



Decision Report

Application for Licence

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

Licence Number	L8956/2016/1
Applicant	Shire of Cuballing
File Number	DER2016/000278-1
Premises	Cuballing Waste Management Facility 151 Brundell Street CUBALLING WA 6311 Being Lot 350 on Plan 50864 as depicted in Schedule 1 of the Licence
Date of Report	23/06/2020
Proposed Decision	Licence granted

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MANAGER WASTE INDUSTRIES
INDUSTRY REGULATION

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

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1. Decision summary

This Decision Report documents the assessment of potential risks to the environment and public health from emissions and discharges during the operation of the Premises. As a result of this assessment, Licence L8956/2016/1 has been granted.

2. Scope of assessment

2.1 Regulatory framework

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

2.2 Application summary and overview of Premises

On 11 November 2015, the applicant submitted a concurrent works approval and licence application to the department under section 54 of the *Environmental Protection Act 1986* (EP Act).

The application was to undertake construction works relating to a solid waste depot at the Premises. The premises consists of a recycling shed, hardstand area and bunding for bins and waste storage and a sedimentation dam. Less than 20 tonnes of waste is expected to be processed per annual period, the application has been assessed at a capacity of 500 tonnes per annual period.

The Premises is approximately 1.7 km west north-west of Caballing's town centre. Cuballing is located approximately 160 km south-east of Perth. The Premises land is zoned for public purposes: waste disposal. Land to the north, west and south are zoned general agriculture, lands to the east are zoned rural residential. A small area of vegetation exists between the prescribed activities and the western, northern and eastern boundary on the Premises.

The Works Approval W5955/2016/1 was issued on 14 April 2016 and an amendment to remove the acceptance of asbestos and related conditions was issued on 20 March 2019.

The Premises relates to the category and assessed production capacity under Schedule 1 of the *Environmental Protection Regulations 1987* (EP Regulations) which are defined in Licence L8956/2016/1. The infrastructure and equipment relating to the premises category and any associated activities which the department has considered in line with *Guidance Statement: Risk Assessments* (DER 2017) are outlined in Licence L8956/2016/1.

No assessment of other prescribed activities, being Category 89 putrescible landfill, at the premises is undertaken in this Decision Report as the applicant has advised that the putrescible landfill operates at a throughput of less than 200 tonnes per annual period. The applicant advised that they planned on ceasing landfilling on site once the works approval was completed, the licence holder is to inform DWER if/when this occurs.

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 *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.

3.1 Source-pathways and receptors

3.1.1 Emissions and controls

The key emissions and associated actual or likely pathway during premises operation which have been considered in this Decision Report are detailed in Table 1 below. Table 1 also details the proposed control measures the applicant has proposed to assist in controlling these emissions, where necessary.

Table 1: Proposed operational applicant controls

Emission	Sources	Potential pathways	Proposed controls
<i>Leachate</i>	<i>Waste storage and processing</i>	<i>Overland flow</i>	
<i>Windblown waste</i>	<i>Waste storage and Processing</i>	<i>Windborne dispersion</i>	
<i>Contaminated stormwater</i>	<i>Waste storage and processing</i>	<i>Overland flow</i>	<i>Sedimentation pond</i>
<i>Smoke</i>	<i>Unauthorised fire</i>	<i>Air</i>	
<i>Dust</i>	<i>Waste processing</i>	<i>Air</i>	<i>No controls are proposed by the applicant</i>

3.1.2 Receptors

In accordance with the *Guidance Statement: Risk Assessment* (DER 2017), the Delegated Officer has excluded employees, visitors and contractors of the applicant'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 2 and

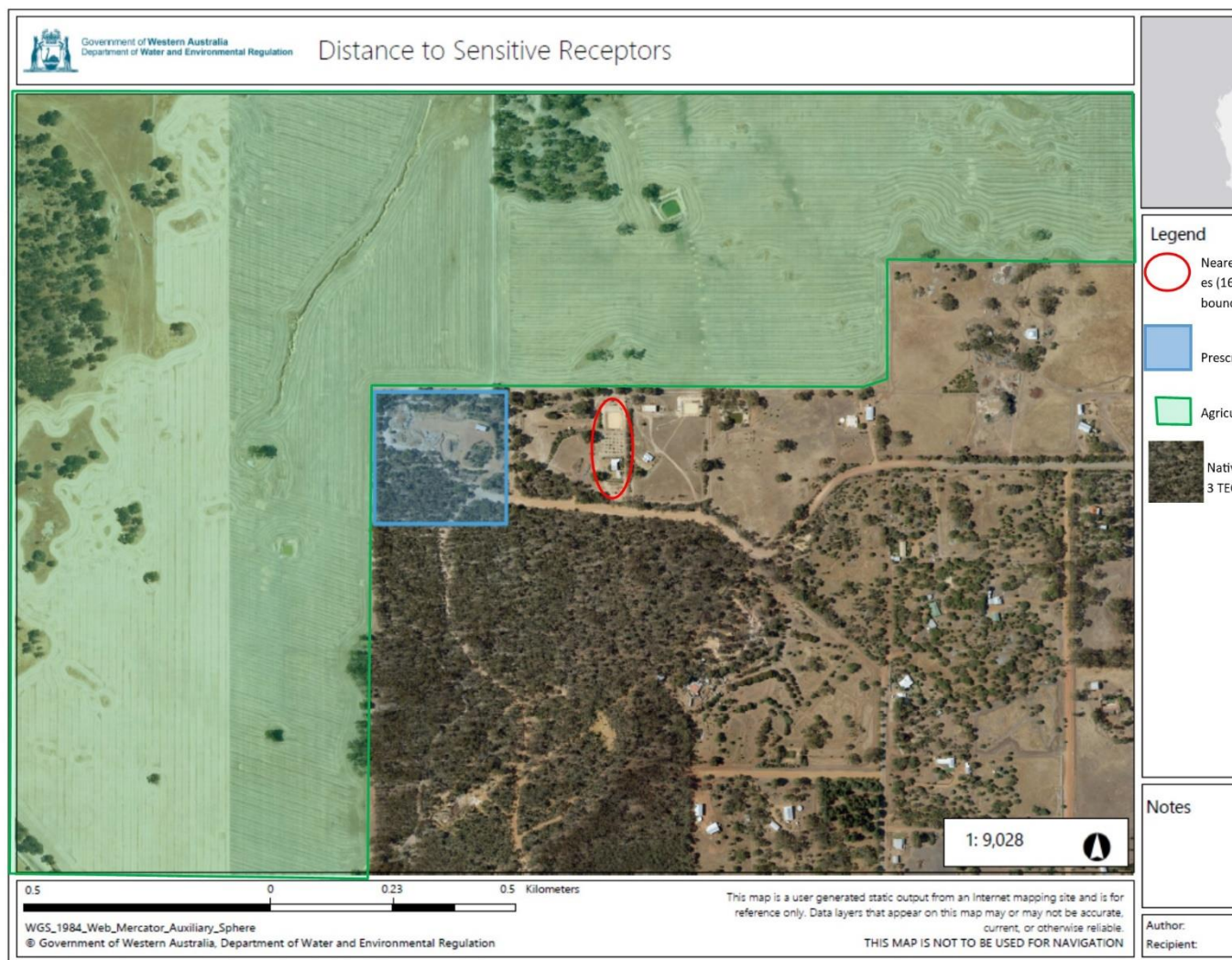


Figure 1 below provides a summary of potential human and environmental receptors that may be impacted as a result of activities upon or emission and discharges from the prescribed premises (*Guidance Statement: Environmental Siting* (DER 2016)).

Table 2: Sensitive human and environmental receptors and distance from prescribed activity

Human receptors	Distance from prescribed activity
<i>Residential dwelling</i>	<i>150 m east of the Premises</i>
<i>Agricultural land</i>	<i>Located immediately north and west of the premises</i>
Environmental receptors	Distance from prescribed activity
<i>Native vegetation</i>	<i>Extends over 800m to the south of the Premises</i>
<i>Priority 3 TEC</i>	<i>Premises is within Priority 3 TEC (Eucalypt woodlands of Western Australian Wheatbelt)</i>

<i>RIWI Act 1914</i>	<i>Within Murray River System catchment proclaimed surface water area</i>
<i>Groundwater</i>	<i>Depth unknown</i>
<i>WRIMS – Aquifer</i>	<i>Combined – Fractured Rock West – Alluvium</i>
<i>PDWSA</i>	<i>Premises is not within the vicinity of a PDWSA</i>

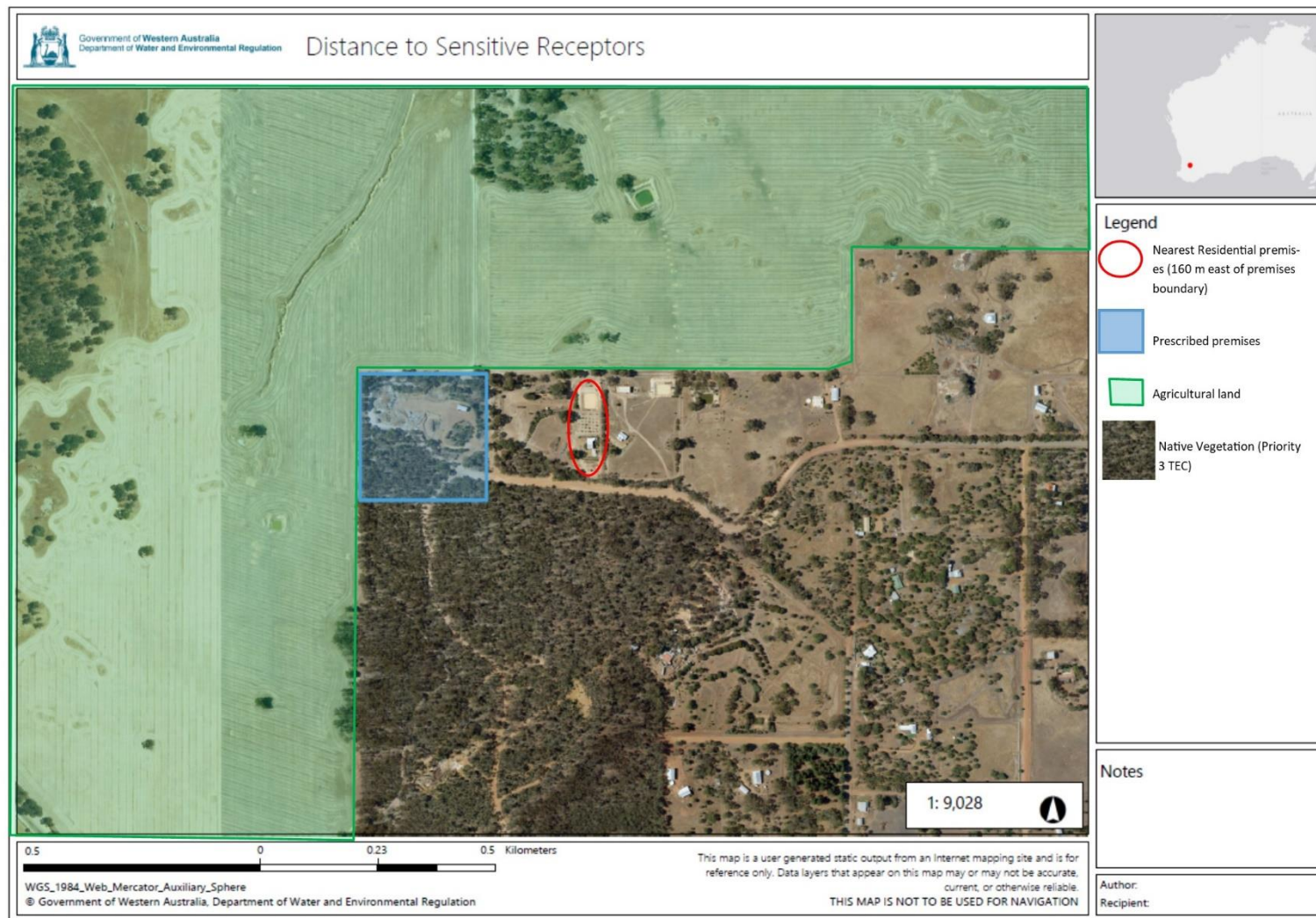


Figure 1: Distance to sensitive receptors

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3.2 Risk ratings

Risk ratings have been assessed in accordance with the *Guidance Statement: Risk Assessments* (DER 2017) for each identified emission source and takes into account potential source-pathway and receptor linkages as identified in Section 3.1. Where linkages are in-complete they have not been considered further in the risk assessment.

Where the applicant 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 applicant'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 applicant's controls are not deemed sufficient. Where this is the case the need for additional controls will be documented and justified in Table 3.

Licence L8956/2016/1 that accompanies this Decision Report authorises emissions associated with the operation of the Premises i.e. Category 62: solid waste depot activities.

The conditions in the issued Licence, as outlined in Table 3 have been determined in accordance with *Guidance Statement: Setting Conditions* (DER 2015).

Table 3: Risk assessment of potential emissions and discharges from the Premises during operation

Risk Event					Risk rating ¹ C = consequence L = likelihood	Applicant controls sufficient?	Conditions ² of licence	Justification for additional regulatory controls
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls				
Operation								
Storage of waste	Leachate	Overland runoff causing interference with the health, welfare, convenience, comfort or amenity of sensitive receptors	<p>The closest property boundary is approximately 20 m from the prescribed activities, the closest residence is located about 150 m east of prescribed activities.</p> <p>Native vegetation within the premises boundary.</p> <p>Neighbouring agricultural activities</p>	<p>Hardstands and bins for managing waste acceptance and storage</p> <p>WA controls: Hardstand free of leaks and defects, sedimentation dam located on area not previously landfilled, areas constructed for waste storage are bunded hardstands.</p>	<p>C = Minor</p> <p>L = Unlikely</p> <p>Moderate Risk</p>	Y	<p><u>Licence condition 2 requires that all waste is stored on the hardstands of the solid waste depot.</u></p> <p><u>Licence condition 3 ensures the integrity of the hardstand and sedimentation dam are maintained.</u></p> <p><u>Licence condition 2 requires the storage time for putrescible waste at the premises during operation is a maximum of 2 weeks.</u></p> <p><u>Licence condition 2 requires the storage of putrescible waste in leak proof, lidded vessels</u></p>	<p>Licence condition 2 will assist in ensuring that any leachate arising from the stored waste is contained and managed appropriately and does not migrate to the sedimentation dam or infiltrate.</p>

Risk Event					Risk rating ¹ C = consequence L = likelihood	Applicant controls sufficient?	Conditions ² of licence	Justification for additional regulatory controls
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls				
Storage of waste	Vector borne diseased Pests and vermin	Transmission via Pests and vermin. Interference with the health, welfare, convenience, comfort or amenity of sensitive residential receptors and impacts on native vegetation ecosystem health and agricultural activities	The closest property boundary is approximately 20 m from the prescribed activities, the closest residence is located about 150 m east of prescribed activities. Native vegetation within the premises boundary.	Waste storage controls are proposed in the form of bins	C = Moderate L = Unlikely Moderate Risk	N	<u>Licence condition 2 requires the storage of putrescible waste is in contained and covered infrastructure</u> <u>Licence condition 2 requires the storage time for putrescible waste at the premises during operation is a maximum of 2 weeks.</u> <u>Licence condition 3 ensures that the bins are sealed when the premises is unoccupied.</u> <u>Licence condition 5 requires that control measures are required to prevent and stop infestations, meaning a reduction in numbers should numbers be prevalent.</u>	The implementation of regulatory controls brings the Likelihood rating from Unlikely to Rare.
Waste storage and processing	Windblown waste	Air. Amenity/nuisance impacts to nearby receptors	Neighbouring agricultural activities		C = Minor L = Possible Medium Risk	N	<u>Licence condition 2 requires the storage of putrescible waste is in contained and covered infrastructure</u> <u>Licence condition 3 ensures that the bins are sealed when the premises is unoccupied.</u> <u>Licence condition 4 requires windblown waste management practices be implemented</u>	Licence condition 4 reduces the likelihood of windblown waste affecting neighbouring sensitive receptors to Unlikely.

Risk Event					Risk rating ¹ C = consequence L = likelihood	Applicant controls sufficient?	Conditions ² of licence	Justification for additional regulatory controls
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls				
Waste storage and processing	Contaminated stormwater	Overland flow Stormwater and contaminants leaving the premises and entering adjacent properties may potentially impact the health, welfare, convenience, comfort or amenity of those residences. Some contaminants may have the potential to migrate through soils into the groundwater.	No groundwater users proximate to the premises have been identified and hydrogeological conditions are not known	The applicant has committed to constructing and maintaining hardstands and refers to the use of bins for waste containment. A sedimentation dam has been constructed for stormwater management The WA ensured that the hardstands were constructed with adequate bunding. .	C = Minor L = Rare Low Risk	Y	<u>Licence condition 2 requires that all waste is covered and contained during storage and when the site is unattended.</u>	It is considered that the provisions of Section 49 of the Environmental Protection Act 1986 and the provisions of the Environmental Protection (Unauthorised Discharge) Regulations 2004 are sufficient to regulate the emissions of stormwater during operation. The requirement of condition 2 is considered consistent with the applicant's commitment to use bunded hardstands and bins for waste storage.

Risk Event					Risk rating ¹ C = consequence L = likelihood	Applicant controls sufficient?	Conditions ² of licence	Justification for additional regulatory controls
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls				
Waste storage	Smoke from unauthorized fire	Air dispersion of smoke – may have health and amenity impacts to nearest receptors	<p>The closest property boundary is approximately 20 m from the prescribed activities, the closest residence is located about 150 m east of prescribed activities.</p> <p>Native vegetation within the premises boundary.</p> <p>Neighbouring agricultural activities</p>	Fenced and locked to prevent unauthorised access	<p>C = Minor</p> <p>L = Possible</p> <p>Medium Risk</p>	N	<p><u>Licence conditions 6 to 8 ensures fire management practices are performed onsite and the perimeter fence is secure and maintained.</u></p>	<p>Fire poses a risk to the neighboring native vegetation and a risk of smoke impacts to the nearby residential properties. As such, the delegated officer considers the inclusion of general fire conditions adequate in mitigating any potential impacts.</p>
Acceptance and movement of waste	Noise	Interference with the health, welfare, convenience, comfort or amenity of sensitive residential receptors.	<p>The closest property boundary is approximately 20 m from the prescribed activities, the closest residence is located about 150 m east of prescribed activities</p>	No controls were specified by the applicant	<p>C = Slight</p> <p>L = Likely</p> <p>Low Risk</p>	Y		<p>It is considered that the provisions of the Environmental Protection (Noise) Regulations 1997 will be sufficient to regulate noise emissions during operation</p>

Risk Event					Risk rating ¹ C = consequence L = likelihood	Applicant controls sufficient?	Conditions ² of licence	Justification for additional regulatory controls
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls				
Waste processing	Odour	Interference with the health, welfare, convenience, comfort or amenity of sensitive commercial or residential receptors.	The closest property boundary is approximately 20 m from the prescribed activities, the closest residence is located about 150 m east of prescribed activities	The applicant committed to store all waste at least 30 m from the premises boundary	C = Slight L = Possible Low Risk	Y	<u>Licence condition 2 requires the commitment indicated by the applicant to construct and subsequently store all waste at least 30 m from the premises boundary to be met. This will help ensure that fugitive odour emissions do not arise adjacent to the boundary of private properties.</u> <u>Licence condition 2 requires the storage time for putrescible waste at the premises during operation to a maximum of 2 weeks (this condition also in part addresses the risk of pest and vermin).</u>	It is considered that the provisions of Section 49 of the Environmental Protection Act 1986 are sufficient to regulate odour emissions.
Waste processing and storage of putrescible waste	Dust	Reduced local air quality from airborne particles,	The closest property boundary is approximately 20 m from the prescribed activities, the closest residence is located about 150 m east of prescribed activities	No controls were proposed by the applicant	C = Slight L = Possible Low Risk	Y		It is considered that the provisions of Section 49 of the Environmental Protection Act 1986 are sufficient to regulate dust emissions.

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

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

4. Consultation

Table 4 provides a summary of the consultation undertaken by the department.

Table 4: Consultation

Consultation method	Comments received	Department response
<i>Application advertised on the department's website (2016)</i>	<i>None received</i>	N/A
<i>Applicant was provided with draft documents on 3 June 2020</i>	<i>Condition 2 – Applicant requested to change waste storage period from 1 week to 2 weeks. Conditions 10 and 11 – As there is no weigh bridge on the premises, the wording of condition 10 could have been difficult to comply with. Applicant states that the amount of waste taken offsite is weighed by weigh bridge at the Shire of Narrogin Waste Disposal Site. The Applicant requested the removal of condition 10.</i>	<i>The Delegated Officer has determined the request relating to condition 2 acceptable and made the relevant changes to the Licence. The Delegated Officer has determined that the request to remove condition 10 is not acceptable but has included an option that measurement of inputs can be by estimation based on records of waste removed off site.</i>

5. Conclusion

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

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.