



Application for Licence Amendment

Part V Division 3 of the *Environmental Protection Act 1986*

Licence Number	L9178/2018/1
Licence Holder	Hancock Prospecting Pty Ltd
ACN	008 676 417
File Number	DER2018/001539-1
Premises	Mulga Downs Exploration Camp Landfill Part of R47/12 within E656287 N7559031, E656339 N7556031, E656287 N7555959, E656339 N7555959 Mulga Downs WA 6751 As defined by the coordinates in Schedule 1 of the Licence.
Date of Report	04 February 2021
Decision	Revised licence granted

ANA MESQUITA
SENIOR ENVIRONMENTAL OFFICER, RESOURCE INDUSTRIES

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

Table of Contents

1. Decision summary	2
2. Works Approval and licence history	2
3. Scope of assessment	2
3.1 Regulatory framework	2
3.2 Application summary	2
4. Risk assessment	3
4.1 Source-pathways and receptors	3
4.1.1 Emissions and controls	3
4.1.2 Receptors	3
4.2 Risk ratings	5
5. Consultation	7
6. Conclusion	7
6.1 Summary of amendments	7
References	8
Appendix 1: Summary of Licence Holder’s comments on risk assessment and draft conditions	9
Appendix 2: Application validation summary	10
Table 1: works approval and licence history for the premises.	2
Table 2: Licence Holder controls	3
Table 3: Sensitive human and environmental receptors and distance from prescribed activity	4
Table 4. Risk assessment of potential emissions and discharges from the Premises during operation of the proposed changes.	5
Table 5: Consultation	7
Table 6: Summary of licence amendments	7

1. Decision summary

Licence L9178/2018/1 is held by Hancock Prospecting Pty Ltd (Licence Holder) for the Mulga Downs Exploration Camp Landfill (the premises), located within Part of R47/12, Mulga Downs.

This Amendment Report documents the assessment of potential risks to the environment and public health from proposed changes to the emissions and discharges during the operation of the Premises. As a result of this assessment, Revised Licence L9178/2018/1 has been granted.

2. Works Approval and licence history

Table 1: works approval and licence history for the premises.

Instrument	Issued	Nature and extent of works approval, licence or amendment
W5185/2012/1	19/07/2012	Works approval for the construction of a new landfill Category 89 with an expected throughput of less than 50 tonnes per year.
L8661/2012/1	13/09/2012	Licence to operate a Category 89 landfill to service the Mulga Downs Exploration camp.
L8661/2012/2	10/09/2015	Renewal of licence to operate a Category 89 landfill to service the Mulga Downs Exploration camp. Licence was surrendered in 2016 when camp went into care and maintenance.
W6152/2018/1	12/09/2018	Works approval for the construction/re-establish a Category 89 landfill with an expected throughput of less than 50 tonnes per year.
L9178/2018/1	16/01/2019	New licence to allow operation of the landfill.
L9178/2018/1	04/02/2021	Amendment to approve burial of up to 0.25 m ³ /year Special Waste Type 2.

3. Scope of assessment

3.1 Regulatory framework

In completing the assessment documented in this Amendment Report, the department has considered and given due regard to its Regulatory Framework and relevant policy documents which are available at <https://dwer.wa.gov.au/regulatory-documents>.

3.2 Application summary

On 29 October 2020, the Licence Holder submitted an application to the department to amend Licence L9178/2018/1 under section 59 and 59B of the *Environmental Protection Act 1986* (EP Act).

An amendment is sought for burial of up to 0.25 cubic metres (m³) per year of Special Waste Type 2 (as defined in the *Landfill waste classification and waste definitions 1996, as amended 2018*) at the premises' category 89 landfill.

The Special Waste Type 2 will consist of bandages, dressings, syringes, Covid19 finger prick tests (used) and Fitness for work drug swabs.

The Applicant has not requested a change to the existing category 89 throughput capacity of 50 tonnes per year.

4. Risk assessment

The department assesses the risks of emissions from prescribed premises and identifies the potential source, pathway and impact to receptors in accordance with the *Guidance Statement: Risk Assessments* (DER 2017).

To establish a Risk Event there must be an emission, a receptor which may be exposed to that emission through an identified actual or likely pathway, and a potential adverse effect to the receptor from exposure to that emission.

4.1 Source-pathways and receptors

4.1.1 Emissions and controls

The key emissions and associated actual or likely pathway during premises operation which have been considered in this Amendment Report are detailed in Table 2 below. Table 2 also details the proposed control measures the Licence Holder has proposed to assist in controlling these emissions, where necessary.

Table 2: Licence Holder controls

Emission	Sources	Potential pathways	Proposed controls
Odour	Special Waste Type 2 materials	Air/wind	Landfill location. Limit of 0.25 m ³ per year Special Waste Type 2 disposed.
Waste potentially containing blood, virus, bacteria.		Movement of waste by scavenger species.	Special Waste Type 2 to be placed at the bottom of the 2.5 m deep trench and covered with general waste immediately. Landfill is fenced.
Contaminated stormwater	Special Waste Type 2 exposed to rain/stormwater.	Runoff and overland flow.	Up to 0.25 m ³ per year Special Waste Type 2 disposed. Special Waste Type 2 to be placed at the bottom of the 2.5 m deep trench and covered with general waste immediately. Stormwater is diverted away from waste by a bund surrounding the active trench. The landfill site also has a small windrow that acts as the main storm water diversion which sits outside the fence as part of the fire break.
Waste leachate	Infiltration of water into the landfill and moisture content of waste including Special Waste Type 2, creating leachate.	Infiltration through ground to groundwater.	Landfill location and construction (indicative groundwater is 12-14 mbgl and maximum depth of cells is 2.5 m deep). Up to 0.25 m ³ per year Special Waste Type 2 disposed.

4.1.2 Receptors

In accordance with the *Guidance Statement: Risk Assessment* (DER 2017), the Delegated Officer has excluded employees, visitors and contractors of the Licence Holder's from its assessment. Protection of these parties often involves different exposure risks and prevention strategies, and is provided for under other state legislation.

Table 3 below provides a summary of potential human and environmental receptors that may be impacted as a result of activities upon or emission and discharges from the prescribed premises (*Guidance Statement: Environmental Siting* (DER 2016)).

Table 3: Sensitive human and environmental receptors and distance from prescribed activity

Human receptors	Distance from prescribed activity
Mulga Downs Pastoral Station Homestead	Approximately 4.5km west of the landfill.
Environmental receptors	Distance from prescribed activity
Yumbilly Creek (minor ephemeral water course)	Approximately 390 m to the east of the boundary.
Minor drainage line (flows during rainfall events).	Approximately 94 m to the west of the landfill boundary.
Groundwater - Water is used for potable and industrial use.	Data from three existing groundwater bores on the proposed premises indicated depth to groundwater to be approximately 12-14 meters below ground level (mbgl) (from Decision Report for L9178/2018/1 dated 16 January 2019)

4.2 Risk ratings

Risk ratings have been assessed in accordance with the *Guidance Statement: Risk Assessments* (DER 2017) for those emission sources which are proposed to change and takes into account potential source-pathway and receptor linkages as identified in Section 4.1. Where linkages are in-complete they have not been considered further in the risk assessment.

Where the Licence Holder has proposed mitigation measures/controls (as detailed in Section 4.1), these have been considered when determining the final risk rating. Where the Delegated Officer considers the Licence Holder's proposed controls to be critical to maintaining an acceptable level of risk, these will be incorporated into the licence as regulatory controls.

Additional regulatory controls may be imposed where the Licence Holder's controls are not deemed sufficient. Where this is the case the need for additional controls will be documented and justified in Table 4.

The Revised Licence L9178/2018/1 that accompanies this Amendment Report authorises emissions associated with the operation of the Premises i.e. Category 89 activities.

The conditions in the Revised Licence have been determined in accordance with *Guidance Statement: Setting Conditions* (DER 2015).

Table 4. Risk assessment of potential emissions and discharges from the Premises during operation of the proposed changes.

Risk Event					Risk rating ¹ C = consequence L = likelihood	Licence Holder's controls sufficient?	Conditions ² of licence	Justification for additional regulatory controls
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Licence Holder's controls				
Landfilling operations – burial of Special Waste Type 2.	Odour as scavenger attractant Contaminated materials potentially containing blood, virus, bacteria.	Air/wind Scavenger species attracted to the waste/ carrying waste to other locations and ecosystems. Impact to amenity. Increase in scavenger numbers	Mulga Downs pastoral station approximately 4.5 km to the southwest. Other fauna and ecosystems Locations visited or workplaces in the area.	Refer to Section 4.1	C = Moderate L = Rare Medium Risk	N	Condition <u>1</u> , 2, 3, 4, <u>5</u>	Applicant control is to immediately cover with 'general waste' which may consist of material such as paper or plastic and may blow off or dissolve after exposure to rain/ stormwater. Additional regulatory control added for Special Waste Type 2 to be immediately covered with 300 mm Inert Waste
	Contaminated stormwater	Runoff and overland flow to surface water	Drainage line ~95m to the west of the	Refer to Section 4.1	C = Minor L = Unlikely	N	Condition <u>1</u> , 2, 3, 4, <u>5</u>	

Licence: L9178/2018/1

Risk Event					Risk rating ¹ C = consequence L = likelihood	Licence Holder's controls sufficient?	Conditions ² of licence	Justification for additional regulatory controls
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Licence Holder's controls				
		features. Contamination of surface water/drainage lines. Reduced amenity values	landfill Yumbilly Creek ~ 390 m east of the landfill		Medium Risk			Type 1 or Clean Fill. Additional regulatory control requiring record of location and volume buried, and for no uncovering of the area.
	Leachate	Infiltration through ground and contamination of groundwater.	Groundwater	Refer to Section 4.1	C = Minor L = Unlikely Medium Risk	Y	Condition 1, 2	N/A

Note 1: Consequence ratings, likelihood ratings and risk descriptions are detailed in the *Guidance Statement: Risk Assessments* (DER 2017).

Note 2: Proposed Licence Holder's controls are depicted by standard text. **Bold and underline text** depicts additional regulatory controls imposed by department.

5. Consultation

Table 5 provides a summary of the consultation undertaken by the department.

Table 5: Consultation

Consultation method	Comments received	Department response
Department of Health advised of proposal 3/12/2020.	No comments received (21/12/2020)	N/A
Licence Holder was provided with draft amendment on 21 December 2021	Refer to Appendix 1	Refer to Appendix 1

6. Conclusion

Based on the assessment in this Amendment Report, the Delegated Officer has determined that a Revised Licence will be granted, subject to conditions commensurate with the determined controls and necessary for administration and reporting requirements.

6.1 Summary of amendments

Table 6 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 6: Summary of licence amendments

Condition no.	Proposed amendments
Front cover	Inclusion of assessed production capacity
Previous condition 1	Removed as it is considered a redundant condition.
Condition 1, Table 1	Cover type redefined in terms of the <i>Landfill Waste Classification and Waste Definitions 1996</i> (as amended 2018) for clarity. Addition of operational requirements for disposal of Special Waste Type 2 – immediate covering, disposal area defined and recorded, and not to be uncovered during subsequent landfilling operations.
Condition 3, Table 2	Addition of a waste rate limit for Special Waste Type 2 added as per Application.
Condition 5	Addition of Special Waste Type 2 to the record keeping requirements (location and volume).
Definitions	Updated and transferred to end of the conditions.

References

1. Department of Environment Regulation (DER) 2016, *Guidance Statement: Environmental Siting*, Perth, Western Australia.
2. DER 2017, *Guidance Statement: Risk Assessments*, Perth, Western Australia.
3. DER 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.
4. Department of Water and Environmental Regulation (DWER), 2018, *Landfill waste classification and waste definitions 1996 (as amended 2018)*, Perth, Western Australia.
5. DWER, 2019, *Industry Regulation Guide to Licensing*, Perth, Western Australia.

Appendix 1: Summary of Licence Holder's comments on risk assessment and draft conditions

Condition	Summary of Licence Holder's comment	Department's response
Premises description in Licence and Amendment Report	R47/12 expires on 17/05/2021 and the Application Form states that an "Application for renewal will be made prior" to expiry. DWER queried the renewal during the 21 days consultation period. The Licence Holder has stated that "A decision is being discussed at present about converting the Licence from an Exploration Tenement to a Mining Tenement. However, either way a renewal or conversion will be submitted prior to expiry."	It is the Licence Holder's responsibility to ensure tenements are valid.

Appendix 2: Application validation summary

SECTION 1: APPLICATION SUMMARY				
Application type				
Works approval	<input type="checkbox"/>			
Licence	<input type="checkbox"/>	Relevant works approval number:		None <input type="checkbox"/>
		Has the works approval been complied with?	Yes <input type="checkbox"/> No <input type="checkbox"/>	
		Has time limited operations under the works approval demonstrated acceptable operations?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>	
		Environmental Compliance Report / Critical Containment Infrastructure Report submitted?	Yes <input type="checkbox"/> No <input type="checkbox"/>	
		Date Report received:		
Renewal	<input type="checkbox"/>	Current licence number:		
Amendment to works approval	<input type="checkbox"/>	Current works approval number:		
Amendment to licence	<input checked="" type="checkbox"/>	Current licence number:	L9178/2018/1	
		Relevant works approval number:	N/A	<input type="checkbox"/>
Registration	<input type="checkbox"/>	Current works approval number:	None	<input type="checkbox"/>
Date application received	29/10/2020			
Applicant and Premises details				
Applicant name/s (full legal name/s)	Hancock Prospecting Pty Ltd			
Premises name	Mulga Downs Exploration Camp Landfill			
Premises location	Part of R47/12 (within E656287 N7559031, E656339 N7556031, E656287 N7555959, E656339 N7555959)			
Local Government Authority	Shire of Ashburton			
Application documents				
HPCM file reference number:	DER2018/001539			
Key application documents (additional to application form):	Supporting document			
Scope of application/assessment				
Summary of proposed activities or changes to existing operations.	Inclusion of 0.25 cubic metres/year of Special Waste Type 2 to be disposed into the existing Category 89 putrescible landfill.			

Category number/s (activities that cause the premises to become prescribed premises)

Table 1: Prescribed premises categories

Prescribed premises category and description	Assessed production or design capacity	Proposed changes to the production or design capacity
Category 89: Putrescible landfill site	50 tonnes per annual period. Waste allowed: <ul style="list-style-type: none"> • Clean fill • Inert waste type 1 and 2 • Uncontaminated fill • Putrescible wastes • Contaminated solid waste meeting waste acceptance criteria specified for Class II landfills 	No change to total combined capacity. Additional waste to be disposed into landfill: Special Waste Type 2 (up to 0.25 m ³ per year)

Legislative context and other approvals

Has the applicant referred, or do they intend to refer, their proposal to the EPA under Part IV of the EP Act as a significant proposal?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Referral decision No: Managed under Part V <input type="checkbox"/> Assessed under Part IV <input type="checkbox"/>
Does the applicant hold any existing Part IV Ministerial Statements relevant to the application?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Ministerial statement No: EPA Report No:
Has the proposal been referred and/or assessed under the EPBC Act?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Reference No:
Has the applicant demonstrated occupancy (proof of occupier status)?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Certificate of title <input type="checkbox"/> General lease <input type="checkbox"/> Mining lease / tenement <input type="checkbox"/> Other evidence <input checked="" type="checkbox"/> Retention licence R47/12 Expiry: 17/05/2021
Has the applicant obtained all relevant planning approvals?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>	Approval: Expiry date: If N/A explain why? Retention licence R47/12
Has the applicant applied for, or have an existing EP Act clearing permit in relation to this proposal?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	CPS No: N/A No clearing is proposed.
Has the applicant applied for, or have an existing CAWS Act clearing licence in relation to this proposal?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Application reference No: N/A Licence/permit No: N/A No clearing is proposed.

Has the applicant applied for, or have an existing RIWI Act licence or permit in relation to this proposal?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Application reference No: Licence/permit No: Licence / permit not required.
Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the EP Act)?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Name: Pilbara Type: Surface Water Area Has Regulatory Services (Water) been consulted? Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/> Regional office: North West
Is the Premises situated in a Public Drinking Water Source Area (PDWSA)?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Name: N/A Priority: N/A Are the proposed activities/ landuse compatible with the PDWSA (refer to <u>WQPN 25</u>)? Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
Is the Premises subject to any other Acts or subsidiary regulations (e.g. <i>Dangerous Goods Safety Act 2004, Environmental Protection (Controlled Waste) Regulations 2004, State Agreement Act xxxx</i>)	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Is the Premises within an Environmental Protection Policy (EPP) Area?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Is the Premises subject to any EPP requirements?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Is the Premises a known or suspected contaminated site under the <i>Contaminated Sites Act 2003</i> ?	Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/>	Classification: N/A Date of classification: N/A