

# **Amendment Notice 1**

Licence Number L8199/2007/2

**Licensee** Chichester Metals Pty Ltd

**ACN** 109 264 262

File Number: DER2013/001073

Premises Cloudbreak Iron Ore Mine

Mining Tenements M45/1126, M46/401, M46/404, M46/405, M46/356, M46/402, M46/410, M46/411, M46/357, M46/409, M46/453, M45/1128, M46/449, M46/452, M46/451, M46/454, M46/450, M45/1084, M45/1140, M45/1139, M46/423, M46/424, M45/1102, M45/1105, M45/1124, M45/1103, M45/1106, M45/1125, M45/1104, M45/1107, L46/48, L46/49, M45/1082, M45/1083. M45/1127, M45/1138. M46/403, M46/406, M46/407, M46/408, M46/409, M46/412, M46/413, M46/414, M46/415, L46/52, L46/99, L46/46, L46/96, L46/49, L46/64, L45/152, L46/47, L46/48, L46/51, L46/60, L46/57, L46/62 and Exploration Leases E45/2498, E46/590, E46/612,

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E46/724, E45/2499, E45/2652 MULGA DOWNS WA 6751

Date of Amendment 27/02/2018

#### Amendment

The Chief Executive Officer (CEO) of the Department of Water and Environmental Regulation (DWER) has amended the above Licence in accordance with section 59 of the *Environmental Protection Act 1986* (EP Act) as set out in this Amendment Notice. This Amendment Notice constitutes written notice of the amendment in accordance with section 59B(9) of the EP Act.

Date signed: 27 February 2018

#### Alana Kidd

#### Manager Licensing, Industry Regulation (Resource Industries)

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

# **Definitions and interpretation**

## **Definitions**

In this Amendment Notice, the terms in Table 1 have the meanings defined.

**Table 1: Definitions** 

Term	Definition			
ACN	Australian Company Number			
Amendment Notice	refers to this document			
Category/ Categories/ Cat.	categories of Prescribed Premises as set out in Schedule 1 of the EP Regulations			
CEO	means Chief Executive Officer			
	CEO for the purposes of notification means:			
	Director General Department Administering the Environmental Protection Act 1986 Locked Bag 33 Cloisters Square PERTH WA 6850 info@dwer.wa.gov.au			
Delegated Officer	an officer under section 20 of the EP Act			
Department	means the department established under section 35 of the <i>Public Sector Management Act 1994</i> and designated as responsible for tadministration of Part V, Division 3 of the EP Act			
DWER	Department of Water and Environmental Regulation			
EPA	Environmental Protection Authority			
EP Act	Environmental Protection Act 1986 (WA)			
EP Regulations	Environmental Protection Regulations 1987 (WA)			
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999 (Cth)			
Existing Licence	The Licence issued under Part V, Division 3 of the EP Act and in force prior to the commencement of and during this Amendment			
GLpa	gigalitres per annum			
Licensee	Chichester Metals Pty Ltd			
m³	cubic metres			
Minister	the Minister responsible for the EP Act and associated regulations			

Term	Definition				
MS	Ministerial Statement				
mtpa	million tonnes per annum				
MVV	megawatt				
Occupier	has the same meaning given to that term under the EP Act				
Prescribed Premises	has the same meaning given to that term under the EP Act				
Premises	refers to the premises to which this Amendment Notice applies, as specified at the front of this Amendment Notice				
RIWI Act	Rights in Water and Irrigation Act 1914				
Risk Event	as described in Guidance Statement: Risk Assessment				
UDR	Environmental Protection (Unauthorised Discharges) Regulations 2004 (WA)				

## **Amendment Notice**

This amendment is made pursuant to section 59 of the EP Act to amend the Licence issued under the EP Act for a prescribed premises as set out below. This notice of amendment is given under section 59B(9) of the EP Act.

This notice is limited only to an amendment for the construction and operation of the Norfolk and Kangaroo transfer ponds. No other changes to the aspects of the Existing Licence relating to category 5, 6, 52, 54, 57, 64 and 73 have been requested by Chichester Metals Pty Ltd (Licensee).

The following guidance statements have informed the decisions made on this amendment:

- Guidance Statement: Regulatory Principles (July 2015);
- Guidance Statement: Setting Conditions (October 2015);
- Guidance Statement: Decision Making (February 2017);
- Guidance Statement: Risk Assessment (February 2017); and
- Guidance Statement: Environmental Siting (November 2016).

## **Amendment description**

On 13 December 2017 and 28 December 2017, the Licensee submitted an application (Application, 2017) and additional information (FMG, 2017) to DWER for an amendment to the Cloudbreak Iron Ore Mine (Premises) licence L8199/2007/2. The Licensee has applied to construct and operate the Norfolk and Kangaroo transfer ponds and associated pipework as part of the re-injection infrastructure.

Groundwater abstracted to facilitate mining below the water table is transferred to the bore reinjection system via a network of pipelines. The saline re-injection infrastructure consists of a complicated network of numerous paths and nodes including bores, pipelines, pumps, and transfer ponds. Saline water is pumped from saline transfer ponds via the saline re-injection pipeline network and headers which facilitate its transfer to saline re-injection bores.

The Norfolk transfer pond will contain saline water. The Kangaroo transfer pond will contain either brackish or saline water. There are a series of existing pipelines in the vicinity of the proposed transfer ponds which will be connected to these ponds and associated pipelines. The system will be isolated during the connection of these ponds to the existing pipework.

There is no change to the Existing Licence volume or nature of the emissions.

During this amendment, DWER has also updated Table 1.2.6 to include specified infrastructure requirements for the construction of the replacement Power Station generator sets (gensets) as derived from the Licensee's obligations within FMG, 2015.

## Other approvals

Other approvals relevant to the Premises are outlined in Table 2.

**Table 2: Relevant approvals** 

Legislation	Number	Approval		
Part IV of the EP Act	Ministerial Statement (MS) 899	The Cloudbreak Life of Mine Project was referred to the Environmental Protection Authority (EPA) on 2 September 2010 and involved the expansion of mining, ore production, waste dumps, dewatering and water disposal options. MS 899 for the Cloudbreak Life of Mine Project was issued 5 June 2012, superseding the conditions of MS 721.  The Minister's decision that the Cloudbreak Life of Mine Project may be implemented subject to conditions was informed by the EPA assessment (Assessment Number 1848), which produced EPA Report 1429. In its assessment the EPA determined that the following were key environmental factors relating to the proposal:		
		<ul> <li>Flora and Vegetation;</li> </ul>		
		<ul> <li>Conservation significant fauna;</li> </ul>		
		Surface water flows;		
		<ul> <li>Groundwater quantity and quality;</li> </ul>		
		Rehabilitation and closure; and		
		Residual impacts		
	MS 962	On 18 March 2014, MS 962 was issued to amend MS 899 conditions 7-1 and 7-2 relating to Groundwater Levels - Fortescue Marsh		
	MS 1010	MS 1010 was issued on 4 August 2015 to approve an increase in groundwater abstraction and reinjection from 100 gigalitres per annum (GLpa) to 150 GLpa,		

Legislation	Number	Approval
		noting that the implementation conditions of MS 899, as amended by MS 962, apply to the revised proposal
Iron Ore (FMG Chichester Pty Ltd) Agreement Act 2006		The Premises is subject to the <i>Iron Ore</i> ( <i>FMG Chichester Pty Ltd</i> ) Agreement Act 2006, which ratifies and authorises the development of mining of iron ore by the Licensee 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
Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)	EPBC No. 2010/5696	The Commonwealth of Australia considered the Cloudbreak Life of Mine Project to be a controlled action under the EPBC Act because of potential significant impacts to listed threatened species and communities and listed migratory species.  The proposal was assessed according to the Bilateral Agreement between the Commonwealth and State of Western Australia. The Cloudbreak Life of Mine Project was approved under the EPBC Act on 29 November 2012
Rights in Water and Irrigation Act 1914 (RIWI Act)	Section 5C Groundwater Licences	Groundwater abstraction is undertaken to enable the mining of ore below the water table and provide mine site water supply.  In accordance with the requirements of the Section 5C Licence, the Licensee has developed the "Cloudbreak Groundwater Operating Strategy". This strategy documents the operation of dewatering, injection and process water supply systems and the management systems to be implemented to monitor and mitigate potential impacts

## **Amendment history**

Table 3 provides the amendment history for L8199/2007/2.

**Table 3: Licence amendments** 

Instrument	Issued	Amendment				
L8199/2007/2	09/08/2012	Licence amendment to increase capacity of category 6 from 25 million tonnes per annum (mtpa) to 48 mtpa				
L8199/2007/2	14/03/2013	Licence amendment to increase the capacity of category 52, inclusion of category 73 and replacing category 89 with category 64				
L8199/2007/2	18/07/2013	Licence amendment to increase the capacity for category 6, 54 and 73 and removal of vegetation health monitoring requirements as these are regulated under Part IV of the EP Act				
L8199/2007/2	28/11/2013	Licence amendment to facilitate the construction and operation of additional mobile crushing and screening facilities, to include the monitoring of groundwater bores associated with the operation of the Brampton Phase 2 Tailings Storage Facility and to lengthen the landfill tipping length				
L8199/2007/2	16/04/2014	Licence amendment to increase the capacity for category 6 from 85 mtpa to 95 mtpa for reinjection				
L8199/2007/2	18/12/2014	Licence amendment to increase category 6 from 95 mtpa to 115 mtpa for groundwater reinjection and increase category 73 from 6,132 cubic metres (m³) to 7,700.5 m³				
L8199/2007/2	17/12/2015	Licence amendment to modify the groundwater monitoring requirements for the bulk fuel facility, expand the prescribed premises boundary, update the landfill requirements, include two groundwater monitoring bores associated with the landfill, increase mine dewatering abstraction and reinjection from 115 mtpa to 150 mtpa and replace 18 of the power station gensets over the next 1 to 2 years and conversion to updated licence template				
L8199/2007/2	29/04/2016	Amendment to extend licence expiry date to 3 February 2032				
L8199/2007/2	01/03/2017	Licence amendment to include specific groundwater emission points and monitoring requirements, remove reference to the implementation of the <i>Cloudbreak Water Management Scheme</i> , changes to the landfill ambient groundwater monitoring, increase category 5 production capacity and removal of conditions that are not valid, enforceable or risk-based				
L8199/2007/2	27/02/2018	Amendment Notice 1				

Instrument	Issued	Amendment
		Licence amendment to include the construction and operation of the Norfolk and Kangaroo transfer ponds

## **Location and receptors**

The Premises is located approximately 120 kilometres (km) north-west of Newman and 89 km west-south-west of Nullagine in the Pilbara region of Western Australia. There are no relevant sensitive land uses in the vicinity of the Prescribed Premises with Marillana Station and Bamboo Springs located approximately 31.5 km and 34.8 km respectively from the Premises.

The Premises is located directly west of the Christmas Creek Iron Ore Mine which is also owned and operated by the Licensee. The workforce for the Premises operates on a fly-in/fly-out basis and is housed at the accommodation camps located within the Premises. As the accommodation camps are operated by the Licensee, they are not considered a sensitive land use or receptor.

Table 4 below lists the relevant environmental receptors in the vicinity of the Prescribed Premises which may be receptors relevant to the proposed amendment.

Table 4: Environmental receptors and distance from activity boundary

Environmental receptors	Distance from Prescribed Premises
The Fortescue Marsh is listed in <i>A Directory</i> of <i>Important Wetlands in Australia</i> and listed as a Priority 1, Priority Ecological Community by the Department of Biodiversity, Conservation and Attractions (PEC, 2017)	1 km to 10 km south of the Premises 4 km south of the transfer ponds
The Fortescue Marsh occupies an area around 100 km long by typically 10 km wide and is the largest ephemeral wetland in the Pilbara	

#### Risk assessment

Tables 5 and 6 below describe the Risk Events associated with the amendment consistent with the *Guidance Statement: Risk Assessments*. Both tables identify whether the emissions present a material risk to public health or the environment, requiring regulatory controls.

Table 5: Risk assessment for proposed amendments during construction

			Event Event						
Source/Activitie	es	Potential emissions	Potential receptors	Potential pathway	Potential adverse impacts	Consequence rating	Likelihood rating	Risk	Reasoning
		Dust associated with construction activities of the	The closest sensitive receptor is Marillana Station located approximately 31.5 km from the Premises		Public health and amenity impacts	Slight	Rare	Low	The Delegated Officer considers the distance to the closest sensitive receptor to be sufficient to ensure that there is minimal impacts to public health and amenity on a local scale
Construction, mobilisation and positioning of infrastructure	Disturbance of ground from earthworks and construction activities	sturbance ground and pipelines transfer ponds	Flora and	r ponds elines  Flora and  Air / win dispersi	photosynthesis and plant	Slight	Unlikely	Low	The Delegated Officer considers the natural dust tolerance of vegetation species should ensure that there is minimal onsite impacts to vegetation
for transfer ponds and associated pipeworks		Noise associated with construction activities of the transfer ponds and pipelines	The closest sensitive receptor is Marillana Station located approximately 31.5 km from the Premises		Amenity impacts	Slight	Rare	Low	The Delegated Officer considers the distance to the closest sensitive receptor to be sufficient to ensure that there is minimal impacts to amenity on a local scale
	Disturbance of terrestrial vegetation for laying of pipeline	No emission	Terrestrial vegetation in the pathway of the pipeline/s	Direct impact	Loss of local biodiversity	N/A	N/A	N/A	"Area Disturbed" is managed under Part IV of the EP Act

Table 6: Risk assessment for proposed amendments during operation

Table 0. Kish	Risk Event								
Source/Activit	ies	Potential emissions	Potential receptors	Potential pathway	Potential adverse impacts	Consequence rating	Likelihood rating	Risk	Reasoning
Transfer ponds	Saline groundwater storage within the transfer ponds	Spill of saline groundwater from overtopping of transfer ponds	Terrestrial environment adjacent to the transfer ponds	Direct discharges to land	Degradation of soils as water quality is saline	Major	Unlikely	Medium	The Saline Water Infrastructure Environmental Improvement Assessment defined environmentally sensitive areas as vegetated areas containing Mulga (Acacia aneura). The transfer ponds and associated pipelines are located within the sensitive area.  The transfer ponds and pipelines are also located within the Proposed Conservation Reserve and within zone 1a (northern flank) Fortescue Marsh management area (FMG, 2017).  Notwithstanding this, the
									Project Area in which the transfer ponds and pipelines are located has
Saline groundwater pipework	Pipelines transferring saline groundwater	Spill of saline groundwater from leaks or ruptures of pipeline/s	Terrestrial environment adjacent to pipeline alignment	Direct discharges to land	Degradation of soils as water quality is saline Vegetation inundation with saline groundwater	Major	Unlikely	Medium	been approved under MS 899, which authorises a disturbance area of up to 13,633 hectare (ha) within a 35,390 ha Project Area, where 5,500 ha applies to Existing Mine and 8,133 ha applies to the Expansion.  Based on the above, the

		impact from overtopping of the transfer ponds and leaks or ruptures of the pipelines would result in high level on-site impacts and mid level off-site impacts on a local scale.
		The Licensee will implement the following controls:
		The transfer ponds will be constructed of HDPE / concrete or similar impermeable layer;
		<ul> <li>The pipework will be constructed of HDPE; and</li> </ul>
		<ul> <li>Flow meters and pressure gauges will be installed on the pipework.</li> </ul>
		Conditions on the Existing Licence are applicable and relate to:
		Containment     requirements for the     transfer ponds     including maintaining     a minimum vertical     freeboard of 200 mm;
		<ul> <li>Daily visual inspections of the transfer ponds and pipelines; and</li> </ul>
		Implementation of a leak detection system on the saline/hypersaline

				pipelines.
				The likelihood of the consequence is unlikely.
				The risk rating for the overtopping of the transfer ponds and leaks or ruptures of the pipelines is medium.

#### **Decision – Construction**

The Licensee controls for the construction of the transfer ponds and associated pipeworks have been conditioned via this Amendment Notice through condition 1.2.9 and were derived from the Licensee's obligations within FMG, 2017.

Condition 1.2.11 has been included via this Amendment Notice and allows for the operation of the Norfolk and Kangaroo transfer ponds following submission of a compliance document required under condition 4.3.1.

## **Decision - Operation**

The Delegated Officer has determined that the key emissions associated with the operation of the Norfolk and Kangaroo transfer ponds and associated pipework to be discharges to land.

The Delegated Officer considers the risk associated with the discharge of saline groundwater from the overtopping of the transfer ponds and pipeline leaks or ruptures to be *medium*, but considers the existing regulatory controls (Existing Licence conditions 1.2.2, 1.2.3 and 1.2.10) sufficient in terms of regulatory control.

## **Power Station gensets**

The Power Station comprises of 22, 2.2 megawatt (MW) and one 2.8 MW, diesel powered gensets, with a combined design capacity of 52 MW.

The Existing Licence was amended (17 December 2015) to allow for the replacement of 18 existing G62 gensets at the Power Station with newer G63 gensets (FMG, 2015).

FMG, 2016 states that "Engines one (1) through to eight (8) have been replaced with the newer model diesel generators (G63s) and commissioning has been completed. Engines nine (9) and ten (10) have been replaced however are yet to be commissioned. It is expected commissioning of these two engines will be completed within the next few months".

Previous Table 1.2.6 of the Existing Licence has been removed via this Amendment Notice as conditions must not reference applications or other documentation. Specified infrastructure requirements for the construction of the replacement Power Station gensets have been included in Table 1.2.6 of this Amendment Notice and were derived from the Licensee's obligations within FMG, 2015.

The operation of the replacement Power Station gensets is authorised via this Amendment Notice under condition 1.2.11 following submission of the compliance report now required under condition 4.3.1 (previously under condition 4.2.1).

### Other amendments

During this amendment the following administrative changes have also been made to the Licence:

- All references to DER changed to DWER.
- Addition of definition for 'GLpa' and 'TSFs' and updates to the definitions for 'Annual Period', 'CEO', 'CEO for the purposes of notification', 'Department', 'quarterly' and 'six monthly'.
- Conditions 1.2.10 and 4.3.1 have been updated via this Amendment Notice to remove reference to Phase 1 for the detailed leak detection system. The Licensee submitted the Report on the Detailed Engineering for the Optimal Leak Detection System at the Cloudbreak and Christmas Creek Mines (Phase 1) to DWER on 10 October 2017 satisfying conditions 1.2.10 and 4.3.1 for Phase 1.

- Inclusion to condition 3.1.2 to ensure that six monthly monitoring is undertaken at least 5 months apart.
- Condition 3.2.1 includes point source emissions to surface water limits for Electrical conductivity and Turbidity. Condition 4.3.1 has been updated via this Amendment Notice to include Table 3.2.1 for the reporting of a breach of the limit specified.
- Removal of reference to "each phase" from condition 4.3.1 for condition 1.2.10 as Phase 1 for the detailed leak detection system has been provided to DWER. The Phase 2 report is due for completion by quarter 4 of the 2018 financial year.
- The second map under Map of containment infrastructure in Schedule 1 has been deleted and replaced with the map in Attachment 1 of this Amendment Notice which includes the location of the Norfolk and Kangaroo transfer ponds.

### Licensee's comments

The Licensee was provided with the draft Amendment Notice on 14 February 2018. Comments received from the Licensee have been considered by the Delegated Officer as shown in Appendix 2.

#### **Amendment**

1. Definitions of the Licence are amended by the deletion of the text shown in strikethrough below and the insertion of the bold text shown in underline below:

**'<u>A</u>annual <u>P</u>period'** means <u>a 12 month</u> the inclusive period <u>commencing</u> from 1 January to 31 December in the same year;

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

'CEO' for the purposes of notification correspondence means:

**Director General** Chief Executive Officer

Department <u>Administering</u> Division 3 Part V of the Environmental Protection Act 1986

Locked Bag 33 Cloisters Square

PERTH WA 6850

Email: info@dwer.wa.gov.au;

**'Department'** means the department established under section 53 of the Public Sector Management Act <u>1994</u> and designated as responsible for the administration of <u>Part V</u>, Division 3 Part V of the Environmental Protection Act <u>1986</u>;

### 'GLpa' means gigalitres per annum;

'quarterly' means the 4 inclusive periods from 1 January to 31 March, 1 April to 30 June, 1 July to 30 September, and 1 October to 31 December and in the following year, 1 January to 31 March;

'six monthly' means the 2 inclusive periods from 1 January to 30 June and 1 July to 31 December 1 April to 30 September and 1 October to 31 March in the following year;

#### 'TSFs' means Tailings Storage Facilities;

- 2. Condition 1.2.9 of the Licence is amended by the deletion of the text shown in strikethrough below and the insertion of the bold text shown in underline below:
  - 1.2.9 The Licensee shall construct the replacement of the Power Station generators.

    Norfolk and Kangaroo transfer ponds in accordance with the requirements specified in the infrastructure requirements documentation detailed in Table 1.2.6. The Licensee must not depart from the design and construction requirements specified in Table 1.2.6 except:
    - (a) where such departure is minor in nature and does not materially change or affect the infrastructure; or
    - (b) where such departure improves the functionality of the infrastructure and does not increase risks to public health, public amenity or the environment;

and all other conditions in this Licence are still satisfied.

Table 1.2.6 Construction Requirements⁴							
<b>Document</b>	<del>Parts</del>	Date of Document					
Letter correspondence, Licence Amendment Application for the Power Station at the Cloudbreak Mine (L8199/2007/2), Fortescue Metals Group Limited	All	11 November 2015					

Table 1.2.6: Infrastructure requirements <sup>1</sup>			
<u>Infrastructure</u>	Requirements (Design and construction)		
Power Station generators	Replacement of 8 x G62s gensets with G63s gensets		
Norfolk and Kangaroo transfer ponds	<ul> <li>Transfer ponds</li> <li>HDPE liner/concrete or similar impermeable layer; and</li> <li>Minimum vertical freeboard of 200 mm;</li> <li>Pipework</li> <li>HDPE; and</li> <li>Flow meters and pressure gauges installed</li> </ul>		

Note 1: Where the details and commitments of the documents listed in condition 1.2.9 are inconsistent with any other condition of this Licence, the conditions of this Licence shall prevail.

- 3. Condition 1.2.10 of the Licence is amended by the deletion of the text shown in strikethrough below and the insertion of the bold text shown in underline below:
  - 1.2.10 The Licensee shall implement a leak detection system on the saline/hypersaline pipelines, as identified on the map of environmentally sensitive areas depicted in Schedule 1, in accordance with the following implementation schedule:
    - (a) Phase 1 detailed engineering of the optimal leak detection system following on site pilot testing and procurement of new equipment to be completed by guarter 1 of the 2018 financial year; and
    - (b) (a) Phase 2 (a) Linstallation, testing and commissioning of the leak detection system to be completed by quarter 4 of the 2018 financial year.
- 4. The Licence is amended by the insertion of the following Condition 1.2.11
  - 1.2.11 The Licensee shall operate the replacement Power Station generators, and Norfolk and Kangaroo transfer ponds in accordance with the conditions of this Licence, following submission of the compliance documents required under condition 4.3.1.

- 5. Condition 3.1.2 of the Licence is amended by the deletion of the text shown in strikethrough below and the insertion of the bold text shown in underline below:
  - 3.1.2 The Licensee shall ensure that:
    - (a) monthly monitoring is undertaken at least 15 days apart;
    - (b) quarterly monitoring is undertaken at least 45 days apart; and
    - (c) six monthly monitoring is undertaken at least 5 months apart; and
    - (d) annual monitoring is undertaken at least 9 months apart.
- 6. Condition 4.2.1 of the Licence is amended by the deletion of the text shown in strikethrough below:
  - 4.2.1 The Licensee shall submit to the CEO an Annual Environmental Report by 31 March each year. The report shall contain the information listed in Table 4.2.1 in the format or form specified in that table.

Table 4.2.1: An	nual Environmental Report	
Condition or table (if relevant)	Parameter	Format or form <sup>‡</sup>
-	Summary of any failure or malfunction of any pollution control equipment and any environmental incidents that have occurred during the annual period and any action taken	None specified
Table 1.2.1	Location of ponds/sumps used for the storage of potentially contaminated water	Map and grid coordinates
Table 1.2.3	Location of tyre disposal areas	Map and grid coordinates
Table 1.2.6	Provide an update on the status of the construction of the replacement of the Cloudbreak mine power station generators as specified in condition 1.2.9.  The Licensee must:	None specified
	<ul> <li>(a) confirm that the works were constructed in accordance with condition 1.2.9 and Table 1.2.6; and</li> <li>(b) be signed by a person authorised to represent the Licence Holder and contain the printed name and position of that person within the company.</li> </ul>	
	The Licensee shall operate the Cloudbreak mine power station replacement generators in accordance with the conditions of this Licence.	
Table 2.1.1	Average percentage sulphur content of diesel fuel used	None specified
Table 2.4.1	L1 – representative photographs of the irrigation area, summary of vegetation health and weed management implemented during reporting period	None specified
Table 3.2.1	Contingency discharge monitoring	None specified
Table 3.3.1	Groundwater reinjection monitoring and a comparison of results against background water quality and/or established trigger values. Details of	None specified

	investigations conducted, including outcomes, environmental impacts and remedial actions, in relation to deviations from background water quality and/or trigger exceedances	
Table 3.4.1	Monitoring of emissions to land and interpretation of results against plant design specifications	None specified
Table 3.5.1	Process monitoring results and interpretation of results	None specified
Table 3.6.1	Ambient groundwater monitoring and a comparison of results against background water quality and established trigger values. Details of investigations conducted, including outcomes, environmental impacts and remedial actions, in relation to deviations from background water quality and/or trigger exceedances	None specified
4.1.2	Annual Audit Compliance Report	None specified
4.1.3	Complaints summary	None specified

Note 1: Forms are in Schedule 2

- 7. Condition 4.3.1 of the Licence is amended by the deletion of the text shown in strikethrough below and the insertion of the bold text shown in underline below:
  - 4.3.1 The Licensee shall ensure that the parameters listed in Table 4.3.1 are notified to the CEO in accordance with the notification requirements of the table.

Table 4.3.1: Notification requirements			
Condition or	Parameter	Notification requirement <sup>1</sup>	Format or
table			form <sup>2</sup>
(if relevant)			
Table <u>s</u> 1.2.3,	Breach of any limit	Part A: As soon as practicable	N1
1.2.5 <u>, <b>3.2.1</b></u>	specified in the Licence	but no later than 5pm of the next	
and 3.5.1		usual working day.	
		Part B: As soon as practicable	
1.2.10	Saline/hypersaline water	Within 14 days of the completion	None
	pipeline telemetry	of works, notify the CEO in	specified
	installation	writing on the completion of	
		Phase 2 each phase of the	
		saline/hypersaline leak detection	
		system, and provide a report to	
		the CEO which describes the	
		work undertaken and outcome	
		for each phase of	
4044	The Lie was a shall	implementation	A/
<u>1.2.11</u>	The Licensee shall	Within 7 days of the	None None
	submit a compliance	completion of construction	<u>specified</u>
	document to the CEO,		
	following the		
	construction of the		
	replacement Power		
	Station generators, and		
	Norfolk and Kangaroo		
	transfer ponds. The		
	compliance document/s		

2.2.1	shall:  (a) certify that the works were constructed in accordance with the construction requirements specified in Table 1.2.6;  (b) provide a list of departures from the specified works; and  (c) be signed by a person authorised to represent the Licensee and contain the printed name and position of that person within the company  Contingency discharge	Within 3 days of cessation of the discharge; and including results from the monitoring required	None specified
3.1.4	Calibration report	under condition 3.2.1 As soon as practicable	None specified

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

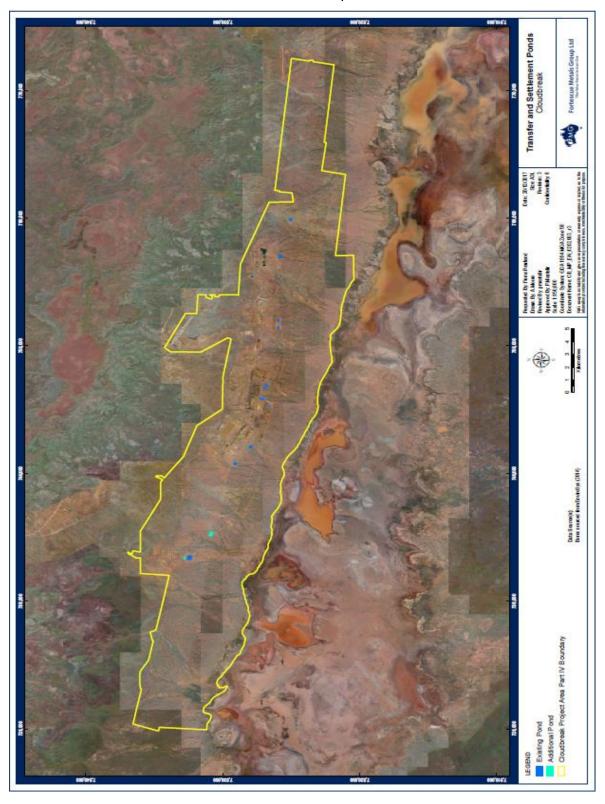
Note 2: Forms are in Schedule 2

8. The second map under Map of containment infrastructure in Schedule 1 has been deleted and replaced with the map in Attachment 1 of this Amendment Notice.

### **Attachment 1**

## Map of containment infrastructure

The location of the containment infrastructure defined in Table 1.3.1 and Process Monitoring location defined in Table 3.5.1 are shown in the maps below.



# **Appendix 1: Key documents**

	Document title	In text ref	Availability
1	A Directory of Important Wetlands in Australia (Third Edition), Environment Australia, 2001	A Directory of Important Wetlands in Australia	accessed at www.environment.gov.au
2	Cloudbreak Groundwater Operating Strategy, Water Management, Revision 4 (CB-PH-HY-0009), FMG, 29 August 2016	Cloudbreak Groundwater Operating Strategy	DWER records (A1345120)
3	Environmental Protection Act 1986 Annual Licence Renewal Cloudbreak Mine Site (L8199/2007/2), FMG, dated 13 December 2017 including Application form Licence and amended "Transfer and Settlement Ponds" figure	Application, 2017	DWER records (A1579515)
4	Guidance Statement: Decision  Making, Department of Environment  Regulation, February 2017	Guidance Statement: Decision Making	accessed at www.dwer.wa.gov.au
5	Guidance Statement: Environmental Siting, Department of Environment Regulation, November 2016	Guidance Statement: Environmental Siting	
6	Guidance Statement: Setting Conditions, Department of Environment Regulation, October 2015	Guidance Statement: Setting Conditions	
7	Guidance Statement: Risk Assessments, Department of Environment Regulation, February 2017	Guidance Statement: Risk Assessments	
8	Licence Amendment Application for the Power Station at the Cloudbreak Mine (L8199/2007/2), UID-53752 ELP98, FMG, dated 11 November 2015	FMG, 2015	DWER records (A1006431)
9	Licence L9188/2007/2 – Cloudbreak Iron Ore Mine, amended 1 March 2017	Existing Licence	accessed at www.dwer.wa.gov.au
10	Ministerial Statement 899	MS 899	accessed at www.epa.wa.gov.au/
11	Ministerial Statement 962	MS 962	
12	Ministerial Statement 1010	MS 1010	
13	Priority Ecological Communities for Western Australia, Version 27,	PEC, 2017	accessed at www.dpaw.wa.gov.au

	Document title	In text ref	Availability
	Species and Communities Branch, Department of Biodiversity, Conservation and Attractions, 30 June 2017		
14	RE: Construction of the replacement Cloudbreak Mine Power Station generators – Binannual Update #1 (CB-EN-0238), FMG, dated 28 June 2016	FMG, 2016	DWER records (A1129808)
15	Report on the Detailed Engineering for the Optimal Leak Detection System at the Cloudbreak and Christmas Creek Mines (Phase 1), CH-EN-0017, FMG, dated 9 October 2017 including Chichester Saline Water Leak Detection System, Summary of Detailed Engineering Works, Chichester Water Management Telemetry and Controls Project (CH-00000-RP-EG-0001), FMG Engineering, 29 September 2017	Report on the Detailed Engineering for the Optimal Leak Detection System at the Cloudbreak and Christmas Creek Mines (Phase 1)	DWER records (A1538748)
16	Response to Proposed Amendment to Licence L8199/2007/2, UID-77931, dated 22 February 2018	FMG, 2018	DWER records (A1621573)
17	Response to the Additional Information Request for the Application to Amend the Cloudbreak Licence (L8199/2007/2), UID-76519, email received from Fiona Rowland (FMG), dated 28 December 2017	FMG, 2017	DWER records (A1586656)
18	Saline Water Infrastructure Environmental Improvement Assessment (CC-RP-EN-1072), FMG, 30 June 2016	Saline Water Infrastructure Environmental Improvement Assessment	DWER records (A1124678)

## **Appendix 2: Summary of Licensee comments**

The Licensee was provided with the draft Amendment Notice on 14 February 2018 for review and comment. The Licensee responded on 22 February 2018 (FMG, 2018) the following comments were received on the draft Amendment Notice.

Condition	Summary of Licensee comment	DWER response
Condition 1.2.11	Condition 1.2.11 states: The Licensee shall operate the replacement Power Station generators, and Norfolk and Kangaroo transfer ponds in accordance with the conditions of this Licence, following submission of the compliance documents required under condition 4.3.1.  The Licensee requests the removal of the wording "following submission of the compliance documents	DWER requires compliance documentation to be submitted following construction works and prior to operation of the infrastructure. This condition and wording has been retained.
	required under condition 4.3.1".	
Condition 4.3.1 for Breach of any limit specified in the Licence	The Licensee requests that "after a breach is identified" is added to the notification requirement.	DWER has retained the original wording and acknowledges that breaches can't be reported until they have been identified.
Condition 4.3.1 for	The Licensee requested the removal of the requirement for	DWER acknowledges that an update on the
condition 1.2.11	a compliance document for the power station generators	replacement power station generators is provided
	as an update on the status of the replacement power	annually in the Annual Environmental Report, but
	station generators is presented in the Annual	DWER would like formal notification when the
	Environmental Report as required by condition 4.2.1.	construction of the power station is complete.