

Amendment Notice 1

Licence Number	L8610/2011/1			
Licence Holder	Roy Hill Infrastructure Pty Ltd			
Registered business address	28-42 Ventnor Avenue WEST PERTH WA 6005			
Date of amendment	8 February 2017			
Prescribed Premises	Category 54: Sewage facility			
Premises	Roy Hill Infrastructure Rail Construction Camp 2 Approximately 100 kilometres south of Port Hedland within the area bounded by 677460E, 7662967N, 677642E, 7662838N, 677748E, 7662672N, 678000E, 7662672N, 678001E, 7662152N, 677499E, 7662156N, 677497E, 7662674N, 677450E, 7662758N, 677370E and 7662817N (MG50). MARBLE BAR WA 6760			

Amendment

The Chief Executive Officer (CEO) of the Department of Environment Regulation has amended the above licence in accordance with section 59 of the *Environmental Protection Act 1986* as set out in this Amendment Notice.

Date signed: 8 February 2017

Alan Kietzmann MANAGER LICENSING (WASTE INDUSTRIES) an officer delegated under section 20 of the Environmental Protection Act 1986

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

Roy Hill Infrastructure Pty Ltd (RHI) (the Licence Holder) was granted a Licence by DER on 31 August 2012 for the operation of the RHI Rail Construction Camp 2 (RC2) premises under category 54 sewage facility with a capacity of 175.7 cubic metres per day. The Licence was amended on 18 April 2013 to include category 89 putrescible landfill site with a capacity of 500 tonnes per annual period. The capacity of category 89 was amended to 5000 tonnes per annual period on 28 January 2016. RHI operated RC2 between 2013 and 2016 to allow the construction of the Roy Hill Railway.

DER received an application for licence amendment on 18 January 2017 requesting removal of category 89 from the licence. This change was requested on the basis that the landfill site at RC2 had been decommissioned, remediated and validated. The Licence Holder submitted a supporting document entitled "Roy Hill Infrastructure – Rail Camp 2 – Generator Area and Landfill Remediation and Validation Report" with its licence amendment application. The report details the remediation and validation works of the landfill and diesel spilled areas at RC2. The remediation works are as follows:

- removal and validation of camp waste approximately 5.4 tonnes buried at the landfill site in 2013;
- removal and validation of diesel contaminated soil from the refuelling area; and
- removal and validation of diesel contaminated soil from the 2015 diesel spill at the generator area.

No other amendments were proposed.

Risk Assessment

Table 1 - Risk assessment for the proposed amendments under operation

Activity	Potential emission	Potential receptors	Potential pathway	Potential impacts	Material risk	Reasoning
Category 89 – putrescible landfill site	Leachate: infiltration from the putrescible waste	Groundwater	Land and groundwater – direct infiltration into soil and groundwater.	Alteration to soil and /or vegetation. Alteration to groundwater that has the potential to disrupt ecological processes of groundwater with excess metals, heavy metals and nutrients	No	 The proposed amendment is to remove Category 89: putrescible landfill activity from the licence. The landfill is no longer in use. The landfill area and diesel impacted area from the generator on RC2 have been remediated and validated by removing waste buried at the landfill and contaminated soil from the diesel spilled areas. The Licence Holder provided a remediation and validation report "Roy Hill Infrastructure – Rail Camp 2 – Generator Area and Landfill Remediation and Validation Report". The general observation of the monitoring data are as follows: Soil samples Refuelling area – TRH C6- C10, TRH C10 – C16, TRH C16 – C34 and TRH C34 – C40 are less than the assessment criteria specified in the NEPM (1999) Volume 2 Schedule B1, Table 1b(6) ESLs for TPH Fractions F1 – F4 and Landfill area – Heavy metals, TRH and Benzene, Toluene, Ethyl benzene and Xylenes (BTEX) are less than the assessment criteria in accordance with NEPM (1999) Volume 2 Schedule B1, Table 1b(6) ESLs for TPH Fractions F1 – F4. Groundwater samples Groundwater monitoring bore results appear to be stable since 2014. As per the report the remediation works conducted at RC2 are considered to have successfully remediated the generator, refuelling and landfill areas. The results of the validation soil sampling indicate that RC2 is suitable for the intended future land use as a camp.

Decision

The proposed amendment of the Licence L8610/2011/1 is made by the Delegated Officer pursuant to section 59(1) (a) of the EP Act.

The Delegated Officer has determined that an amendment be made to the Licence to remove category 89 from the licence on the basis that the landfill has been decommissioned and remediated for an alternative land use.

The Delegated Officer considers the amended conditions are appropriate and in line with other premises as assessed across the State, and in accordance with DER's regulatory approach.

The Delegated Officer has considered DER's *Guidance Statement: Regulatory Principles, Guidance Statement: Setting Conditions* and *Guidance Statement: Risk Assessment* in granting this amendment, and does not consider that this amendment will impact the risk profile of the premises, which is currently considered as low.

Instrument	Issued	Amendment	
L8610/2011/1	18/04/2013	Licence amendment to include category 89.	
L8610/2011/1	17/10/2013	Amendment to allow discharge of brine from the Reverse Osmosis Plant to the irrigation field.	
L8610/2011/1	10/10/2015	Amendment to allow a change in discharge concentration of TDS in brine from the Reverse Osmosis Plant to the irrigation field.	
L8610/2011/1	28/01/2016	Amendment to increase production and design capacity of the landfill.	
L8610/2011/1	08/02/2017	Amendment Notice 1 Remove category 89	

Amendment History

Licence Holder's Comments

The Licence Holder was provided with the draft Amendment Notice on 6 February 2017. The Licence Holder responded on 7 February 2017 waiving the remaining comment period with no comment provided.

Amendment

- 1. The licence is amended by the deletion of the Category 89 on the front page of the licence.
- 2. The definitions under 1.1.2 that relate to landfill operation are also deleted. These include the definitions: Acceptance Criteria, Clean Fill, Inert Waste Type 1, Inert Waste Type 2, Putrescible Waste, and Restoration
- 3. Table 1.3.1 is amended by the deletion of the text shown in strikethrough below in the Table waste acceptance:

Waste type	Quantity limit	Specification ¹
Inert Waste Type 1	Combined total up	None specified
Inert Waste Type 2		None specified
Clean Fill	per annual periou	None specified
Putrescible Waste	Up to 100 tonnes	None specified
	per annual period	
Sewage	175.7 m ³ /day	Accepted through sewer inflow(s) only

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

4. Condition 1.3.2, Table 1.3.2 is amended by the deletion of the text shown in strikethrough below in Table 1.3.2 waste processing:

Table 1.3.2: Waste processing				
Waste type	Process(es)	Process limits ¹		
Inert Waste Type 1		<u>All waste types</u> Disposal of waste by landfilling shall only take place		
Putrescible Waste		within the landfill area shown on the Premises Map Schedule 1.		
Clean Fill	Receipt, handling and disposal of waste by landfilling	The separation distance between the base of the- landfill and the highest groundwater level shall not be- less than 2 metres (m).		
Inert Waste Type 2		Loss than 100 units of tyres to be stored at the promises.		
Sewage	Biological, physical and chemical treatment.	175.7 m³/day		

Note 1: 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.

5. Condition 1.3.3 is removed from the licence as the condition relates to landfill operation.

1.3.3 The Licensee shall manage the landfilling activities to ensure:

(a) the size of the tipping face is kept to a minimum and not larger than 30 m in length;

(b) waste is levelled and compacted as soon as practicable after it is discharged;

(c) waste is placed and compacted to ensure all faces are stable and capable of retainingrestoration material; and

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(d) restoration of a cell or phase takes place within 6 months after disposal in that cell or phase has been completed.

- 6. Condition 1.3.4 and Table 1.3.3 are removed from the licence as the conditions relate to landfill operation.
- 1.3.4 The Licensee shall ensure that cover is applied and maintained on landfilled wastes in accordance with Table 1.3.3 and that sufficient stockpiles of cover are maintained on site at alltimes.

Table 1.3.3: Cover requirements ¹				
Waste Type	Material	Depth	Timescales	
Inert Waste Type 1	Inert and incombustible	Sufficient to ensure the waste is completely	Wookly or as soon as practicablo- after deposit and prior to-	
Putrescible Waste	material	covered and that no- waste is exposed	compaction	
Inert Waste Type 2 (Tyres only)	Soil	500 mm	As soon as practical following the achievement of final waste levels in the area(s) in which tyres are deposited	

Note 1: Additional requirements for the covering of tyres are set out in Part 6 of the Environmental Protection-Regulations 1987.

- 7. Condition 1.3.5 is amended by the deletion of the text shown in strikethrough below:
- 1.3.5 The Licensee shall:
 - (a) erect and maintain suitable fencing around the irrigation area and landfill facility that acts as an effective barrier to unauthorised persons, cattle, horses and other stock; and
 - (b) undertake regular inspections of all security measures and repair damage as soon as practicable.
- 8. Condition 1.3.6 is removed from the licence as the condition relates to landfill operation text shown in strikethrough below:
- 1.3.6 The Licensee shall ensure that wind-blown waste is contained within the landfill area and that wind-blown waste is returned to the tipping area on at least a monthly basis.
- 9. Condition 3.3.1, Table 3.3.1 are removed from the licence as the conditions relate to landfill operation text shown in strikethrough below:
- 3.3.1 The Licensee shall undertake the monitoring specified in Table 3.3.1.

Table 3.3.1 Monitoring of inputs and outputs					
Input/Output	Parameter	Units	Averaging Period	Frequency	
Waste Inputs	Inort Wasto Typo 1, Inort Wasto Typo 2, Putroscible Wasto and Clean Fill	tonnes or (where no weighbridge is present) m³	N/A	Each load arriving at the landfill	

Appendix 1: Key Documents

	Document Title	In text ref	Availability
1	Licence L8610/2011/1 – Roy Hill		accessed at
	Infrastructure Rail Construction Camp	L8610/2011/1	http://www.der.wa.gov.au
	2		
	Roy Hill Infrastructure -Rail Camp 2 –		A1360042
2	Generator Area and landfill		
	Remediation and Validation		
2	DER, July 2015. Guidance Statement:		accessed at
	Regulatory principles. Department of	DER 2015a	http://www.der.wa.gov.au
	Environment Regulation, Perth.		
3	DER, October 2015. Guidance		
	Statement: Setting conditions.	DER 2015b	
	Department of Environment		
4	Regulation, Perth. DER, August 2016. <i>Guidance</i>		-
4	Statement: Licence duration.		
	Department of Environment	DER 2016a	
	Regulation, Perth.		
5	DER, November 2016. <i>Guidance</i>		-
5	Statement: Risk Assessments.		
		DER 2016b	
	Department of Environment Regulation, Perth.		
6	DER, November 2016. <i>Guidance</i>		4
0	Statement: Decision Making.		
	Department of Environment	DER 2016c	
	Regulation, Perth.		
7	National Environmental Protection		Accessed at www.nepc.gov.au
	(Assessment of Site Contamination)	NEPM 1999	
	Measure		