ponds, including:
  - 2 HDPE-lined ponds to hold process water; and
  - 1 earthen-lined pond to hold borefield water; and
- Administrative amendments to existing licence conditions (see Section 2.2.3).

The proposed amendments do not change the prescribed categories listed on the existing licence or the assessed production/design capacities.

[1] 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

2.2.1 Expansion of mine dewater re-injection system

The licence holder operates an existing saline transfer and injection system as a component of mine dewatering and reinjection activities. Groundwater is abstracted under the Permit to Take Groundwater (GWL167593), issued under section 5C of the *Rights in Water and Irrigation Act 1914* (RIWI Act), which permits the abstraction of up to 50,000,000 kL of water per annum from the 'Pilbara Hamersley – Fractured Rock' aquifer. Abstracted groundwater is used for general mine site purposes, such as dust suppression, construction, ore processing and camp water supply. Surplus water is reinjected in accordance with category 6 for mine dewatering and point source emissions to groundwater as specified in Table 9 (condition 13) of the existing licence. There are no proposed changes to the assessed production capacity of 43,000,000 tonnes per annual period (injected) under category 6.

The saline injection borefield is between the Christmas Creek dewatering borefield and the northern boundary of Fortescue Marsh, where the Oakover geological formation (part of the Tertiary sedimentary package) is the primary aquifer. The Oakover Formation is the target aquifer for injection. It has high transmissivity due to calcretes and silcretes. It is overlain by a clay-dominated sequence, which acts as a confining layer between the Oakover Formation and groundwater occurrence within the overlying alluvial sequence (Fortescue Metals Group, 2016).

Expansion of existing saline injection and transfer system

Currently, the licence holder is permitted to operate 65 saline injection bores and 22 brackish injection bores at the premises. As the Christmas Creek mine continues to develop and expand, an expansion of the existing saline transfer and injection system is required to meet forecast increases in saline water abstraction. Therefore, the licence holder proposes to expand the existing saline injection and transfer system consisting of injection bores, pipelines, turkeys nests and transfer ponds. New infrastructure proposed to comprise the expansion of the existing system includes:

- 66 km of new pipeline corridors;
- 25 new injection bores; and
- 8 new turkeys nests/transfer ponds.

Proposed Hall saline injection and transfer system

The licence holder has a five-year plan to open new mine pits within the undeveloped Hall, Bull and Cue areas, with mining proposed to commence in early 2024. These new pits will increase dewatering activities (mostly from the Hall, Bull, Young, Lefroy and Windich areas) and require the existing saline injection borefield capacity to be upgraded by approximately 3,000 L/s. Currently, there is no infrastructure to transfer saline abstractions from the undeveloped Hall (and eventually Bull or Cue) areas to the existing injection borefields. Therefore, the following infrastructure is required in the undeveloped Hall (and eventually Bull and Cue) areas:

- 85 km of new pipeline corridors;
- 13 new turkeys nests/transfer ponds; and
- 83 new injection bores within the existing injection borefields.

The proposed location of the above infrastructure is depicted in Figure 1, Figure 2 and Figure 3.

The proposed turkeys nests will be HDPE-lined and have dimensions of about 50 m x 50 m from crest to crest (top of embankment). The proposed transfer ponds will be HDPE-lined and have dimensions of approximately 257 m x 328 m from opposing top of embankments.

Native vegetation clearing for all proposed infrastructure is regulated under Part IV of the EP Act and will be managed in accordance with the clearing limits defined under Table 2 in

Ministerial Statement (MS) 1033 (see Section 3).

2.2.2 Settlement ponds

The licence holder is proposing to construct three settlement ponds (locations depicted in Figure 1). The Ore Processing Facility 1 (OPF1) Settlement Pond and Ore Processing Facility 2 (OPF2) Settlement Pond will be constructed to store process water from each respective ore processing facility. A third pond (referred to as the RCH 'Micky's Pond' Settlement Pond) will receive process water in addition to brackish water. The OPF1 and OPF2 Settlement Ponds and RCH 'Micky's Pond' Settlement Pond will have a HDPE-lined base. Each pond will have an operational sump with dimensions of 175 m x 174 m and a height of 5 m from base to top of embankment. Each pond will have an adjacent emergency sump with dimensions of 110 m x 174 m.

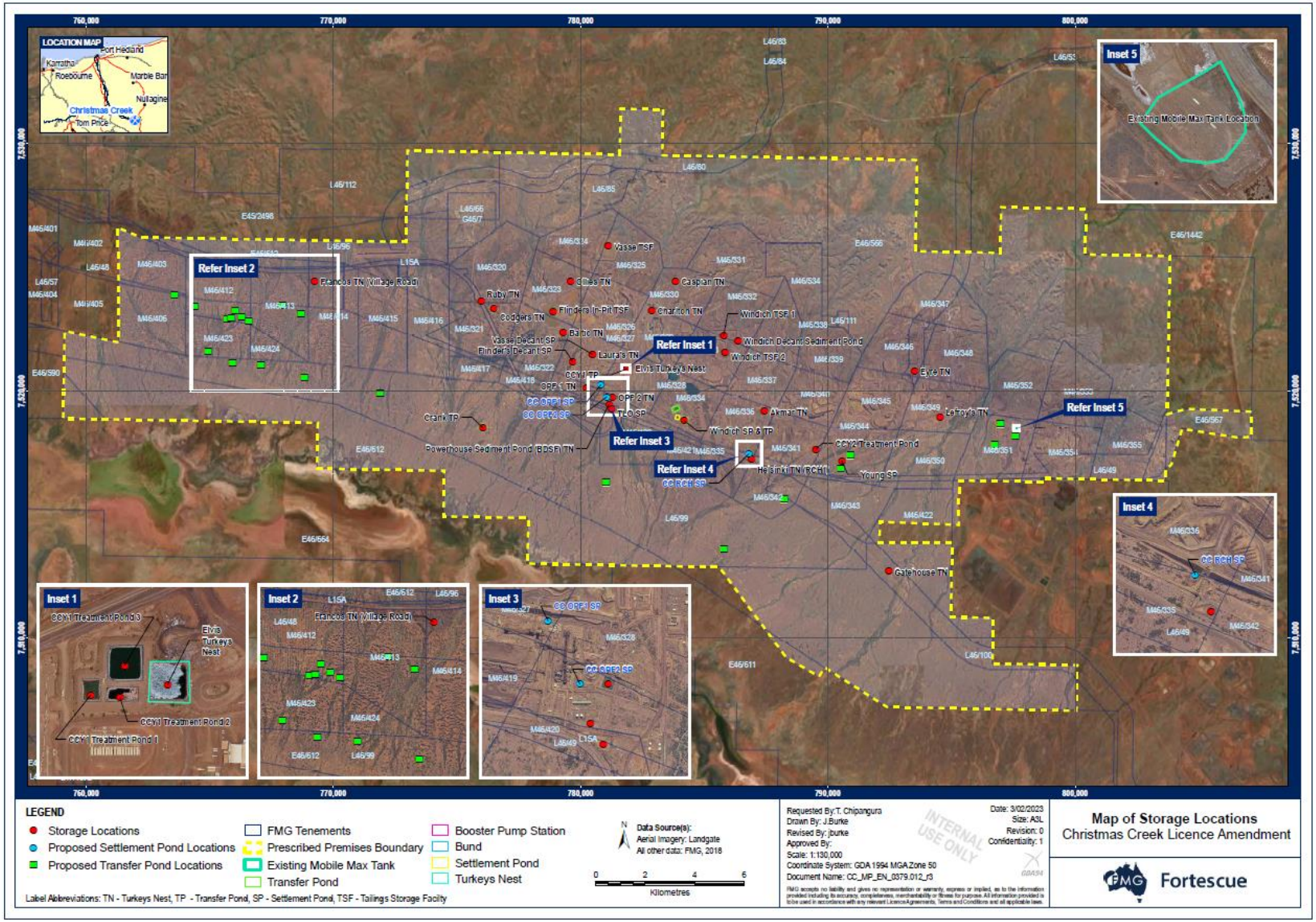

Figure 1: Proposed settlement pond and transfer pond locations

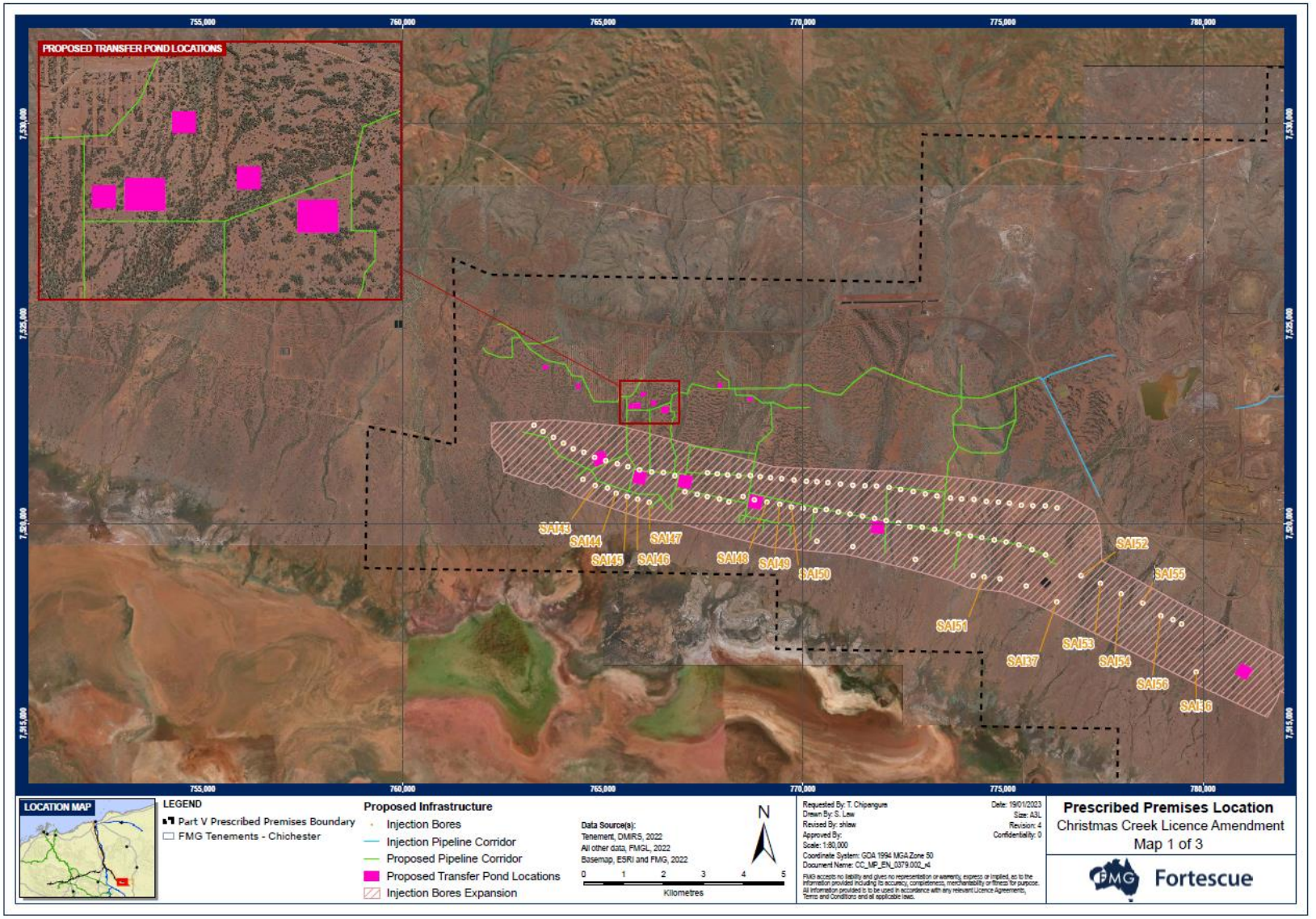

Figure 2: Proposed pipelines and injection bore infrastructure (western extent)

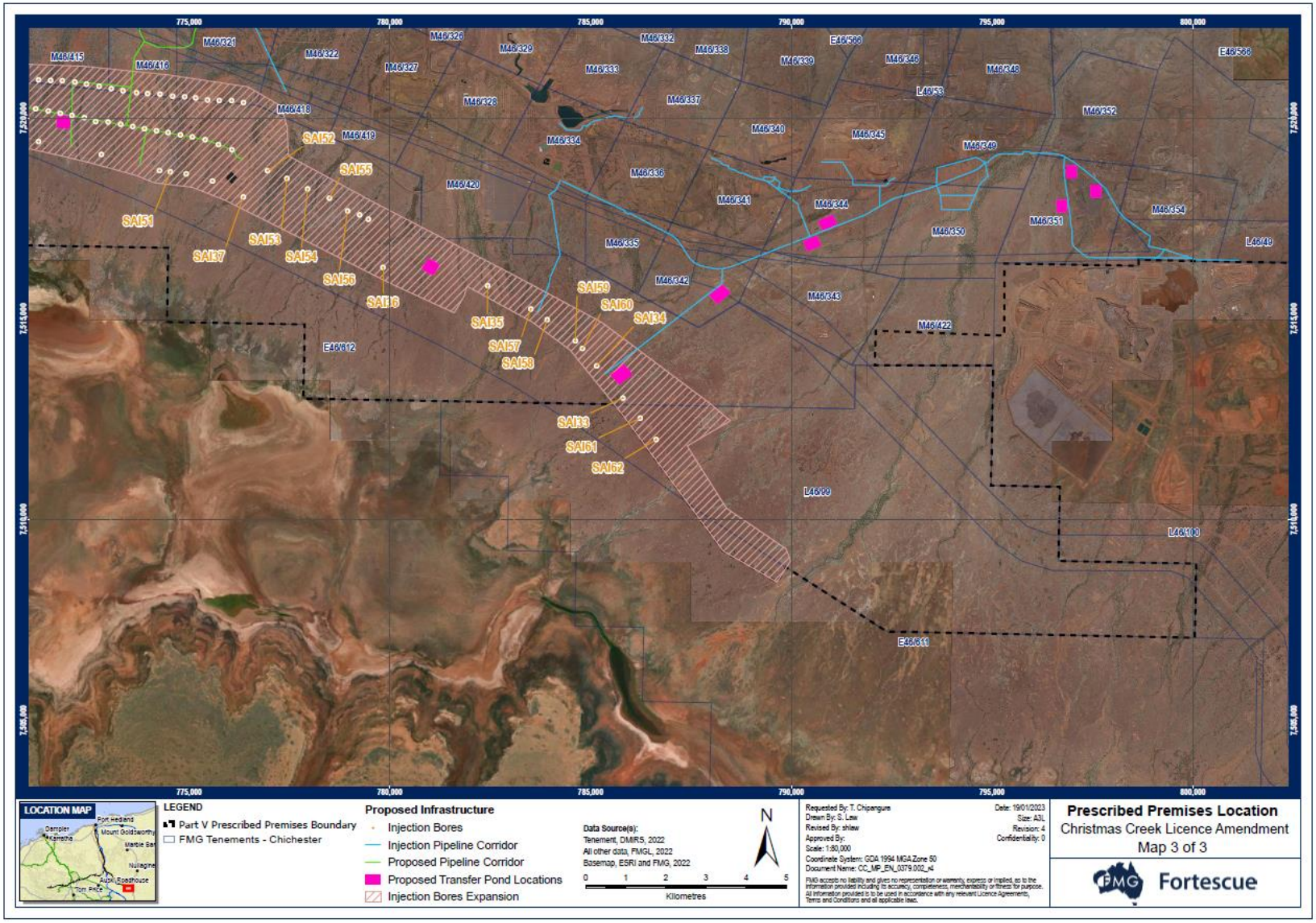

Figure 3: Proposed pipelines and injection bore infrastructure (eastern extent)

2.2.3 Administrative amendments

The licence holder has proposed the removal of Category 5 (beneficiation of non-metallic ore) infrastructure from Table 6 (condition 9) of the existing licence for items that have been constructed. The items installed or constructed include:

- Flinders In-Pit TSF 1 Complex – three tailings delivery spigots; and
- Flinders In-Pit TSF 2 Complex - Stage 1 tailings delivery pipelines, spigots 5 and 6 and decant return water pump and pipeline.

Infrastructure relating to Stage 2 of the Flinders In-Pit TSF 2 Complex is yet to be constructed, including:

- Extension of the Ore Processing Facility 1 (OPF1) tailings delivery pipeline;
- Installation of spigots SP7a and SP8a on the OPF1 tailings delivery pipeline;
- Extension of the Ore Processing Facility 2 (OPF2) tailings delivery pipeline off the existing line; and
- Installation of spigots SP1, SP2, SP3 and SP4 on the OPF2 tailings delivery pipeline extension.

In addition, the licence holder has advised that three of the four contingency surface water discharge points listed in Table 8 and Table 12 of the existing licence require revision to reflect their actual location. These contingency points allow for the discharge of mine dewater to surface waters if reuse, reinjection, in-pit disposal or temporary storage options are unavailable or have been exhausted. The correct coordinates for these emission points are listed in Table 1.

Table 1: Updated coordinates for the contingency discharge points listed in Table 8 and Table 12 of licence L8454/2010/2

Contingency discharge emission points	Current location on existing licence		Proposed (actual) location		Comments
	GDA94 MGA Zone 50				
	Easting	Northing	Easting	Northing	
CCDP01 (W2)	787710	7516338	787710	7516338	No requested change
CCDP02 (W3)	785267	7517866	785315	7517965	The actual location is approximately 110 m north-northeast
CCDP03 (W4)	795267	7517972	795750	7519075	The actual location is approximately 1200 m north-northeast
CCDP04 (W1)	772347	7523656	769520	7523385	The actual location is approximately 2840 m west-southwest

2.3 CEO initiated amendments

In reviewing the application documents the Delegated Officer observed that the Gatehouse Turkey Nest listed in the licence as approved containment infrastructure is not located within the prescribed premises boundary. In response to clarification, the licence holder advised that they formally request the premises boundary be amended to include the Gatehouse Turkey Nest within tenement L46/99. The revised premises boundary is depicted in Figure 1.

The Delegated Officer also notes that the prescribed premises boundary overlaps with the premises boundary specified in licence L8199/2007/2, which is also held by Chichester Metals Pty Ltd. The licence holder clarified that the reason for the overlap was that saline injection infrastructure, including several re-injection bores and pipelines, are utilised by both the Christmas Creek and Cloudbreak mine operations, as authorised under MS 1033 (EPA 2016).

3. Legislative context

3.1 Part IV of the EP Act

The Christmas Creek Iron Ore Mine Expansion was approved on 08 August 2016 by Ministerial Statement (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 EPA identified in its Report No: 1567 the following factors as the key environmental factors during its assessment of the proposal and set the following 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.

3.1.1 Groundwater management

The Delegated Officer sought advice from the EPA Services team regarding the Part IV and Part V regulatory interactions to manage potential impacts to groundwater at the premises. The EPA advised that the proposed infrastructure to expand the re-injection system is to be regulated under Part V of the EP Act, given when MS 1033 was granted it did not contain any conditions directly relating to hydrological process (groundwater) during operations to avoid regulatory duplication. EPA also noted dewatering activities are regulated through the Groundwater Operating Strategy (see Section 3.2) required as part of the RiWI Act, which specifies that groundwater is to be maintained within defined levels.

Notwithstanding the above, the Delegated Officer notes that impacts to conservation significant vegetation and subterranean fauna (stygofauna and troglofauna) from changes in groundwater levels and quality as a result of reinjecting mine dewater have been assessed by the EPA under Part IV of the EP Act. Conditions have been imposed on MS 1033 to address the potential impacts to vegetation and subterranean fauna associated with the reinjection of mine dewater.

Commitments under Part IV include monitoring groundwater quality and levels in bores ‘in close proximity to quadrats where available’ is specified in the approved Vegetation Health Monitoring and Management Plan (VHMMP) prepared to address condition 7 of MS 1033. However, this commitment does not specify a disturbance footprint, parameters or specific locations of monitoring bores. The EPA advised that the VHMMP is unlikely to be sufficient for the management of potential impacts to other environmental receptors and management of emissions and discharges from the expanded reinjection activities should be regulated under Part V of the EP Act. Regardless, based on a review of the figures in the VHMMP, there do not appear to be any quadrats within the proposed expansion area.

The Delegated Officer has determined from the information above, and in consideration of previous Part V assessments undertaken for the premises, that the scope of this licence assessment will include an assessment of impacts on groundwater quality and groundwater mounding associated with injection of groundwater.

3.2 Rights in Water and Irrigation Act 1914 (RiWI Act)

The proposal is located within the Pilbara Groundwater Area and the Pilbara Surface Water area which are proclaimed under the RiWI Act. The licence holder has not applied for an increase to the existing licensed groundwater abstraction or re-injection volumes.

Groundwater abstraction is undertaken to enable mining to take place below the watertable and mine site water supply. Abstracted groundwater is utilised for general mine site purposes including dust suppression, construction, ore processing and camp water supply; with surplus water injected back to suitable aquifers. Groundwater is abstracted in accordance with Section 5C licences issued by the department in accordance with the RiWI Act.

The mine site operates under an existing groundwater licence GWL167593, which allows the abstraction of 50,000ML per annum. The licence is operated in accordance with an approved Groundwater Operating Strategy (GWOS) – CC-PH-HY-0002.

The GWOS requires updating as part of this proposal and the licence holder must apply for a 26D licence to construct the new injection bores. Works affecting the beds and banks of watercourses may be exempt from requiring permits if located on mining tenure (except not if located on general purpose lease) and if activities are not related to storing, diverting, or taking water.

Groundwater monitoring objectives set in the GWOS relating to the saline injection management zone include:

- *Water table* - No adverse impact to Mulga vegetation community and associated Acacia species of trees or due to groundwater mounding; and
- *Oakover aquifer* - Ensure pressurisation and drawdown of deep aquifer is managed so as not to impact on the Mulga vegetation community and associated Acacia species of trees.

3.3 Hydrogeological Assessment

The Delegated Officer sought advice from the department's Principal Hydrogeologist to review the adequacy of the existing groundwater monitoring network to monitor upward seepage and groundwater quality across the expanded injection network. Advice received concluded that the current network of monitoring bores on the licence should be expanded to improve spatial coverage where the proposed new injection bores will be installed. Further, the density and distribution of these new monitoring sites should be approximately the same as in the original wastewater reinjection areas.

As the principal purpose of the monitoring program is to assess the degree to which the injection of mine wastewater into the Oakover aquifer has the potential to cause upward seepage into the overlying water table aquifer, it is recommended that bores at each monitoring site are constructed both above and below the confining bed that separates these two aquifers. This would be necessary to enable both the direction and the magnitude of vertical groundwater flowrates to be determined at each site.

The program could be improved by monitoring equivalent freshwater heads in pairs of monitoring bores at each site in the monitoring network in the expanded reinjection areas. This should be done at least quarterly on an ongoing basis. Changes in the direction of the density-corrected vertical hydraulic head gradient from a downward to an upward direction would indicate an increased risk of upward seepage into the shallow aquifer, as would a decrease in the magnitude of the vertical hydraulic gradient.

4. 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.

4.1 Source-pathways and receptors

4.1.1 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 2. Table 2 also details the proposed control measures the licence holder has proposed to assist in controlling these emissions, where necessary.

Table 2: Licence holder controls

Emission	Sources	Potential pathways	Proposed controls
Construction			
Dust	Construction and installation of dewatering infrastructure including injection bores, turkey nests/transfer ponds with pump stations and new pipeline corridors Movement of vehicles and heavy equipment	Air/wind dispersion	• Potential dust impacts to vegetation and conservation significant flora are managed by implementing controls detailed in the licence holder's *Vegetation Health Monitoring and Management Plan* (100-PL-EN-1020), prepared to meet the requirements of MS 1033 conditions 5, 7 and 13.
Operation			
Hydrocarbons (e.g. hydraulic oil or diesel) and chemicals	Operation of pump stations at turkeys nests/transfer ponds, including: • Damage to equipment causing leaks • Refueling and routine maintenance of equipment (e.g. generators and pumps)	Direct leaks to ground, infiltration to underlying soils and groundwater	• Inlet and outlet pumps to be installed on a concrete plinth mounted on an elevated pump pad designed with a 2% graded fall away from the turkeys nest/transfer pond.
Mine process	Storage of mine	Seepage of	• Pond base and walls fitted with a 1.5

Emission	Sources	Potential pathways	Proposed controls
water	dewater in the HDPE-lined OPF1 and OPF2 settlement ponds	mine process water through base and walls of HDPE-lined OPF1 and OPF2 settlement ponds to soil and groundwater	mm HDPE liner; and • Daily visual inspections of the HDPE ponds (liner integrity).
		Overtopping of mine process water from OPF1 and OPF2 settlement ponds	• Daily visual inspections of the HDPE ponds (freeboard level); and • Maintain minimum freeboard of 200 mm.
	Transport of mine process water in pipelines	Mine process water discharged to environment via pipeline leak/rupture	• Adherence to existing licence condition 2: All pipelines or sections of pipelines containing tailings or high-risk saline pipelines (as identified on the map of environmentally sensitive areas depicted in Schedule 1) are either: ➢ equipped with telemetry; or ➢ equipped with automatic cut-outs in the event of a pipe failure; or ➢ provided with secondary containment sufficient to contain any spill for a period equal to the time between routine inspections.
Mine dewater (saline)	Storage of mine dewater in the HDPE-lined turkeys nests/transfer ponds	Seepage of mine dewater through pond base and walls to underlying soil and groundwater	• Pond base and walls fitted with a 1.5 mm HDPE liner (turkeys nest/transfer ponds); and • Daily visual inspections of the HDPE ponds (liner integrity).
		Overtopping of mine dewater from ponds	• Daily visual inspections of the HDPE ponds (freeboard level); and • Maintain minimum freeboard of 200 mm.
	Transport of mine dewater from water source locations approved under the existing RIWI Act licence GWL167593(7)	Mine dewater discharged to environment via pipeline leak/rupture	• Implementation of existing licence condition 2: All pipelines or sections of pipelines containing tailings or high-risk saline pipelines (as identified on the map of environmentally sensitive areas depicted in Schedule 1) are either: ➢ equipped with telemetry; or

Emission	Sources	Potential pathways	Proposed controls
			➢ equipped with automatic cut-outs in the event of a pipe failure; or ➢ provided with secondary containment sufficient to contain any spill for a period equal to the time between routine inspections.
	Injection of mine dewater to environment (Oakover Formation, the target aquifer for injection) via injection bores	Direct injection of mine dewater via injection bores	• Implementation of existing biennial monitoring of dewater quality in pipelines discharging to the saline injection borefield (from the Windich transfer pond [CCSP0024] and Crank transfer pond [CCSP0015]) and to the Hillside East Brackish Injection Borefield (CCSP001). • Existing ambient groundwater monitoring in the vicinity of the injection system

4.1.2 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 3 below provides a summary of potential environmental receptors that may be impacted by activities upon or emission and discharges from the prescribed premises *(Guideline: Environmental siting* (DWER 2020)). No human receptors were identified as being potentially impacted by the proposed activities.

Table 3: Sensitive environmental receptors and distance from prescribed activity

Human receptors	Description and distance from prescribed activity
Townsites and Homesteads	Nullagine is the nearest town, located over 60 km away from the prescribed premise 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	**Description and 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 a 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 are 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.
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 *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.
Native vegetation	There is native vegetation in the vicinity of the proposed activities. Priority 1 flora 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 DBCA flora surveyed: *Calotis squamigera Eremophila spongiocarpa* Priority 4 DBCA flora surveyed: *Eremophila youngii subsp. lepidota*

4.2 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 considers potential source-pathway and receptor linkages as identified in Section 4.1. 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 4.1), 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 4. The Revised Licence L8454/2010/2 that accompanies this Amendment Report authorises emissions associated with the operation of the Premises i.e. Category 6 activities.

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

Table 4: Risk assessment of potential emissions and discharges from the Premises during construction and operation

Risk Event					Risk rating[1] C = consequence L = likelihood	Licence Holder's controls sufficient?	Conditions[2] of licence	Justification for additional regulatory controls
Source/Activities	**Potential emission**	**Potential pathways and impact**	**Receptors**	**Licence Holder's controls**				
Construction								
Movement of mobile equipment (e.g. light vehicles and heavy equipment) constructing and installing dewatering infrastructure including injection bores, turkey nests/transfer ponds with pump stations and new pipeline corridors	Dust	Air/Wind dispersion causing impacts to native vegetation health	Native vegetation	Refer to Section 4.1	C = Minor L = Unlikely **Medium Risk**	Y	N/A	The Delegated Officer considers potential impacts to vegetation from dust are adequately managed under MS 1033
Operation								
Refueling and routine maintenance of pump stations at new turkey nests / transfer ponds, including unplanned leaks/spills	Hydrocarbons (e.g. hydraulic oil or diesel) and chemicals	Overland flow causing reduced quality or contamination of soil, sediment, groundwater and/or surface water Impacts to local proximate native vegetation health	Soil Groundwater Surface water Native vegetation (located along dewatering pipeline routes)	Refer to Section 4.1	C = Minor L = Unlikely **Medium Risk**	Y	Condition 9, Table 6 Infrastructure requirements Requires construction requirements including impermeable concrete foundations	N/A
Transport of mine dewatering water via: • 66 km of new pipelines servicing the existing saline injection and transfer system; and • 85 km of new pipelines servicing the proposed Hall saline injection and transfer system	Saline groundwater (abstracted from dewatering borefields)	Mine dewater discharged to environment via pipeline leak/rupture causing: • Reduced quality or contamination of groundwater or soil • Soil sodicity, impacted areas may become dispersive, causing increased erosion/sedimentation • Impacts to native vegetation health	Soil Groundwater Native vegetation	Refer to Section 4.1	C = Moderate L = Possible **Medium Risk**	Y	Condition 2 Pipeline construction infrastructure requirements Condition 4, Table 3 Inspection of infrastructure Requires daily visual integrity inspections of pipelines Condition 9, Table 6 Infrastructure requirements Requires construction requirements including telemetry, automatic cut-outs and secondary containment	N/A. Existing condition on licence considered sufficient to reduce the risk of impact to an acceptable level.
Storage of mine dewatering water in new turkey nests/transfer ponds	Saline groundwater (abstracted from dewatering borefields)	Seepage of mine dewater through base and walls of HDPE-lined turkey nests/transfer ponds causing: • Reduced quality or contamination of groundwater or soil • Groundwater mounding • Impacts to native vegetation health	Soil Groundwater Native vegetation (located within any areas of groundwater mounding)	Refer to Section 4.1	C = Minor L = Unlikely **Medium Risk**	Y	Condition 9, Table 6 Infrastructure requirements Requires construction requirements including HDPE liners	N/A
		Overtopping of mine dewater from turkey nests/transfer ponds causing: • Reduced quality or contamination of soil, sediment, groundwater and/or surface water • Soil sodicity, impacted areas may become dispersive, causing increased erosion/sedimentation • Impacts to native vegetation health	Soil Groundwater Native vegetation	Refer to Section 4.1	C = Minor L = Unlikely **Medium Risk**	Y	Condition 3, Table 2 Containment infrastructure Requires operational requirement to maintain 200 m freeboard	N/A

Risk Event					Risk rating[1] C = consequence L = likelihood	Licence Holder's controls sufficient?	Conditions[2] of licence	Justification for additional regulatory controls
Source/Activities	**Potential emission**	**Potential pathways and impact**	**Receptors**	**Licence Holder's controls**				
Storage of mine dewatering water in OPF1, OPF2 and RCH settlement ponds	Saline groundwater (abstracted from dewatering borefields)	Seepage of mine dewater through base and walls of the settlement ponds causing: • Reduced quality or contamination of groundwater or soil • Groundwater mounding • Impacts to native vegetation health	Soil Groundwater Native vegetation (located within any areas of groundwater mounding)	Refer to Section 4.1	C = Minor L = Unlikely **Medium Risk**	N	Condition 9, Table 6 Infrastructure requirements Requires construction requirements including HDPE liners	N/A
		Overtopping of mine dewater from settlement ponds causing: • Reduced quality or contamination of soil, sediment, groundwater and/or surface water • Soil sodicity, impacted areas may become dispersive, causing increased erosion/sedimentation • Impacts to native vegetation health	Soil Groundwater Native vegetation	Refer to Section 4.1	C = Minor L = Unlikely **Medium Risk**	Y	Condition 3, Table 2 Containment infrastructure Requires containment infrastructure operational requirement to maintain 200 m freeboard Condition 9, Table 6 Infrastructure requirements Requires construction requirements including HDPE liners	N/A
Injection of mine dewatering water to Oakover Formation via 108 new saline re-injection bores (SAI43 – SAI151)	Saline groundwater (abstracted from dewatering borefields)	Saline mine dewater discharged to environment (Oakover Formation, the target aquifer for injection) via injection bores causing: • Reduced quality or contamination of groundwater and surface water • Groundwater mounding from pressurization of the deep Oakover aquifer resulting in vertical migration through the confining clay layer into the overlying shallow aquifer • Impacts to native vegetation health	Soil Groundwater Native vegetation (located within any areas of groundwater mounding) including impacting Mulga and associated Acacia species or samphire vegetation Fortescue Marsh	Refer to Section 3.3 and 4.1	C = Moderate L = Possible **Moderate Risk**	N	**Condition 24, Table 17 Expansion of ambient groundwater monitoring network requirements Requires expanded groundwater monitoring program to cover extended reinjection area**	**The Delegated Officer notes that although there is no proposed increase in the total volume of mine dewater to be injected, the proposed operation of 108 new saline re-injection points across the existing system has potential to create new source-pathway-receptor linkages that have not been previously assessed. These pathways relate to seepage from the pressurized Oakover aquifer to the overlying surficial water table.** **Additional ambient groundwater monitoring bores in the new reinjection area are recommended.** The Licence Holder will use a strategy of using the current potentiometric head differences across the aquitard as an indication of a good aquitard seal, and setting a minimum head difference that would indicate that leakage is taking place. This is regulated by Water Services as part of their Groundwater Operating Strategy, so not duplicated by Part V of the EP Act.

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.

5. Consultation

Table 5 provides a summary of the consultation undertaken by the department.

Table 5: Consultation

Consultation method	Comments received	Department response
Local Government Authority advised of proposal (21/02/2023)	None.	N/A.
Department of Mines, Industry Regulation and Safety (DMIRS) advised of proposal (21/02/2023)	None.	N/A.
Department of Biodiversity, Conservation and Attractions (DBCA) advised of proposal (21/02/2023)	DBCA replied on 10 March 2023 stating *"that the Pilbara Iron Ore and Infrastructure Project (Christmas Creek Mine, East-West Railway and Mindy Mindy Mine) – Revised Proposal is the subject of an existing approval under Part IV of the EP Act, with environmental conditions issued under Ministerial Statement 1033.* *While noting DBCA provided input into the environmental impact assessment for this project, it appears that the infrastructure associated with the licence amendment is located in close proximity to priority flora records. Consequently, it is DBCA's expectation that any direct and indirect impacts on priority flora individuals are avoided where possible."*	Noted.
Karlka Nyiyaparli Aboriginal Corporation RNTBC advised of proposal (21/02/2023)	None.	N/A.
Department of Planning, Lands and Heritage (DPLH) advised of proposal (21/02/2023)	DPLH replied on 03 April 2023 recommending that the Licence Holder contacts the Aboriginal heritage conservation team to discuss the project and any required approvals. DWER advised the Licence Holder of this recommendation via email letter on 09 June 2023.	FMG met with DPLH and more accurate spatial data provided. DPLH advised that the smaller development footprint intersects with on Aboriginal Site, which is included within an existing section 18 consent area held by FMG. However, FMG intends to amend the footprint and excise the site from the development boundary. As a result this means no approvals under the *Aboriginal Heritage Act 1972* would be required for the works associated with the

Consultation method	Comments received	Department response
		application. This particular site is within a S18 consent area, however, the entirety of the proposed works area is not.
Licence Holder was provided with draft amendment on (08/08/2023)	Licence Holder replied on 25/08/2023 and 12/09/2023 Refer to Appendix 1	Refer to Appendix 1

6. 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.

6.1 Summary of amendments

Table 6 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 6: Summary of licence amendments

Existing condition	Condition summary	Revised licence condition	Conversion notes
3, Table 2	Containment infrastructure	3, Table 2	Inclusion of new transfer ponds / turkeys nests and settlement ponds. An additional requirement to have visual markers installed for freeboard monitoring has also been included for all infrastructure in this table that has freeboard requirements. The inclusion is to allow for easy confirmation of compliance with the freeboard limits specified in the licence.
10, Table 6	Construction	9	Updated version of condition included.
10, Table 6	Infrastructure requirements	9, Table 6	Inclusion of new injection bores. Inclusion of new transfer ponds / turkeys nests, settlement ponds and pipelines. Flinders In-Pit TSF 1 and 2 removed from construction table as completed and operations covered by Condition 3, Table 2. An additional requirement to have visual markers installed for freeboard monitoring has also been included for all infrastructure in this table that has freeboard requirements. The inclusion is to allow for easy confirmation of

Existing condition	Condition summary	Revised licence condition	Conversion notes
			compliance with the freeboard limits specified in the licence.
14, Table 9	Point source emissions to groundwater	13, Table 9	Addition of 108 new injection bores
24, Table 16	Monitoring of ambient groundwater quality	23, Table 16	Addition of new ambient groundwater monitoring bores
N/A	Specified actions Expansion of ambient groundwater monitoring network requirements	24, Table 17	Requirement for expanded monitoring well network to cover the spatial extent of the area where the proposed new injection bores will be installed.
31, Table 18	Notification requirements	31, Table 19	Updated version of condition included. Addition of compliance for ambient groundwater monitoring network.
Schedule 1: Maps	Premises Map	N/A	Updated Premises map, Figures 1, 3, 4, 8, 9, 10, 11, and 17. Removal of Premises map, Figures 6, 7, and 8. Renumbered Figures 9 to 21 as Figures 6 to 18.
N/A	Coordinates	Schedule 2: Premises boundary, Table 21	Addition of coordinates.

References

1. Department of Environment Regulation (DER) 2013, *Water Quality Protection Note 27 - Liners for containing pollutants*, Perth, Western Australia.
2. Department of Environment Regulation (DER) 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.
3. Department of Water and Environmental Regulation (DWER) 2020, *Guideline: Environmental Siting*, Perth, Western Australia.
4. DWER 2020, *Guideline: Risk Assessments*, Perth, Western Australia.
5. Fortescue Metals Group Ltd, Fortescue submission of the Christmas Creek Licence Amendment L8454/2010/2 under s59 of the EP Act 1986 17/11/2023, East Perth, Western Australia.
6. Fortescue Metals Group 2016, *Christmas Creek Groundwater Operating Strategy (CC-PH-HY-0002 Rev 7)*. Unpublished Report.
7. Fortescue Metals Group Ltd, Fortescue's response to the RFI received for the Christmas Creek L8454/2010/2 licence amendment application 03/02/2023, East Perth, Western Australia.
8. Fortescue Metals Group Ltd, Fortescue response to the review of the Christmas Creek L8454/2010/2 licence amendment 25/08/2023, East 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
3, Table 2	"Visual markers installed along embankments for freeboard monitoring" to be modified to "Visual markers installed to adequately monitor freeboard".	Updated as requested.
3, Table 2	Fortescue wishes to clarify that the RCH 'Micky's Pond' Settlement Pond will be receiving process water in addition to brackish water, and, thus, will be lined. Fortescue requests for the removal of this settlement pond from the brackish water material containment storage section and requests its added (moved) to the saline or brackish water material section of the table.	Updated as requested.
3, Table 2	Flinder's Decant Settlement Pond, Franco's Turkey's Nest (Village Road), Ollies Turkey's Nest, Windich Decant Sediment Pond and Vasse Decant Settlement Pond, Ruby Turkey's Nest Remove visual freeboard markers as Licence Holder is required to conduct daily inspections of saline water infrastructure (inclusive of transfer ponds, settlement ponds and pipelines). The existing daily saline water infrastructure monitoring requirements are considered adequate and sufficient to address the intended outcome of freeboard monitoring.	Updated as requested.
3, Table 2	TLO Settlement Pond (Jeffs) Remove visual freeboard markers as Licence Holder is required to conduct daily inspections of saline water infrastructure (inclusive of transfer ponds, settlement ponds and pipelines). The existing daily saline water infrastructure monitoring requirements are considered adequate and sufficient to address the intended outcome of freeboard monitoring.	Updated as requested.
3, Table 2	Fortescue notes that the wording in Table 2 seems to suggest that OPF1 and OPF2 Settlement Ponds are part of the Young Settlement Ponds. This is incorrect. OPF1 and OPF2 Settlement Ponds are not in the vicinity of the Young Settlement Ponds and should not be considered to be a part of it. Fortescue requests that OPF1 and OPF2 Settlement Ponds are separated and distinguished apart from the Young Settlement Ponds. Fortescue further requests that OPF1 and OPF2 Settlement Ponds and RCH 'Micky's Pond' Settlement	Updated as requested.

Condition	Summary of licence holder's comment	Department's response
	Pond are grouped together as they are located within the vicinity of each other, Fortescue requests that these ponds are.	
3, Table 2	21 transfer ponds / turkey nests The Licence Holder requests for the removal of the department's new requirements for new transfer ponds/turkeys nest to be lined with a 1.5 mm HDPE liner (in opposition to a HDPE liner which is also sufficient) and the installation of visual markers along embankments for freeboard monitoring to ensure consistency across the Christmas Creek Mine Licence and other FMG sites.	Updated as requested.
3, Table 2	CCY1 Treatment Ponds 1, 2 and 3 Remove visual freeboard markers as Licence Holder is required to conduct daily inspections of saline water infrastructure (inclusive of transfer ponds, settlement ponds and pipelines). The existing daily saline water infrastructure monitoring requirements are considered adequate and sufficient to address the intended outcome of freeboard monitoring.	Updated as requested.
3, Table 2	CCY2 Treatment Ponds 1 and 2 Remove visual freeboard markers as Licence Holder is required to conduct daily inspections of saline water infrastructure (inclusive of transfer ponds, settlement ponds and pipelines). The existing daily saline water infrastructure monitoring requirements are considered adequate and sufficient to address the intended outcome of freeboard monitoring.	Updated as requested.
9, Table 6	Construction condition has been revised. The Licence Holder requests this be rephrased.	Retained as new version of this condition.
9, Table 6	The Licence Holder requests for the removal of the prescriptive numerical lengths of pipelines stated for installation into the existing saline injection, transfer system, proposed Hall saline injection and transfer system, to provide operational flexibility whilst still meeting the intended outcomes of the condition.	Updated as requested.
9, Table 6	Fortescue requests for the addition of the RCH 'Micky's Pond' to OPF1 and OPF2 Settlement Pond.	Updated as requested.
9, Table 6	OPF1 Settlement Pond OPF2 Settlement Pond RCH 'Micky's Pond' Settlement Pond The Licence Holder requests for the removal of the department's new requirements for new transfer ponds/turkeys nest to be lined with a 1.5 mm HDPE liner (in opposition to a HDPE liner which is also sufficient) and the installation of visual markers along embankments for freeboard monitoring to ensure consistency across the Christmas Creek Mine Licence and other FMG sites.	Updated as requested.
9, Table 6	RCH Settlement Pond	Updated as requested.

Condition	Summary of licence holder's comment	Department's response
	Fortescue requests for the removal of these design/construction requirements from Table 6 as this pond will receive process water and be lined.	
9, Table 6	Fortescue requests for the removal of the Mobile Max Turkey's Nest from Condition 9, Table 6, as this infrastructure is constructed.	Updated as requested.
9, Table 6	Fortescue requests for the removal of the Hydrogen Refuelling Station from Condition 9, Table 6, as this infrastructure is constructed.	Updated as requested.
9, Table 6	Fortescue notes that the line item 'Filled in two stages' is not a construction requirement. Rather, this is a description of what is intended to occur during the operation of the TSF in accordance with Condition 3, Table 2. Consequently, this is a requirement which cannot be addressed in a Compliance Report. Fortescue requests for this line item to be removed from the table.	Updated as requested.
9, Table 6	Footnote 1 Fortescue has identified a discrepancy in Condition 9, Table 6, regarding an outdated footnote reference. This reference to Footnote 1 in Condition 9, Table 6 is a remnant from a historical version of the Christmas Creek Licence L8454/2010/2 and is no longer relevant. Fortescue requests that the footnote reference is removed from Condition 9, Table 6.	Removed as requested.
23, Table 16	Fortescue requests for a minor administrative naming convention update to the Flinders In-Pit TSF 1 Complex bores to clarify and remove any ambiguity surrounding the bores are to be monitored deep and/or shallow. Fortescue requests for a minor update to the bores, as highlighted in bold text below: FLM06_D FLM08_D FLM17 CCE04MB_S and CCE04MB_D	Updated as requested.
23, Table 16	Based on the request from the department and in support of the expansion of the Mine dewater reinjection, Fortescue proposes to utilise existing, constructed monitoring bores (rather than designing, constructing and installing new monitoring bores). The intention to utilise existing, constructed monitoring bores will still meet the department's intended outcome, ensuring sufficient monitoring across the spatial extent of the injection monitoring well network. Fortescue requests for the inclusion of the existing, constructed, and expanded monitoring well network bores as outlined below, namely: SAM15_I	Updated as requested.

Condition	Summary of licence holder's comment	Department's response
	SAM15_S SAM18_D SAM18_S SAM64_D SAM64_S SAM85_D SAM85_S SAM109_D SAM109_S SAM110_D SAM110_S.	
24, Table 17	Fortescue proposes to utilise existing and constructed groundwater monitoring bores for the expansion of ambient groundwater monitoring network requirements across the spatial extent of the area where the proposed new injection bores will be installed. It should be noted that Fortescue will provide the information requirements in accordance with the requirements of Table 17. All bores were constructed in accordance with the Minimum Construction Requirements for Water Bores in Australia, 4th Edition. The logging of hydrogeological bores was conducted in accordance with the Hydrogeological Bore Logging Procedure (45-00000-PR-GY-000). Fortescue requests for the rephrasing of the condition to enable the use of the existing and as-constructed groundwater monitoring wells whilst still meeting the intended outcome of the condition.	Updated conditions based on Principal Hydrogeologist technical advice and email correspondence with Licence Holder on 12 September 2023.
24, Table 17	Fortescue acknowledges the new requirement placed by the department to monitor equivalent freshwater heads in pairs of monitoring bores at each site in the monitoring network in the expanded reinjection areas. However, Fortescue notes that this new requirement is inconsistent with the Christmas Creek licence and other FMG licences. Fortescue requests for the removal of the condition to ensure consistency. Removal of: "*Incorporate improvements by monitoring equivalent freshwater heads in pairs of monitoring bores at each site in the monitoring network in the expanded reinjection areas. This should be done at least quarterly on an ongoing basis*."	Removed as requested
24, Table 17	Fortescue acknowledges the new requirement placed by the department to determine changes in the	Removed as requested

Condition	Summary of licence holder's comment	Department's response
	direction of the density-corrected vertical hydraulic head gradient from a downward to an upward direction would indicate an increased risk of upward seepage into the shallow aquifer, as would a decrease in the magnitude of the vertical hydraulic gradient. However, Fortescue notes that this new requirement is inconsistent with the Christmas Creek licence and other FMG licences. Fortescue requests for the removal of the condition to ensure consistency. Removal of: "*Changes in the direction of the density-corrected vertical hydraulic head gradient from a downward to an upward direction would indicate an increased risk of upward seepage into the shallow aquifer, as would a decrease in the magnitude of the vertical hydraulic gradient*."	
24, Table 17	Fortescue acknowledges the department's new requirement to design and construct wells in accordance with the ASTM D5092/D5092M-16: Standard practice for design and installation of groundwater monitoring bores. Fortescue notes that this new requirement is inconsistent with the construction of bores which is conducted under the application to construct a well (26D licence), managed separately under the *Rights in Water and Irrigation (RIWI) Act 1914*. The correct reference for the construction of wells in Australia is the *Minimum Construction Requirements for Water Bores in Australia (*4th Edition, 2020*),* as referred to on the DWER website. Fortescue requests for the revision of the wording in the design, construction, and installation requirements to align with the minimum construction standards for water bores in Australia in accordance with the licence to construct a well (26D licence) which is separately managed under the RIWI Act 1914.	Updated as requested.
25	Fortescue notes that several of the condition references appear to be incorrect and are referencing the wrong conditions. Fortescue requests for a minor correction to the condition references.	Updated as requested.
31, Table 19	Fortescue notes that one of the condition references appears to be incorrect and is referencing the wrong conditions. Fortescue requests for a minor correction to the condition references.	Updated as requested.
31, Table 19	Fortescue requests a minor change to the wording to replace the word 'and' with 'or'. The change will simplify the submission of the Environmental Compliance Report, as the current wording requires the submission of constructed plans and a detailed site plan for each item of infrastructure or component of infrastructure. Fortescue notes that the infrastructure listed within this licence amendment is not complex infrastructure	Updated as requested.

Condition	Summary of licence holder's comment	Department's response
	and, therefore, considers that it would not require as-constructed plans and detailed site plan(s). This is provided that the other conditions (a) and condition (c) are met; namely, the designs of the infrastructure are certified by a suitably qualified engineer and are signed off by a person authorised to represent the Licence Holder.	
31, Table 19	Fortescue requests for ongoing flexibility in the wording of the condition to ensure that either a suitably qualified engineer and/or a suitably qualified hydrogeologist can sign off the compliance document on the construction and/or installation of the groundwater monitoring network expansion required by Condition 24, Table 17. This minor administrative change will not change the intended outcome as both the hydrogeologist and engineer will be required to verify and review the compliance documents.	Updated as requested.
Schedule 1 Maps		
Figure 1	Fortescue has revised the map in Figure 1 to remove the insets to make the map clearer and less convoluted.	Inclusion of updated figure.
Figure 3	Based on the Christmas Creek licence amendment L8454/2010/2 request for further information (RFI) received from the department on 9 January 2023, Fortescue was advised to update the prescribed premises boundary due to an overlap between two separate Chichester Metals Pty Ltd licences (Christmas Creek Mine Site L8454/2010/2 and Cloudbreak Mine L8199/2007/2). Therefore, as noted in Fortescue's response to the RFI dated 3 February 2023, Fortescue updated the prescribed premises boundary to include tenement L46/99 containing the Gatehouse turkeys nest as this was located outside the Christmas Creek Part V licence boundary.	Inclusion of updated figure.
Figure 4	Fortescue has updated the prescribed premises boundary to include tenement L46/99 containing the Gatehouse turkeys nest, as this was located outside the CC Mine Site Part V licence boundary. Fortescue notes that the red dot inset is not the correct location of the discharge pond. Therefore, Fortescue has updated the map to show the correct location of the discharge pond at coordinates X: 781148.16551, Y: 7519462.48571.	Inclusion of updated figure.
Figure 5	Fortescue requests for the removal of Figure 5 from the Licence as the Flinders In-Pit TSF1 has been constructed in accordance with Condition 9, Table 6.	Removed figure.
Figure 6	Fortescue requests for the removal of this map as the V-WHIMS Plant has been constructed in accordance with the Licence. The Compliance Document (CC-00000-CK-EN-0001_Rev0) was submitted to the department on 22	Removed figure.

Condition	Summary of licence holder's comment	Department's response
	October 2022.	
Figure 7	Fortescue requests for the removal of this map as the Reverse Osmosis plant at Karntama Camp was constructed in accordance with the Licence. The Compliance Document (100-CK-EN-0015 Rev 0) was submitted to the department on the 27th of August 2020. The DWER confirmation of compliance document for the construction of the reverse osmosis plant at Karntama Camp was received on the 20th of October 2020.	Removed figure.
Figure 8	Fortescue requests for the removal of this map as the V-WHIMS Plant was constructed in accordance with the Licence. The Compliance Document (CC-00000-CK-EN-0001_Rev0) was submitted to the department on the 22nd of October 2020.	Removed figure.
Figure 9	Fortescue has updated the prescribed premises boundary to include tenement L46/99 containing the Gatehouse turkeys nest, as this was located outside the CC Mine Site Part V licence boundary. Fortescue has updated the map to include all existing pits, waste dumps and potential future disposal locations, consistent with the CC 10 year plan.	Inclusion of updated figure. Figure renumbered as Figure 5.
Figure 10	Fortescue has updated the prescribed premises boundary to include tenement L46/99 containing the Gatehouse turkeys nest, as this was located outside the CC Mine Site Part V licence boundary.	Inclusion of updated figure. Figure renumbered as Figure 6.
Figure 11	Fortescue has updated the prescribed premises boundary to include tenement L46/99 containing the Gatehouse turkeys nest, as this was located outside the CC Mine Site Part V licence boundary.	Inclusion of updated figure. Figure renumbered as Figure 13.
Figure 17	Fortescue has updated the map as the depicted items on the legend are not legible.	Inclusion of updated figure. Figure renumbered as Figure 7.