



Application for Licence Amendment

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

Licence Number	L8765/2013/1
Licence Holder	Veolia Environmental Services (Australia) Pty Ltd
ACN	051 316 584
File Number	DWERVT16181~1
Premises	NWA Karratha Waste Handling and Transfer Station 2864 Pyramid Road, Karratha Industrial Estate KARRATHA 6714 Legal description – Lot 2864 on Deposited Plan 184127
Date of Report	19 February 2025
Decision	Revised licence granted

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

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1. Decision summary

Licence L8765/2013/1 is held by Veolia Environmental Services (Australia) Pty Ltd (Licence Holder) for the NWA Karratha Waste Handling and Transfer Station (the Premises), located at 2864 Pyramid Road, Karratha Industrial Estate.

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 L8765/2013/1 has been granted.

2. Scope of assessment

2.1 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>.

2.2 Application summary

On 1 November 2024, the Licence Holder submitted an application to the department to amend Licence L8765/2013/1 (L8765) under section 59 and 59B of the *Environmental Protection Act 1986* (EP Act). Amendments are being sought to facilitate the construction and operation of a large-scale oily water processing facility (OWF), which will involve the following:

- The relining of the two steel below ground pits (Pit 1 and Pit 2) with equivalent steel plates;
- Installation of:
 - An oil separator in Pit 1.
 - A 60 kL oil tank.
 - Clarified oily water storage tanks – 4 x 50 kL steel, 1 x 30 kL plastic, 6 x 25 kL Iso-tainers.
 - Concrete bunding to tank farm – on top of existing concrete hump bund.
 - Bunded concrete spill pad and sump.
 - 2 x high pressure water supply hose reel for washdown.
 - Associated piping, fittings, pumps and power supply.

The existing licence sets out the authorised waste types and quantities that can be accepted at the Premises. There is sufficient liquid waste capacity at the Premises under the existing licence for the proposed oily water processing, hence there is no need to change the existing licence waste types and Production and Design Capacity (P&DC).

Table 1 below outlines the proposed changes to the existing Licence.

Table 1: Proposed design or throughput capacity changes

Category	Current design throughput capacity	Proposed design throughput capacity	Description of proposed amendment
61	20,000 tonnes per	20,000 tonnes per	No Changes –

	annual period	annual period	construction of oily water processing facility.
61A	13,000 tonnes per annual period	13,000 tonnes per annual period	

2.3 Oily water waste acceptance

Bulk volumes of oily water will be delivered to the Premises by Tanker truck and discharged into the existing primary 33 m³ below ground receival pit (Pit 1) where it is allowed to settle. Thereafter the oil is skimmed off the surface and pumped to a 60 kL oil storage tank, the clarified residual oily water (L150) will then be pumped to one of 11 bulk water storage tanks and sludge removed by vacuum truck.

The vacuumed sludge will be removed from the Premises and once there is sufficient volume of separated oil and clarified water, these liquids will be removed from site in either bulk liquid tankers or Intermediate Bulk Containers (IBC).

Small quantities of oily water received in small containers up to approximately 1 kL IBC will be decanted into the receival Pit 1 and processed at the same time as the incoming bulk oily water.

There is an adjacent existing spare 33 m³ below ground pit (Pit 2) that can be used if there are bulk deliveries received in a short timeframe. In this event, oily waste from Pit 2 will be pumped into Pit 1 when there is capacity – there will be no processing of oily water within Pit 2 as there will be no oil water separator in Pit 2.

The receival and separation of the liquid waste will occur on an existing concrete lined and bunded area. The storage tank farm will be developed in a new concrete lined bunded area and the processed oil and water discharge activity will occur within a new bunded concrete spill pad.

The Licence Holder expects to receive up to 25 kL of oily water per day six days a week. This equates to around 7,800 kL/yr which falls within the existing licence P&DC.

2.4 Proposed works

2.4.1 Receival Pits

The Premises has two existing below ground steel lined pits (Pit 1 and Pit 2) which are approximately 6 m x 3 m with a volume of 33 m³. These pits have been inspected and some significant rust damage has been identified. Integrity testing indicates both pits need to be completely relined with new steel plates. The two pits are surrounded by a bunded concrete hardstand area – no additional work is required here.

Pit 1 will have a new oil water separator installed that will have a flow of approximately 5 m³/hr which will remove 15% of the pit volume in one hour. The oil water separator will be operated by a manual switch and the pump will be connected to the oil storage tank via a 90 mm pipe. Pit 1 will also have a pump and pipeline for the removal of clarified water from the pit. The pump will have a flow of approximately 15 L/s which will take approximately 30 minutes to empty 25 kL of liquid (one tanker delivery load). The pipe to the water storage tanks is 90 mm and will be connected to the top of each tank to prevent any of the tanks from draining in the event of any damage to the pipeline.

Pit 2 will simply be a standby pit to receive additional oily water in the event Pit 1 is being used. Any liquid load into Pit 2 will be transferred to Pit 1 for processing when Pit 1 has capacity. It is not envisioned that Pit 2 will be utilised regularly and therefore there will be no permanent inter-tank plumbing equipment installed between the two pits. When a transfer is required a mobile pump and pipe will be employed.

2.4.2 Tank Farm Bunded Area

There is an existing concrete bunded area where the tank farm will be located however the existing bund is a low hump and not sufficient for the tank farm. A new 900 mm high bund wall has been designed to be constructed on top of the existing concrete hump to achieve sufficient storage of 110% of the volume of the largest tank or 25% of the combined storage of all tanks within the tank farm.

Each tank within the tank farm will be filled from the top and have a separate discharge pipe to the facility discharge pump to ensure that each tank is completely separate from all other tanks so that there is no interconnectivity between any tanks with the tank farm.

Due to the large size of the tanks (9.1 m x 9.8 m high) a structural engineer will design structural supports (foundation and horizontal) for the tanks which will include cyclone rating. In addition, external cladding will be constructed to counter any jetting from the tanks if punctured, and the cladding will ensure any jetting does not enter the environment and is captured in the bunded area.

The bunded area has an existing sump. A small sump pump will be installed with a flow rate of approximately 3 L/s and operated via manual switch. This pump is intended for the removal of rainwater, wash down water and minor spillages and will be discharged into Pit 1 for processing.

2.4.3 Oil and Water Storage Tanks

The Premises has an existing 6 x 25 kL Iso-tainers and there are 4 x 50 kL steel tanks and a 60 kL steel tank that will be used at the tank farm. An additional new 30 kL plastic storage tank will be used for storage.

The 60 kL steel tank will be used for the storage of oil from the oil separator with all the other tanks used for the storage of clarified oily water.

2.4.4 Spill pad

A 5 m wide x 14.5 m long bunded concrete spill pad and sump will be constructed immediately adjacent to the tank farm concrete bunded area. This spill pad will be used for liquid tankers to park on while being filled. The spill pad will also be utilised to place IBC on when being filled.

3. 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 *Guideline: Risk assessments* (DWER 2020).

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.

3.1 Source-pathways and receptors

3.1.1 Emissions and controls

The key emissions and associated actual or likely pathway during premises construction and 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
Construction			
Dust	Construction of OWF. Operation of OWF.	Air/windborne pathway	Wetting down construction area prior to construction activities. Siting.
Noise	Associated vehicle movement to unload / load wastes.		Compliance with <i>Environmental Protection (Noise) Regulations 1997</i> (Noise Regs). Siting.
Operation			
Dust	Construction of OWF. Operation of OWF.	Air/windborne pathway	Wetting down construction area prior to construction activities. Siting.
Noise	Associated vehicle movement to unload / load wastes.		Compliance with <i>Environmental Protection (Noise) Regulations 1997</i> (Noise Regs). Siting.
Odour	Acceptance, handling, consolidation, treatment, and storage of liquid and solid wastes		Sludge removed from the Premises. Use of Tanks. Siting.
Fire			Siting. Closed system tanks. Fire extinguishers.
Contaminated Stormwater including Fire water		Seepage to soils and groundwater	Steel Pits. Waste received and stored in impervious containers within steel lined Pits and/or on existing bunded hardstand areas. Spill kits available and stocked for immediate cleanup of any spills Concrete hardstand constructed to meet not less than 1 x 10 ⁻⁸ m/s permeability with bunds surrounding hardstand constructed of concrete and a minimum (900 mm) high. Spill pad and sump. Sufficient storage of 110% of the volume of the largest tank or 25% of the combined storage of all tanks within the tank farm. Tanks are not connected.
Spill / Leaks			

Emission	Sources	Potential pathways	Proposed controls
			Cladding to prevent Jetting beyond the tank farm. Sludge removed from the Premises.

3.1.2 Receptors

In accordance with the *Guideline: Risk assessments* (DWER 2020), 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 and Figure 1 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 (*Guideline: Environmental siting* (DWER 2020)).

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

Human receptors	Distance from prescribed activity
H1 - Nearest sensitive receptor Residential Premises - 1968 Anderson Road, Karratha Industrial Estate.	140 m south of the Premises boundary
H2 - Karratha Kart Club - Anderson Road, Karratha Industrial Estate	240m southeast of the Premises boundary
H3 - Kingway Motel, 1069 King Way, Karratha Industrial Estate	1.3 km northwest of Premises boundary
Nearest industrial receptors	Adjacent to northern, western and southern Premises boundaries
Environmental receptors	Distance from prescribed activity
Groundwater Pilbara fractured rock aquifer (unconfined)	The water table in the Pilbara fractured rock aquifer is generally within 5 – 10 m of the surface. Regional groundwater flow is inferred to be north to northeast towards Nickol Bay. There are two licensed groundwater users within 5km of the Premises, with the nearest being 1.3 km south west Premises boundary Private extraction well (GWL202093 - Norwest Sand and Gravel Pty Ltd, drawing from Pilbara fractured rock aquifer), shown as E1 in Figure 1.
E2 - Minor non-perennial watercourse Tributary of Gwen Creek	Approximately 195 m east of the Premises boundary.
Priority 1 Ecological Community Roebourne Plains gilgai grasslands	Approximately 900 m west of the Premises boundary. The buffer area of the PEC extends onto the Premises. The PEC has not been considered further as a receptor in the risk assessment due to the distance to the physical

	location of the PEC.
Priority 3 Ecological Community	Approximately 1.5 km west of the Premises boundary. The buffer area of the PEC extends onto the Premises.
Horseflat Land System	The PEC has not been considered further as a receptor in the risk assessment due to the distance to the physical location of the PEC.

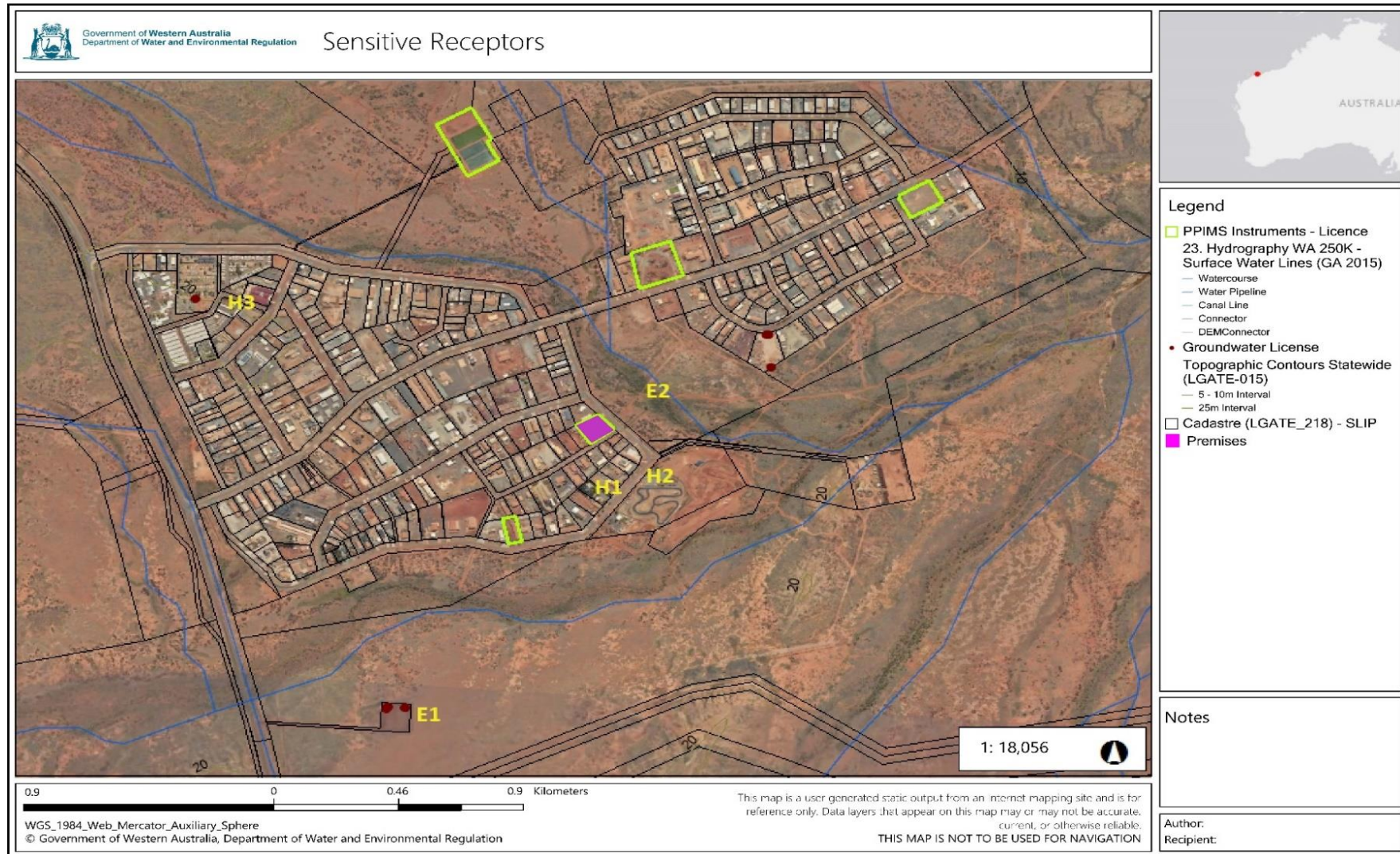


Figure 1: Distance to sensitive receptors

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3.2 Risk ratings

Risk ratings have been assessed in accordance with the *Guideline: Risk Assessments* (DWER 2020) for those emission sources which are proposed to change and takes into account potential source-pathway and receptor linkages as identified in Section 3.1. Where linkages are incomplete they have not been considered further in the risk assessment.

Where the Licence Holder has proposed mitigation measures/controls (as detailed in Section 3.1), 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 L8765 that accompanies this Amendment Report authorises emissions associated with the operation of the Premises

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 construction and operation

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				
Construction								
Construction of Steel pit. Tanks and cladding and associated equipment including vehicle movements (reversing beepers).	Dust	Air/windborne pathway causing impacts to health and amenity	Residential receptor 140 m south of the Premises boundary	Refer to Section 3.1	C = <i>Slight</i> L = <i>Unlikely</i> Low Risk	Y	N/A	N/A The Delegated Officer has considered the scale of the works and the separation distance between the source and receptors as indicating that the risk of dust emission impacts is not foreseeable.
	Noise		Karratha Kart Club 240m southeast of the Premises boundary Industrial premises adjacent to northern, western and southern Premises boundaries					
Operation								
Operation of OWF Vehicle movements	Dust	Air/windborne pathway causing impacts to health and amenity	Residential receptor 140 m south of the Premises boundary	Refer to Section 3.1	C = <i>Slight</i> L = <i>Unlikely</i> Low Risk	Y	N/A	No additional conditions required - Existing Licence Condition 8 and 9.
	Noise		Karratha Kart Club 240m southeast of the Premises					

Risk Event					Risk rating ¹	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	C = consequence L = likelihood			
			boundary Industrial premises adjacent to northern, western and southern Premises boundaries					between the source and receptors as indicating that the risk of noise emission impacts is not foreseeable. Noise emissions will be adequately regulated under the Noise Regs.
	Odour		Residential receptor 140 m south of the Premises boundary	Refer to Section 3.1	C = <i>Slight</i> L = <i>Unlikely</i> Low Risk	Y	N/A	No additional conditions required - Existing Licence Condition 10
	Fire		Karratha Kart Club 240m southeast of the Premises boundary Industrial premises adjacent to northern, western and southern Premises boundaries	Refer to Section 3.1	C = Moderate L = Unlikely Medium Risk	Y	Condition 1 and 6	No additional conditions required - Existing Licence condition 1, 2, 3, 4, 11 and 18.
	Contaminated Stormwater including Fire water	Contamination of land, surface water or groundwater	Minor non-perennial watercourse 195 m east of the Premises	Refer to Section 3.1	C = Moderate L = Unlikely Medium Risk	Y	Condition 1, 3 and 6.	No additional conditions required - Existing Licence Condition 11.

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				
	Spill / Leaks	through direct discharge, runoff or infiltration	boundary. Soil and groundwater 5-10 mbgl	Refer to Section 3.1	C = Moderate L = Unlikely Medium Risk	Y	Condition 1, 3 and 6.	No additional conditions required - Existing Licence Condition 11. Discharges to the environment may also be regulated under the <i>Environmental Protection (Unauthorised Discharges) Regulations 2004</i> .

Note 1: Consequence ratings, likelihood ratings and risk descriptions are detailed in the *Guideline: Risk assessments* (DWER 2020).

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

4. Consultation

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

Table 5: Consultation

Consultation method	Comments received	Department response
Local Government Authority advised of proposal 31 January 2024	<p>The City of Karratha replied on 3 February 2025 advising:</p> <p><i>The amendment relates to administrative updates, the neutralisation of acidic wastes, and for the receipt and storage of C100 wastes (basic solutions or bases in solid form) at Lot 2864 on Deposited Plan 184127, Pyramid Road, Karratha Industrial Estate.</i></p> <p><i>Regarding the above, the City of Karratha advises Development Approval was issued 26 July 2013 for "Additional Temporary Facilities – Waste Management", being a Noxious Industry. Please note that the reference to 'temporary' is in relation to the existence of the lease held by Veolia over Lot 2864. The Development Approval is not time limited and therefore is still current.</i></p> <p><i>The City has no further comment to add in relation to the licence amendment. Noting that the City previously provided comments in September 2024 (CofK Reference - LM24149).</i></p>	Noted.
Licence Holder was provided with draft amendment on 17 February 2025	<p>Licence Holder responded on 18 February 2025 advising they had reviewed the proposed amendment and were happy with the proposed conditions and hence requested to issue the licence.</p> <p>The Licence Holder also requested to remove N1 Notification Form referenced in Condition 18.</p>	DWER has removed the N1 From as requested and amended Condition 18 accordingly.

5. 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.

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
Condition 3 Table 2	Pit 1 and Pit 2 and the Tank Farm can be operated once the Environmental Compliance Report (ECR) required under condition 20 and 21 has been submitted to DWER and construction requirements have been met.
Condition 19	Addition of Specified works condition to authorise construction of the OWF as outlined in Table 5.
Condition 20	Condition 20 outlines requirement of the submission of an ECR upon construction of the OWF under condition 19.
Condition 21	Condition outlines the information required to be submitted in the ECR.
Schedule 1	Addition of new Figure 2, 3 and 4 maps for the construction of the OWF.
-	With the addition of the Specified works conditions to authorise construction of the OWF the Existing Licence has been amended to allow Premises Operations. Accordingly, these Licence condition / Table numbers have been amended but there are no changes to the conditions themselves.

References

1. Department of Environment Regulation (DER) 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.
2. Department of Water and Environmental Regulation (DWER) 2020, *Guideline: Environmental Siting*, Perth, Western Australia.
3. DWER 2020, *Guideline: Risk Assessments*, Perth, Western Australia.