



Application for Licence Amendment

Environmental Protection Act 1986, Part V

Licence Number	L8912/2015/1
Licence Holder	Halls Creek Mining Pty Ltd
ACN	168 093 347
File Number:	DER2015/001934
Premises	Lamboo Gold Project M80/343, M80/355, M80/359, M80/362, M80/503, M80/471, L80/70 and L80/71 MUELLER RANGES WA 6770
Date of Report	27/11/2019
Decision	Intent to grant amended licence

1. Definitions and interpretation

Definitions

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

Table 1: Definitions

Term	Definition
ACN	Australian Company Number
Amendment Report	refers to this document
Category/ Categories/ Cat.	categories of Prescribed Premises as set out in Schedule 1 of the EP Regulations
CEO	means Chief Executive Officer. CEO for the purposes of notification means: Director General Department Administering the <i>Environmental Protection Act 1986</i> Locked Bag 33 Cloisters Square PERTH WA 6850 info@dwer.wa.gov.au
Delegated Officer	an officer under section 20 of the EP Act
Department	means the department established under section 35 of the <i>Public Sector Management Act 1994</i> and designated as responsible for the administration of Part V, Division 3 of the EP Act.
DWER	Department of Water and Environmental Regulation
EPA	Environmental Protection Authority
EP Act	<i>Environmental Protection Act 1986</i> (WA)
EP Regulations	<i>Environmental Protection Regulations 1987</i> (WA)
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 Review
HCM	Halls Creek Mining Pty Ltd
km	kilometres
Licence Holder	Halls Creek Mining Pty Ltd
m	metres
mtpa	million tonnes per annum

Term	Definition
Noise Regulations	<i>Environmental Protection (Noise) Regulations 1997 (WA)</i>
Occupier	has the same meaning given to that term under the EP Act.
Prescribed Premises	has the same meaning given to that term under the EP Act.
Premises	refers to the premises to which this Amendment Report applies, as specified at the front of this Amendment Report.
Revised Licence	the amended Licence issued under Part V, Division 3 of the EP Act, with changes that correspond to the assessment outlined in this Amendment Report.
Risk Event	as described in <i>Guidance Statement: Risk Assessment</i>
tpa	tonnes per annum

2. Amendment

This amendment is made pursuant to 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 following guidance statements have informed the assessment and decision outlined in this Amendment Report:

- *Guidance Statement: Setting Conditions (October 2015)*
- *Guidance Statement: Environmental Siting (November 2016)*
- *Guidance Statement: Risk Assessment (February 2017)*
- *Guidance Statement: Decision Making (June 2019)*
- *Guideline: Industry Regulation Guide to Licensing (June 2019)*

3. Amendment application

On 15 July 2019, the Licence Holder (Halls Creek Mining Pty Ltd) (Applicant) (HCM) submitted an application to amend Licence L8912/2015/1 for:

- Relocation of the Project's Category 64 landfill to the Nicolsons Waste Rock Dump (WRD);
- Expansion of tyre disposal to include Wagtail North WRD, Wagtail South WRD in addition to Nicolsons WRD;
- An increase in tonnage of Category 64 waste to be disposed within the facility from 100 tonnes per annum (tpa) to 130 tpa,
- An increase of disposal of used tyres from 60 to 75 tyres per year; and
- Additional raw water and process water storage dams.

HCM later requested by comments provided with a draft licence, that the increase in tonnage of Category 64 waste be increased to 200 tpa in order to account for the increased tonnage of the tyres.

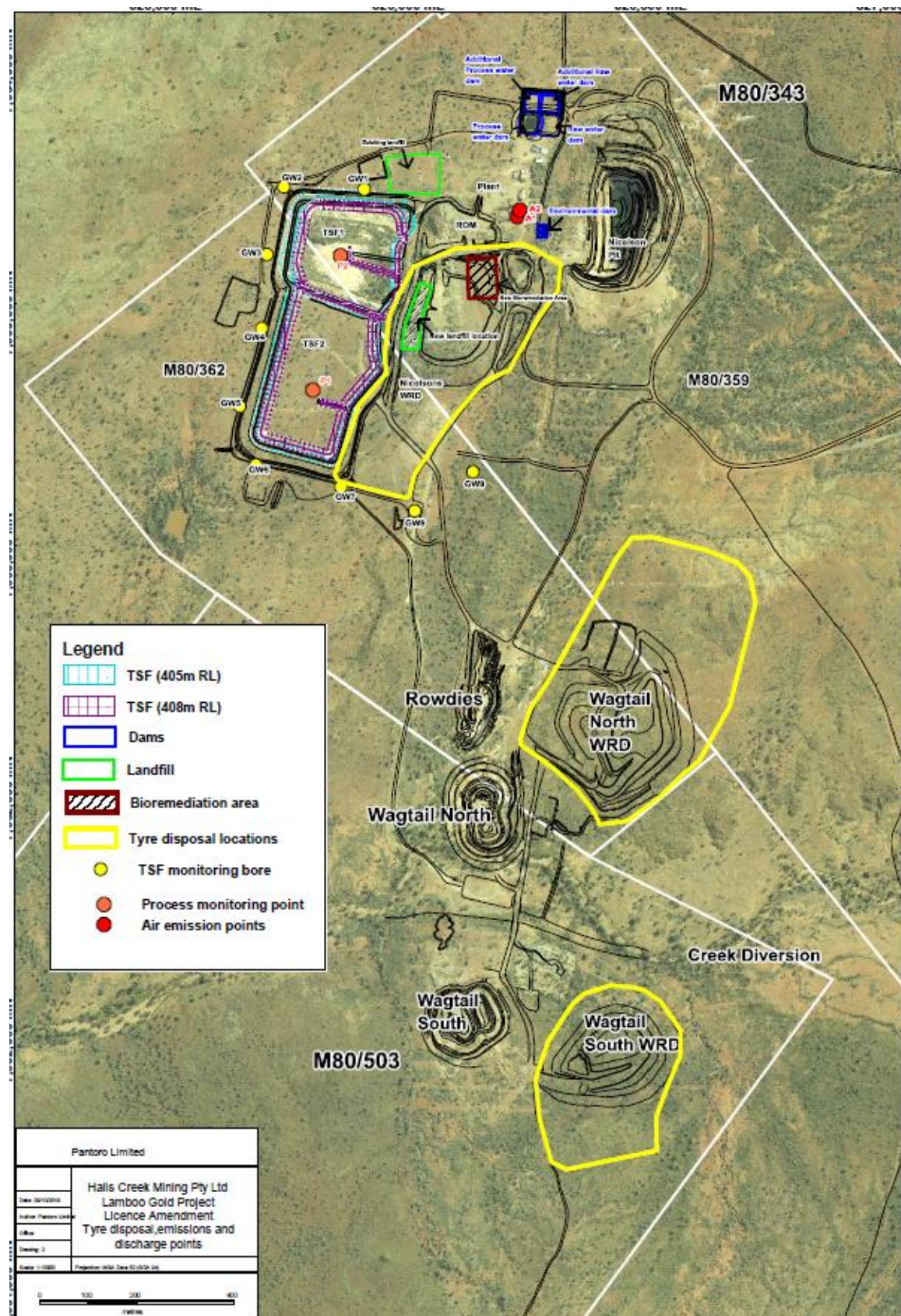
Table 2 below outlines the proposed changes to the Licence.

Table 2: Proposed throughput capacity changes

Category	Current throughput capacity	Proposed throughput capacity	Description of proposed amendment
5	250,000 tpa	No change	Additional raw water and process water ponds.
64	100 tpa	200 tpa	Category 64 Landfill relocated to Nicolsons WRD and tyre disposal to also include Wagtail North WRD and Wagtail South WRD.

The location of the proposed new infrastructure is shown in Figure 1 below.

Figure 1: Location of proposed and existing infrastructure



4. Location and receptors

Table 3 below lists the distance to closest sensitive land uses.

Table 3: Sensitive land uses

Residential and sensitive premises	Distance from Prescribed Premises
Lamboos Pastoral Station Homestead	~ 5 km southwest

Table 4 below lists the distances to environmental receptors.

Table 4: Environmental receptors

Environmental receptors	Distance from proposed activities
Laura River tributaries - A number of ephemeral tributaries are located within the premises.	The closest tributary is 250 m from the proposed putrescible landfill to be located at Nicolson's WRD.
RIWI Act Areas - Fitzroy River and Tributaries Surface Water and Irrigation Districts	Premises is within the Area.
Public Drinking Water Source Areas – Halls Creek Water Reserve	36 km away – not considered a sensitive receptor for the proposed activities.
Ramsar wetlands – Lake Gregory Draft Proposed Ramsar Addition	150 km away – not a sensitive receptor for the proposed activities.
Groundwater Groundwater supplies have been developed for homestead water use and stock watering on the Lamboos pastoral lease and within 5 km of the premises activities. The water is of stock drinking water quality (generally less than 5,000 mg/L total dissolved solids (TDS)).	Data from the GIS Dataset – WIN Groundwater sites indicate depth to groundwater in the area is approximately 40- 55 meters below ground level (mbgl). Groundwater occurs in limited quantities in fractures in the predominantly impermeable bedrock, and in some weathered material. Overall the rocks have low permeability; and groundwater would flow at low rates south-westerly and westerly.
Threatened Ecological Communities (TEC)	Closest TEC is 20 km away - not considered a sensitive receptor for the proposed activities.
Threatened or priority flora	No Declared Rare Flora or Priority flora has been reported within the premises boundary or within 10 km (information from (DWER mapping database) – not considered sensitive receptors to the proposed activities.
Conservation significant fauna	A Level 1 fauna assessment was undertaken by Keith Lindbeck and Associates in 2011 which found the premises does not contain habitat of high ecological significance from a faunal perspective, or contain faunal assemblages that are ecologically significant.
Department for Parks and Wildlife Managed Lands and Water	The Ord River Regeneration Reserve is approximately 50 km away – not considered a sensitive receptor for proposed activities.

5. Other approvals

The Licence Holder has provided the following information relating to other relevant approvals as outlined in Table 5.

Table 5: Relevant approvals

Legislation	Number	Approval
<i>Mining Act 1978</i>	Mine Proposal Reg Id: 80959 Lamboog Gold Project - Mining Proposal Waste Rock Dump Extensions and Mine Infrastructure - M80/359, M80/362 & M80/503	Submitted to the Department of Mining, Industry Regulation and Safety for assessment 01/07/2019.

6. Amendment history

Table 6 provides the amendment history for the premises.

Table 6: Amendments

Instrument	Issued	Amendment
L8912/2015/1	05/11/2015	First issue of operating Licence for Categories 5 and 64.
L8912/2015/1	29/04/2016	Notice of amendment of licence expiry date, section 59b (9) and section 59(1)(k) <i>Environmental Protection Act 1986</i> ; extension of licence expiry date to 8 November 2035. Administrative amendment only
L8912/2015/1	11/7/2017	Amendment Notice 1 to allow for embankment lifts to TSF1 and TSF2
L8912/2015/1	31/01/2018	Amendment Notice 2 to increase Category 5 plant throughput to 250,000 tpa and relocation of the landfill and expansion 25m southeast of the originally approved landfill area.
L8912/2015/1	27/11/2019	Amendment for changes to landfills and waste tonnages, addition of process and raw water ponds, and consolidation of Amendment Notices 1 and 2 into the licence.

7. Landfilling

HCM intends to construct and operate a Category 64 landfill within a defined area of the Nicolson's WRD, as shown in Figure 1. Once approval has been received, the existing landfill site (Figure 1) will be closed, and operations will remain the same in that:

- Contaminated storm water runoff is contained (cells will be located within the WRD).
- The closest drainage line is located more than 250 m from the landfill site.
- Groundwater is at ~46 m below the ground surface.
- No clearing is required.
- Waste types will continue to consist of Putrescible waste, Inert Waste Type 1 and 2 (plastics and tyres) and Clean Fill, but increased from 100 tpa to 200 tpa.
- Landfill cells (other than tyres) located within a defined area;
- Disposal of waste in separate cells - one for industrial (inert) and one for putrescible waste;

- Covering of landfill within the cells undertaken a minimum of once per week;
- Survey of each site, and the site location recorded prior to closure of each landfill site;
- Maintenance of a fence around the landfilling site.

HCM has an approved bioremediation facility within the Nicolson's WRD. The existing Licence requires the facility to be clay lined and bunded. Storm water and wastes from the bioremediation facility are contained by the bunding.

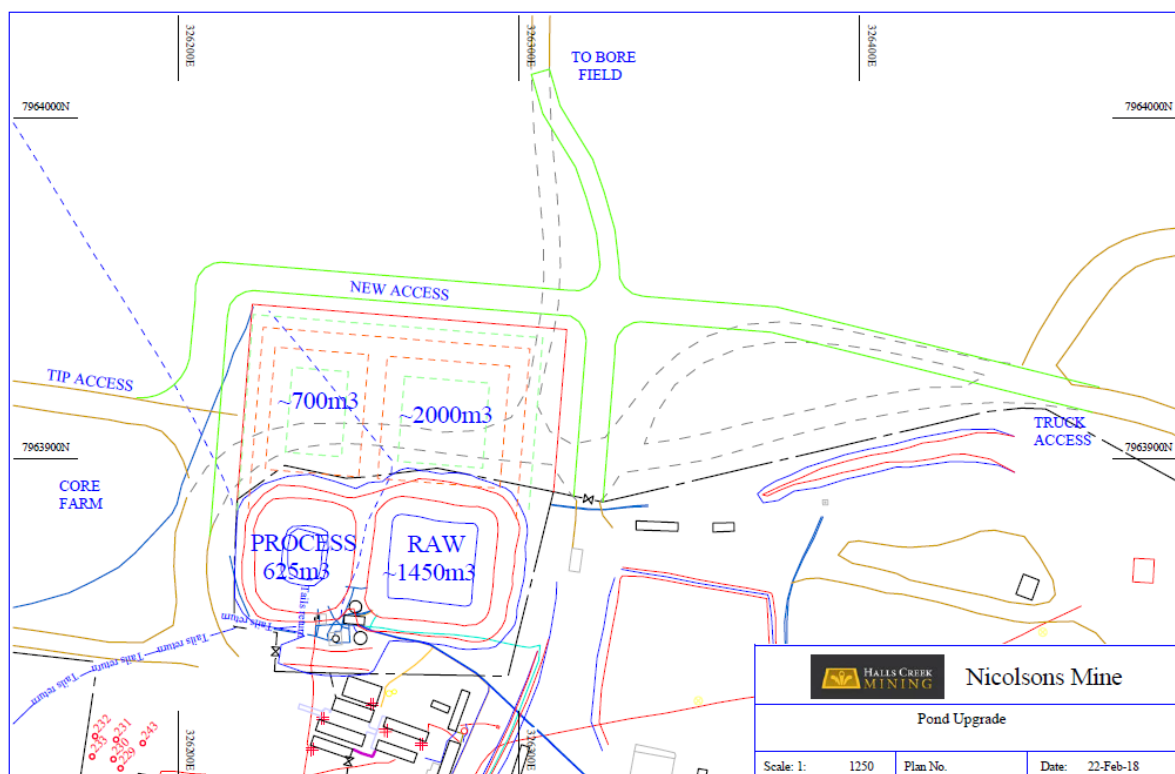
HCM currently has approval for burial of tyres within Nicolson's WRD. HCM proposes to also bury tyres within Wagtail North WRD and Wagtail South WRD (shown in Figure 1). Tyres will be disposed of in accordance with the requirements of the *Environmental Protection Regulations 1987* r.14(2) and the existing Licence.

8. Ponds

HCM proposes to construct and operate additional raw water and process water 'dams' adjacent to the current dams (as shown in Figures 1 above and Figure 2 below).

The dams will be lined with HDPE and a freeboard of 300mm maintained as per the existing dams and in accordance with the existing licence conditions.

Figure 2: Proposed ponds



9. Assessment

In undertaking its risk assessment, DWER will identify all potential emissions, pathways and potential receptors to establish whether there is a Risk Event, consistent with the *Guidance Statement: Risk Assessments*. DWER will determine controls having regard to the adequacy of controls proposed by the Licence Holder.

9.1 Risk Assessment - Construction

Table 7: Risk assessment for construction of proposed infrastructure

Risk Event				Consequence rating ¹	Likelihood rating ¹	Risk ¹	Reasoning	Regulatory controls (conditions refer to conditions of the works approval)
Source/Activities	Potential emissions	Potential receptors, pathway and impact	Applicant controls					
Construction of raw water and process water ponds and landfill trenches	Dust and noise	Lamboos Pastoral Station Homestead ~ 5 km southwest.	None provided in the Application	N/A	N/A	N/A	Distance to closest sensitive land use and environmental receptors is sufficient to inform the risk of dust and noise emissions during construction as not foreseeable.	Condition 1.2.1 to locate infrastructure to be constructed. The <i>Environmental Protection (Noise) Regulations 1997</i> (WA) are applicable.
		No conservation significant flora or TEC on the premises.		N/A	N/A	Low		
	Stormwater (sediment and hydrocarbons)	Contamination of soils and ephemeral creek by direct discharge and stormwater flow.		Minor	Unlikely	Medium	Construction is short term. Closest sensitive receptor (ephemeral creek) is more than 250 m from construction. Applicant has stormwater and hydrocarbon management in place at the premises.	Condition 1.2.1 to locate infrastructure to be constructed. The <i>Environmental Protection (Unauthorised Discharges) Regulations 2004</i> (WA) are applicable

Note 1: Consequence ratings, likelihood ratings and risk descriptions are detailed in the Department's Guidance Statement: Risk Assessments (February 2017)

9.2 Risk assessment - operation

Landfilling operation

Risk of landfilling is considered to be noise, dust, leachate, contamination of stormwater and surface water with landfilling waste, and odorous attraction to fauna scavengers.

Although landfilling tonnage will increase from 100 tpa to 200 tpa, waste types will remain the same as for the existing Licence, and emissions will essentially remain the same.

Pathways and distances to sensitive land users and environmental receptors remain unchanged from the existing landfill.

The Applicant's proposed controls also remain essentially unchanged from the existing landfill and are in accordance with the existing landfilling infrastructure and operation conditions.

Risk of operation of landfilling remains the same, and existing licence conditions remain appropriate for operations at the new landfilling locations. Proposed landfill locations will be updated on the Licence maps.

Dams operation

Risk assessment for storage of raw water and process water is described in Table 8 below.

Table 8: Risk assessment for proposed amendments during operation (process water and raw water dams)

Risk Event				Consequence rating ¹	Likelihood rating ¹	Risk ¹	Reasoning	Regulatory controls (refer to conditions of the granted instrument)
Source/Activities	Potential emissions	Potential receptors, pathway and impact	Applicant controls					
Storage of raw water and process water	Overflow of process water or raw water	Direct discharge of overflow, impact to native vegetation by inundation and contamination of soils. Closest sensitive receptor is an ephemeral creek 250 m away.	300 mm freeboard to be maintained as per existing licence conditions.				Applicant's controls and distance to sensitive receptors.	Conditions 1.2.1 for Infrastructure construction requirements. Existing licence conditions for process and raw water ponds require HDPE lining and 300 mm freeboard and are appropriate for operation of the additional dams.
	Seepage of stored water	Seepage of potentially contaminated water through ground to groundwater with beneficial use of stock watering. Groundwater in the area is approximately 40- 55 mbgl.	Dams lined with HDPE and maintained as per existing licence conditions.				Applicant's controls and distance to sensitive receptors	

Note 1: Consequence ratings, likelihood ratings and risk descriptions are detailed in the Department's Guidance Statement: Risk Assessments (February 2017)

10. Consultation

Table 9: Summary of consultation

Method	Comments received	DWER response
Department of Mines, Industry regulation and Safety advised of proposal 30/08/2019	No comments received	N/A
Applicant referred draft documents	Summary of comments in Appendix 2	Appendix 2

11. Conclusion

Based on the assessment in this Amendment Report, the Delegated Officer has determined that a licence amendment for the changes requested by the Applicant will be granted, subject to conditions commensurate with the determined controls and necessary for administration and reporting requirements.

12. Consolidation of Licence

As part of this amendment package DWER has consolidated the licence by incorporating changes made under the following Amendment Notices:

- Amendment Notice 1, granted 11/7/2017; and
- Amendment Notice 2, granted 31/01/2018.

The obligations of the Licence Holder have not changed in consolidating the licence. DWER has not undertaken any additional risk assessment of the Premises related to previous Amendment Notices.

In consolidating the licence, the CEO has:

- updated the appearance of the Licence;
- deleted the redundant AACR form set out in schedule 1 of the previous licence and advise the Licensee to obtain the form from the Department's website;
- revised licence condition's numbers, and removed any redundant conditions and realigned condition numbers for numerical consistency; and
- corrected clerical mistakes and unintentional errors.

Previously issued Amendment Notices will remain on the DWER website for future reference and will act a record of DWER's decision making.

Summary of amendments

Table 10 provides a summary of the proposed amendments and will act as record of implemented changes. All proposed changes have been incorporated into the Revised Licence as part of the amendment process.

Table 10: Licence amendments

Condition No.	Proposed amendments
1.2.1 ,Table 1.2.1	Inclusion of infrastructure construction requirements for the additional process dam and raw water dam.

1.2.1 , Table 1.2.2	Deletion of landfill trench boundary coordinates – not required. Locations defined by map.
Condition 1.3.2 , Table 1.3.1	Location of bioremediation facility by map.
Condition 1.3.6 , Table 1.3.4	Locations of new landfill areas included by map locations.
Conditions 1.3.5 and 2.3.1 Tables 1.3.3 and 2.3.1	Cat 64 waste tonnage increased to 200 tpa.
Previous Section 4	Improvement condition removed as information has been provided.

Alana Kidd

MANAGER, RESOURCE INDUSTRIES

An officer delegated by the CEO under section 20 of the EP Act.

Appendix 1: Key documents

	Document title	In text ref	Availability
1	Application form dated 12/07/2019, with Attachments	Application	DWER records (DWERDT179267)
2	Licence L8912/2015/1 – Lamboo Gold Project	L8912/2015/1	accessed at www.dwer.wa.gov.au
3	DER, October 2015. <i>Guidance Statement: Setting conditions.</i> Department of Environment Regulation, Perth.	-	accessed at www.dwer.wa.gov.au
4	DER, February 2017. <i>Guidance Statement: Risk Assessments.</i> Department of Environment Regulation, Perth.	-	
5	DER, November 2016. <i>Guidance Statement: Environmental Siting.</i> Department of Environment Regulation, Perth.	-	
6	DWER, June 2019. <i>Guideline: Industry Regulation Guide to Licensing</i>	-	
7	DWER, June 2019. <i>Guideline: Decision Making</i>	-	

Appendix 2: Summary of Licence Holder comments

The Licence Holder was provided with the draft Amendment Report on 14 November 2019 for review and comment. The Licence Holder responded on 25 November 2019.

Item	Summary of Licence Holder comment	DWER response
Occupier Representative	The Occupier's Representative needs to be updated (new details provided).	Noted, and updated in DWER's Industry Licensing System.
Registered Office (front page of licence)	The licence needs to be updated to reflect current registered office location - 1187 Hay Street, West Perth, WA 6005	Noted, and DWER's Industry Licensing System and the Licence updated.
Prescribed Premises Category 64	Furthering discussions on 21/11/2019, HCM would like to include additional landfill capacity for tyre disposal. Therefore, amend the original request for: Approved Premises production or design capacity: 64 Class II putrescible landfill site: 20 tonnes or more per year from 100 to 130 tonnes per annual period, to 200 tonnes per annual period.	Agreed, additional tonnage to account for the tyres does not increase the risk with consideration of burial in the waste rock dump, existing controls and licence conditions, and is therefore approved. Licence and Amendment Report updated for 200 tpa.
Typos	Typos identified.	Typos corrected