



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
Premises	<p>Christmas Creek Mine Site</p> <p>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</p> <p>MULGA DOWNS WA 6751</p>
Date of Report	23 November 2020
Decision	Revised licence granted

ALANA KIDD

MANAGER, RESOURCE INDUSTRIES

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

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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 at 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.

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 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 Application/Amendment summary

On 20 August 2020, the department initiated an amendment to Licence L8454/2010/2. The amendment is for correcting the following errors during a previous amendment, dated 07 August 2020:

- Condition 1.2.5, Table 1.2.3 – authorising the “Reverse Osmosis (RO) Reject Stream for onsite irrigation and dust suppression, as it was inadvertently deleted during the previous amendment; and
- Condition 1.2.9, Table 1.2.6 – correcting the number of saline reinjection bores from 15 to 10 as these were updated during the previous amendment, but the number of saline reinjection bores was not modified to the correct number. The number of saline reinjection bores is now 5 as more have been constructed and compliance documentation received.

Compliance Reports have also been received for the diesel generator sets and the Karntama Camp RO Plant, so construction and compliance requirements for the diesel generator sets and Karntama Camp RO Plant have been removed from the licence.

In September 2020, the Licence Holder requested that the RO brine proposal that they had included in the previous Licence Amendment Application (but then withdrawn due to a delay with further information required), be included as part of this amendment. The RO brine is currently discharged to the Karntama irrigation area and the Construction Camp irrigation area for the sewage facilities. This amendment will also allow the RO brine to be transferred to Codgers Transfer Pond, blended and then used in dust suppression on roadways.

A HDPE poly pipeline of approximately 4.2 km will be surface laid and dug in where required for road crossings. The proposed pipeline route for the RO brine from the Karntama WWTP to the Codgers Transfer Pond is shown in Figure 1.

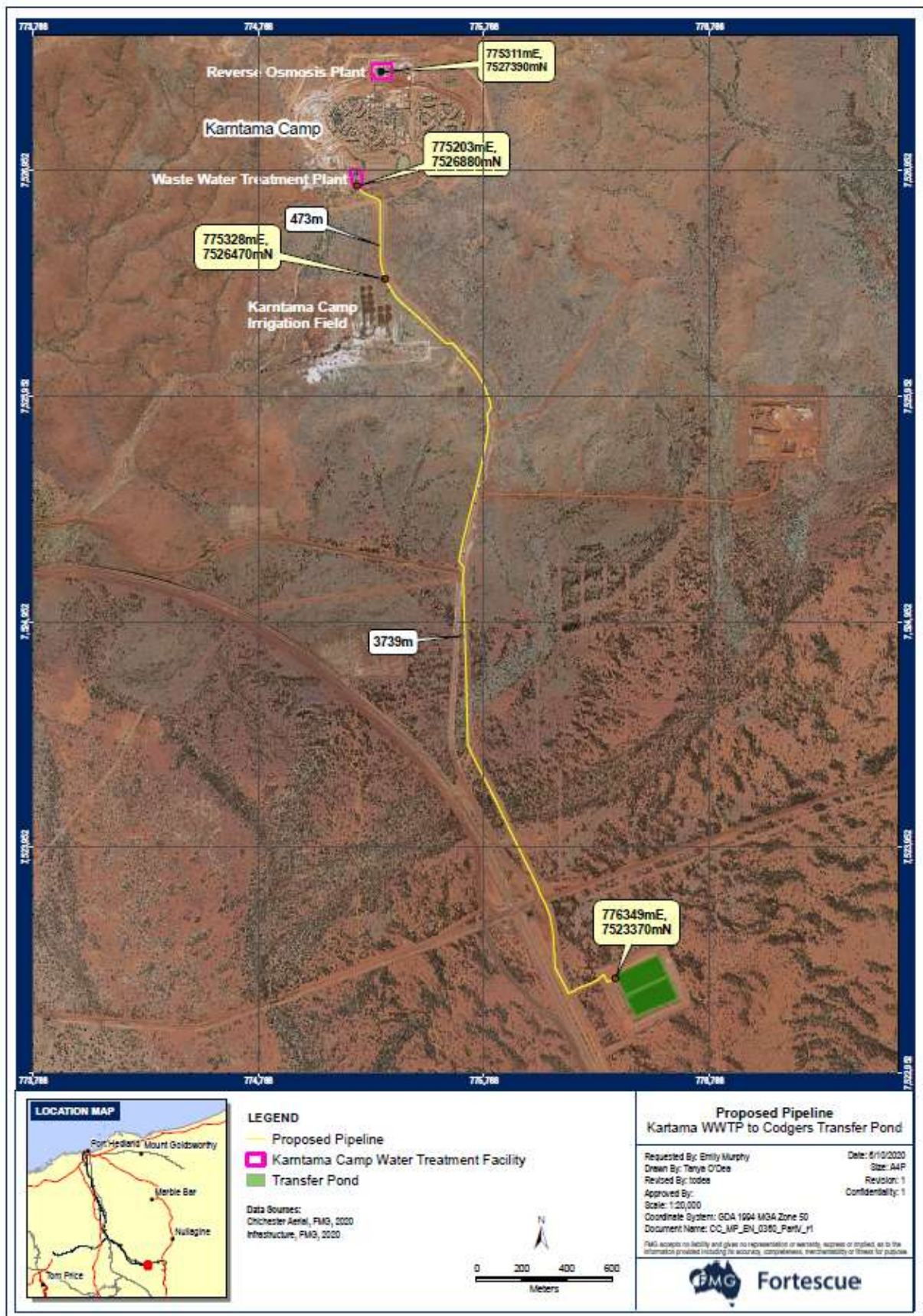


Figure 1: Proposed Pipeline from Karntama WWTP to Codgers Transfer Pond

It should be noted that this new pipeline does not fit into the description of the “high risk saline pipelines” listed under condition 1.2.1 of the licence.

When the RO brine is transferred to the Codgers Transfer Pond, it will mix with the existing brackish water within that pond. Codgers Pond supplies brackish water to a number of other brackish water ponds onsite. From the ponds that are supplied water from Codgers Pond, some are set up with standpipes that are utilised for dust suppression on roads, and other ponds feed the OPFs dust suppression sprinklers for dust suppression on stockpiles and conveyors, and some is used for ore processing.

2.3 RO brine water quality

Samples of the Karntama RO brine water quality were taken on 28 June 2020 and are shown in Table 1.

Table 1: Karntama RO brine water quality on 28 June 2020

Parameters	Units	Sample 28/06/2020	Guidelines ¹
Miscellaneous Inorganics			
pH	pH units	7.5	-
Electrical Conductivity (EC)	mg/L	8,200	-
Total Dissolved Solids (TDS)	mg/L	6,000	4,000
Fluoride	mg/L	1.5	2
Ionic Balance			
Calcium - Dissolved	mg/L	510	1,000
Potassium – Dissolved	mg/L	110	-
Magnesium – Dissolved	mg/L	380	2,000
Sodium – Dissolved	mg/L	1,300	-
Bicarbonate HCO ₃ as CaCO ₃	mg/L	620	-
Carbonate CO ₃ ²⁻ as CaCO ₃	mg/L	<5	-
Hydroxide OH ⁻ as CaCO ₃	mg/L	<5	-
Total Alkalinity as CaCO ₃	mg/L	620	-
Chloride	mg/L	1,700	-
Sulphate	mg/L	1,200	1,000

Ionic Balance	mg/L	16	-
Hardness as CaCO ₃	mg/L	2,800	-
Nutrients in Water			
Total Nitrogen	mg/L	30	25-125 ²
Nitrate as N	mg/L	32	400
Nitrite as N	mg/L	<0.005	30
NO _x as N	mg/L	32	-
Ammonia as N	mg/L	0.015	-
Total Phosphorus	mg/L	0.83	0.8-12 ²
Total Metals in Water			
Aluminium – Total	mg/L	<0.01	5
Arsenic – Total	mg/L	<0.001	0.5
Boron – Total	mg/L	0.81	5
Beryllium – Total	mg/L	<0.0005	Not determined, insufficient background data to calculate
Cadmium – Total	mg/L	0.0002	0.01
Cobalt – Total	mg/L	<0.001	1
Chromium – Total	mg/L	0.010	1
Copper – Total	mg/L	0.052	1
Iron – Total	mg/L	<0.01	Not sufficiently toxic
Manganese – Total Ultra Low	mg/L	<0.001	Not sufficiently toxic
Molybdenum - Total	mg/L	<0.001	0.15
Nickel – Total	mg/L	0.023	1
Lead – Total	mg/L	0.006	0.1
Antimony – Total	mg/L	<0.001	-
Selenium - Total	mg/L	0.009	0.02
Vanadium – Total	mg/L	<0.001	Not determined, insufficient background data to calculate
Zinc – Total	mg/L	0.097	20

Lithium - Total	mg/L	0.045	-
Thallium – Total	mg/L	<0.001	-
Silver – Total	mg/L	<0.001	-
Bismuth - Total	mg/L	<0.001	-
Lanthanum – Total	mg/L	<0.001	-
Tin – Total	mg/L	<0.001	-
Uranium – Total	mg/L	0.0059	0.2
Mercury - Total	mg/L	0.00014	0.002
Field Data			
EC	mg/L	7,600	-
pH	pH units	7.49	-
TDS	mg/L	6,304	4,000

Note 1: ANZECC/ARMCANZ Livestock drinking water quality guidelines

Note 2: ANZECC/ARMCANZ Water quality for irrigation and general water use, Nitrogen and Phosphorus short-term trigger values in irrigation water

Most parameters are within the ANZECC/ARMCANZ Livestock drinking water quality guidelines aside from TDS and Sulphate.

TDS:

TDS is approximately 6,000 mg/L, which is over the guideline value for beef cattle of 4,000 mg/L.

Total Dissolved Solids	No adverse effects on animals expected	Animals may have initial reluctance to drink or there may be some scouring, but stock should adapt without loss of production	Loss of production and a decline in animal condition and health would be expected. Stock may tolerate these levels for short periods if introduced gradually
Beef cattle	0 – 4,000 mg/L	4,000 – 5,000 mg/L	5,000 – 10,000 mg/L

Sulphate:

Sulphate is 1,200 mg/L, which is over the guideline value of 1,000 mg/L.

Sulphate	No adverse effects to stock are expected	Adverse effects may occur especially in young or lactating animals or in dry, hot weather when water intake is high. Effects may be temporary and may cease once stock is accustomed to the water	May cause chronic or acute health problems in stock
	0 – 1,000 mg/L	1,000 – 2,000 mg/L	> 2,000 mg/L

It should be noted that the RO brine water is sprayed to the roadways by dust suppression water

trucks, so unlikely to infiltrate to the groundwater and thus impact on the quality of the groundwater that may be used for livestock watering. The ANZECC/ARMCANZ Livestock drinking water quality guidelines have been used as they are the most applicable guidelines with livestock watering bores the nearest sensitive receptors. The ANZECC/ARMCANZ Water quality for irrigation and general water use, Nitrogen and Phosphorus short-term trigger values in irrigation water have been used for a comparison for Nitrogen and Phosphorus.

The Licence Holder will implement the following monitoring programme in Table 2.

Table 2: Proposed Monitoring Programme

Parameters	Units	Frequency
RO brine flow meter	m ³	Monthly
TDS	mg/L	Monthly
EC	µS/cm	Monthly
pH	pH units	Monthly
Visual integrity pipeline inspection	N/A	Twice weekly

2.4 Other approvals

The Licence Holder has provided the following information relating to other approvals as outlined in Table 3.

Table 3: Relevant approvals

Legislation	Number	Approval
<i>EP Act 1986 – Part IV</i>	MS 1033	The Christmas Creek Iron Ore Mine Expansion, approved 8/08/2016, to allow the expansion of the existing mining footprint, permanent waste landforms, tailings disposal, conveyors, roads, drainage and other associated mine infrastructure.
<i>Iron Ore (FMG Chichester Pty Ltd) Agreement Act 2006</i>	--	The Premises is subject to the <i>Iron Ore (FMG Chichester Pty Ltd) Agreement Act 2006</i> , which ratifies and authorises the development of mining of iron ore by the licence holder within a defined area of the Chichester Ranges, and defines the assistance to be provided by the State government. The Department of Jobs, Tourism, Science and Innovation is responsible for administering this Act.
<i>EPBC Act</i>	EPBC 2013/7055	On 13 November 2013, the Christmas Creek Iron Ore Mine Expansion project was determined to be a controlled action under the EPBC Act due to potential impact on Matters of National Environmental Significance; listed threatened species and communities, and listed migratory species. The proposal was assessed according to the Bilateral Agreement between the Commonwealth and Western Australian governments. The Christmas Creek Iron Ore Mine Expansion was approved under the EPBC Act on 3 January 2017 (EPBC 2013/7055).
<i>Rights in Water and Irrigation Act 1914</i>	-	Christmas Creek Groundwater Operating Strategy (CC-PH-HY-0002, Revision 6, April 2016).

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 *Guidance Statement: Risk Assessments* (DER 2017).

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 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

Emission	Sources	Potential pathways	Proposed controls
<p>RO brine with elevated salinity that is mixed with groundwater resulting in TDS of approximately 6,000 mg/L and an average pH of 7.5</p> <p>The average daily RO reject discharge is approximately 285 KL. The average daily inflow into Codgers is 200L/s, equal to 17,280 KL. Therefore, the RO reject discharge is <2% of the total volume</p> <p>Water quality is provided in Section 2.3</p>	From the pipeline transferring RO brine from the RO Plant to the Codgers Transfer Pond	Direct discharge from pipeline ruptures to soils, vegetation	<p>Twice weekly inspections of the pipeline transferring RO brine from the Karntama RO Plant to the Codgers Transfer Pond</p> <p>Shut off valves, existing telemetry system and pressure transducer utilized for auto-shutdown of the reject water supply</p> <p>Provision for auto-shutdown to stop flow to Codgers Transfer Pond and divert RO brine to the existing irrigation field</p> <p>Pressure relief into the existing irrigation field</p>
	Overtopping of the Codgers Transfer Pond	Direct discharge to soils, vegetation	<p>Minimum vertical freeboard of 200 mm maintained</p> <p>Daily inspections of saline water infrastructure (transfer ponds, settlement ponds and pipelines)</p>
	Seepage of the water in Codgers Pond through the base of the pond	Infiltration through the base to groundwater	HDPE lined pond
	Planned use in dust suppression of the RO brine blended with the Codgers Transfer Pond water	Sprayed along roadways by water trucks for dust suppression	<p>Mixed water quality will generally have a TDS of approximately 6,000 mg/L and an average pH of 7.5</p> <p>The licence holder is not expecting water quality to cause impacts to surrounding vegetation. Dust suppression is undertaken with minimal amount of water only to prevent water logging and run off of the</p>

Emission	Sources	Potential pathways	Proposed controls
			water. Additionally, windrows and grader spoil bunds are in place on either side of the road, which ensure that water is contained within the roadway only.

3.1.2 Receptors

In accordance with the *Guidance Statement: Risk Assessment* (DER 2017), 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 (*Guidance Statement: Environmental Siting* (DER 2016)). See Figure 2 and Figure 3.

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

Human receptors	Distance from prescribed activity
Construction camp and Operations camp	These camps are located within the prescribed premise boundary. Potential impacts of mine operations on these areas are governed by health and safety legislation and as such these are screened out as a sensitive premises.
Townsites and Homesteads	Nullagine is the nearest town, located over 60 km away from the prescribed premise boundary. Screened out as sufficient distance to avoid potential impacts. Roy Hill Station is located 30 km away. Marillana Homestead is located more than 40 km away. Screened out due to sufficient distance from premises.
Environmental receptors	Distance from prescribed activity
Surface water	The premises are situated approximately 1 km from the boundary of Fortescue Marsh. 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 <i>Environment Protection and Biodiversity Conservation Act 1999</i> (EPBC Act) or Declared Rare Flora (DRF) listed under the <i>Biodiversity Conservation Act 2016</i> (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.
Groundwater	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. To the south of the premises, the MMF is overlain by Alluvial Clays and Tertiary Detritals consisting of layers of clays, silts and minor sandy gravels.
Fauna	Significant fauna identified a potentially occurring within the premises are the Northern Quoll, Night Parrot and Greater Bilby, Pilbara Leaf-nosed Bat and Pilbara Olive Python. Screened out as the proposed amendment is not expected to alter the risks to fauna species outside that addressed within MS 1033.

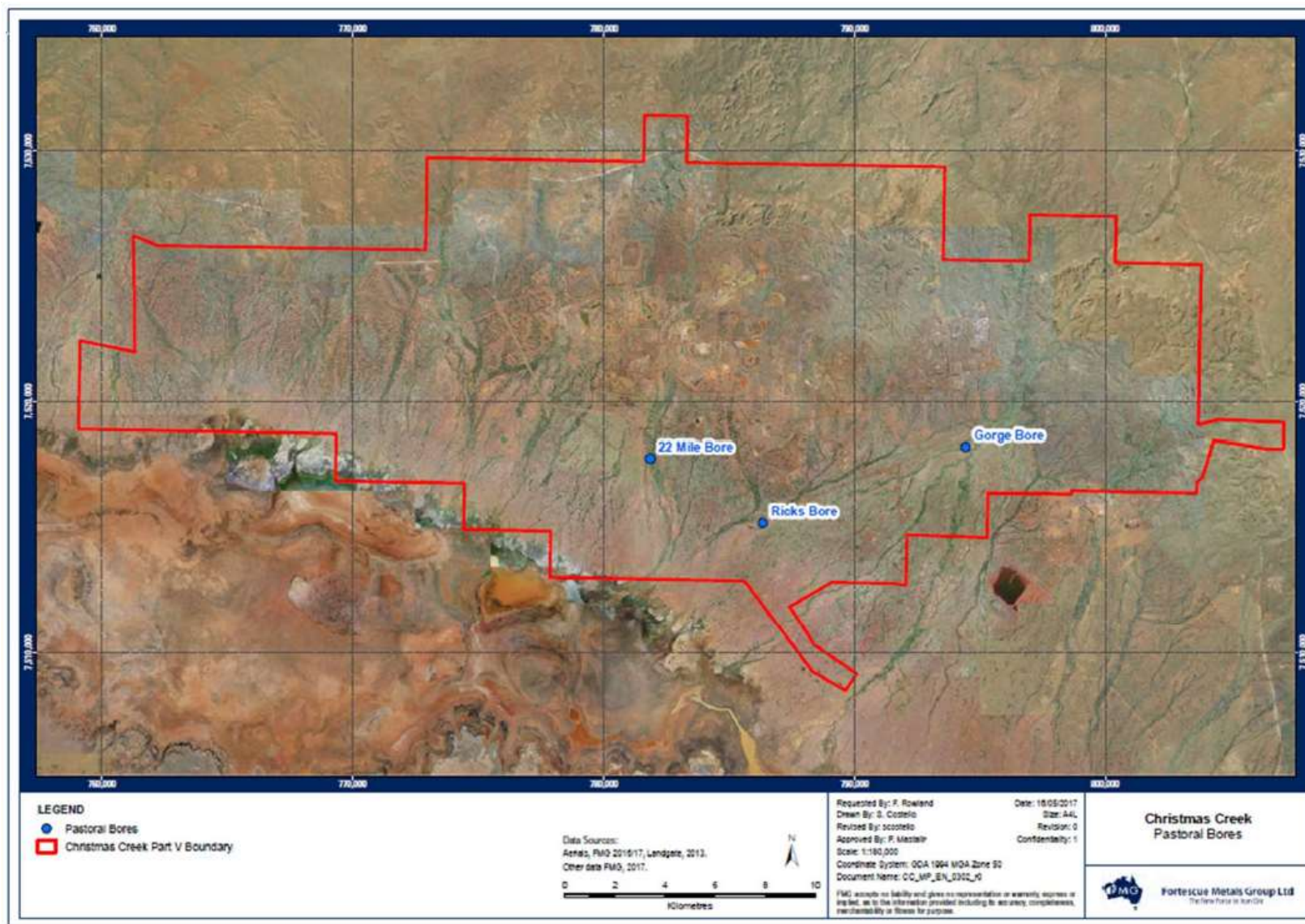


Figure 2: Christmas Creek Pastoral Bores

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IR-T15 Amendment Report Template v2.0 (July 2020)

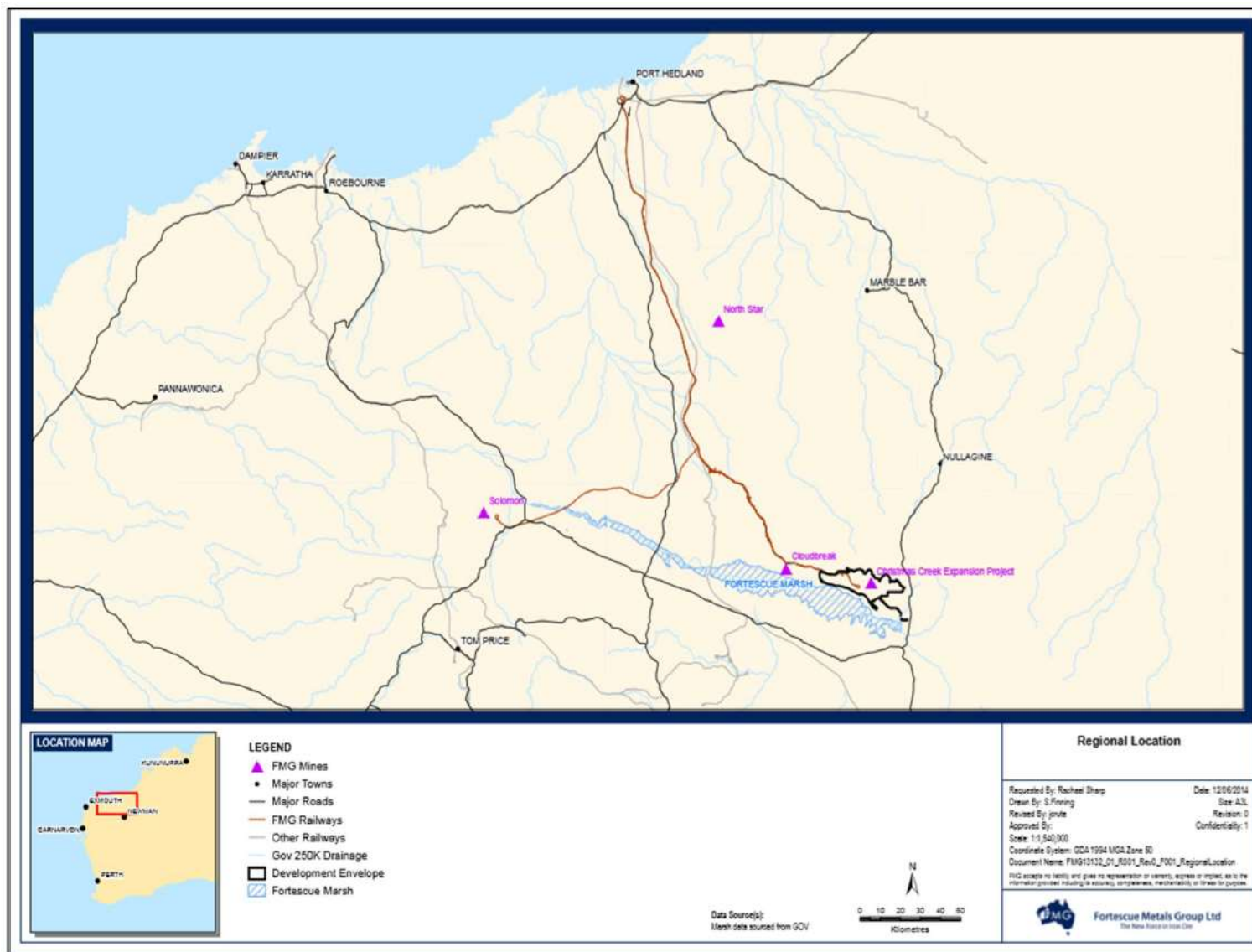


Figure 3: Nearby receptors

Licence: L8454/2010/2

IR-T15 Amendment Report Template v2.0 (July 2020)

3.2 Risk ratings

Risk ratings have been assessed in accordance with the *Guidance Statement: Risk Assessments* (DER 2017) for those emission sources which are proposed to change and takes into account potential source-pathway and receptor linkages as identified in Section 3.1. Where linkages are in-complete they have not been considered further in the risk assessment.

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

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

The Revised Licence L8454/2010/2 that accompanies this Amendment Report authorises emissions associated with the operation of the Premises i.e. the use of RO brine as dust suppression.

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

Table 6. Risk assessment of potential emissions and discharges from the Premises during 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				
Operation								
RO reject water (brine) used on roadways in dust suppression	Saline mixed water with a TDS of approximately 6,000 mg/L and an average pH of 7.5 Water quality is provided in Section 2.3	Direct discharge to roadways that could result in runoff and impact on nearby vegetation along roadways	Fortescue Marsh 1km Vegetation	Refer to Section 3.1.1	C = Minor L = Possible Medium Risk	Y	Condition 2.4.1, Table 2.4.1 <u>Condition 3.4.1, Table 3.4.1</u>	Monitoring of cumulative volume, pH, Electrical Conductivity, TDS and Sulphate
		Direct discharge to roadways that could infiltrate to groundwater	Livestock using groundwater Groundwater sensitive vegetation	Refer to Section 3.1.1	C = Minor L = Unlikely Medium Risk	Y	Condition 2.4.1, Table 2.4.1 <u>Condition 3.4.1, Table 3.4.1</u>	Monitoring of cumulative volume, pH, Electrical Conductivity, TDS and Sulphate
		Compromised integrity of pipelines resulting in direct discharge of saline mixed water to the pipeline route impacting vegetation	Fortescue Marsh 1km Vegetation	Refer to Section 3.1.1	C = Minor L = Unlikely Medium Risk	Y	None	Addition of twice weekly visual monitoring of the pipeline transferring RO brine from the Karntama WWTP to the Codgers Transfer Pond included
		Compromised integrity of pipelines resulting in direct discharge of saline mixed water infiltrating to groundwater	Livestock using groundwater Groundwater sensitive vegetation	Refer to Section 3.1.1	C = Minor L = Rare Low Risk	Y	None	Addition of twice weekly visual monitoring of the pipeline transferring RO brine from the Karntama WWTP to the Codgers Transfer Pond included
		Overtopping of the Codgers Transfer Pond	Fortescue Marsh 1km	Refer to Section 3.1.1	C = Minor	Y	Condition 1.2.2, Table 1.2.1 requires HDPE lining and freeboard of 200 mm	N/A

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Risk Event					Risk rating ¹	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	C = consequence L = likelihood			
		resulting in direct discharge of water impacting on nearby vegetation	Vegetation		L = Unlikely Medium Risk		for Codgers Transfer Pond Condition 1.2.3, Table 1.2.2 requires daily inspections of saline water infrastructure (transfer ponds, settlement ponds and pipelines)	
		Overtopping of the Codgers Transfer Pond resulting in direct discharge of water infiltrating to groundwater	Livestock using groundwater Groundwater sensitive vegetation	Refer to Section 3.1.1	C = Minor L = Rare Low Risk	Y	Condition 1.2.2, Table 1.2.1 requires freeboard of 200 mm for Codgers Transfer Pond Condition 1.2.3, Table 1.2.2 requires daily inspections of saline water infrastructure (transfer ponds, settlement ponds and pipelines)	N/A
		Seepage from Codgers Pond	Livestock using groundwater Groundwater sensitive vegetation	Refer to Section 3.1.1	C = Minor L = Rare Low Risk	Y	Condition 1.2.2, Table 1.2.1 requires HDPE lining of Codgers Transfer Pond	N/A

Note 1: Consequence ratings, likelihood ratings and risk descriptions are detailed in the *Guidance Statement: Risk Assessments* (DER 2017).

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

4. Consultation

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

Table 7: Consultation

Consultation method	Comments received	Department response
Licence Holder was provided with draft amendment on 23 October 2020	Refer to Appendix 1	Refer to Appendix 1

5. Conclusion

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

5.1 Summary of amendments

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

Table 8: Summary of licence amendments

Condition no.	Proposed amendments
Definitions	'ANZECC/ARMCANZ' means Australian and New Zealand Guidelines for Fresh and Marine Water Quality, included in definitions.
1.2.3, Table 1.2.2	Twice weekly visual monitoring of the pipeline transferring RO brine from the Karntama WWTP to the Codgers Transfer Pond included.
1.2.5, Table 1.2.3	Authorising the RO Reject Stream for onsite irrigation and for dust suppression on roadways as part of this amendment.
1.2.9, Table 1.2.6	Removed the Vertical Wet High Intensity Magnetic Separator (V-WHIMS) Plant, Diesel Generator Sets and Reverse Osmosis Plant as the Compliance Documents have been received, including infrastructure requirements. Modifying the number of saline reinjection bores from 15 to 10 as some have already been stalled and this was not updated during the last amendment. This is now 5 as compliance documentation has been received for more saline reinjection bores, which have been removed (SAI38, SAI39, SAI40, SAI41 and SAI42). Added pipeline from Karntama RO Plant to Codgers Transfer Pond for infrastructure requirements.
1.2.10	Included pipeline from Karntama RO Plant to Codgers Transfer Pond for operation after compliance.
2.4.1, Table 2.4.1	Adding in L4 as an emission point reference for RO brine used in dust suppression.
3.4.1, Table 3.4.1	Adding in comparison to relevant ANZECC/ARMCANZ Guidelines and monitoring for L4 discharges in dust suppression.
4.2.1, Table 4.2.1	Added in comparison to relevant ANZECC/ARMCANZ Guidelines.
4.3.1, Table 4.3.1	Removed the V-WHIMS Plant, Diesel Generator Sets and Reverse Osmosis Plant as the Compliance Documents have been received.

	Added in pipeline from Karntama RO Plant to Codgers Transfer Pond.
Schedule 1: Maps	Maps updated

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

Condition	Summary of Licence Holder's comment	Department's response			
3.4.1, Table 3.4.1	Clarifying the use of the ANZECC/ARMCANZ Guidelines.	Section 2.3 of this Amendment Report explains this			
1.2.5, Table 1.2.3	<p>Please change text in Table 2.4.1 to reflect the proposed changes below to correctly reflect the operational use of the reject water on site. As previously mentioned in the response to comments on 22 September, RO reject water from Codgers Transfer Pond feeds a number of other ponds where the reject water may be used for dust suppression through water cannons on ore stockpiles, re-used for ore processing or used for dust suppression on the roads.</p> <table border="1"> <tr> <td><u>Reverse Osmosis (RO) Reject Stream</u></td><td>Onsite dust suppression on roadways and/or ore processing using blended RO reject stream with mine dewatering water</td><td>Undiluted RO reject stream will not be used for dust suppression and/or ore processing</td></tr> </table>	<u>Reverse Osmosis (RO) Reject Stream</u>	Onsite dust suppression on roadways and/or ore processing using blended RO reject stream with mine dewatering water	Undiluted RO reject stream will not be used for dust suppression and/or ore processing	Updated as requested
<u>Reverse Osmosis (RO) Reject Stream</u>	Onsite dust suppression on roadways and/or ore processing using blended RO reject stream with mine dewatering water	Undiluted RO reject stream will not be used for dust suppression and/or ore processing			
2.4.1, Table 2.4.1	Please change text in Table 2.4.1 to reflect the proposed changes below to correctly reflect the operational use of the reject water on site. As previously mentioned in the response to comments on 22 September, RO reject water from Codgers Transfer Pond feeds a number of other ponds where the reject water may be used for dust suppression through water cannons on ore stockpiles, re-used for ore processing or used for dust suppression on the roads.	Updated as requested			

Condition	Summary of Licence Holder's comment			Department's response
	<p>L4 – RO brine used for in dust suppression and/or ore processing on roadways via water trucks</p>	<p>RO brine is transferred to the Codgers Transfer Pond where it is mixed with groundwater and used for dust suppression and/or ore processing.</p> <p>Water trucks take mixed water from the Codgers Transfer Pond and spray the mixed water on roadways for dust suppression</p>	<p>RO reject water (brine)</p>	