



Licence Number	L5850/1993/11
Licence Holder	Cliffs Asia Pacific Iron Ore Pty Ltd
ACN	001 892 995
Registered business address	Level 11 1 Williams Street PERTH WA 6000
Date of amendment	24 April 2017
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); 64 – class II or III putrescible landfill; 85 – sewerage facility.
Premises	Koolyanobbing Iron Ore Project Being Part tenements L77/219, M77/606, M77/607, M77/611, M77/990 and E77/1307 as depicted in Schedule 1 KOOLYANOBING WA 6427

Amendment

The Chief Executive Officer (CEO) of the Department of Environment Regulation (DER) has amended the above licence in accordance with section 59 of the *Environmental Protection Act 1986* 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)

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.

Amendment Description

Cliffs Asia Pacific Iron Ore Pty Ltd (Cliffs) operates the Koolyanobbing Iron Ore mine which is subject to Licence conditions under Part V of the EP Act.

On 19 February 2016 Cliffs submitted an application to DER for an amendment to licence L5850/1993/11. The licence amendment application relates to the extension of the Koolyanobbing mine to include Range F Deposit and inclusion of a mobile crushing and screening plant to process other rock material along with low grade ore. A Class II putrescible landfill will also be constructed in the Waste Rock Landform (WRL) at F Range and will supplement the current landfill operations for the Koolyanobbing mine. The additional putrescible landfill will not result in an increase in the mass of landfill disposal but will simply represent an additional site at which landfill may occur.

In parallel with the application under Part V of the EP Act, Cliffs' proposal for development of the Range F Deposit, located immediately south-east of the existing Koolyanobbing mine operations, was under assessment by the Environmental Protection Authority (EPA) under Part IV of the EP Act. Subject to section 41(3) of the EP Act, an approval could not be issued under Part V pending completion of the Part IV process.

On 21 January 2017 Cliffs applied to DER to further amend the licence to include all the locations of the inert waste activities occurring at the current mining operation.

On 25 January 2017 the Minister for Environment issued a Statement under Part IV of the EP Act that the Range F Deposit proposal may be implemented.

The EPA assessment and Ministerial Statement focussed on biodiversity issues, particularly the conservation of the Declared Rare Flora (DRF) species *Tetratheca erubescens* which is endemic (unique) to the southern part of the Koolyanobbing Range. The EPA assessment included consideration of the potential for dust impacts on the DRF species and on other conservation significant flora and vegetation.

The current Amendment Notice addresses both the applications of 19 February 2016 and 21 January 2017. The Amendment Notice adds category 12 – for screening of other material using mobile plant. It also incorporates a revised premises boundary which includes new tenements covering the Range F Deposit and includes all the existing and proposed new waste landfill locations.

Risk Assessment

Table 1 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 1 – 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 12 Screening etc of material extracted from the ground (other than ore)	Dust	Kooyanobbing township, 10 km to the north-west of F Deposit.	Air / wind	Dust can cause health and amenity impacts to humans.	No	The Delegated Officer notes the distance to sensitive receptors (Kooyanobbing township) and determines that there is no material risk of impacts from dust generated from mobilisation and operation of the crushing and screening equipment
	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).
	Noise	Kooyanobbing township, 10 km to the north-west of F Deposit.	Air / wind	Nuisance noise can cause amenity impacts to nearby sensitive receptors	No	The Delegated Officer notes the distance to sensitive receptor (Kooyanobbing township) and determines that there is no material risk of nuisance noise impact.
Cat 57 Used Tyre storage facilities at F Deposit.	Dust	Kooyanobbing township, 10 km to the north-west of F Deposit.	Air / wind	Dust can cause health and amenity impacts to humans.	No	The Delegated Officer notes the distance to sensitive receptors (Kooyanobbing township) and determines that there is no material risk of impacts from dust generated from mobilisation and operation of the used tyres storage facilities.
	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).
	Noise	Kooyanobbing township, 10 km to the north-west of F Deposit.	Air / wind	Nuisance noise can cause amenity impacts to nearby sensitive receptors	No	The Delegated Officer notes the distance to sensitive receptor (Kooyanobbing township) and determines that there is no material risk of nuisance noise impact from the used tyres storage facilities.

Category and Source Activity	Risk Event				Continue to detailed risk assessment?	Reasoning
	Potential emission	Potential receptors	Potential pathway	Potential impacts		
Cat 57 Used Tyre storage (general).	Dust	Kooyanobbing township, approximately 1.2 km to the north-west of the existing mine.	Air / wind	Dust can cause health and amenity impacts to humans.	No	Given the distance to the nearest human receptor (Kooyanobbing township), the Delegated Officer considers there is no material risk of impacts to the receptor from dust emissions from construction or operation of the used tyre storage facilities.
	Noise			Nuisance noise can cause amenity impacts to humans	No	Given the distance to the sensitive receptor (Kooyanobbing township), the Delegated Officer considers there is no material risk from noise emissions from the construction or operation of the used tyre storage facilities.
	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 tyre storage is regulated through the existing licence condition 1.2.9 and table 1.2.4. The Licence amendment will specify the locations of used tyre storage facilities at the Haulage and K1 yards at the current Kooyanobbing mine site and apply the same regulatory controls as currently exist.
Cat 64 Class II putrescible landfill	Dust	Kooyanobbing township, 10 km to the north-west of F Deposit.		Dust can cause health and amenity impacts to humans	No	Given the distance to the sensitive receptor (Kooyanobbing township), the Delegated Officer considers there is no material risk from dust emissions for the construction and operation of the putrescible landfill
	Dust	Declared Rare Flora species <i>Tetradlea erubescens</i> and other conservation significant flora and vegetation.		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).
	Odour	Kooyanobbing township, 10 km to the north-west of F Deposit	Air / wind	Odour can cause amenity impacts to humans receptors	No	Given the distance to the sensitive receptor (Kooyanobbing township) the Delegated Officer considers there is no material risk from odour emissions from the putrescible landfill
	Noise	Kooyanobbing township, 10 km to the north-west of F Deposit.		Noise can cause amenity impacts to humans	No	Given the distance to the sensitive receptor (Kooyanobbing township), the Delegated Officer considers there is no material risk from noise emissions from the construction and operation of the of the putrescible landfill

Category and Source Activity	Risk Event					Continue to detailed risk assessment?	Reasoning
	Potential emission	Potential receptors	Potential pathway	Potential impacts			
Cat 57 Used Tyre storage (general). Storage and disposal of used tyres in F Deposit waste rock landform.	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 tyre storage is regulated through the existing licence condition 1.2.9 and table 1.2.4. The Licence amendment will specify the locations of used tyre storage facilities at F Deposit and apply the same regulatory controls as currently exist.	
Cat 64 Class II putrescible landfill. Storage and disposal of Class II putrescible waste in F Deposit waste rock landform.	Leachate	Groundwater Declared Rare Flora species <i>Tetradleuca 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	Given that the new landfill is to be located within the waste rock landform the Delegated Officer considers there is no material risk of groundwater contamination or impacts to the DRF species or other flora or vegetation. Putrescible landfills are currently regulated under licence conditions 1.2.7 to 1.2.11 inclusive. This Licence amendment will amend table 1.2.4 (condition 1.2.9) to include the new landfill location.	

Decision

The Delegated Officer assessed that the proposed mine extension to include Range F deposit plus inclusion of landfills within the WRL's and has determined to not change 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 will include new mining tenement description, inclusion of category 12 in Licence table, amendment to Table 1.2.4 to authorise Range F deposit crushing and screening, putrescible landfill, tyre disposal and a new Schedule 1 Premises Map.

Amendment History

Instrument	Issued	Description
L5850/1993/9	19/10/2007	Licence re-issue
L5850/1993/10	17/09/2010	Licence re-issue
L5850/1993/11	25/10/2013	Licence re-issue
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	XX/02/2017	Amendment Notice 1 to: <ol style="list-style-type: none"> 1. Include Range F deposit processing or beneficiation of metallic or non-metallic ore; 2. Update the Premises address and boundary; 3. Include Category 12 – Screening of material; 4. Include existing inert waste locations to reflect current Koolyanobbing mine site operations; and, 5. Update the Premises map in schedule 1 of the Licence.

Amendment

1. The licence prescribed premises location is amended by addition of two additional mining tenements indicated in red text below:

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

Cliffs Asia Pacific Iron Ore Pty Ltd				
L77/219	M77/606	M77/607	M77/611	M77/990
E77/1307	M77/989	M77/1278		

2. The Prescribed premise category Licence table be amended with 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 tonnes per annual period

3. Table 1.2.4 is amended to include Class II putrescible landfill and tyre disposal by the insertion of the red text shown below. Additional text (in red below) has been added to the waste type and process columns for clarity.

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 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.
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.

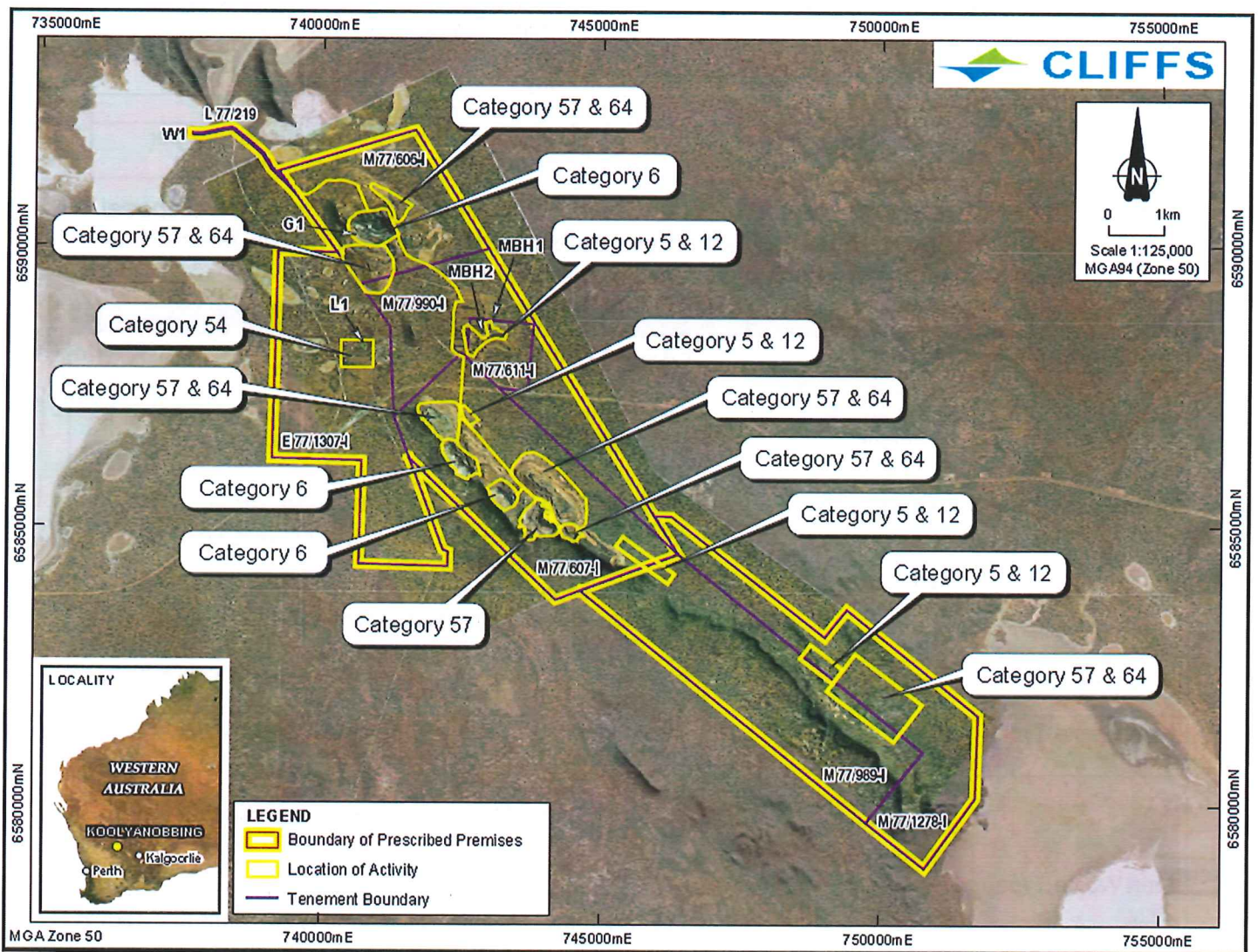
Note 1: Requirements for landfilling tyres are set out in Part 6 of the *Environmental Protection Regulations 1987*.
 Note 2: Additional requirements for the acceptance and landfilling of controlled waste (including asbestos and tyres) are set out in the *Environmental Protection (Controlled Waste) Regulations 2004*.

4. Schedule 1 Premise map is replaced with the map below:

Schedule 1: Maps

Premise Map

The Premises is shown in the map below. The yellow line depicts the new Premises boundary.



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.der.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, Sept 2016, <i>Guidance Statement: Environmental Standards</i> . Department of Environment Regulation, Perth.	
5	DER, Sept 2015, <i>Guidance Statement: Licensing and Works Approvals</i> . Department of Environment Regulation, Perth.	
6	DER, Oct 2015, <i>Guidance Statement: Setting Conditions</i> . Department of Environment Regulation, Perth.	
7	DER, Aug 2016, <i>Guidance Statement: Licensing Duration</i> . Department of Environment Regulation, Perth.	
9	Licence amendment application signed by company representative on 19 February 2016: <ul style="list-style-type: none"> Cliffs Asia Pacific Iron Ore Pty Ltd – Application form to amend Licence L5850/1993/11 dated 19 February 2016. 	DER Records (A1055333)
10	Licence amendment supporting documentation received on 19 February 2016: <ul style="list-style-type: none"> Cliffs Asia Pacific Iron Ore Pty Ltd – Attachments 1 to Attachment 14 supporting the application form to amend Licence L5850/1993/11 dated 19 February 2016. 	DER Records (A1055333)
11	Licence amendment application signed by company representative on 21 January 2017: <ul style="list-style-type: none"> Cliffs Asia Pacific Iron Ore Pty Ltd – application form to amend licence L5850/1993/11 dated 21 January 2017. 	DER record (A1363357)
12	E-mail titled "Cliffs L5850" dated 16 February 2017 from Cliffs Environmental Advisor – Compliance.	DER record (A1382898)

