



Licence Number	L5850/1993/11
Licence Holder	Yilgarn Iron Pty Ltd
ACN	626 035 078
Registered business address	1 Sleat Road APPLECROSS WA 6153
File Number	2012/002671-1
Prescribed Premises	5 – processing and beneficiation of metallic or non-metallic ore; 6 – mine dewatering; 12 – Screening, etc. of material; 54 – sewage facility; 57 – used tyre storage (general); and 64 – class II or III putrescible landfill
Premises	Koolyanobbing Iron Ore Project Being Part tenements L77/219, M77/606, M77/607, M77/611, M77/989, M77/990, M77/1278 and E77/1307 as depicted in Schedule 1 KOOLYANOBING WA 6427
Date of amendment	23 October 2019

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.

Tim Gentle

Manager, Resource Industries

REGULATORY SERVICES

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

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.

The DWER's Regulatory Framework informs this licence amendment and is available at <https://www.der.wa.gov.au/our-work/regulatory-framework>.

Amendment Description

Yilgarn Iron Pty Ltd (YIPL) operates the Koolyanobbing Iron Ore project which is subject to Licence (L5850/1993/11) issued under Part V of the EP Act.

On 26 September 2018, YIPL submitted an application to transfer licence L5850/1993/11 from Cliffs Asia Pacific Iron Ore Pty Ltd. DWER received the transfer fee and transfer application within the statutory timeframe prescribed in the EP Act.

On 15 May 2019, YIPL submitted a licence amendment application. The application proposes amendments to the licence by,

- reducing Category 64 'production and design capacity' from 6,000 to 4,000 tonnes per annum;
- including 'C pit' as a Category 64 landfill for disposal of putrescible waste and mine vehicle tyres;
- removing Category 57 tyre storage from the licence because tyres will be disposed in the Category 64 landfills; and,
- removing Category 6 dewatering from the licence including W1 discharge point at Lake K, remove Lake K water monitoring, vegetation monitoring, sediment monitoring and 12 hourly inspections of the discharge pipeline.

On 19 July 2019, YIPL submitted a proposed upgrade to the category 5 primary crusher feed bin. This will allow road trains to unload iron ore directly into the crusher. YIPL also propose to install additional infrastructure post crushing and screening to improved materials handling and train loading. The feed bin and additional materials handling infrastructure will not increase dust emissions because dust suppression water sprays are included at the feed bin and on stacker conveyors and conveyor transfer points. As well, all operations at the crusher and stacker facility are subject to operational controls described in the Koolyanobbing operations dust management plan. A minor realignment to the boundary including clearing approval is required from Department of Mines Industry Regulation and Safety (DMIRS). The infrastructure upgrade will not change the Category 5 approved production or design capacity at the operations.

New licence conditions addressing the upgraded infrastructure will provide advice to the Department about what additional infrastructure is at the crushing and screening plant.

This Amendment Notice will assess the applications of 26 September 2018 (licence transfer), 15 May 2019 and supplementary information provided on 19 July 2019 and 11 October 2019.

Amendment history

Table 1 provides the amendment history for L5850/1993/9 since 2007.

Table 1: L5850/1993/9 amendments

Instrument	Issued	Description
L5850/1993/9	19/10/2007	Licence re-issue

Instrument	Issued	Description
L5850/1993/10	17/09/2010	Licence re-issue
L5850/1993/11	25/10/2013	Licence re-issue (REFIRE format)
L5850/1993/11	26/03/2015	Licence amendment for pit-to-pit dewatering and Licence format conversion
L5850/1993/11	14/05/2015	Amendment to improvement condition IR1(a)
L5850/1993/11	19/11/2015	Increase in throughput and removal of improvement condition
L5850/1993/11	1/9/2016	Licence amendment to incorporate A Deposit Mine Pit as an emission point
L5850/1993/11	24/04/2017	Amendment Notice 1 to include Range F deposit, update the premises boundary and maps, include Category 12 and include waste locations to reflect current site operations.
L5850/1993/11	28/09/2017	Amendment Notice 2 to amend table 2.4.1 to include emission point L2, remove MBH1 & MBH2 from condition 3.5.1 table 3.5.1 and replace premises map, map of emission points for waste water treatment plant (WWTP).
L5850/1993/11	21/10/2019	Amendment Notice 3 to transfer licence from 'Cliffs Asia Pacific Iron Ore Pty Ltd' to 'Yilgarn Iron Pty Ltd'. Reduce category 64 production design capacity from 6,000 to 4,000 tonnes per annum and include 'C pit', remove category 6 & 57 from the licence including the removal of approved discharge points at Lake K and remove monitoring of vegetation, water quality, sediment and dewater pipeline inspections.

Pit C

C pit has been backfilled with inert waste material from Koolyanobbing's mining operations from the pit floor at elevation 318mAHD to an elevation of 364mAHD. Figure 1 and Figure 2 are aerial views of backfilling completed at C Pit to an elevation of 364mAHD. YIPL propose utilising C pit as an additional location for the disposal of inert waste type 2 (tyres) and putrescible waste.

The standing groundwater level prior to mining at the Koolyanobbing operation was 337mAHD. Since dewatering ceased, the post mining groundwater modelling indicates recovery of groundwater in C pit to 330mAHD elevation after 10 years. (Rockwater 2011).

The Rockwater Proprietary Limited completed a report titled 'Koolyanobbing A, B & C Pits Assessment of dewatering rates and final void water levels' dated June 2011 (Rockwater 2011) confirmed the following information,

- the pre dewatering standing water level (SWL) at the Koolyanobbing operations was 337mAHD elevation across all pits;
- the final standing water level post dewatering for A, B and C pits was 284, 303 and 318mAHD, respectively;
- during dewatering operations, C Pit water level was reduced by 19m to elevation 318mAHD;
- Approximately four years of dewatering was simulated in Rockwater 2011 groundwater model;

Figure 1 & 2:

C Pit area is proposed to be used for the disposal of class II and putrescible waste (Category 64)

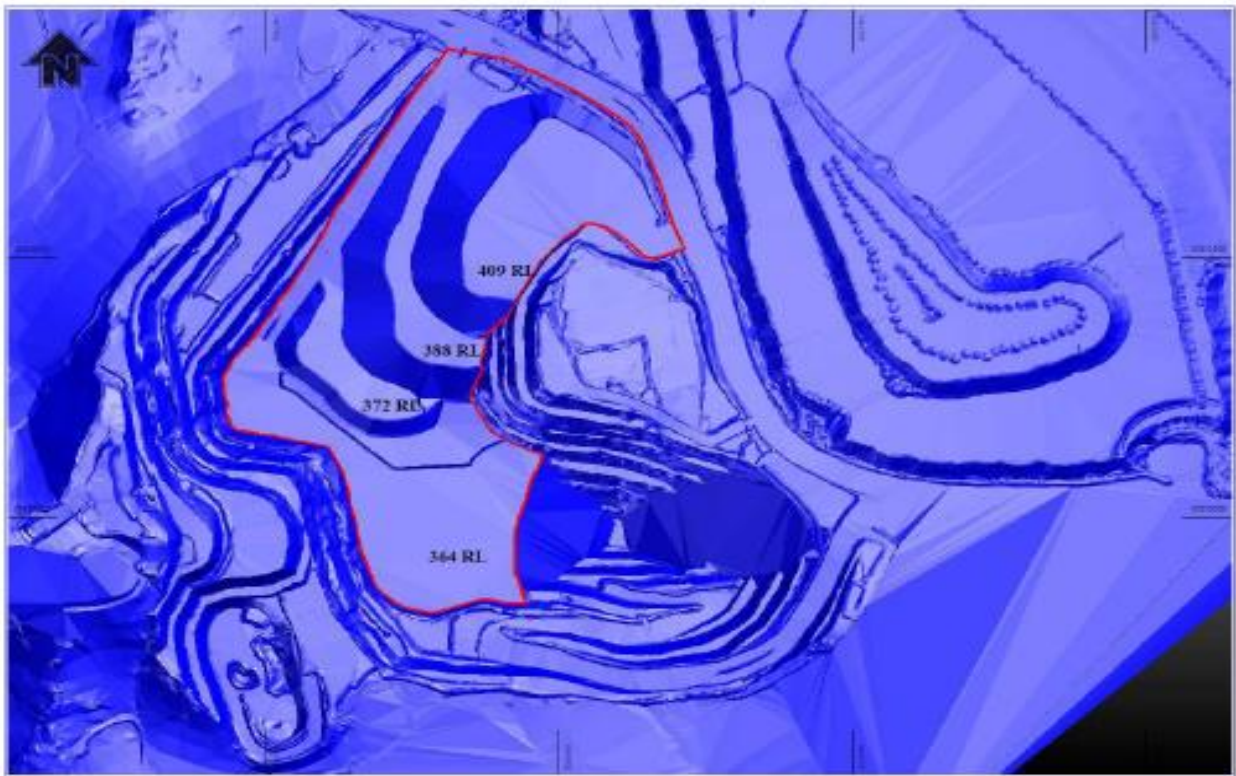


Figure 1: Area of C pit backfilled to 364m AHD (aerial view)

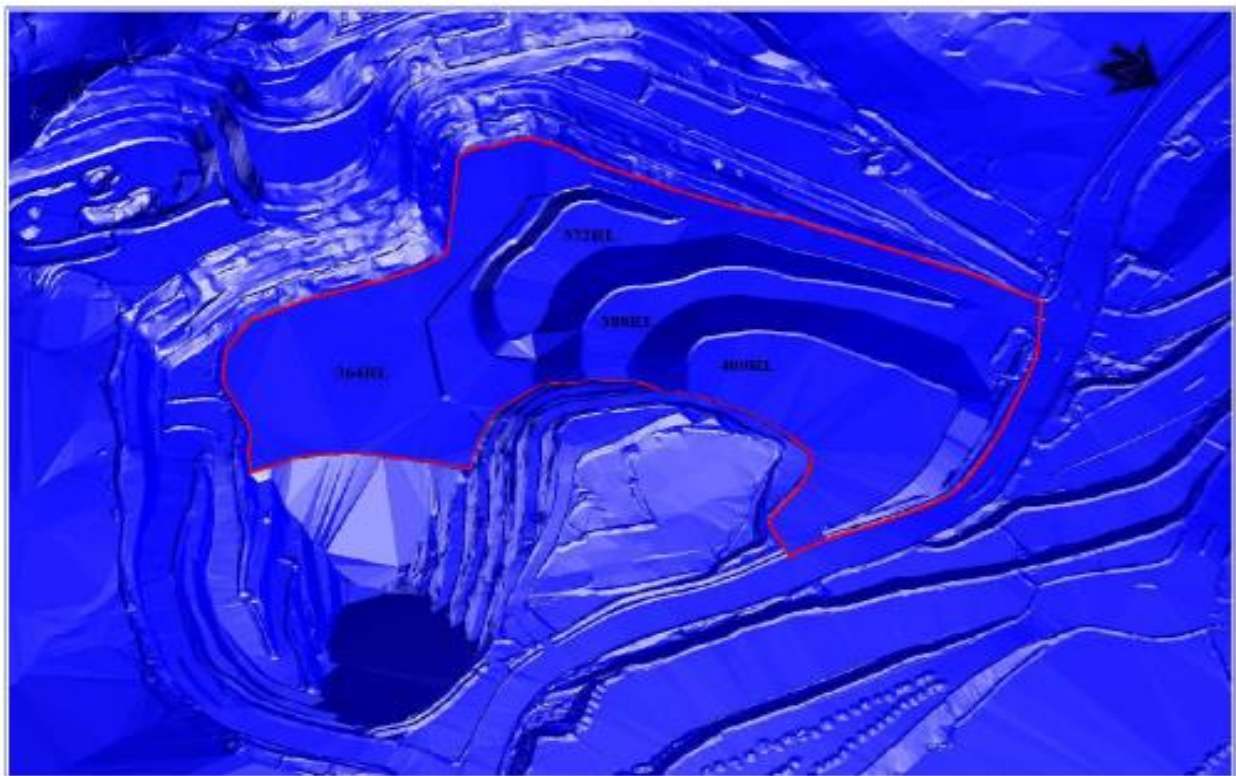
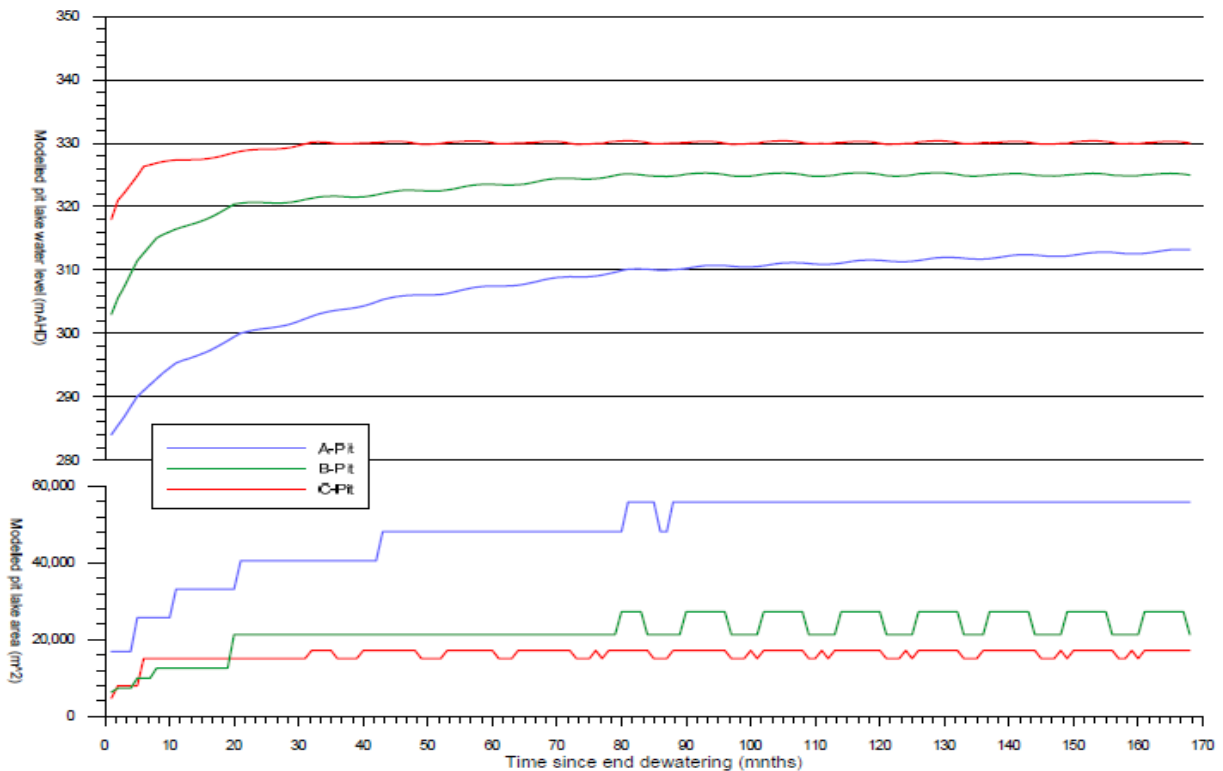


Figure 2: Area of C pit backfilled to 364m AHD (looking west)

The Rockwater 2011 report summary findings are;

- Groundwater levels in the A, B & C pits will recover now dewatering has ceased. The groundwater recovery in all pits is dependent on groundwater inflow, rainfall and evaporation.
- The Rockwater model indicate SWL in A pit will recover to 300mAHD (16 m water depth) within the first two years and stabilise at approximately 312 mAHD (28 m water depth) after approximately 10 years. (Figure 3). Using the same model, the predicted SWL at which water will stabilise in the B and C pits are 325 and 330mAHD, respectively. Figure 3 below shows the final pit groundwater levels over 170 months.

Figure 3: A, B & C pits final void water level (Rockwater 2011 Report - Figure 4)



The recommendations from the Rockwater 2011 in relation to the use of C pit as a putrescible and tyre wastes to landfill is summarised below;

- The water balance model of each pit did not account for potential inflows from or outflows to the nearby pits. In reality, there is likely to be some flow of water between the pits, so that the stabilised water level in the A pit will be slightly higher than modelled and the stabilised water levels in the B and C pits will be slightly lower.
- Recovery in each of the pits would be quicker and stabilise at a lower elevation as basaltic rock (inert material) are less permeable than were assumed to be in the model zones and parameters shown in Figure 4 below.

Figure 4: Model zones and parameters

	LAYER 1		
	A, B & C Orebodies	BIF	Basalt
Top of Layer (mAHD)	400	400	400
Bottom of Layer (mAHD)	250	250	250
Initial Water Level (mAHD)	337	337	337
Horizontal Hydraulic Conductivity, along strike (m/d)	1.5	0.5	0.01
Horizontal Hydraulic Conductivity, across strike (m/d)	0.75	0.25	0.005
Specific Yield	0.1	0.05	0.05

- As the pit lakes will stabilise at lower elevations than the pre mining groundwater level (337mAHD), the pits will function as a groundwater sinks following the cessation of dewatering. Groundwater will flow towards the pits so that any changes in water quality within the pits will not affect the regional groundwater system.
- Drilling and test-pumping data indicated the iron -orebodies mined in the A, B and C pits at the Koolyanobbing Range are moderately permeable. As the orebodies are linear and narrow, most inflow to the pits is from the adjacent, weathered, basaltic rocks and more so, from any high-permeability faults that intersect the pit margins.
- SWL in C pits is likely to recover to 330mAHD within ten years post mine dewatering. A more rapid and lower elevation of recovery will occur if the permeability of the basaltic rock is less than that assumed in the Rockwater model.

DWER will assess the risk waste material being disposed into C pit at elevation commencing 364mAHD. This provides a 34m vertical separation above the Rockwater 2011 predicted SWL after 10 years post dewatering operation and potential leachate from the putrescible waste. The existing licence conditions will be reassessed in table 2 to decide if C pit has suitable leachate containment to accept putrescible and tyre wastes.

Review of the Vegetation at Lake K

On 26 November 2018, Mineral Resources Limited (MRL) completed an assessment of the fringing vegetation at Lake K as part of this licence amendment application. The vegetation report has concluded:

- The 13 years of monitoring data collected on the condition of lake edge vegetation within the Lake Deborah system has revealed the dynamic nature of this environment. The response to, and continuing recovery from salt-water intrusion into the vegetation at Lake K from an extremely high rainfall event in 1999, combined with fluctuating seasonal rainfall, are the most significant influences upon the ongoing health of this vegetation community.
- The results do not currently indicate the dewatering program had any significant effect on the fringing vegetation health. The 2018 monitoring found the vegetation at Lake K responded in a similar way to both control lakes, particularly Lake Deborah East Major separated by a road servicing the WA salt supply operations.
- Dewatering inputs to Lake K ceased in February 2018. The value in continuing to monitor the fringing vegetation in the Lake Deborah considering the lack of evidence that dewatering discharge has impact lake K vegetation.

The licence conditions to monitor vegetation at Lake K has an low environmental risk and therefore little impact due to dewatering discharge has occurred as described in the MRL report. The review provides sufficient evidence to allow the removal of conditions from the licence requiring vegetation monitoring.

Review of Water Quality and Sediment at Lake K

MRL completed a review of the water quality and sediment monitoring for Lake K and surrounding water bodies at Koolyanobbing operations. The report titled *“Koolyanobbing Iron Ore Project – water and sediment quality monitoring for Lake K and surrounding waterbodies, Koolyanobbing minesite”* dated 7 November 2018 concluded;

- The results from the monitoring program provided no evidence of contamination of the surface water or sediments in Lake K attributable to the dewatering operations at Koolyanobbing.
- The discharge of mine water into Lake K have shown the site to be compliant with the operating licence conditions.
- Pit dewatering operations achieved the desired objectives of lowering groundwater levels in A, B, C and K Pits without having a significant environmental impact on the

water and sediment quality of the receiving salt lake system. This observation is based on the variation of surface water and sediment quality from monitoring conducted between 1999 to 2018 and minor changes in concentrations for anolytes at control sites.

- An increase in salt-crust and surface water coverage through the Lakes appears to have ceased with the cessation of dewatering discharge to Lake K. The potential for surface water connectivity between Lake K and Southern Lake is now very low under normal climatic conditions with only a remote possibility for large storm events resulting in mobility and exchange of salts and metals between lake systems.
- The surface change from a clayey lake sediment to a salt crust (similar to that observed at the Lake K sites: KL-1, KL-2, KL-3 and the control site) does not appear to have affected the function of the system. Continued exchange of ion species with the underlying lake sediments appears to be functioning with normal expected reactions at Lake K and the control sites.
- Based on this review YIPL have ceased dewatering discharge to Lake K from the Koolyanobbing Operations at the end of 2017, monitoring of sediment and water quality from Lake K and surrounding areas has ceased.

The licence conditions to monitor sediment and water quality at Lake K has a low environmental risk with only minor impacts observed during dewatering operations. The MRL review of water quality and sediment at Lake K provides sufficient evidence to allow the removal of monitoring conditions from the licence.

Redesign of primary crusher feed bin and additional infrastructure at the rail siding

YIPL email of 19 July 2019 proposed an upgrade to the Category 5 primary crusher feed bin to allow road trains to unload directly into the crusher. YIPL also proposed the addition of infrastructure at the rail siding to improve product handling and the loading of iron ore onto railway trains. The overall environmental risk of these alterations are assessed as low. Fugitive dust and noise emissions are low risk because existing management controls reduce these discharges. The alterations described in the licence will change the sites infrastructure. A condition requiring a completion report once the infrastructure is constructed is included in this licence amendment.

Risk Assessment

Table 2 below applies a screening level risk assessment for the potential emissions that may arise from the application. The table identifies whether these emissions present a material risk requiring regulatory control.

Table 2 – Risk assessment for proposed amendments

Category and Source Activity		Risk Event				Continue to detailed risk assessment?	Reasoning
		Potential emission	Potential receptors	Potential pathway	Potential impacts		
Cat 5 processing and beneficiation of metallic or non-metallic ore	Redesign and construction of crusher feed bin and ramp plus additional materials handling infrastructure near the rail siding at Koolyanobbing operation	Dust	Southern Cross township, ~50 km south of Koolyanobbing operation.	Air / wind	Dust can cause health and amenity impacts to humans.	No	The sensitive receptors at Southern Cross township are too far away from the activity for impacts by dust generated from construction and operation of the crusher feed bin and linear stackers. Construction report required as new administrative licence condition.
		Dust	Declared Rare Flora species <i>Tetradlea erubescens</i> and other conservation significant flora and vegetation.	Air / wind	Dust can coat leaves and impact plant health and survival.	No	Potential dust impacts to the DRF species and other flora and vegetation do not require further consideration here as they were included in previous EPA assessment where management controls found acceptable by the Minister for Environment subject to preparation and implementation of Flora and Vegetation Management Plan. Construction report required as new administrative licence condition.
		Noise	Southern Cross township, ~50 km south of Koolyanobbing operation.	Air / wind	Nuisance noise can cause amenity impacts to nearby sensitive receptors	No	The sensitive receptors at Southern Cross township are too far away from the activity for impacts by nuisance noise during construction and operation of the crusher feed bin and linear stackers. Construction report required as new administrative licence condition.
Cat 64 Class II putrescible landfill and used tyre disposal	Construction and operation Class II putrescible landfill in C Pit	Dust	Declared Rare Flora species <i>Tetradlea erubescens</i> and other conservation significant flora and vegetation.	Air / wind	Dust can coat leaves and impact plant health and survival	No	Potential dust impacts to the DRF species and other flora and vegetation do not require further consideration here as they were included in the EPA assessment and were found acceptable by the Minister for Environment subject to preparation and implementation of a Flora and Vegetation Management Plan including specific dust management provisions (condition 6, Ministerial Statement 1054).
		Dust	Southern Cross township, ~50 km to the south of Koolyanobbing operation.		Dust can cause health and amenity impacts to humans	No	Given the distance to the sensitive receptor (Southern Cross township), there is no material risk from dust emissions for the construction and operation of the putrescible landfill
		Odour			Odour can cause amenity impacts to humans receptors	No	Given the distance to the sensitive receptor at Southern Cross township, there is no material risk from odour emissions from the putrescible landfill and tyre disposal.
		Noise			Noise can cause amenity impacts to humans	No	Given the distance to the sensitive receptor (Koolyanobbing township), the Delegated Officer considers there is no material risk from noise emissions from the construction and operation of the of the putrescible landfill

Table 2 – Risk assessment for proposed amendments

Category and Source Activity		Risk Event				Continue to detailed risk assessment?	Reasoning
		Potential emission	Potential receptors	Potential pathway	Potential impacts		
Cat 64 Class II putrescible landfill and used tyre disposal.	Storage and disposal of used tyres in C pit.	Leachate	Groundwater	Infiltration through the soil profile to groundwater.	Contamination of groundwater and/or impacts to the DRF species or other flora or vegetation.	No	Negligible leachate is produced from used tyre storage. Used tyres regulated through the existing licence condition 1.2.9 and table 1.2.4. The Licence amendment will specify the locations of used tyre facilities at C pit and apply the same regulatory controls as currently exist. Depth from base of the C pit landfill to the water table is 23m separation 10 years after dewatering ceases. This providing adequate separation distance from groundwater which is hypersaline.
	Storage and disposal of Class II putrescible waste in C pit.	Leachate	Groundwater Declared Rare Flora species <i>Tetradlea erubescens</i> and other conservation significant flora and vegetation.	Infiltration through the soil profile to vegetation and to groundwater.	Contamination of groundwater and/or impacts to the DRF species or other flora or vegetation.	No	Rockwater 2011 predicted groundwater after 10 years post dewatering will be 34 metres below landfill base and will act as a natural sink drawing groundwater towards C pit. Therefore, potential leachate reaching the water table will not affect regional groundwater quality (hypersaline) and will be contained within C pit. Given the new landfill is located within C pit there is no material risk of impacts to flora species as the vegetation root zone is over 69 metres from the groundwater. This provides adequate separation distance between vegetation and hypersaline groundwater. C pit putrescible landfill is regulated by licence conditions 1.2.7 to 1.2.11. Licence condition 1.2.9 and table 1.2.4 is amended to include the C pit putrescible landfill.

Decision

The DWER assessed the application to transfer and amend the licence. The assessment included 'C pit' suitability to dispose putrescible waste and tyres and the proposed new infrastructure for the redesign of the crusher feed bin and handling of iron ore product.

The proposed licence transfer and amendment will not change the risk profile of emissions and discharges such that they would be unacceptable in terms of public health or the environment.

Administrative changes to transfer the licence will require;

- changing Licence Holder from 'Cliffs Asia Pacific Iron Ore Pty Ltd' to 'Yilgarn Iron Pty Ltd'; and
- updating the Australian Company Number (ACN) and registered business address;

The Licence amendment will also include,

- deleting category 6 and 57 and reducing the approved production capacity for category 64 to 4,000 tonnes per year;
- amending licence conditions 1.2.9, 1.2.5, 1.2.6, 1.2.7, 1.2.16, 2.2.1, 3.2.1, 3.5.1 and 4.2.1 to address the category changes;
- a new administrative condition 1.2.17 explaining the infrastructure location to be constructed at the ROM pad feed bin and rail siding plus a new condition 5.1.5 requiring compliance reporting once construction has been completed;
- amend the Schedule 1 Premises map, delete schedule 1 water quality and sediment monitoring location map; and,
- include new plans in Schedule 2A, 2B & 2C showing the optional infrastructure to be constructed at the ROM pad and rail siding.

DWER determined the YIPL Koolyanobbing premises risk remains unchanged following the completion of the infrastructure at the feed bin redesign and rail siding.

Licensee's comments

The draft Amendment Notice 3 was provided to the Licence Holder on 4 October 2019. The Licence Holder responded on 11 October and all comments have been considered by the Delegated Officer are shown in Appendix 2.

Amendment

1. The Licence Holder, ACN and registered business address has been amended by deleting the black strikethrough text and inserting the red text below

<u>From:</u> Cliffs Asia Pacific Iron Ore Pty Ltd	<u>To:</u> Yilgarn Iron Pty Ltd
001 892 995	626 035 078
Level 12, 1 William Street	1 Sleaford Road, Applecross
PERTH WA 6000	PERTH WA 6153

2. The Prescribed premise category Licence table is amended by deleting the black strikethrough text and inserting the red text shown below:

Prescribed premises category

Schedule 1 of the Environmental Protection Regulations 1987

Category number	Category description	Category production or design capacity	Approved premises production or design capacity
05	Processing or beneficiation of metallic or non-metallic ore	50 000 tonnes or more per year	12 500 000 tonnes per annual period
06	Mine dewatering	50 000 tonnes or more per year	2 010 000 tonnes per annual period
12	Screening etc of materials	50 000 tonnes or more per year	500 000 tonnes per annum
54	Sewage Facility	100 m ³ or more per day	300 cubic metres per day
57	Used tyre storage (general)	100 tyres or more	1,000 tyres
64	Class II putrescible landfill site	20 tonnes or more per year	6 000 4 000 tonnes per annual period

3. Condition 1.2.9 and Table 1.2.4 amended to include tyre disposal and putrescible landfill at C pit by the insertion of the red text shown below.

1.2.9 The Licensee shall ensure that the wastes accepted onto the Premises are only subjected to the process(es) set out in Table 1.2.4 and in accordance with any process requirements described in that table.

Waste type	Process	Process requirements ^{1, 2}
Sewage	Physical, biological and chemical treatment	Treatment of sewage waste shall be limited at or below the treatment capacity of 300 m ³ /day cumulative volume.
Sewage sludge	Disposal	Removed by a licensed controlled waste carrier
All	Disposal of waste by landfilling	(i) A suitable barrier is installed to prevent windblown waste leaving the trench. (ii) The separation distance between the base of the landfill and the highest groundwater level shall not be less than 2m.
Clean Fill	Receipt, handling and storage prior to disposal, and disposal (burial)	Stockpile clean fill to allow for the covering of waste for at least two weeks.
Inert Waste Type 1		Buried in trenches at the F, K and A2 WRL putrescible landfill sites as depicted in Schedule 1.
Inert Waste Type 2		(i) Used tyres buried at the B/C, C and D Pits, A2, F and K WRL landfill sites as depicted in Schedule 1. (ii) Used tyres stored in Haulage and K1 yards in the open are arranged in rows with at least 3m separating each row to allow access for firefighting equipment. (iii) Each row of stored used tyres is not more than 18m in length, or 10m in width, or not more than 4m in height. (iv) No more than 1,000 tyres stored at any location.
Putrescible waste	Disposal	(i) Buried in C pit and trenches at the F, K and A2 WRL putrescible landfill sites as depicted in Schedule 1. (ii) The tipping area is less than 20 metres in length. (iii) Stormwater is diverted away from the trench or tipping face.

All used or surplus lubricants, hydraulic fluids and radiator coolant or inhibitors	Storage and disposal	Stored in holding tanks for recycling and removal to an appropriate facility.
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Note 1: Requirements for landfilling tyres are set out in Part 6 of the *Environmental Protection Regulations 1987*.
Note 2: Additional requirements for the acceptance and landfilling of controlled waste (including asbestos and tyres) are set out in the *Environmental Protection (Controlled Waste) Regulations 2004*.

4. Condition 1.2.5, 1.2.6, 1.2.7, 1.2.16, 2.2.1, 3.2.1, 3.5.1 and 4.2.1 amended to include text depicted in red and delete that text depicted in black strikethrough.

- 1.2.5 The Licensee shall:
- undertake inspections as detailed in Table 1.2.2;
 - where any inspection identifies that an appropriate level of environmental protection is not being maintained, take corrective action to mitigate adverse environmental consequences as soon as practicable; and
 - maintain a record of all inspections undertaken.

Table 1.2.2: Inspection of infrastructure

Scope of inspection	Type of inspection	Frequency of inspection
Dewater pipeline-	Visual integrity-	12 hourly-
C3, C4, C5 and C6	Freeboard capacity	Daily
L1	Freeboard capacity	Weekly

~~1.2.6 The Licensee shall undertake an annual assessment of vegetation within the zone of influence of dewatering discharge to Lake K. The assessment shall:-~~

- ~~photograph and record the presence and condition of key vegetation features within the zone of influence;-~~
- ~~compare the results of the assessment against previous years assessments and identify whether any deterioration in the presence and/or quality of vegetation has taken place; and-~~
- ~~be undertaken by a person suitably qualified in vegetation identification and sampling.-~~

1.2.7 The Licensee shall only allow waste to be accepted on to the Premises if:

- it is of a type listed in Table 1.2.3;
- the quantity accepted is below any limit listed in Table 1.2.3; and
- it meets any specification listed in Table 1.2.3.

Table 1.2.3: Waste acceptance

Waste	Quantity Limit	Specification ¹
WWTPs		
Sewage	Cumulative total for all WWTPs of 300 m ³ /day	Accepted through sewer inflows only
Landfill		
Clean Fill	None	None Specified
Inert Waste Type 1	Cumulative total of € 4,000 tonnes per annual period	Waste containing visible asbestos or ACM shall not be accepted.
Inert Waste Type 2		Scrap metal, tyres and plastic only
Putrescible Waste		None specified

Note 1: Additional requirements for the acceptance of controlled waste are set out in the *Environmental Protection (Controlled Waste) Regulations 2004*.

1.2.16 The Licensee shall ensure the limits specified in Table 1.2.6 are not exceeded.

Table 1.2.6: Production or design capacity limits		
Category¹	Category description¹	Premises Production or design capacity limit
06	Mine dewatering	2,010,000 tonnes per annual period
05	Processing or beneficiation of metallic or non-metallic ore	12,500,000 tonnes per annual period

Note 1: Environmental Protection Regulations 1987, Schedule 1

2.2 Point source emissions to surface water

2.2.1 The Licensee is permitted, subject to conditions in the Licence, to emit wastes to water from the emissions points listed in Table 2.2.1 and identified in the Premises Map in Schedule 1.

Table 2.2.1: Emission points to surface water		
Emission point reference and location on Premises Map	Description	Source including abatement
W1	Discharge to Lake K	Mine Dewater from A, B, C and K Pits

3.2 Monitoring of point source emissions to surface water

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 point source emissions to surface water				
Emission point reference	Parameter	Units	Averaging Period	Frequency
W1	Volumetric flow rate (cumulative)	L/s m ³ /day	Monthly	Continuous
	pH ¹	N/A	Spot sample	Quarterly

Note 1: In-field non-NATA accredited analysis permitted.

3.5.1 The Licensee shall undertake the monitoring in Tables 3.5.1 and 3.5.2 according to the specifications in those tables and record and investigate results that do not meet any limit specified.

Table 3.5.1: Monitoring of ambient groundwater quality				
Monitoring point reference and location	Parameter	Units	Averaging period	Frequency
MBH1 and MBH2	Standing water level	mbgl	Spot sample	Quarterly
	pH ¹	N/A		
	Total Dissolved Solids	mg/L		
	Electrical Conductivity	µS/cm		

Note 1: In-field non-NATA accredited analysis permitted.

Table 3.5.2: Monitoring of ambient sediment quality

Monitoring point reference and location	Parameter	Units	Averaging Period	Frequency
KL-1, KL-2, KL-3, KL-7, KL-8, KL-9, KL-10, KL-11, KL-12, KL-13, KL-14, KL-15, KL-16, KL-21 and KL-22	pH	N/A	Spot sample	Annually in the same month
	Electrical Conductivity	µS/cm		
	Total Dissolved Solids	mg/kg		
	Total Suspended Solids			
	Carbonate (CO ₃)			
	Bicarbonate (HCO ₃)			
	Hydroxide			
	Chloride			
	Nitrate (NO ₃)			
	Sulfate (SO ₄)			
	Total Nitrogen			
	Total Phosphorus			
	Aluminium			
	Arsenic			
	Calcium			
	Cadmium			
	Copper			
	Cobalt			
	Chromium			
	Iron			
	Lead			
Magnesium				
Manganese				
Potassium				
Sodium				
Nickel				
Zinc				

Note 1: In-field non-NATA accredited analysis permitted.

4.2.1 The Licensee shall submit to the CEO an Annual Environmental Report by 28 February after the end of the annual period. 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: Annual Environmental Report

Condition or table (if relevant)	Parameter	Format or form ¹
-	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
4.1.3	Compliance	Annual Audit Compliance Report (AACR)
4.1.4	Complaints summary	None specified

1.2.6	Annual assessment of vegetation
1.3.16	Prescribed category throughputs
Table 3.2.1	Monitoring of emissions to surface water
Table 3.3.1	Monitoring of emissions to land
Table 3.4.1	Monitoring of inputs and outputs
Table 3.5.1	Monitoring of ambient groundwater quality
Table 3.5.2	Monitoring of ambient sediment quality
-	Measures taken to suppress dust

Note 1: Forms are in Schedule 2 and AACR form available from DWER website at https://www.der.wa.gov.au/images/documents/our-work/licences-and-works-approvals/aacr/IR-F14_AACR_Form_v3.docx

5. Delete the schedule 1 map of water quality and sediment monitoring locations as defined by the monitoring points referenced in table 3.5.2.
6. Insert new licence condition as depicted in red text to confirm construction of new infrastructure at the beneficiation plant.

1.2.17 The License Holder must complete construction of associated infrastructure in accordance with the documentation listed in Table 1.2.7 and in the location depicted in Schedule 2 plans titled "ROM pad redesign and material handling infrastructure".

Table 1.2.7: Construction requirements ¹		
Document	Parts	Date of Document
Email from YIPL dated 19 July 2019 titled "L5850 - Proposed upgrade to OHP stackers" and 11 October 2019 titled "L5859 Licence Amendment Notice 3" from Neil Smith		
Key Infrastructure is;		
1. Redesign of the feed bin and ramp to the primary crusher on the ROM so that road trains can direct tip into the feed bin.	Attached design file titled "ROM pad area upgraded.jpg"	19 July 2019
2. Install two additional linear stackers (option 1) or staker and reclaimers for lump and fines material handling and/or loading hopper for loading railway trains (option 2).	Attached design file titled "Koolyanobbing linear stacking Rev A.PDF" and "Stacker Reclaimer and TLO layout.PDF"	19 July 2019 and 11 October 2019

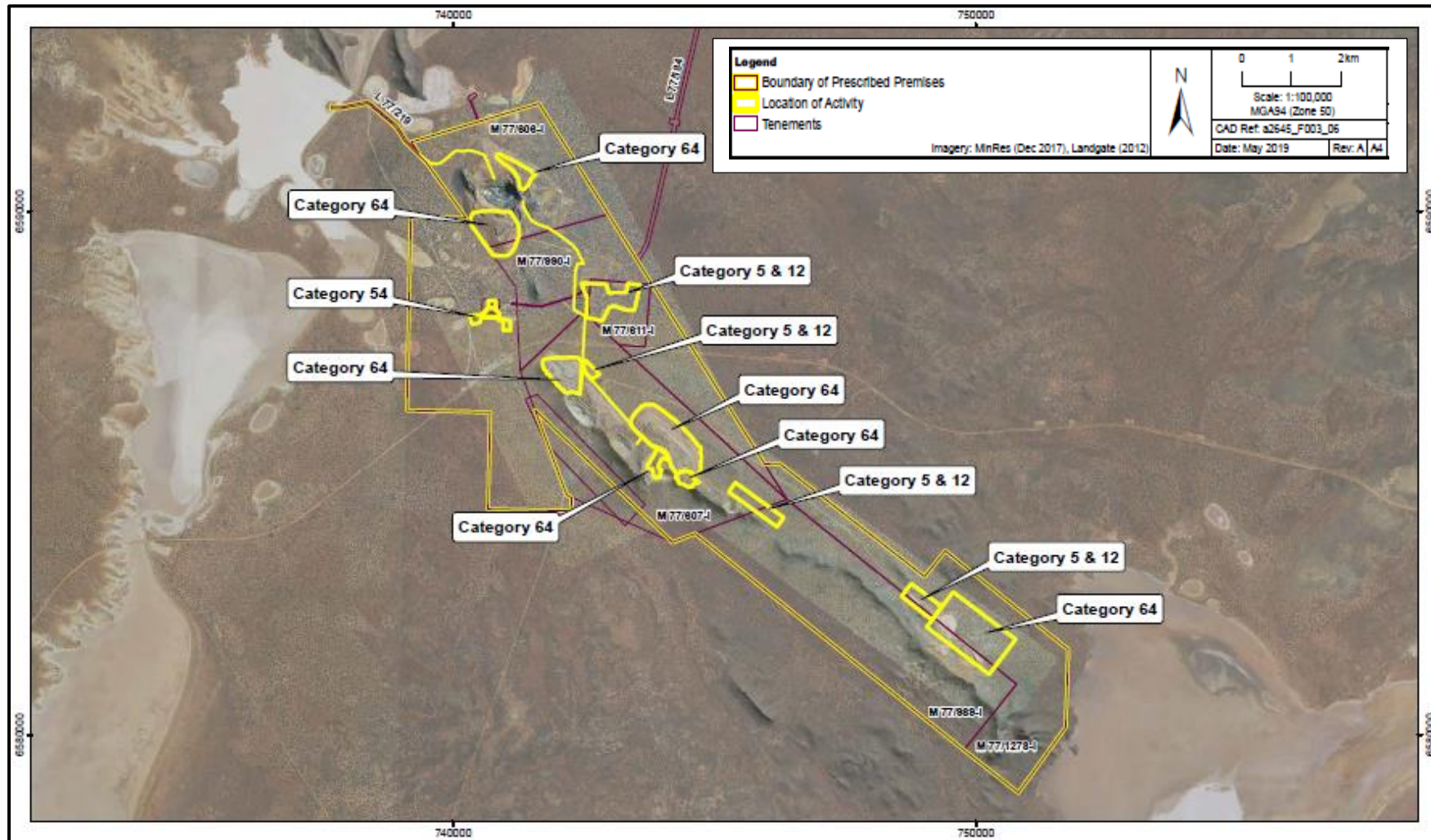
- 5.1.5 The licence holder must within 30 days of each item of infrastructure required by condition 1.2.17 and table 1.2.7 being constructed:
- (a) undertake an audit of their compliance with the requirements of condition 1.2.17 and
 - (b) prepare and submit to the CEO an audit report of that compliance.
 - (c) be signed by a person authorised to represent the licence holder and contains the printed name and position of that person within the company

7. Insert new schedule 1 maps for Premises map and condition 1.2.17 infrastructure plans as shown in schedule 2A, 2B and 2C following

Schedule 1: Maps

Premise Map

The Premises is shown in the map below. The yellow line including brown insert depicts the Premises boundary.



Schedule 2A:

ROM pad redesign to allow road trains to dump directly into the crusher feed bins



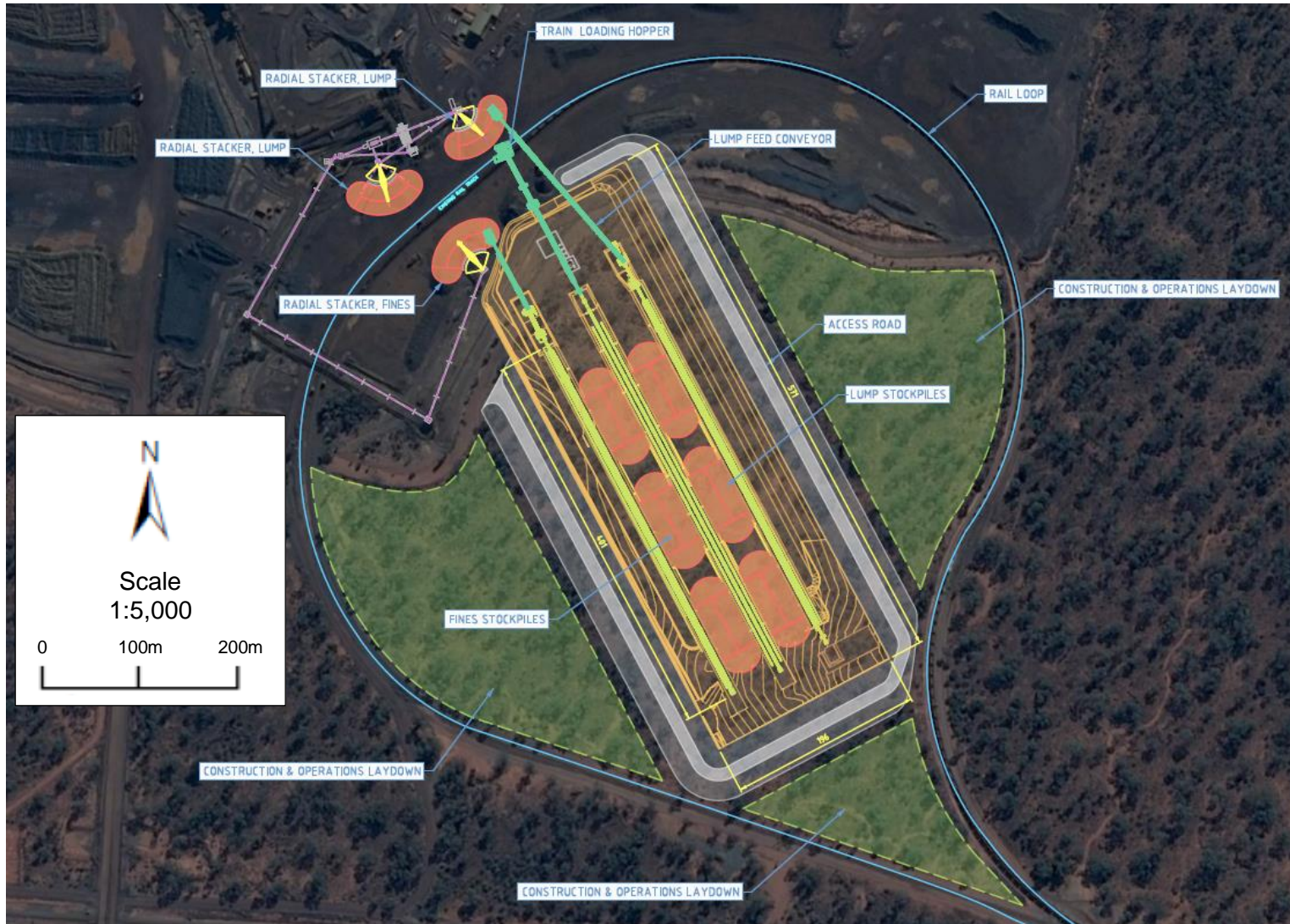
Schedule 2B:

Linear stackers for ore handling during train loading - option 1



Schedule 2C:

Linear stackers for ore handling during train loading – option 2



Appendix 1: Key Documents

	Document Title	Availability
1	DER, Nov 2016, <i>Guidance Statement: Risk Assessment</i> . Department of Environment Regulation, Perth.	Accessed at http://www.dwer.wa.gov.au
2	DER, Nov 2016, <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, Oct 2015, <i>Guidance Statement: Setting Conditions</i> . Department of Environment Regulation, Perth.	
5	DER, Aug 2016, <i>Guidance Statement: Licensing Duration</i> . Department of Environment Regulation, Perth.	
6	Licence transfer application signed by company representative dated 26 September 2018: <ul style="list-style-type: none"> Cliffs Asia Pacific Iron Ore Pty Ltd – Application to transfer licence to Yilgarn Iron Pty Ltd along with transfer fee. 	DWER Record A1738978 and A1731792 (Receipt)
7	Licence amendment application signed by company representative dated 15 May 2019: Yilgarn Iron Pty Ltd – Application to amend licence for Category 6, 64 and 57 and remove lake K monitoring and reporting.	DWER record DWERDT160093
8	Email from YIPL staff dated 19 July 2019 and titled “L5850 - Proposed upgrade to OHP stackers” plus attachments of proposed infrastructure.	DWER Records A1823981, A1823983 & A1823984
9	Email from YIPL staff dated 11 October 2019 and titled “L5850 Licence Amendment Notice 3” plus attachments of proposed infrastructure and comments on Amendment Notice 3.	DWER records A1833404, A1833405, A1833406 & A1833407.

Appendix 2: Comments from Licence Holder

Licence Holder provided with the draft Amendment Notice 3 on 4 October 2019 for review and comment. The Licence Holder responded on 11 October 2019 with the following comments about the draft Amendment Notice.

Condition	Summary of Licence Holder comment	DWER response
<p>Condition 1.2.17 table 1.2.7 plus text within Amendment Notice 3.</p>	<p>YIPL is conducting a feasibility study into a couple of upgrade options for the handling of product from the crushing and screening plant at Koolyanobbing.</p> <p>The draft Amendment Notice 3 (L5850) is prescriptive in terms of the infrastructure to be constructed.</p> <p>The environmental risk is the same for either option (lineal stackers or stacker/re-claimer and train load-out hopper) where the low risk of impacts of fugitive dust and noise is managed in accordance with YIPL existing operational controls.</p> <p>The licence amendment should be flexible so that either option is constructed.</p> <p>YIPL is committed once construction is completed, to undertake an audit of compliance authorised by a competent person for the infrastructure.</p>	<p>Agreed to adjust the condition, table and Schedule 2A 2B 2C plans to reflect new infrastructure construction of either lineal stackers (option 1) or stacker/re-claimer and train load-out hopper (option 2).</p> <p>Text within the Amendment Notice was adjusted to reflect either option of infrastructure could be constructed.</p>