



Amendment Notice 2

Licence Number	L8667/2012/1
Licence Holder	Yilgarn Iron Pty Ltd
ACN	626 035 078
Registered business address	1 Sleat Road APPLECROSS WA 6153
Date of amendment	05 August 2019
Prescribed Premises	6 – mine dewatering; 12 – screening of material; 54 – sewage facility; 64 – class II or III putrescible landfill.
Premises	Windarling Range Mine Operations Being Part Mining Lease M77/1001, M77/999, M77/1038, M77/1039, M77/1000, M77/1257, M77/1258, M77/1259 AND L77/235 MOUNT JACKSON, 6426 as depicted in Schedule 1. KOOLYANOBING WA 6427

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.

Tim Gentle

Manager Licensing – 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
Category/ Categories/ Cat.	categories of Prescribed Premises as set out in Schedule 1 of the EP Regulations
CEO	for the purpose of correspondence means; Chief Executive Officer Department Administering the <i>Environmental Protection Act 1986</i> Locked Bag 10 JOONDALUP DC WA 6919 Email: info@dwer.wa.gov.au ;
Delegated Officer	an officer delegated under section 20 of the EP Act
DMIRS	means Department of Mines, Industry Regulation and Safety
DWER	means Department of Water and Environmental Regulation
EP Act	<i>Environmental Protection Act 1986 (WA)</i>
EP Regulations	<i>Environmental Protection Regulations 1987 (WA)</i>
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 Report
Licence Holder	Yilgarn Iron Pty Ltd
m ³	cubic metres
mAHD	metre(s) Australian Height Datum
mbgl	metre(s) below ground level
mg/L	milligrams per litre
Mining Act	<i>Mining Act 1978 (WA)</i>
Noise Regulations	<i>Environmental Protection (Noise) Regulations 1997 (WA)</i>
Prescribed Premises	has the same meaning given to that term under the EP Act.
Premises	refers to the premises to which this Decision Report applies, as specified at the front of this Decision Report.
Risk Event	as described in <i>Guidance Statement: Risk Assessment</i>

Amendment Notice

This notice is issued under section 59 of the *Environmental Protection Act 1986* (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 licence Amendment Notice (2) assesses the extension of the Windarling Range operations to include the Deception iron ore deposit. This proposal will not lead to an increase in annual production capacity of category 6, 12, 54 or 64 activities and will not change the licence term, expiring on 9 December 2027.

The following DWER guidance statements have informed the decision 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)*
- *Guidance Statement: Environmental Siting (November 2016)*

Amendment Description

On 26 September 2018, Yilgarn Iron Ore Pty Ltd (Yilgarn Iron) applied to transfer the Cliffs Asia Pacific Iron Ore Pty Ltd (Cliffs) licence L8667/2012/1 for the Windarling Range mine operations.

A second application was submitted on 20 February 2019 by Yilgarn Iron to amend the licence to extend the Windarling Range mine operations to include the Deception deposit located approximately 30 kilometres north of Windarling Range operations. The operations at Deception deposit will include a satellite mine pit, waste dump and limited support infrastructure. The Deception operations will not be developed to the extent that was originally proposed and will thus rely upon the existing support infrastructure of the Windarling Range operations. The civil engineering construction of the Deception deposit infrastructure has commenced under the approvals obtained under the *Mining Act 1978* and Part IV *Environmental Protection Act 1986* Ministerial Statement 982.

Mineral tenure boundaries have been used to define the new premises boundary of the Yilgarn operations at Windarling Range and Deception deposit. A haul road joining the Windarling deposit to the Deception deposit traverses Mineral Lease 77/235 and is the contiguous connection between the mineral deposits which delineates the new Premises boundary.

No change to L8667/2012/1 annual production capacity for Category 6 or 64 is required. Also Pit W4 West can be removed from the licence as an approved discharge for mine dewater. The W4 West pit has been backfilled and a waste dump has been constructed covering the location where the pit was located. As such the licence can be updated to remove W4.

Category 6

The Deception deposit operation is to include prescribed activities Category 6; mine dewatering to enable mining below the water table and provide the excess dewater for dust suppression at the Deception operations. Sensitive flora is located greater than 50 m from areas where dewater for dust suppression will be discharged. Category 6 is already a prescribed activity included in the existing licence. The dewatering requirement for the Deception deposit is expected to be less than 0.6GL/y for approximately 2 years. As the mining of some pits at Windarling ceases, so too does the dewatering requirements from these pits. Meanwhile, the introduction of dewatering from the Deception deposit will not increase the

overall abstraction volume of the Windarling operations above the production or design capacity of 3.42GL/y stipulated by the EP Act licence.

An assessment of dewatering operations has been completed by Rockwater Pty Ltd in report titled "*Deception Iron Ore Deposit – Assessment of Dewatering and Final Void Water Level*" dated April 2018. This report was reviewed as part of this assessment and information utilised in the risk assessment Tables 9 and 10.

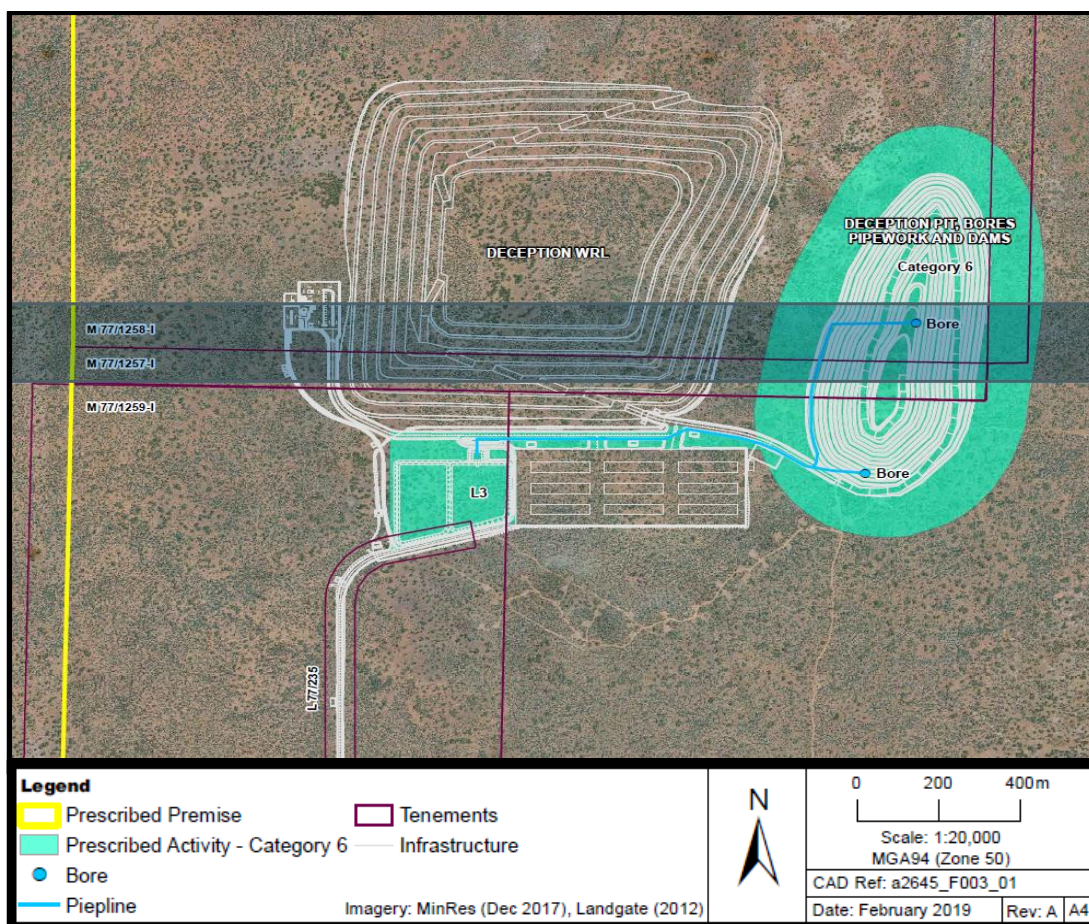
The dewatering infrastructure will include the following:

- Two Abstraction bores (DCW1P & DCW2P) drawing over a screen interval of ~ 171 metres. The natural ground level is at 500m AHD and the water table depth commences at 425m AHD being approximately 75m below natural ground level.
- Pipeline constructed of HDPE PN16 pipe contained in a v-drain that includes sumps at regular intervals sufficient to contain any spill for a period equal to the time between routine inspections.
- HDPE lined Turkeys nest dam used to contain the initial extracted groundwater.
- Clay lined dam(s) for water disposal via evaporation and infiltration.

Extracted mine dewater will be pumped via a pipeline to the HDPE lined turkeys nest dam and will be utilised for dust suppression activities at the mine and on haul roads. Excess water to dust suppression requirements will be directed to the unlined evaporation / infiltration dam(s) to discharge to the environment. All dewater infrastructure will be inspected at least daily during operations.

Figure 1 below indicates the general layout of the Deception deposit pit, Bores Pipework and storage and evaporation dams.

Figure 1: Deception deposit Category 6 infrastructure layout



Dewatering infrastructure has been previously assessed and approved under the *Mining Act 1978* approval references 37155, 39493 and 70821.

Category 64

Additionally to current Category 64; Class I and II putrescible landfill facilities, Yilgarn Iron seeks to include the W7 waste rock landform (WRL) and W1W pit as approved areas for the disposal of inert and putrescible waste. Over time it is envisioned that the proposed Category 64 landfill locations will replace the currently approved Windarling Range inert and putrescible landfill locations as mining near the existing landfills reaches completion. The additional landfills are not expected to result in an increase in the annual volumes of landfill disposal, but simply represent an additional location at which landfill disposal may occur during mining operations.

On 24 September 2014 the Minister for Environment issued Statement No. 982 (MS982), EPA Assessment No. 2011, under Section 46 (Part IV) of the EP Act that the Yilgarn Operations may be implemented at the Windarling Range, Mt Jackson Range and Deception Deposits located in the shires of Menzies and Yilgarn.

The EPA assessment and Ministerial Statement focussed on biodiversity issues, particularly the conservation significant flora species *Calytrix viscida* (Myrtle) which is endemic (unique) to the Deception Deposit and Mt Jackson Range. The EPA assessment included consideration of the potential impacts to flora species and significant vegetation communities.

This Amendment Notice will address the applications of 26 September 2018 and 20 February 2019 and consolidates the prescribed categories to include the Deception deposit into the licence and also incorporates revised Licence conditions, new premises boundary which includes new tenements covering the Deception deposit and includes all the existing and proposed new waste landfill locations. The existing category activities and annual throughput

remain unchanged at Windarling Range and will not be reassessed by this licence amendment.

Amendment History

Table 3 provides the amendment history for L8667/2012/1.

Table 3 Licence amendments

Instrument	Issued	Amendment
R1750/2005/1	11/04/2005	Registration for operation of category 85 sewage facility.
W5141/2012/1	3/05/2012	Works approval to construct/upgrade sewage plant.
L8667/2012/1	29/11/2012	New Application for Licence of sewage facility.
L8667/2012/1	03/01/2013	Licence Amendment for operation of new crushing and screening plant.
L8667/2012/1	15/01/2015	Licence Amendment to include dewatering operations.
L8667/2012/1	21/05/2015	Licence amendment to include burial of tyres in the landfill areas.
L8667/2012/1	28/01/2016	Licence amendment to expand dewatering from W7 pit to W2 pit plus landfilling operations.
L8667/2012/1	29/04/2016	Licence amendment to extend licence expiry date to 9 December 2027.
L8667/2012/1	5/01/2017	Amendment Notice 1 to allow dewatering from W10 pit into W2 pit.
L8667/2012/1	02/08/2019	Amendment Notice 2 to allow extension of Windarling Range operations to include Deception deposit dewatering and landfill activities.

Other approvals

The Licence Holder has provided the following information relating to other approvals for the Deception deposit as outlined in Table 2.

Table 2: Deception deposit approvals

Legislation	Number	Approval
<i>Environmental Protection and Biodiversity Conservation Act 1999 (Cth)</i> (Commonwealth Department of the Environment and Energy)	EPBC No 2012/6593	Not a controlled action.
<i>Environmental Protection Act 1986 (WA)</i> (Department of Water and Environmental Regulation)	Environmental Protection Authority approval EPA Report 1521, Assessment number 2011	Ministerial Statement 982 issued on 24 September 2014.
<i>Mining Act 1978 (WA)</i> (Department of Mines, Industry Regulation and Safety)	Registration Id: 37155, 39493 & 70821 Deception deposit	Windarling Range, Mt Jackson and Deception deposit.
<i>Environmental Protection Act 1986 (WA)</i> (delegated to Department of Mines, Industry Regulation and Safety)	Native Vegetation Clearing Permit – Exemption as vegetation assessed under section 46 EP Act, conditioned by Ministerial Statement 982.	Exempt from Clearing Permit within new Mining Tenements.

<i>Rights in Water and Irrigation Act 1914 (WA)</i> (Department of Water and Environmental Regulation)	GWL154459(14) – expire 06/04/2028 CAW167437(1) – Ref 023910	Dewatering process – 6.20 GL/yr Construct new dewatering wells DCW1P and DCW2P.
<i>Health Act 1911 (WA)</i> Shire of Menzies	Shire of Menzies Approval No. 183.18 (A1793907) The daily volume of sewage treated does not trigger category 54 prescribed activity.	Construct and install an apparatus for the treatment of sewage and disposal of liquid wastes. This approval is for a small sewage treatment plant to service a lunch room and small workshop area at the Deception deposit.

Location and receptors

Table 4 lists the relevant sensitive receptors in the vicinity of the primary activity within the location plan enclosed in Figure 1 of this report.

Table 4: Receptors and distance from prescribed activity

Residential and sensitive premises	Distance from Prescribed Premises
<i>Township of Koolyanobbing</i>	<i>Located ~ 120km south south east of Deception deposit and 100km from Windarling Range operations.</i>
<i>Township of Southern Cross</i>	<i>Located ~ 150km from south of Deception deposit and 130km from Windarling Range operations.</i>

Table 5 below lists the closest relevant environmental receptors in the vicinity of the primary activity within the location plan enclosed in Figure 1 of this report.

Table 5: Environmental receptors and distance from activity boundary

Environmental receptors	Distance from Prescribed Premises
Goldfields Groundwater Area (GWA)	Windarling Range and Deception deposit are located within the GWA.
Groundwater Production Bores	There are no registered groundwater users within 5 km of the Windarling Range and Deception deposit.
Remnant native vegetation (Habitat for threatened fauna species)	Directly north and east of Deception deposit open pit.
Avon River Hydrographic Catchment	Windarling Range and Deception deposit are located in the Avon River catchment. Lake Barlee is located 31km north of Deception deposit.
Native Title Claims	Marlinyu Ghoorlie – federal court claim.
Threatened and Priority Flora	Priority 1 flora located within prescribed Premises boundary, being the <i>Calytrix viscida</i> (Star Flower Myrtle).
Threatened and Priority Fauna	Closest Threatened fauna recorded immediately east in the vacant crown lands, 2.5km from the prescribed Premises boundary.

Deception deposit dewatering assessment

An assessment of dewatering and final void water level was completed on 20 April 2011, on behalf of the Applicant by consultants Rockwater Pty Ltd, where a simple groundwater model predicted how much groundwater would be extracted to dewater the pit as it is deepened from the water table at 425 mAHD to its final depth at 254 mAHD. Salinity of the groundwater was confirmed to be 25,000mg/L Total Dissolved Solids (TDS).

Drilling data indicate that the Deception deposit iron-orebody is weathered and broken and likely to be permeable. Most of the inflows to the pit will be derived from the high-permeability faults which intersect the pit margins. A groundwater model using Processing Modflow Pro, which incorporates Modflow, designed by the McDonald and Harbaugh (1988) comprised an 8 x 8 km square, subdivided into 185 rows and 202 columns, with the rows aligned in a north-north easterly direction, roughly parallel to the strike of the Deception deposit orebody and a grid cell size of 50 x 50 m except in the orebody where it was reduced to 25 x 25 m. The model layer assumed the dip of the strata was vertical and the boundaries were assigned as constant-head, and the initial water level was set at 425 mAHD.

The numerical groundwater model results indicate that the long-term dewatering rate at the Deception deposit pit will be about 20 L/s for the five years of mining when dewatering is required. This rate is consistent with the dewatering rates for Windarling Range and the Mt Jackson deposit as indicated in Figure 3 below.

Figure 3 Modelled Dewatering Rates

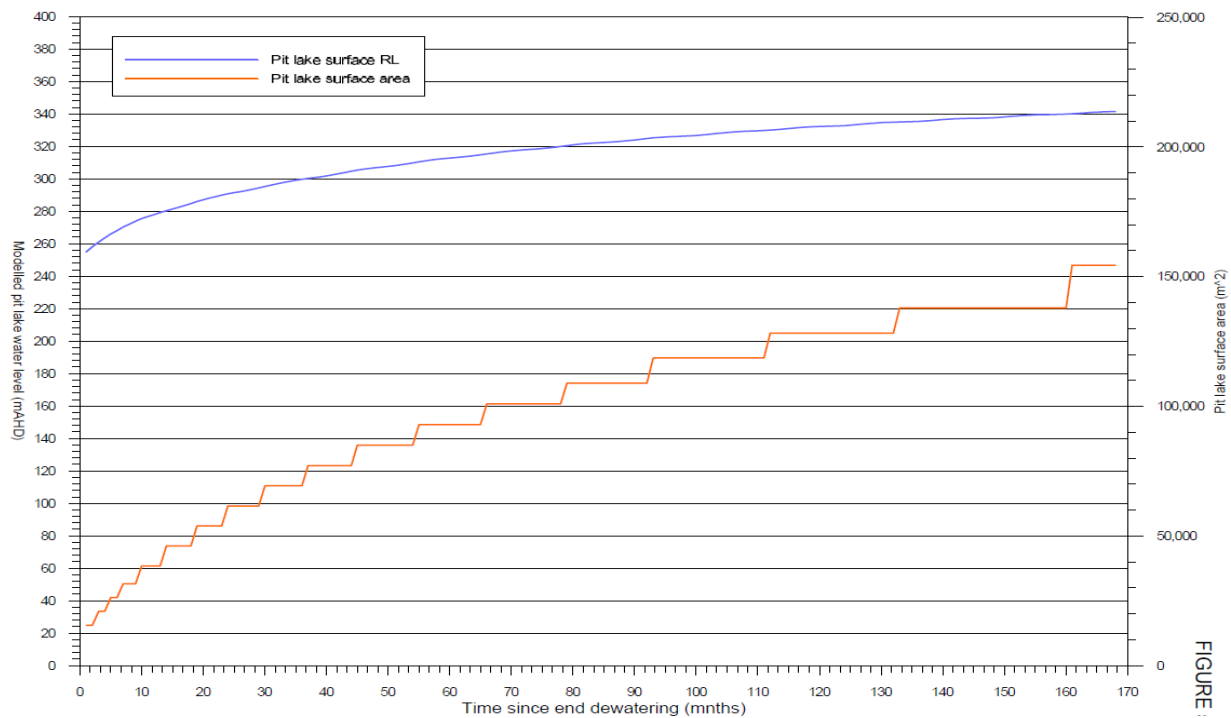
Model stress period	Time (d)	Cum. time (d)	Drain elevation (mAHD)	Total drawdown (m)	Drain discharge (kL)	Cum. drain discharge (kL)	Discharge rate for stress period (L/s)	Discharge rate for last month of stress period (L/s)
1	365	365	410	15	160,088	160,088	5	3
2	365	730	374	51	593,653	753,742	19	10
3	365	1,095	302	123	1,142,901	1,896,643	36	21
4	365	1,460	272	153	856,797	2,753,440	27	21
5	365	1,825	254	171	728,046	3,481,486	23	19

Final water levels in the void are likely to recover from the finished mine pit base elevation of 254 m AHD to about 275 mAHD (20m water depth) within the first year, to approximately 300 mAHD by the end of the third year, and eventually stabilise to 340 mAHD within 12 years

subject to permeability of the geology. Figure 2 indicates the Deception deposit final void water level model outcomes plotted against months since dewatering ended.

Calibration and improved accuracy of the groundwater and final void water level model could be achieved using pumping test data, the water level recovery and pumping rates observed during initial dewatering of the Deception deposit. Monitoring of groundwater levels in monitoring bores placed along-strike and across-strike of the Deception deposit would also assist in confirming the lateral extent of drawdown simulated by the model.

Figure 2: Deception deposit final void water levels



Risk Assessment Methodology

The risk assessment following utilizes the risk rating matrix as shown in Table 6, recently updated in accord with DER’s *Guidance Statement: Risk Assessments (February 2017)*. The risk criteria used in the matrix below is further defined in Table 7 and 8 below.

Table 6 Risk Rating Matrix

Likelihood	Consequence				
	Slight	Minor	Moderate	Major	Severe
Almost certain	Medium	High	High	Extreme	Extreme
Likely	Medium	Medium	High	High	Extreme
Possible	Low	Medium	Medium	High	Extreme
Unlikely	Low	Medium	Medium	Medium	High
Rare	Low	Low	Medium	Medium	High

DWER will undertake an assessment of the consequence and likelihood of the Risk Event in accordance with Table 7 following:

Table 7: Risk criteria definitions (taken from DER's Guidance Statement: Risk Assessments)

Likelihood		Consequence		
The following criteria has been used to determine the likelihood of the Risk Event occurring.		The following criteria has been used to determine the consequences of a Risk Event occurring:		
			Environment	Public health* and amenity (such as air and water quality, noise, and odour)
Almost Certain	The risk event is expected to occur in most circumstances	Severe	<ul style="list-style-type: none"> • onsite impacts: catastrophic • offsite impacts local scale: high level or above • offsite impacts wider scale: mid-level or above • Mid to long-term or permanent impact to an area of high conservation value or special significance[^] • Specific Consequence Criteria (for environment) are significantly exceeded 	<ul style="list-style-type: none"> • Loss of life • Adverse health effects: high level or ongoing medical treatment • Specific Consequence Criteria (for public health) are significantly exceeded • Local scale impacts: permanent loss of amenity
Likely	The risk event will probably occur in most circumstances	Major	<ul style="list-style-type: none"> • onsite impacts: high level • offsite impacts local scale: mid-level • offsite impacts wider scale: low level • Short-term impact to an area of high conservation value or special significance[^] • Specific Consequence Criteria (for environment) are exceeded 	<ul style="list-style-type: none"> • Adverse health effects: mid-level or frequent medical treatment • Specific Consequence Criteria (for public health) are exceeded • Local scale impacts: high level impact to amenity
Possible	The risk event could occur at some time	Moderate	<ul style="list-style-type: none"> • onsite impacts: mid-level • offsite impacts local scale: low level • offsite impacts wider scale: minimal • Specific Consequence Criteria (for environment) are at risk of not being met 	<ul style="list-style-type: none"> • Adverse health effects: low level or occasional medical treatment • Specific Consequence Criteria (for public health) are at risk of not being met • Local scale impacts: mid-level impact to amenity
Unlikely	The risk event will probably not occur in most circumstances	Minor	<ul style="list-style-type: none"> • onsite impacts: low level • offsite impacts local scale: minimal • offsite impacts wider scale: not detectable • Specific Consequence Criteria (for environment) likely to be met 	<ul style="list-style-type: none"> • Specific Consequence Criteria (for public health) are likely to be met • Local scale impacts: low level impact to amenity
Rare	The risk event may only occur in exceptional circumstances	Slight	<ul style="list-style-type: none"> • onsite impact: minimal • Specific Consequence Criteria (for environment) met 	<ul style="list-style-type: none"> • Local scale: minimal to amenity • Specific Consequence Criteria (for public health) met

[^] Determination of areas of high conservation value or special significance should be informed by the *Guidance Statement: Environmental Siting*.

* In applying public health criteria, DWER may have regard to the Department of Health's *Health Risk Assessment (Scoping) Guidelines*.

"onsite" means within the Prescribed Premises boundary.

DWER will determine the acceptability and treatment of Risk Events in accordance with the Risk treatment table 8 below:

Table 8: Risk treatment table

Rating of Risk Event	Acceptability	Treatment
Extreme	Unacceptable.	Risk Event will not be tolerated. DWER may refuse application.
High	May be acceptable. Subject to multiple regulatory controls.	Risk Event may be tolerated and may be subject to multiple regulatory controls. This may include both outcome-based and management conditions.
Medium	Acceptable, generally subject to regulatory controls.	Risk Event is tolerable and is likely to be subject to some regulatory controls. A preference for outcome-based conditions where practical and appropriate will be applied.
Low	Acceptable, generally not controlled.	Risk Event is acceptable and will generally not be subject to regulatory controls.

Risk Assessment

Table 9 & 10 below applies a screening level risk assessment for the potential emissions which may arise from the application. The table identifies whether these emissions present a material risk requiring regulatory control.

Table 9 – Risk assessment for proposed amendments during construction

Source/Activities		Risk Event				Conseq'e	Likelihood	Risk	Reasoning
		Potential emissions	Potential receptors	Potential pathway	Potential adverse impacts				
Deception deposit Construction, mobilisation and positioning of dewatering infrastructure	Construction includes earthworks for pipeline corridor and dewater storage dam and landfill pit.	Nuisance Noise	Nil human receptors	N/A	N/A	N/A	N/A	Nil	<p>There are no residential premises in the vicinity of the premises that would be impacted by noise and dust from relevant construction activity.</p> <p>The nearest residential premises is the Koolyanobbing and Southern Cross townships located 130km and 150km south respectively from the Deception deposit.</p> <p>Dewatering wells, pipeline corridors and dewater dams will be constructed in disturbed or cleared areas reducing the need for mechanical removal of existing vegetation.</p> <p>Three new conditions will be included requiring an audit report (4.2.5) and compliance report (4.2.6) confirming the proposed infrastructure as per condition 1.2.11 has been installed at the Deception deposit.</p> <p>MS982 provides conditions to ensure adequate management controls reduce dust impacts to vegetation during construction due for completion within 4 to 6 months.</p>
	Installation includes pipelines, dewatering production wells, HDPE lined Turkey Nest dam and evaporation dam(s) liners.	Fugitive Dust	Nil human receptors Priority 1 flora species <i>Calytrix viscida</i> (Star Flower Myrtle) and significant flora communities.	Air	Dust can coat flowers, leaves and impact plant health and survival.	Rare	Minor	Low	

Table 10: Risk assessment for proposed amendments during operation

Source/Activities		Risk Event				Cons'qe	Likelihood	Risk	Reasoning
		Potential emissions	Potential receptors	Potential pathway	Potential adverse impacts				
Category 6 Mine dewatering:	Dewatering discharged to lined storage dam and evaporation dams.	Water: Water table	No groundwater receptors (users) within 10km of Deception deposit. Vegetation root zones not deeper than 10mbgl.	Water	N/A.	N/A	N/A	Nil	Human receptors are greater than 100km from Deception deposit. Water Table is 60m below flora root zones.
		Waste: Dewater used for dust suppression	Haulage roads and within crushing and screening operations	Land	Impacts upon nearby vegetation	Rare	Minor	Low	Dewater used for operations and the potential risk to flora species and floral communities do not require further consideration they were addressed in MS982 (condition 7) and found acceptable by the Minister for Environment subject to preparation and implementation of a Flora and Vegetation Management Plan including specific management provisions. Existing Licence condition 1.2.8 will be amended to include dewater discharge to evaporation dams and dewater being used for dust suppression.
Category 6 Mine dewatering:	Dewatering discharged to lined storage dam and evaporation dams.	Waste: Dewater spills or discharges	Priority 1 flora species <i>Calytrix viscida</i> (<i>Star flower myrtle</i>) and significant flora communities.	Land	Dewater impact root zones and effect plant health and survival.	Rare	Moderate	Medium	Priority 1 flora is located greater than 50 metres from potential spills, dewatering activities or discharges of dewater as dust suppressant on haul roads. This species is generally located in the sandy gravel areas of the Deception Deposit and Mt Jackson Ranges with shallow root systems. The species is not found within 400 m of the lined storage dam and evaporation dams established upon sandy gravel soils. This flora species does not require further consideration as they were addressed in the EPA assessment and addressed in condition 7 of MS982 requiring the preparation and implementation of a Flora and Vegetation Management Plan including specific management provisions for spills in emergency situations and dewatering activities during mining operations. Existing licence condition 1.2.7(c) provides secondary containment of pipeline spills or discharges and adequately controls of emergency spills and discharges. A new condition will be included that requires water used for dust suppression is applied so as to avoid damage to native vegetation.

Risk Event					Cons'qe	Likelihood	Risk	Reasoning	
Source/Activities	Potential emissions	Potential receptors	Potential pathway	Potential adverse impacts					
Category 64 Class II putrescible landfill	Operation Class II putrescible landfill at W7 waste rock landform (WRL) and W1W pit.	Dust, Noise & Odour	Koolyanobbing and Southern Cross townships greater than 100km from proposed landfills.	Air / wind	Dust can cause health and amenity impacts to humans	N/A	N/A	Nil	The distance to the sensitive receptor at the Koolyanobbing and Southern Cross townships are at no material risk from dust, noise and odour emissions from operations at the putrescible landfills W7 and W1W.
		Dust	Priority 1 flora species <i>Calytrix viscida</i> (<i>Star flower myrtle</i>) and significant flora communities.	Air / wind	Dust can coat leaves and impact plant health and survival.	Rare	Moderate	Medium	Potential dust impacts upon flora species does not require further consideration as they are addressed in the EPA assessment reflected in Ministerial condition 7 of statement MS982) requiring the preparation and implementation of a Flora and Vegetation Management Plan including specific dust management provisions.
		Leachate	Groundwater Priority 1 flora species <i>Calytrix viscida</i> (<i>Star flower myrtle</i>) and significant flora communities.	Infiltration through the soil profile	Contamination of groundwater and/or impacts to vegetation.	N/A	N/A	Nil	Given that the new landfill is to be located within the W7 WRL and W1W pit the depth to groundwater is greater than 20m from landfill floor level, there is no material risk by groundwater contamination or impacts to the nearby vegetation. Putrescible landfills are currently regulated under licence conditions 1.2.8 and Table 2.2.1 & 2.3.1. to 1.2.11 inclusive. This Licence amendment will amend table 1.2.4 (condition 1.2.9) to include new landfill location.

Decision

The Delegated Officer assessed that the proposed mine extension to include Deception deposit and extend category 6 and 64 has not changed the risk profile of emissions and discharges such that they would be unacceptable in terms of public health or the environment.

Changes to the Licence include;

1. Amend the Licence Holder name, registered business address and ACN;
2. Amend the contact details for the CEO of DWER;
3. Include new tenement to Licence for the Deception deposit;
4. Include new conditions 1.2.11, 1.2.12, 4.2.5 and 4.2.6 regarding category 6 infrastructure, dust suppressing activities not impacting native vegetation, plus compliance reporting requirements;
5. Administrative amendment to licence condition numbers for 4.4 and 4.5;
6. Administrative change to renumber duplicate licence condition number 2.3.1;
7. Amend condition number 1.2.8 (b) to allow for evaporation dam(s) at Deception;
8. Amend conditions 2.2.1, 2.3.1 and 3.2.1 by removing reference to W4 and including new category 6 discharge point L3;
9. Update the Licence 8667/2012/1 maps, including revised Premises map to include Deception deposit, including revised category 12 and 54 maps, include two category 6 maps and the category 64 map.

Changes to the Licence have been made in accordance with DWER administrative changes including DWER's name and logo. The operation of this Premises remains unchanged and licence conditions will ensure emissions are controlled by the Licence Holder.

The Premises emission risk will remain unchanged following the changes to the prescribed Premises boundary and the inclusion of the Deception deposit operations will not change each prescribed Premises category annual production throughput.

This licence amendment will be incorporated, at the next opportunity, into the existing licence.

Amendment

1. The Licence Holder name, registered business address and Australian Company Number are amended to;
Yilgarn Iron Pty Ltd
1 Sleat Road
APPLECROSS WA 6153
ACN: 626 035 078
2. The definition for Department contact details are amended to; 'CEO' for the purpose of correspondence means;
Manager – Resource Industries (South)
Locked Bag 10
JOONDALUP DC WA
6919
Email: Info@dwer.wa.gov.au

3. The prescribed premises location is amended by addition of additional mining tenements indicated by the red text below:

The Premises boundary is defined by the tenements listed in the table below and depicted in Schedule 1 Premises Map:

Yilgarn Iron Pty Ltd				
M77/1001	M77/999	M77/1038	M77/1039	M77/1000
M77/1257	M77/1258	M77/1259	L77/235	

4. Include new conditions 1.2.11, 1.2.12, 4.2.5 & 4.2.6 in red text which describes the works to be completed at the Deception deposit and the compliance reporting required following construction.

- 1.2.11 The Licensee shall complete construction of the dewatering infrastructure in accordance with the documentation listed in Table 1.2.7 in the location depicted in Schedule 1 plan titled "Deception Deposit, Licence 8667, and Category 6 Prescribed Activity locations" dated February 2019.

Table 1.2.7: Construction requirements¹

Document	Parts	Date of Document
Application to amend the Windarling Range and Deception Deposit Project prescribed Premise Licence L8667/2012/1 plus supporting documentation.	All	20 February 2019
1. Two Production bores (DCW1P & DCW2P).	Attach 3A pg 79	20 February 2019
2. Pipeline constructed of HDPE PN16 pipe.	Attach 3A pg 80	20 February 2019
3. V-drain that includes sumps at regular intervals sufficient to contain any spill for a period equal to the time between routine inspections.	Attach 3A pg 80	20 February 2019
4. HDPE lined Turkeys nest storage dam (L3).	Att 8 Golder Report.	25 August 2011
5. Clay lined dam(s) for water disposal via evaporation and infiltration.	Attach 3A pg 81	20 February 2019

Note 1: Where the details and commitments of the documents listed in condition 1.3.6 are inconsistent with any other condition of this licence, the conditions of this licence shall prevail.

- 1.2.12 The Licence Holder must ensure that dust suppression activities are conducted so as to not damage native vegetation.

- 4.2.5 The licence holder must within 30 days of each item of infrastructure required by condition 1.2.11 and table 1.2.7 being constructed:
- undertake an audit of their compliance with the requirements of condition 1.2.11; and
 - prepare and submit to the CEO an audit report of that compliance.

- 4.2.6 The audit report required by condition 4.2.5, must:
- be certified by a qualified engineer that each item of infrastructure listed in Table 1.2.7 meets the corresponding specifications and at the locations set out in Table 1.2.7 and has been constructed with no material defects;
 - contain an 'as constructed plan' for the works that show the infrastructure;
 - be signed by a person authorised to represent the licence holder and contains the printed name and position of that person within the company; and,
 - include a commissioning report demonstrating that the infrastructure operates as designed.

5. Conditions 4.4.1 to 4.4.4 to be renumbered to 4.2.1 to 4.2.4 and all notification conditions numbered 4.5 will be renumbered 4.3.
6. Condition number 2.3.1 has been duplicated and the “emissions limits to land” condition will be renumbered 2.3.2 to eliminate the duplication.
7. Condition 1.2.8 is amended by including the red text.
 - 1.2.8 The Licensee shall ensure that any saline dewatering effluent shall only be managed in the following manner:
 - (a) used for dust suppression in a manner that minimises damage to surrounding vegetation; or
 - (b) discharged to previously mined pits; or
 - (c) discharged to evaporation dam(s) through authorised discharge point L3.
8. Condition 2.2.1, 2.3.1 and 3.2.1 are amended by deleting the black text that is struck through and including the red text.

2.2 Point source emissions to groundwater

- 2.2.1 The Licensee is permitted, subject to conditions in the Licence, to emit waste to groundwater through the emissions points listed in Table 2.2.1.

Table 2.2.1: Emission points to groundwater		
Emission point reference	Description	Source
W2	Mine dewater	W1, W3, W7 and W10 pits
W4	Mine dewater	W1 and W3
L3	Mine dewater	Deception mine pit

2.3 Emissions to land

- 2.3.1 The Licensee is permitted, subject to conditions in the Licence, to emit waste to land through the emissions points listed in Table 2.3.1

Table 2.3.1: Emission points to land		
Emission point reference	Description	Source
L1	Discharge to lined turkeys nest dam for use in dust suppression, with overflow to an unlined storage dam	Treated wastewater and mine dewater
L2	Discharge to irrigation area (as depicted in Schedule 1)	Treated wastewater
L3	Dewater discharge to HDPE lined storage dam for used in dust suppression, with overflow to an unlined evaporation dam.	Deception deposit mine dewater

3.2 Monitoring of point source emissions to groundwater

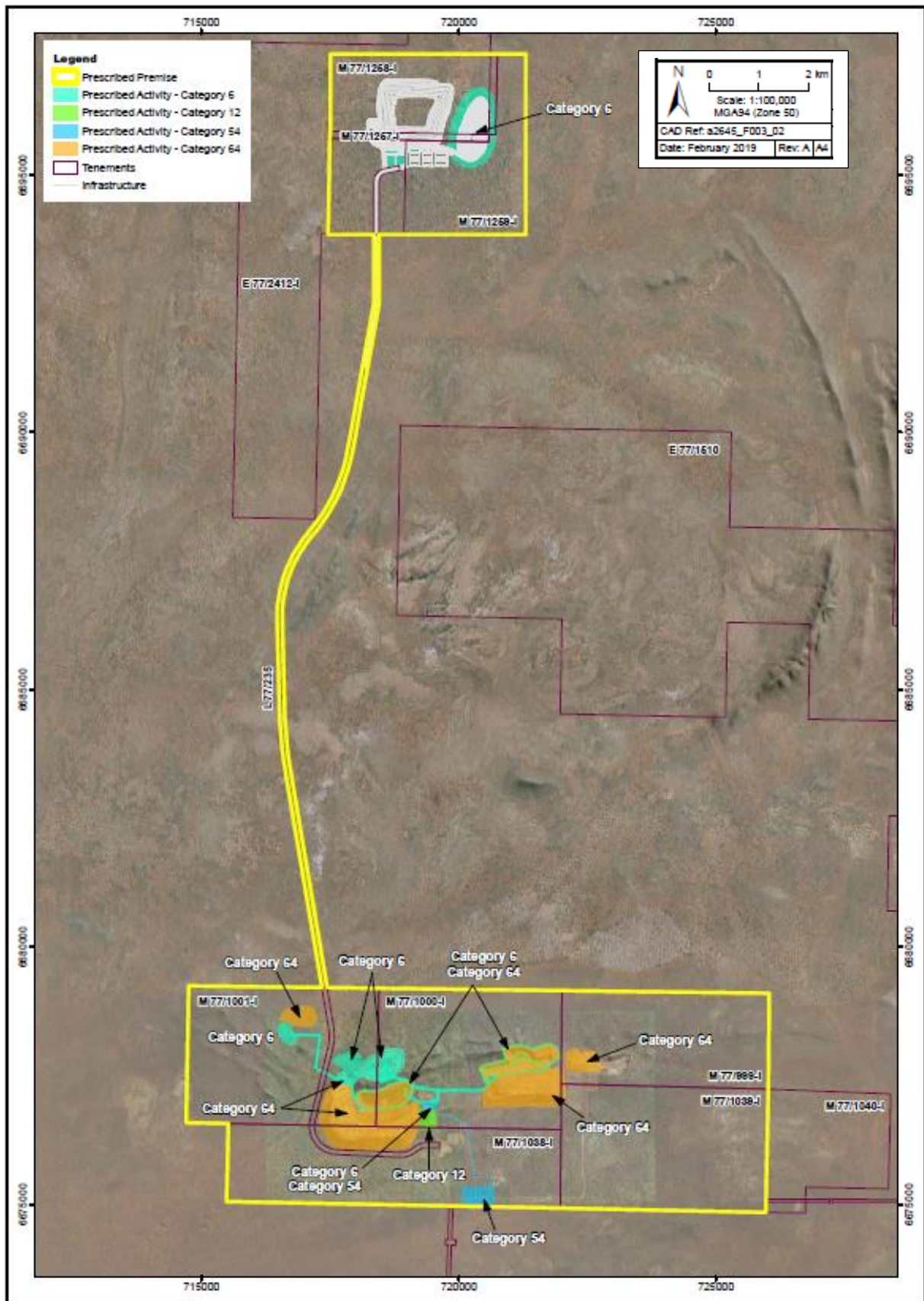
- 3.2.1 The Licensee shall undertake the monitoring in Table 3.2.1 according to the specifications in that table.

Table 3.2.1: Monitoring of emissions to groundwater				
Monitoring point reference	Parameter	Limit	Units	Frequency
W2 and W4	Freeboard	4	m below crest level	Monthly
	Volumetric flow	N/A	kL	
	pH1	N/A	N/A	Quarterly
Total Dissolved Solids ¹	N/A	mg/L		

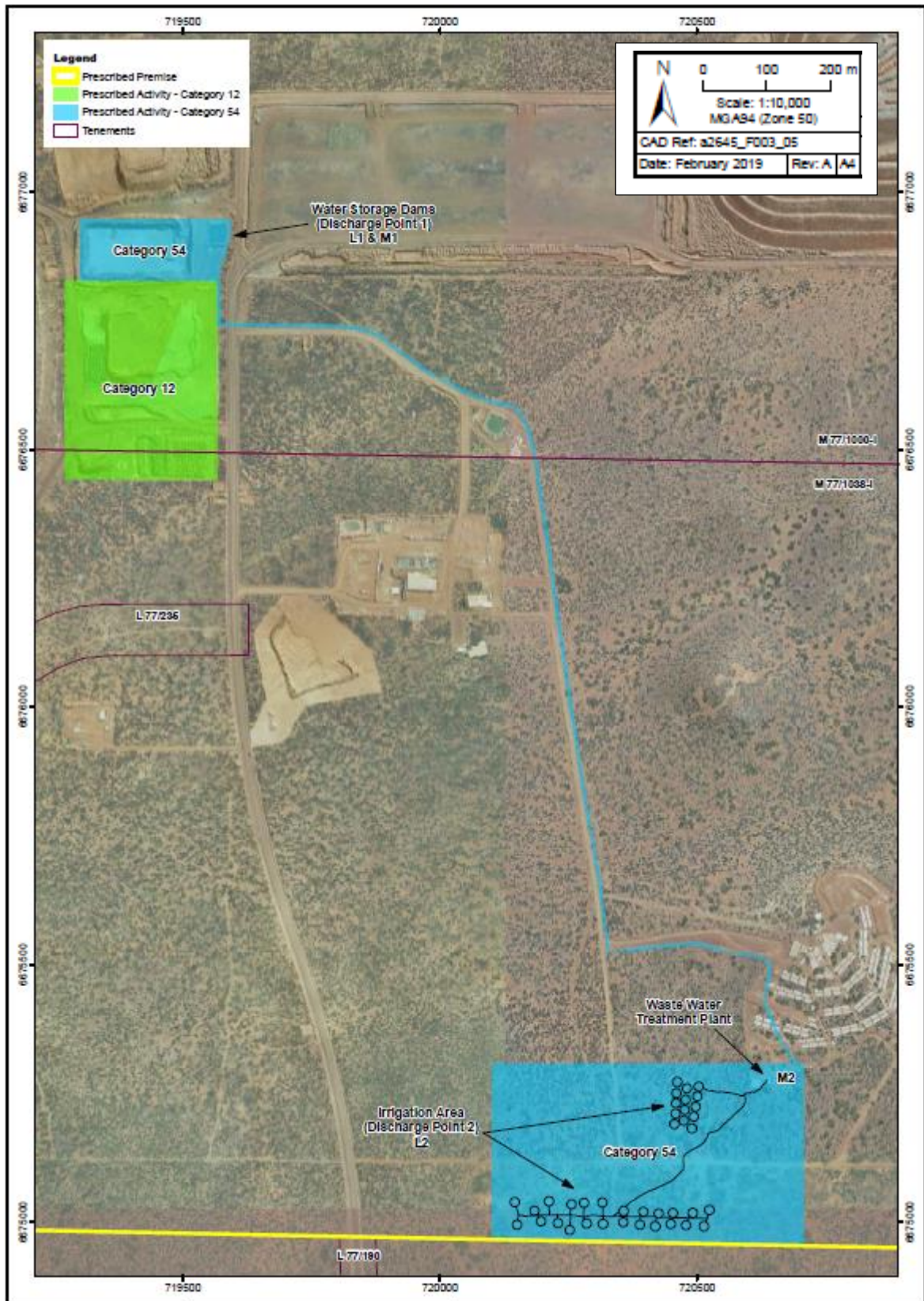
Note 1: pH and TDS is permitted to be measured in the field in accordance with Australian Standard 5667.

9. Schedule 1 Maps "Premises map" is replaced with the map below:

Yilgarn Operations Licence 8667 Prescribed Premises depicted by the yellow boundary.

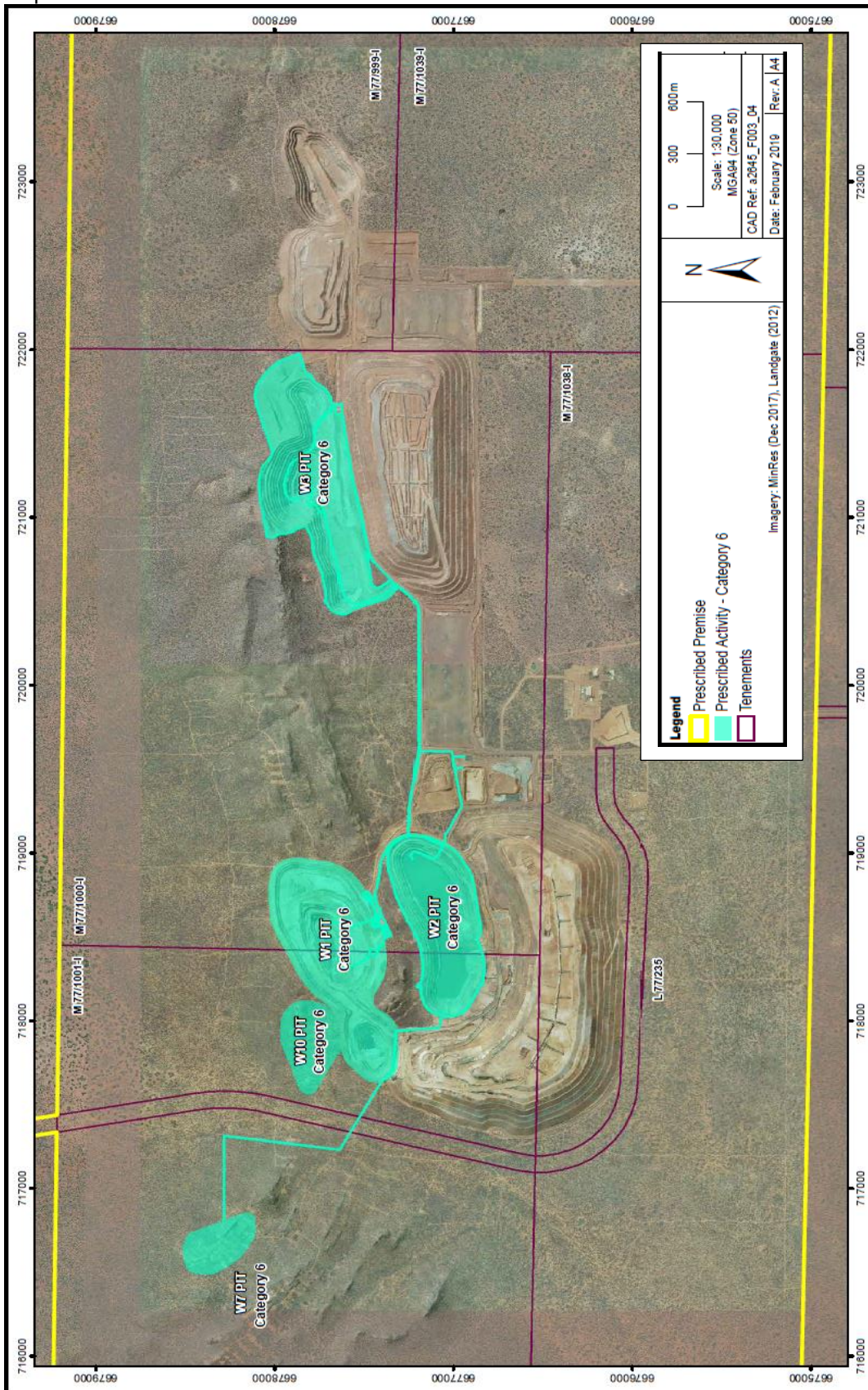


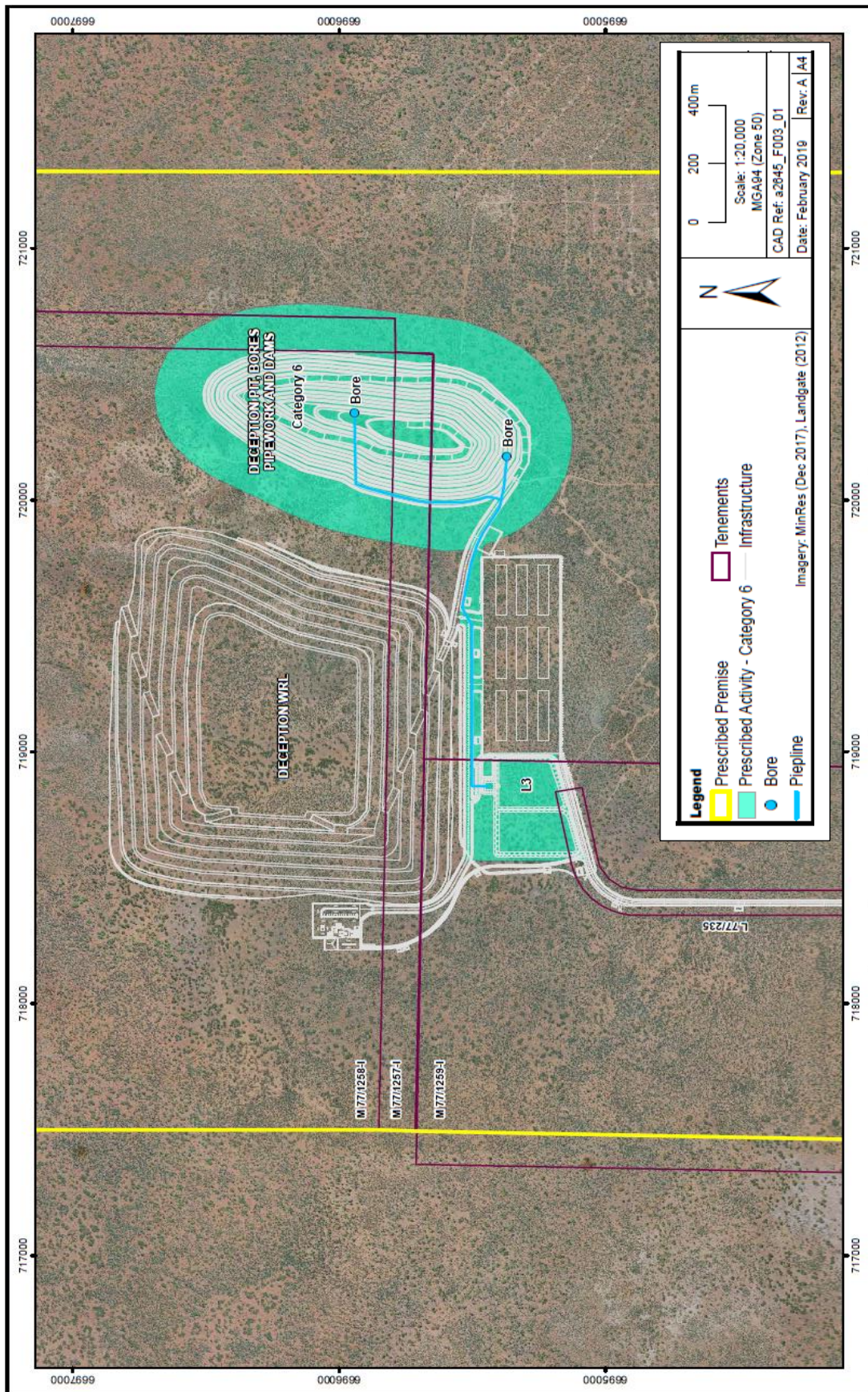
9. Schedule 1 Maps “Emission Points” defined in Table 2.3.1, 2.3.2 and 3.3.1 is amended as shown below:



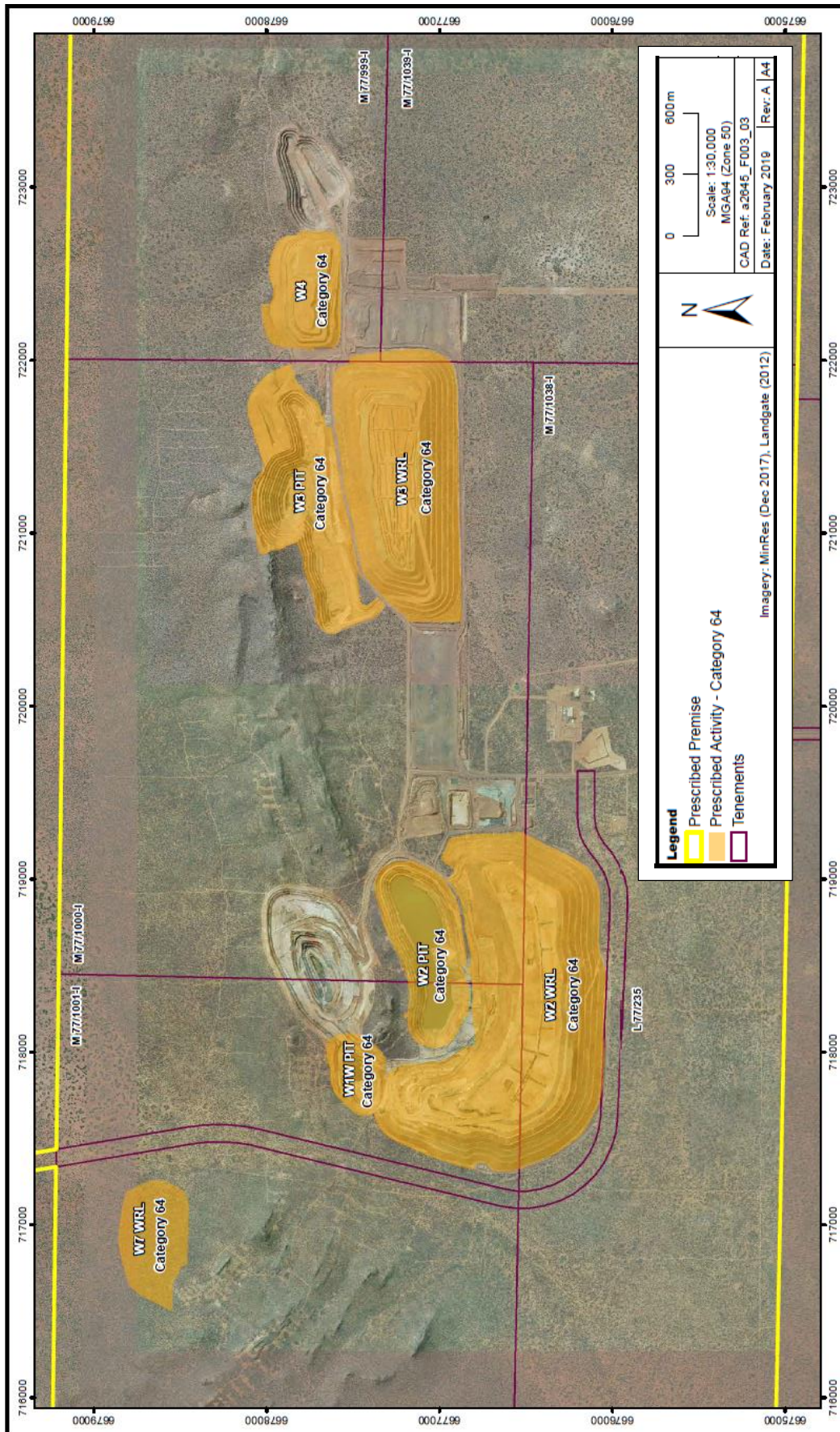
Schedule 1 category 6 activities is included in two maps following:

Map 1 of 2





Schedule 1 landfill area map is replaced with category 64 activities map:



Appendix 1: Key Documents

Document Title		Availability
1	DER, Feb 2017, <i>Guidance Statement: Risk Assessment</i> . Department of Environment Regulation, Perth.	Accessed at http://www.dwer.wa.gov.au
2	DER, Feb 2017, <i>Guidance Statement: Decision Making</i> . Department of Environment Regulation, Perth.	
3	DER, Nov 2016, <i>Guidance Statement: Environmental Siting</i> . Department of Environment Regulation, Perth.	
4	DER, Sept 2016, <i>Guidance Statement: Environmental Standards</i> . Department of Environment Regulation, Perth.	
5	DER, Oct 2015, <i>Guidance Statement: Setting Conditions</i> . Department of Environment Regulation, Perth.	
6	DER, Aug 2016, <i>Guidance Statement: Licensing Duration</i> . Department of Environment Regulation, Perth.	
7	Licence transfer application signed by company representative on 26 September 2018: <ul style="list-style-type: none"> • Yilgarn Iron Pty Ltd – Application form to transfer Licence L8667/2012/1 from Cliff Asia Pacific Pty Ltd to Yilgarn Iron Pty Ltd. 	DWER Record A1723420
8	Licence amendment application signed by company representative on 20 February 2019: <ul style="list-style-type: none"> • Yilgarn Iron Pty Ltd – Application form to amend Licence L8667/2012/1 to include the Deception deposit in Windarling Licence. 	DWER Record A1767188
9	Licence amendment supporting documentation received on 20 February 2018:	DWER record A1767188 (Attachments)
10	Certificate of Construction – permit to use – 1 x NEP 4kL baffled septic tank to Rainsmart W leach drains approved by Health Department of WA from Shire of Laverton on 11 May 2019	DWER record A1793907

Appendix 2: Summary of Licence Holder comments

The Licence Holder was provided with the draft Amendment Notice on 25 July 2019 for review and comment. The Licence Holder responded on 1 August 2019 with the following comments about the draft Amendment Notice.

Condition	Summary of Licence Holder comment	DWER response
Flora	<p>Clarified that <i>Calytrix viscida</i> is a Priority 1 listed species and not threatened</p> <p>Explained that <i>Calytrix viscida</i> is endemic to the Deception deposit and Mt Jackson Range but not the Koolyanobbing Range</p>	<p>Accepted and all references changed to Priority 1 listed species.</p> <p>Text and risk assessment reviewed to reflect the Priority 1 listed species.</p>
	Minor grammatical changes	Accepted and text changed