# **Decision Report**

# **Application for Licence**

#### Division 3, Part V Environmental Protection Act 1986

Licence Number L9191/2019/1

**Applicant** Cleanaway Pty Ltd

**ACN** 000 164 938

File Number DER2018/001661

**Premises** Albany Transfer Station

16 Cuming Road

Mount Melville WA 6330

Legal description -

Part of Lot 167 on Deposited Plan 248882

As defined by the coordinates in Schedule 1 of the Licence and as defined by the Premises maps attached to the issued

licence.

**Decision / Proposed** 

decision

Decision to grant licence

# 1. Definitions

Key terms relevant to this decision report and their associated definitions are listed in **Error! Reference source not found.**.

**Table 1: Definitions** 

Term	Definition
ACN	Australian Company Number
Applicant	means Cleanaway Pty Ltd
Category/ Categories/ Cat.	Categories of Prescribed Premises as set out in Schedule 1 of the EP Regulations
Decision Report	refers to this document.
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 As of 1 July 2017, the Department of Environment Regulation (DER), the Office of the Environmental Protection Authority (OEPA) and the Department of Water (DoW) amalgamated to form the Department of Water and Environmental Regulation (DWER). DWER was established under section 35 of the <i>Public Sector Management Act 1994</i> and is responsible for the administration of the <i>Environmental Protection Act 1986</i> along with other legislation.
Emission	has the same meaning given to that term under the EP Act.
EP Act	Environmental Protection Act 1986 (WA)
EP Regulations	Environmental Protection Regulations 1987 (WA)
Noise Regulations	Environmental Protection (Noise) Regulations 1997 (WA)
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 Decision Report applies, as specified at the front of this Decision Report
Risk Event	As described in Guidance Statement: Risk Assessment

#### 2. Overview of Premises

#### 2.1 Classification of Premises

Table 2: Classification of Premises and assessed design capacity

Category	Description	Assessed production or design capacity or throughput
Category 62	Solid waste depot: Premises on which waste is stored, or sorted, pending final disposal or re-use	10,000 tonnes per annual period

### 2.2 Description of proposed activity

The Albany Transfer Station (Premises) is an existing materials recovery facility situated next to the licensed Albany Refuse Site (L6925/1997/8) within the City of Albany. The Applicant has operated the site since 2004.

The applicant has advised that only kerbside collected recyclable waste is received at the Premises. Waste reports directly to the receival belt and then hand sorted into the specific areas of paper, glass, steel aluminium and plastics. It is then stored in either bales or hook bins ready for transfer off site.

The Applicant has applied to licence its existing operations which sorts and recycles cardboard, waste paper, mixed plastics, glass, aluminum and steel. The recyclables are delivered to the facility from municipal collections within the City of Albany and the Shires of Denmark, Plantagenet, Jerramungup and Ravensthorpe as well as commercial and industrial clients transported by Cleanaway fleet and commercial customers.

#### Primary Activities

Two main activities are conducted on the Premises being:

- 1. the receival, baling and transfer of cardboard/paper, and
- 2. the receival, sorting, storing and transfer of glass, plastic, aluminum and steel recyclables.

Infrastructure relating to these activities is outlined below in Table 3.

An office and workshop area are present on-site. The rest of the site consists of laydown areas for light-vehicle and truck parking as well as storage.

Recycling activities occur on a concrete hardstand inside an enclosed steel fabricated shed. Waste is brought in via a truck and tipped onto the receival belt for processing.

The processing and sorting occur in the building (Existing Shed in Figure 2). Glass and mixed types of plastic is hand sorted while the steel is taken off the belt by a magnet system and the aluminium is processed via the Edi-current system on a separate belt system.

The paper and cardboard are hand sorted and separated onto two belt lines prior to entering the trommel and being baled. Paper and cardboard bales are created at the end of this process. Processed bales are sold to commercial customers.

Once the glass has been hand separated it is transported (via 2 hook lift bins approximately 22 tonnes) to a freight company for interstate transport and processing.

The waste left on the belt feeds into the general waste compactor on site and the general waste is disposed of at the Albany Refuse Site (ARS) next door. The ARS is a Class II unlined landfill located directly south of the Premises.

#### Leachate Collection

There is a leachate collection system comprising of an open drain surrounding the Container Bailer and two concrete lined collection tanks. The floor is graded to drain into the collection tanks surrounding the Recycle Conveyor. The collection tanks are covered with mesh to prevent any large waste particles entering the system. The larger tank is drained or cleaned out on average every two years.

#### **Hours of Operation**

The site is always attended during operations which nominally occur from 3 am to 5 pm Monday to Friday (inclusive of public holidays). Machines typically operate from 4 am to 5 pm with truck movements throughout this time period. Data on noise monitoring was not provided with the application.

#### Storage of empty commercial/skip bins

Empty commercial/skip bins are stored to the east of the Premises in a laydown area. These bins do not contain waste materials. No waste is sorted or stored outside of the building.

There is no long-term storage of materials at the Premises and no point source emission discharge points at the site.

#### Fire and Spill Management

Fire-fighting equipment in place includes three (3) fire hoses connected to mains water, eight (8) fire extinguishers and a portable spill management kit. In addition, the Premises adheres to a Site Emergency Management Plan which includes strategies to be adopted in the event of an emergency.

These strategies include:

- Emergency Awareness Training for staff;
- Evacuation procedure for a fire; and
- Procedure for Product Spill or Environmental incident.

The infrastructure and equipment are outlined in the table below and the site layout is shown in Figure 1.

**Table 2: Infrastructure or Equipment** 

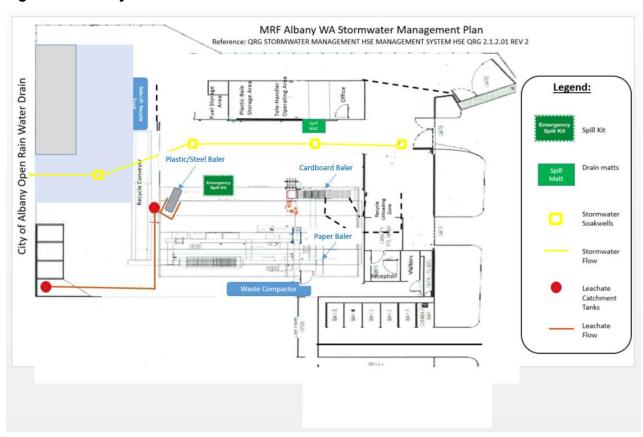
Ref	Infrastructure or Equipment
1	Enclosed Sorting Shed
2	Truck unloading receival area
3	Leachate collection system  Collection tank 1: 300mm x 300mm x 200mm  Collection Tank 2: 400mm x 400mm
Waste sti	ream 1: Cardboard/paper receival, baling and transfer
4	1 x trommel
5	2 x belt lines (sorting paper and cardboard)

Ref	Infrastructure or Equipment
6	2 x balers (Paper and Cardboard) (Model: GB-1108FX – 60HP open ended channel baler with a below ground conveyer.)
7	Baled product storage area
Waste St	ream 2: Co-mingled recyclables receival and transfer
8	Conveyer belt
9	1 x magnet system to remove the steel
10	1 x Edi-current system to remove aluminium
11	1 x glass collection bin
12	1 x mixed plastics bin
13	1 x Plastic/Steel Baler
14	Unprocessed glass storage bays
15	Processed glass storage bays

Figure 1: Site Layout Plan



Figure 2: Site Layout Plan



## 3. Legislative context and other approvals

Approvals relevant to the Premises are outlined in the table below.

**Table 3: Approvals** 

Legislation	Number	Approval
Planning and Development Act 2005	P2096	Planning consent was provided with the Application.
		The Applicant has provided written confirmation from the then Town of Albany which outlines the City's support for the existing operations.
		It is the responsibility of the Licence Holder to ensure that any action or activity referred to in the Licence is permitted by, and is carried out in compliance with, other statutory requirements.

## 4. Emission sources, receptors and pathways

#### 4.1 Emissions

The potential for emissions to impact on sensitive receptors has been assessed in accordance with the Department's Risk Framework. The key emissions associated with Premises operation which have been considered in this report are dust, odour, noise and leachate from the transfer station activities including truck movements, sorting and baling operations and storage of waste.

No dust, noise or odour complaints have been received on the site in the past 15 years of operation.

The Applicant has proposed measures to assist in controlling these emissions, where necessary. The control measures are outlined in Section 4.4 below and have been considered when undertaking the risk assessment detailed in Section 5.

# 4.2 Receptors

Risk is assessed as a combination of emission sources, the proximity and sensitivity of receptors to those emission sources and any pathways that can allow the emission to reach and potentially harm the receptor. Figure 3 and Table 4 provide a summary of human and environmental receptors in proximity to the Premises which have a potential to be impacted from site activities, and the risk assessment in Section 5 considers these receptors in the context of emissions and potential pathways.

#### The Premises:

- is located on crown land,
- is orientated in a north-south direction along the western flanks of Mount Melville,
- hydraulic gradient runs generally north-east to south-west;
- natural topography is gently sloping to the west and steep to the east;
- the site is surrounded by crown land on all sides;
- native vegetation surrounds the site on three sides with the western vegetation buffer being a tree farm;
- a natural water channel to the north of the Premises and a road drain that runs alongside Hanrahan Road and discharges into the Munster Hill drain; and
- Muster Hill drain discharges into Princess Royal Harbour.

**Table 4: Receptors** 

Human receptors	Distance from Prescribed Premises Boundary		
Industrial Premises (ARS)	Adjacent to the south		
Residential Premises – R1	230 m to the north east		
Residential Premises – R2	260 m to the north west		
Environmental receptors	Distance from Prescribed Premises Boundary		
Princess Royal Harbour	located approximately 1,800 m south (down hydraulic gradient of the Premises)		
Natural stormwater drain	immediately North of the Premises (up hydraulic gradient)		
Munster Hill drainage system	210 m to the south-west (down hydraulic gradient)		
Threatened Fauna	Species that have be sighted or recorded in proximity to the premises are:     Pseudocheirus Occidentalis (Western Ringtailed Possum) 250 m to the southeast (within Crown Reserve 52474)     Isoodon Fusciveneter (Southern Brown Bandicoot/Quenda) 435 m east (within Crown Reserve 21300)		
Underlying groundwater	Groundwater information was not available for the site however the groundwater depth is estimated to be <15 metres below ground level at the bioremediation facility site at the ARS located 320 m south of the Premises.  Further information on groundwater is detailed in Section 4.3 below.		
Public Drinking Water Source Area (PDWSA)	The closest PDWSA is located approximately 2.3 km to the south-west of the Premises which is considered to be down hydraulic gradient of the Premises.		

Date of the control of Water and Excessional Regulation

L9191 - Cleanaway Albany Receptor Map

Legend

Figure 3: Distance to sensitive receptors

### 4.3 Pathways

#### **Wind Direction**

As dust and odour are considered potential emissions, the prevailing wind direction has been considered. Using information available on the Bureau of Meteorology's website, the closest available weather station for climate data is Albany Airport Comparison (No. 009741) located 10 km north-west of the Premises. Based on the climate data for Albany Airport Comparison station (1965 to 2014), the prevailing wind direction is north westerly in the morning and varies from south westerly to south easterly in the afternoon. The prevailing wind directions provide a pathway between the premises and the closest sensitive receptors.

#### **Topography**

The Premises is located on crown land and operated under a lease agreement from the City of Albany. The site is surrounded by crown land on all sides.

The Premises is oriented in a north-south direction along the western flanks of Mount Melville, and stormwater flows into the Munster Hill drain and from there into Princess Royal Harbour.

The regional topographic contours available on the Department of Mines, Industry Regulation and Safety (DMIRS) online WA Atlas indicate that the Premises topography slopes down towards the west, with relative ground levels ranging from 60 mAHD in the east to 20 mAHD in the west. The closest surface water body, Princess Royal Harbour, is approximately 1.8 km to the south.

Geomorphic classification for the area inclusive of the Premises (Mount Melville area) was determined using the DMIRS Regolith of WA - 500 m grid database available on the WA Atlas.

which indicated that the Premises lies upon an area of slope deposits, consisting of colluvium and sheet wash (sediment moved downhill by running water) and an area of exposed rocks including saprolite and saprock (chemically weathered rock).

Stormwater in the vicinity of the Premises flows toward Munster drain south, south west of the Premises.

#### Soil Type

The publication, An introduction to the soils of the Albany Advisory District, T.C. Stoneman, Western Australian Department of Agriculture, 1990, describes the soil type in the area as siliceous sand.

The profile is a deep fine sand, generally grey in the top meter, but yellow merging to pale yellow at depth. The soil is described as usually severely restricted by strong water repellency, low water storage capacity and low nutrient status. Due to the strong water repellency the overland flow is increased and therefore creates a pathway for stormwater and leachate if not managed.

#### Groundwater

Based on the topography of the area, the inferred groundwater flow direction is inferred to be west/south-west, towards the Princess Royal Harbour, 1.8 km south of the Premises. Groundwater depth is estimated to be <15 metres below ground level.

Groundwater quality is considered to be fresh to slightly saline (Total Dissolved Salts between 501 – 1000 mg/L) which, based on salinity, may be suitable for domestic non-potable, irrigation and/or stock watering.

There are no known domestic bores within the vicinity of the Premises. There are three DWER WIN network monitoring bores identified by red dots depicted in Figure 3.

Due to the depth to groundwater and the unsealed design of stormwater drain it is considered that there is a potential pathway to the groundwater if leachate is discharged from the premises.

These pathways have been considered in the risk assessment table in Section 5.

### 4.4 Applicant controls

The Applicant has proposed the following management measures/controls as part of the application:

**Table 5: Potential Emissions** 

Emission	Source	Controls				
Fugitive dust	Dust lift off from truck movements onsite Recyclables being unloaded	Site surface is covered with bitumen  Deposited in an enclosed shed.				

Emission	Source	Controls		
	Baler, conveyor and Transfer Station Shed	Restrictions on waste accepted onto site – only recyclable materials from the City of Albany and Shires of of Denmark, Plantagenet, Jerramungup and Ravensthorpe and approved commercial operators. These wastes are considered to pose a lower risk of generating odour emissions because of the predominately inert nature of the material.		
Odour	May occur when non- conforming wastes are	Situated within an enclosed shed in an industrial area.		
	received in the recycling waste stream.	Materials will not accumulate or be stored for long periods on site.		
		Surrounded by native and commercially planted bush areas.		
		No odour complaints have been received at the Premises in the past 15 years the site has been operational.		
		The predominantly inert nature of recyclable materials received results in minimal leachate produced directly from waste.		
		Waste is delivered dry and only sorted in an enclosed shed.		
		All leachate is captured in two fully sealed concrete leachate collection tanks. It is pumped out and removed from site to a suitably licenced facility as required.		
	Baler, conveyor and Transfer Station Shed Low volumes of leachate from the recycled material	No process water is used therefore leachate generation is minimal.		
Leachate		Operations are undertaken in an enclosed shed therefore the potential for stormwater to come in contact with waste is unlikely.		
	entering the Premises.	Stormwater drains onsite divert uncontaminated stormwater away from the operational areas and into an onsite stormwater sump for discharge to the offsite drain.		
		A Stormwater Management Plan (May 2019) is implemented on-site. This recommends that all uncontaminated stormwater is diverted from the site into the naturally occurring drain immediately north of the Premises, this runs into the Munster Hill drainage system.		

Emission	Source	Controls		
		All waste handling and storage occurs within the enclosed shed.		
		Waste is transferred to a trommel for sorting and then baled prior to removal from Premises.		
Windblown waste	Waste materials	No more than 150m3 of finished product is stored on site at any given time and all stored inside an enclosed shed.		
		Inspection/housekeeping processes for windblown waste are administered.		
		Perimeter fence is checked weekly for windblown waste.		
		Waste material is cleaned up on a daily within the shed.		
		All equipment is operated inside the enclosed shed between the hours of 3 am - 5 pm.		
	Mechanical equipment	The Premises is surrounded by a tree plantation and native vegetation.		
	used on-site: wheeled loader, forklift, three balers, edi-current system for aluminium, magnet for steel collection and	All vehicle movements occur on a sealed hardstand both inside the enclosed shed and outside the shed within the premises boundary.		
Noise	conveyor belts.  There may be some localised noise from truck movement including reversing alarms.	No noise complaints have been received at the Premises in the past 15 years the site has been operational.		
		The proposed operational time of 3 am to 7 am is considered as 'night-time' hours in the Environmental Protection (Noise) Regulations (EP Noise Regulations) and is afforded a lower assigned decibel level. The Applicant has not provided information to demonstrate compliance with the EP Noise Regulations.		

# 5. Risk assessment

Risk ratings have been assessed for each key emission source and takes into account potential source-pathway-receptor linkages. The mitigation measures/controls proposed by the Applicant have been considered in determining the risk rating.

Table 6: Risk Assessment

Risk Event							Regulatory controls (refer	
Source/Activities	Potential emissions	Potential receptors, pathway and impact	Applicant controls	Consequence rating*	Likelihood rating*	Risk*	Reasoning	to conditions of the granted instrument)
Vehicle movements; Waste receival;		Air/windborne pathway causing impacts to health and amenity of closest human receptors  Commercial and industrial Premises adjacent to the site.  Closest residential receptor is 230 m north-east.		Minor	Rare	Low	While there are residential receptors located down-prevailing wind of the premises, the premises activities are, by nature, not likely to generate large amounts of dust. On this basis	Infrastructure and Equipment: Condition 2 Waste Acceptance: Conditions 3 and
Screening and sorting activities; Baling activities; and Unloading, loading and storage of material.	Dust	Air/windborne pathway causing impacts to surface water quality on seasonal minor surface water drainage system draining into the Princess Royal Harbour (located adjacent to the Premises boundary draining into the main drain 210 m to the south-west of the site.)	As described in Section 4.4	Minor	Rare	Low	the Delegated Officer considers that the Applicant's proposed dust mitigation controls are likely to be sufficient at mitigating dust emissions.  Regulatory controls are required to reinforce Applicant controls.	Waste Processing: Conditions 5 and 6 Input and output monitoring: Condition 7

Risk Event								Regulatory controls (refer
Source/Activities	Potential emissions	Potential receptors, pathway and impact	Applicant controls	Consequence rating*	Likelihood rating*	Risk*	Reasoning	to conditions of the granted instrument)
Vehicle movement including reversing alarms; Waste receival; Screening and sorting activities; Baling activities; and Unloading, loading and storage of material.	Noise	Air/windborne pathway causing impacts to health and amenity of closest human receptors  Commercial and industrial Premises adjacent to the site.  Closest residential receptor is 230m north east.	As described in Section 4.4	Minor	Possible	Medium	There are residential receptors located down-prevailing wind of the premises. While the applicant controls are likely to manage the risk, the proposed hours of operation fall within night time conditions. On the basis of operations >15 yrs it is considered that while noise emissions are possible, consequences are not likely to be greater than currently experienced by receptors.  As such, the Delegated Officer considers that, additional regulatory controls are required to validate noise emissions and to reinforce Applicant controls.	Infrastructure and Equipment: Condition 2 Noise Validation Condition 13 - 16 Noise emissions from on-site operations will also be subject to the provisions specified in the EP Noise Regulations.
Waste receival; Screening and sorting activities; Baling activities; and Unloading, loading and storage of material.	Odour	Air/windborne pathway causing impacts to health and amenity of closest human receptors Industrial Premises adjacent to the site.  Closest residential receptor is 230 m north east.	As described in Section 4.4	Minor	Unlikely	Medium	While there are residential receptors located down-prevailing wind of the premises, the premises activities are, by nature, not likely to generate large amounts of odour. On this basis the Delegated Officer considers that the Applicant's proposed odour mitigation controls are likely to be sufficient at mitigating odour emissions.  Regulatory controls are required to reinforce Applicant controls.	Infrastructure and Equipment: Condition 2 Waste Acceptance: Conditions 3 and 4 Waste Processing: Conditions 5 and 6 Input and output monitoring: Condition 7

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Risk Event							Regulatory controls (refer	
Source/Activities	Potential emissions	Potential receptors, pathway and impact	Applicant controls	Consequence rating*	Likelihood rating*	Dick*	Reasoning	to conditions of the granted instrument)
Waste receival; Screening and sorting activities; Baling activities; and Unloading, loading and storage of	Leachate / Contaminated stormwater	Stormwater Drain  Contaminated stormwater and leachate runoff discharging into the naturally occurring drain immediately north of the Premises that drains into the Munster Hill Drainage system 210m to the south-west of the site. This discharges into the Princess Royal Harbour.	As described in Section 4.4	Slight	Unlikely	Low	While there are drainage receptors located adjacent the premises, the premises activities are, by nature, not likely to generate large amounts of leachate. On this basis the Delegated Officer considers that the Applicant's proposed leachate mitigation controls are likely to be sufficient at mitigating leachate emissions.  Regulatory controls are required to reinforce Applicant	Infrastructure and Equipment: Condition 2
material.		Groundwater  Contaminated stormwater and leachate runoff discharging into the naturally occurring drain immediately north of the Premises and infiltrating into the groundwater.		Slight	Rare	Low	controls.  The Applicant's proposed stormwater and leachate mitigation controls are likely to be sufficient at mitigating leachate emissions.	

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Risk Event							Regulatory	
Source/Activities	Potential emissions	Potential receptors, pathway and impact	Applicant controls	Consequence rating*	Likelihood rating*	Risk*	Reasoning	controls (refer to conditions of the granted instrument)
Waste receival; Screening and sorting activities; Baling activities; and Unloading, loading and storage of material.	Windblown waste	Air/windborne pathway causing impacts to health and amenity of closest human receptors Industrial Premises adjacent to the site. Closest residential receptor is 230 m north east. Closest threatened fauna recorded is 250 m to the south-east and 435 m east. Windblown waste entering the naturally occurring drain immediately north of the Premises that drains into the Munster Hill Drainage system 210m to the south-west of the site. This discharges into the Princess Royal Harbour.	As described in Section 4.4	Minor	Possible	Low	While there are sensitive receptors located adjacent to the premises, the premises activities are, by nature, not likely to generate large amounts of windblown waste. On this basis the Delegated Officer considers that the Applicant's proposed windblown waste mitigation controls are likely to be sufficient at mitigating windblown waste emissions.  Regulatory controls are required to reinforce Applicant controls.	Infrastructure and Equipment: Condition 2

<sup>\*</sup>Consequence ratings, likelihood ratings and risk descriptions are detailed in the Department's Guidance Statement: Risk Assessments (February 2017)

# **6** Consultation

**Table 7: Consultation notes** 

Method	Comments received		DWER response
Application advertised on DWER website 10/05/2019	None received		N/A
Application referred to the City of Albany on 10/05/2019	None received		N/A
Applicant notified of Draft – 21 Day Referral period on 25 October 2019	Draft Licence Table 3  Conditions 4/5  Decision Report	-	DWER agrees to all changes requested except for:  Condition 4 – This refers to nonconforming waste. Non-conforming waste is waste that does not meet the waste acceptance criteria set out in Table 4.  This waste is required to be removed off-site within 72 hours to avoid and unreasonable odours or contamination.  (Cleanaway agreed to this condition staying and can comply with the 72 hour timeframe. A1843119)
	Page 3	As above, confirming leachate collection tanks are concrete not plastic Confirming "east of Premises in laydown area" is correct	

Method	Comments received		DWER response
	Table 2	Model or specifications for Plastic/Steel Baler are not available	
	Figure 1 & 2	Confirming Figures are correct	
	Page 10	As above, concrete not plastic	
	Page 11	As described above, removal of finished product bales is volume driven due to transport burden. The waste compactor is emptied when full, which is approximately daily.	

### 7 Conclusion

This assessment of the risks of activities on the Premises has been undertaken with due consideration of a number of factors, including the documents and policies specified in this decision report.

Based on this assessment, it has been determined that the issued Licence will be granted subject to conditions commensurate with the determined controls and necessary for administration and reporting requirements.

DWER notes that it may review the appropriateness and adequacy of controls at any time and that, following a review, DWER may initiate amendments to the approval under the EP Act.

Tracey Hassell A/MANAGER WASTE INDUSTRIES REGULATORY SERVICES

Delegated Officer under section 20 of the Environmental Protection Act 1986

# **Appendix 1: Key documents**

Document title	In text ref	Availability
CWY Albany Licence (L9191/2019/1) application form and supporting documentation (December, 2018)		DWER records (A1746231) (A1754544) (A1767515) (A1793614) (A1795788) (A1810637) (A1843119)
DER, October 2015. Guidance Statement: Setting Conditions. Department of Environment Regulation, Perth.	DER, 2015b	
DER, August 2016. <i>Guidance Statement: Licence Duration</i> . Department of Environment Regulation, Perth.	DER, 2016b	accepted at white dwar we gove at
DER, February 2017. Guidance Statement: Risk Assessments. Department of Environment Regulation, Perth.	DER, 2017a	accessed at <u>www.dwer.wa.gov.au</u>
DWER, June 2019. <i>Guideline: Decision Making</i> . Department of Water and Environmental Regulation, Perth.	DER, 2019b	