



## Application for licence

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

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<b>Choose an item.</b>	L9230/2019/1
<b>Applicant</b>	City of Wanneroo
<b>ACN</b>	64 295 981 165
<b>DWER file number</b>	DER2019/000679
<b>Premises</b>	Wangara Transfer Station 86 Motivation Drive WANGARA WA 6065  Legal description - Lot 552 on Deposited Plan 406640  As defined by the coordinates in Schedule 1
<b>Date of report</b>	12/08/2020
<b>Status of Report</b>	Final

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# 1. Definitions

Key terms relevant to this decision report and their associated definitions are listed in **Table 1**.

**Table 1: Definitions**

Term	Definition
Applicant	City of Wanneroo
Category/ Categories/ Cat.	Categories of Prescribed Premises as set out in Schedule 1 of the EP Regulations
CS Act	<i>Contaminated Sites Act 2003 (WA)</i>
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.
DoE	Department of Environment
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	<i>Environmental Protection Act 1986 (WA)</i>
EP Regulations	<i>Environmental Protection Regulations 1987 (WA)</i>
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999 (Cth)</i>
Licence Holder	City of Wanneroo
m <sup>3</sup>	cubic metres
Minister	the Minister responsible for the EP Act and associated regulations
NEPM	National Environmental Protection Measure
Noise Regulations	<i>Environmental Protection (Noise) Regulations 1997 (WA)</i>
Occupier	has the same meaning given to that term under the EP Act.

Term	Definition
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
Primary Activities	as defined in Schedule 2 of the Revised Licence
Risk Event	As described in <i>Guidance Statement: Risk Assessment</i>

## 2. Purpose and scope of assessment

The City of Wanneroo (Applicant) applied under Part V of the EP Act for a Licence to operate the existing waste management facility (Application), known as the Wangara Transfer Station, located at 86 Motivation Drive, being Lot 522 on Plan 406640, Wangara (Premises), on 20 December 2019.

This Decision Report presents a summary of the Application, proposed operations, and how the foreseeable Risk Events to public health, amenity, and the environment were considered in relation to the prescribed activities at the Premises.

## 3. Application details

Table 2 lists the documents submitted to the Department of Water and Environmental Regulation (the Department) during the assessment process.

**Table 2: Documents and information submitted during the assessment process**

Document/information description	Date received
City of Wanneroo Application form for a new licence (DWER records ref - DWERDT238441), including attached supporting information (DWER records ref - DWERDT238446).	30 December 2019

## 4. Background

The Applicant was previously granted Licence L419/97 under Part V of the EP Act for the operation of prescribed activities at the Premises. In 2003 the Licence Holder was advised by the then Department of Environment and Conservation (DEC) that the Premises no longer required a licence as a Solid Waste Depots that accepted material for the purpose of recycling. Category 62 and associated conditions were removed from the licence on 29 December 2003. The Depot continued to operate as a Materials Recycling Facility (MRF) until closing in 2014.

The Wangara Transfer Station is located approximately 20 km north of the Perth CBD within the Wangara Industrial Area. The Premises is located within an area zoned as 'General Industrial' under the City of Wanneroo District Planning Scheme No. 2 and as such is surrounded by other industrial and commercial enterprises. The Premises includes the entire Lot that covers a total area of approximately 18,000 m<sup>2</sup>. An existing building that covers approximately 2,663 m<sup>2</sup> is situated to the eastern portion of the site. No additional infrastructure is required to be constructed to undertake the activities that have been proposed by the Applicant.

## 5. Overview of existing Premises

Table 3 lists the prescribed premises categories that have been applied for.

**Table 3: 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.	30,000 tonnes per annual period

## 6. Description of proposed activities

### Waste Acceptance

The Applicant proposes to use the facility as a waste transfer station through the receipt, storage and compaction of comingled recyclable materials sourced from the City of Wanneroo area. The Applicant's kerbside domestic collection vehicles will access the Premises via the main entrance off Motivation Drive during the hours of 6am and 4pm Monday to Friday (Saturday where there is a public holiday). The vehicles drive over the weighbridge and are weighed for reporting purposes. The vehicles will proceed to the WTS as per the Applicants Traffic Management Plan.

Recyclables will be unloaded inside of the receival area building from the rear of the hopper on to the hardstand floor where a visual inspection will be carried out to identify any non-conforming waste. The door to the receival building is not proposed to be closed during operations. Comingled materials will be moved by front end loader into separate stockpiles. There will be a maximum of three stockpiles within the building at any one time. Each stockpile will have a separation distance of 3 m per pile with a 2 m buffer around each pile to allow access for firefighting purposes in the event of a fire. The height of each pile will not exceed 4 m high by 10 m wide and contain no more than 70 tonnes of recyclable material. The facility will not store more than 300 tonnes of recyclables at any one time.

Clean comingled recyclables will be transported off site for processing or storage via the following:

- Option 1 - Comingled recyclables will be removed from the floor using a high reach loader and loaded into a 90 m<sup>3</sup> semi-trailers inside the building. The City estimate that approximately 4-5 semi-trailers will be filled each day and transported off site for processing; and
- Option 2 - Clean comingled recyclables will be removed from the floor using a high reach loader which will feed recyclables on to a conveyor belt that will transport the materials via a hopper into one of two compactor units located outside the building. Once the recyclables are compacted they will be removed via a hook lift vehicle ready for transporting offsite. The materials will then be transported to an appropriately licenced waste facility. The use of compaction units will allow greater volumes of uncompacted waste to be consolidated prior to final transportation. In the event of compaction breakdown material will be loaded into 90 m<sup>3</sup> semi-trailers and removed off site.

Option 1 will be put in place initially and option 2 will likely become available once the conveying equipment is tested and operational. One or both processing options may be utilised at any one time.

### Non-Conforming Wastes

In the event that non-conforming waste is detected, the waste will be isolated, removed and temporarily stored in 3 m<sup>3</sup> front lift bins for removal and appropriate disposal off site. Non-conforming wastes may include organic waste, hazardous waste and e-waste.

Should asbestos be detected within any of the piles, it will be cordoned off for immediate removal by an approved contractor for disposal at licenced facility.

The Waste Transfer Station facility infrastructure, as it relates to Category 62 activities, is detailed in Table 4 and with reference to the Site Plan (Figure 1). Table 4 lists infrastructure associated with each prescribed premises category.

**Table 4: Proposed infrastructure and equipment**

	Infrastructure	Site Plan Reference
<b>Existing Infrastructure</b>		
1	Receival area building	Site Layout Plan (Figure 1)
2	Conveyor system and hopper	
3	Compactor units x 2	
4	Unlined stormwater sump	
5	Fire water sump (not yet installed)	
6	Seven kerbside collection vehicles	N/A
<b>New Infrastructure</b>		
1	Front end loader	N/A
2	High reach loader	
3	Non-conforming waste bins	Site Layout Plan (Figure 1)
<b>Fire Prevention Infrastructure</b>		
1	Fire detection and warning system	N/A
2	Fire suppression system	N/A
3	Perimeter fencing	Site Layout Plan (Figure 1)
<b>Other activities</b>		
1	Weighbridge and gatehouse	Site Layout Plan (Figure 1)
2	Compactor removal via hook lift trucks	N/A



**Figure 1: Site Layout Plan**



## 6.1 Legislative context and other approvals

The description of other relevant approvals is provided below.

### 6.1.1 Planning approvals

The Premises is situated in an area zoned as 'General Industry'. Development approval is not required for the proposal given General Industrial activities are a permitted use in this area under the City of Wanneroo's District Town Planning Scheme No. 2.

## 7. Emission sources, receptors and pathways

### 7.1 Emissions

The potential for emissions to impact on sensitive receptors has been assessed in accordance with the Department's Risk Framework. The key emissions which have been considered in this report are dust, noise, odour, potentially contaminated stormwater and fugitive vector emissions (feral animals, pests and smoke from fires) from the Waste Transfer Station activities including reception and processing of waste and vehicle movements.

The Applicant has proposed measures to assist in controlling these emissions, where necessary. The control measures are outlined in Section 7.4 below and have been considered when undertaking the risk assessment detailed in Section 8.

### 7.2 Environmental Siting

The Wangara Transfer Station is located approximately 20 km north of the Perth CBD within the Wangara Industrial Area. The Premises is located within an area zoned as 'General Industrial' under the City of Wanneroo District Planning Scheme No. 2.

## 7.2.1 Potential receptors and environmental aspects

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. Table 5 below provides 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 8 considers these receptors in the context of emissions and potential pathways.

**Table 5: Distance to receptors**

<b>Human receptors</b>	<b>Description and distance from activity or prescribed premises</b>
Residential Premises	600 m northeast of the Premises (measured from the nearest emission source to the residential property boundary).
Commercial/Industrial Premises	50 m north of the Premises (measured from the nearest emission source to the commercial/industrial boundary).
<b>Environmental receptors</b>	<b>Distance from activity / prescribed premises</b>
Important wetlands – Western Australia	Lake Joondalup is located 4 km west northwest from the Premises.
Geomorphic Wetlands	<p>Little Badgerup Lake is located 815 m northeast of the Premises.</p> <p>Badgerup Lake is located 1,250 m north northeast of the Premises.</p> <p>Lake Goolelal and Wallubuenup Swamp are located 2,250 m southwest of the Premises.</p> <p>There two unnamed geomorphic wetlands located 1,100 m and 1,500 m southeast of the Premises. These wetlands are located within an established industrial area.</p>
Parks and Wildlife Managed Lands and Waters	The Gngara-Moore River State Forest is located 3.5 km east of the Premises
Bush Forever: Regional open space or proposed regional open space	<p>320 m north of the Premises</p> <p>1,100 m east of the Premises</p>
Regional Parks	The Yellagonga Regional Park is located 2,195 m west southwest of the Premises
Threatened Ecological Communities and Priority Ecological Communities	There are several threatened ecological community buffer zones in proximity to the Premises. The nearest buffer zone is located 145 m north of the Premises. There are no buffer zones located at the Premise with the closest threatened ecological community present 320 m north of the Premises.

Biological component	Distance from the Premises
Threatened/Priority Fauna	Sightings of a threatened species have been recorded 810 m and 1,133 m northwest of the Premises and 1050m northeast of the Premises. The most recent sighting was recorded in 2003.
Environmental aspects	Distance from activity / prescribed premises
RIWI Act 1914	The Premises falls within the proclaimed Rights in Water and Irrigation Act Wanneroo Groundwater Area.

### 7.2.2 Groundwater and water sources

The distances to groundwater and water sources are shown in Table 6.

**Table 6: Groundwater and water sources**

Groundwater and water sources	Distance from Premises	Environmental value
Public drinking water source areas	2,600 m east of the Premises	Priority 1 Drinking Water Source Areas
	3,000 m northeast of the Premises	Priority 2 Drinking Water Source Areas
	2,600 m east of the Premises	Priority 3 Drinking Water Source Areas
Major watercourses/waterbodies	1,300 m north of the Premises	Badgerup Lake
Groundwater	<p>Unconfined superficial aquifer identified approximately 28 metres below ground level with the base of the aquifer at 82.3 metres.</p> <p>Groundwater in the area is described as fresh with a salinity level of 250-500 milligrams per litre and a high risk of iron staining.</p>	<p>Water is not used for potable or industrial use on the Premises.</p> <p>No bores located within 1 km of Premises (based on available GIS dataset –WIN Groundwater Sites).</p>

### 7.2.3 Geology, hydrogeology and hydrology

Table 7 details soil types and characteristics relevant to the assessment.

**Table 7: Soil and sub-soil characteristics**

Groundwater and water sources	Distance from Premises	Environmental Value
Soil type classification	NA	The former Department of Mines and Petroleum (DMP), currently known as the Department of Mines and Industry Resource Safety (DMIRS) Geological Survey 1:250,000 map series for the Perth basin identifies that superficial soils at the Site as the Bassendean sands underlain by Tamala Limestone. It should be noted that the site lies at the interface between the Tamala Limestone formation and the Bassendean Sand formation. Site specific investigations would be required in order to confirm the geology beneath the site. Both geological units are known to be highly permeable.

### 7.2.4 Other site characteristics

The locations of other receptors are shown in Table 8.

**Table 8: Other landscape features, relevant factors or receptors**

Other receptors or areas of concern	Location
Drainage sump	Stormwater will be generated as a result of precipitation falling onto the site. The stormwater will be diverted away from the receival building via a drainage system to an unlined sump. The drainage sump is currently unlined and sits partially on the Premises and partially on the adjacent road reserve.
Fire water sump	The Applicant is in discussions with DFES to determine a suitable sump containment volume that would hold enough water to contain a loose material fire in a transfer station of this size. The proposed location for the fire water sump is depicted in Figure 2. The works to install a suitable sump will be subject to a new works approval application.

## 7.3 Pathways

### 7.3.1 Groundwater

Based on the Perth Groundwater Atlas, groundwater is considered to be flowing in a south westerly direction towards the 'Lake Goollelal' and 'Wallubuenup Swamp' wetland system located approximately 2.5 km from the Premises.

The depth from the Premises ground level to the inferred water table is approximately 28 m. Mapped groundwater salinity is classified as 'fresh' with a salinity level of 250-500 milligrams per litre total dissolved solids (TDS). There are no groundwater abstraction bores located within 1 km of Premises (based on available GIS dataset –WIN Groundwater Sites).

The Premises is not located within a designated Public Drinking Water Source Area

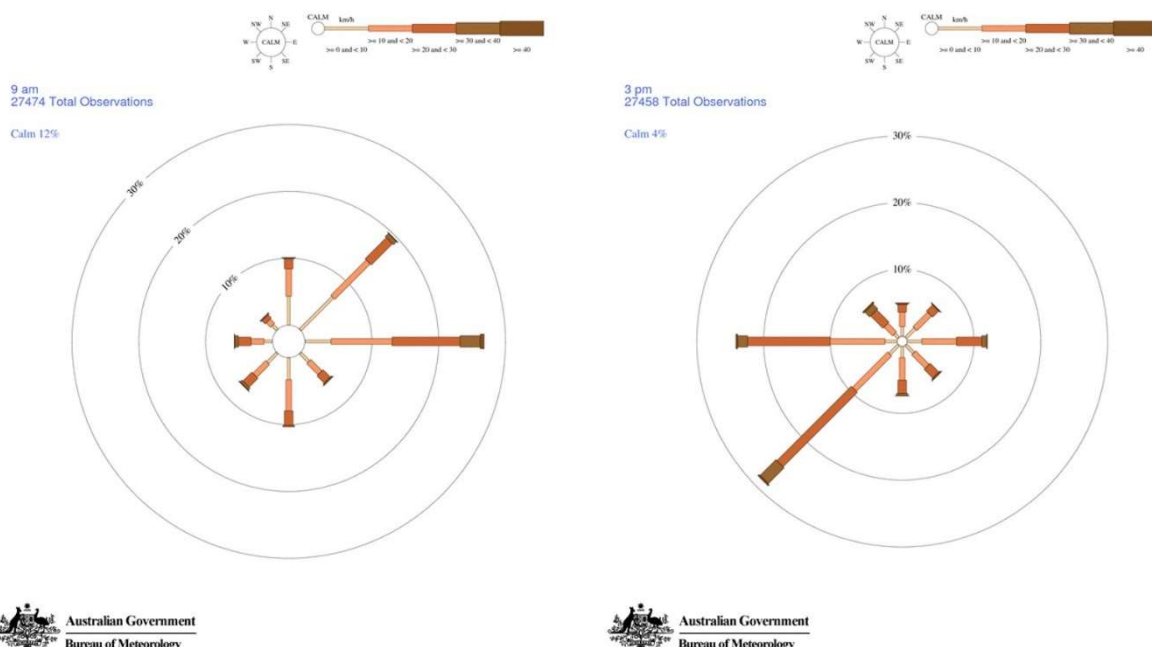
(PDWSA), with the nearest PDWSA located 2,600 m upgradient from the Premise.

The surface geology has been identified as Tamala Limestone and Bassendean sands, which are assumed to be readily permeable and may provide a pathway to groundwater. All leachate and stormwater will be managed and in accordance with the Applicant controls outlines in Section 7.4. Potentially contaminated leachate, wash water and fire water will not be received at the sump.

Based on the industrial setting, lack of groundwater abstraction in the vicinity of the site and distance to downgradient sensitive receptors, groundwater is not considered to be a pathway for the purposes of risk assessment.

### 7.3.2 Air

As dust, noise, odour and fugitive smoke from potential fires are considered potential emissions, the prevailing wind direction has been considered. The following wind rose depict the 9am and 3pm average wind conditions. These observations were taken from the Ocean Reef weather station located approximately 10 km west of the Premises. It is important to note that these wind roses show historical wind speed and wind direction data for the chosen weather station and should not be used to predict future data.



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

### 7.3.1 Surface water

All stormwater will be managed and diverted away from the waste receival building. As the floor of the receival building is proposed to be cleaned regularly, with washwater managed appropriately, the stormwater received at the sump will not contain contaminated stormwater. On this basis and the distance to sensitive downgradient receptors, surface waters are not considered to be a pathway for the purposes of risk assessment

### 7.3.2 Vector – pest and feral animals

Based on the industrial siting, proximity to native vegetation, distance to sighted threatened fauna, and lack of putrescible waste received at the Premises, threatened species, pests and feral animals are not considered to be a pathway for the purposes of risk assessment.

## 7.4 Applicant controls

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

**Table 9: Summary of emissions and applicant controls**

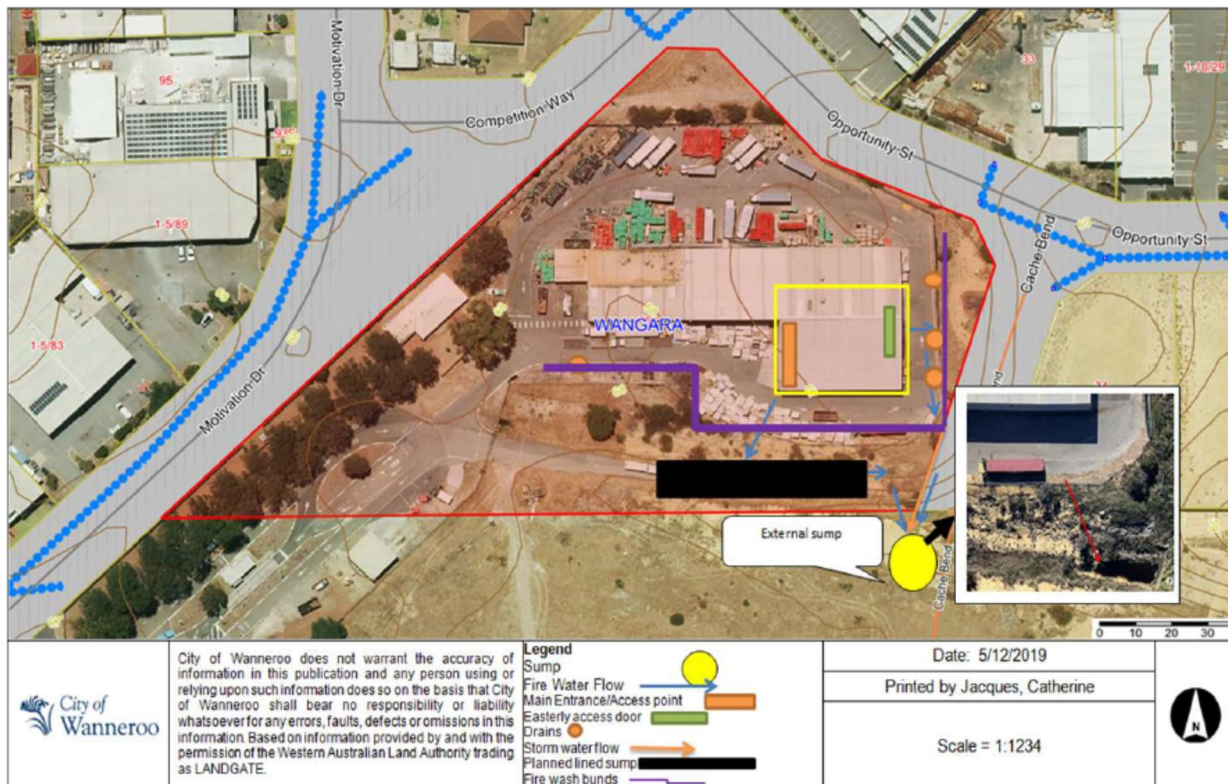
Source	Emission (as identified above)	Proposed controls
Vehicle Movement Receival of recyclable material Stockpiling of materials Processing and movement of materials Conveyor belt operations Compaction of materials	Dust	<p>All operational areas of the site are sealed and maintained.</p> <p>Vehicles are restricted to a maximum speed of 10 km/hour on the Site, which is signposted at appropriate locations including the entrance to the Site.</p> <p>The applicant owns and operates water carts that are available to wet down areas if required.</p> <p>Regular sweeping of access roadways, hard standing areas and transfer station area at least once a week.</p> <p>Given the close proximity of the Wangara Greens Recycling Centre annual ambient dust monitoring will be carried out on site.</p>
Vehicle Movement Receival of recyclable material Stockpiling of materials Processing and movement of materials Conveyor belt operations Compaction of materials	Noise	<p>The recyclables receival area is located within an enclosed building. The door to the building is not proposed to be closed during operations.</p> <p>All materials handling will be confined to the designated areas.</p> <p>Acceptance of recyclables and the operation of equipment and machinery on Site will be restricted to operational hours only (6am to 7pm Monday – Saturday)</p> <p>Vehicles will be restricted to a maximum speed of 10 km/hour as per site Traffic Management Plan.</p> <p>Noise reducing workplace procedures will be adopted, such as slow unloading of materials from the lowest height possible.</p> <p>All equipment and machinery will be maintained in good working condition.</p> <p>A risk assessment will be undertaken determining if plant and equipment noise abatement solutions are required should out of hours operations be required.</p> <p>Baseline and annual noise monitoring will be undertaken.</p>

Source	Emission (as identified above)	Proposed controls
<p>Vehicle Movement</p> <p>Receival of recyclable material</p> <p>Stockpiling of materials</p> <p>Processing and movement of materials</p> <p>Conveyor belt operations</p> <p>Compaction of materials</p>	<p>Odour</p>	<p>Discharge of recyclables will occur in the receival area within the enclosed transfer station. The door to the building is not proposed to be closed during operations.</p> <p>Recyclables will be removed from the Premises within a maximum of 72 hours of being tipped.</p> <p>The facility door will be closed outside of operating hours to reduce any potential odour issues;</p> <p>The receival floor will be swept and washed down regularly with the aim of eradicating any potential odour emitting sources.</p> <p>The Site's peak operating hours will be limited to those specified in this Environmental Management Plan.</p>
<p>Receival of recyclable material</p> <p>Stockpiling of materials</p> <p>Processing and movement of materials</p> <p>Stormwater</p>	<p>Leachate and potentially contaminated stormwater</p>	<p>No liquid or putrescible wastes are received at the Premises.</p> <p>The applicant proposes to bund the main access and easterly door with hair booms.</p> <p>The leachate/spill/floor wash water will be managed with spill containment materials.</p> <p>Contaminated water created as part of any interaction of waste with spill/leachate/floor wash water will be pumped from the bunder area and disposed in a contaminated waste receptacle and removed from site by an approved contractor.</p> <p>The Applicant is currently seeking a Discharge to Sewer trade waste permit via the Water Corporation to manage and mitigate leachate contamination. All drainage works required to meet the trade waste permit will be subject to a new works approval application.</p> <p>All stormwater generated as a result of precipitation is directed away from the receival building through the drainage system to the unlined sump.</p>

Source	Emission (as identified above)	Proposed controls
Vehicle Movement Receipt of recyclable material Processing and movement of materials Conveyor belt operations Compaction of materials	Litter	<p>All unloading of recyclable materials occurs within the enclosed transfer station and is confined to the designated areas prior to loading into semi-trailers or the compaction system.</p> <p>All recyclables are delivered to the site by side loading waste collection vehicles.</p> <p>Any litter generated around the Site and along the fence lines will be collected on a daily basis as part of routine procedures.</p> <p>Any litter blown or dropped off-site will be collected immediately and taken back on-site.</p> <p>A complaints register will be utilised to record details of any potential complaints received and the resolution action undertaken.</p>
Fire event	Fire water, smoke, ash.	<p>In the event of a fire the Applicant will undertake the following to manage fire wash water until the new lined fire water sump works are completed.</p> <ul style="list-style-type: none"> <li>• The drain to the storm water sump will be closed off to avoid fire washwater being diverted to the unlined sump.</li> <li>• The areas depicted in purple in Figure 2 will be bunded, allowing water to be captured and limit overspill</li> <li>• Any fire water wash will be held in the bunded areas;</li> <li>• The first contingency will be to pump fire wash water to the lined water retention basin, with the ability to hold 182,000 L located at the Applicants adjacent site, Wangara Greens Recycling Facility (L8403/2009/3).</li> <li>• The Applicant will instigate the City's approved contaminated waste contractor to attend site to pump fire water in to contaminated water vehicles to be removed off site;</li> </ul>



**Figure 2: Fire prevention drainage and proposed sump layout**



## 8. Risk assessment

The identification of the sources, pathways and receptors to determine Risk Events are set out in Table 10 below, consistent with the *Guidance Statement: Risk Assessments*. Risk ratings have been assessed for each key emission source and take into account potential source-pathway-receptor linkages. The mitigation measures / controls proposed by the Applicant have been considered in determining the risk rating. Emissions during construction and operation have been assessed separately to allow clear delineation of activity phases.

The conditions in the issued Licence, as outlined in Table 10, have been determined in accordance with the *Guidance Statement: Setting Conditions*.

## 8.2 Risk assessment – operation

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 10: Identification of emissions, pathway and receptors during full operation**

Risk Event				Consequence rating <sup>1</sup>	Likelihood rating <sup>1</sup>	Risk <sup>1</sup>	Reasoning	Regulatory controls (refer to conditions of the granted instrument)
Source/Activities*	Potential emissions	Potential receptors, pathway and impact	Applicant controls					
<p>Vehicle movements; Waste receipt; Unloading, loading and storage of material. Compacting activities</p>	Dust	<p>Air/windborne pathway causing impacts to health and amenity of closest human receptors</p> <p>Commercial and industrial Premises approximately 50 m north.</p> <p>Closest residential receptor is 600 m northeast.</p>	As described in Section 7.4	Minor	Rare	Low	<p>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 the Delegated Officer considers that the Applicant's proposed dust mitigation controls are likely to be sufficient at mitigating dust emissions.</p> <p>Regulatory controls are required to reinforce Applicant controls.</p>	<p>Waste Acceptance: Conditions 1 and 2</p> <p>Waste Processing: Conditions 3 and 4</p> <p>Infrastructure and Equipment: Condition 5</p> <p>Input and output monitoring: Condition 6</p> <p>Records and Reporting: Condition 7</p>
<p>Vehicle movements; Waste receipt; Unloading, loading and storage of material. Compacting activities</p>	Noise	<p>Air/windborne pathway causing impacts to health and amenity of closest human receptors</p> <p>Commercial and industrial Premises approximately 50 m north.</p> <p>Closest residential receptor is 600 m northeast.</p>	As described in Section 7.4	Minor	Possible	Medium	<p>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 &gt;15 yrs it is considered that while noise emissions are possible, consequences are not likely to be greater than currently experienced by receptors.</p> <p>As such, the Delegated Officer considers that additional</p>	<p>Infrastructure and Equipment: Condition 5</p> <p>Noise Validation Condition 10 - 13</p> <p>Noise emissions from on-site operations will also be subject to the provisions specified in the EP Noise</p>

Risk Event				Consequence rating <sup>1</sup>	Likelihood rating <sup>1</sup>	Risk <sup>1</sup>	Reasoning	Regulatory controls (refer to conditions of the granted instrument)
Source/Activities*	Potential emissions	Potential receptors, pathway and impact	Applicant controls					
							regulatory controls are required to validate noise emissions and to reinforce Applicant controls.	Regulations.
Vehicle movements; Waste receipt; Unloading, loading and storage of material. Compacting activities	Odour	Air/windborne pathway causing impacts to health and amenity of closest human receptors  Commercial and industrial Premises approximately 50m north.  Closest residential receptor is 600m northeast.	As described in Section 7.4	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.	Waste Acceptance: Conditions 1 and 2  Waste Processing: Conditions 3 and 4  Infrastructure and Equipment: Condition 5  Input and output monitoring: Condition 6
Vehicle movements; Waste receipt; Unloading, loading and storage of material. Compacting activities	Leachate / Contaminated stormwater	Infiltration and contamination to soil and groundwater and transport to adjacent industrial premises.	As described in Section 7.4	Slight	Unlikely	Low	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 stormwater and leachate mitigation controls are likely to be sufficient at mitigating leachate emissions.  Regulatory controls are required to reinforce Applicant controls.	Infrastructure and Equipment: Condition 5

Risk Event				Consequence rating <sup>1</sup>	Likelihood rating <sup>1</sup>	Risk <sup>1</sup>	Reasoning	Regulatory controls (refer to conditions of the granted instrument)
Source/Activities*	Potential emissions	Potential receptors, pathway and impact	Applicant controls					
Waste receipt; 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  Commercial and industrial Premises approximately 50m north.  Closest residential receptor is 600m northeast.	As described in Section 7.4	Minor	Possible	Low	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 5
Fugitive emissions from fire event	Fire water, smoke and ash	Air/windborne pathway causing impacts to health and amenity of closest human receptors  Commercial and industrial Premises approximately 50 m north.  Closest residential receptor is 600 m northeast.  Infiltration and contamination to soil and groundwater and transport to adjacent industrial premises.	As described in Section 7.4	Major	Possible	High	While there are residential receptors located down-prevailing wind of the premises, the Applicant controls and Fire Prevention Plan should  Additional Fire management controls are required to be implemented in order to prevent fire spread and contain a fire to individual bunkers.	Fire Management: Condition 14

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

## 9. Consultation

**Table 11: Summary of consultation**

Method	Comments received	DWER response
Application advertised on DWER website (8/01/2020)	None received	N/A
Other Stakeholders advised of proposal (DFES) Date: 4/02/20	<p>Comments were received from DFES on 7/02/2020 and are summarised below. In order to reduce the risk of fire:</p> <ul style="list-style-type: none"> <li>• Set out the piles in a way that would reduce heat being transferred between piles;</li> <li>• Consider the effect of pile slope on heat transfer and pile stability;</li> <li>• Separate the piles by sufficient free-air gaps (separation distances) or physical barriers made from non-combustible materials (bunker walls); and</li> <li>• Review installing sprinkler systems.</li> </ul>	DWER have reviewed the information provided by DFES and have implemented changes to conditions as appropriate.
<p>Applicant notified of Draft – 21 day referral period on 10/02/2020</p> <p>Draft conditions for fire prevention controls were sent to the Applicant via email on 12/03/2020</p>	<p>The Applicant requested an extension to the 21-day period due to disruptions caused by the State Health Emergency.</p> <p>Applicant's representative confirmed via phone call to Licensing Officer on 7 August 2020 that there were no comments on the draft</p>	N/A

## 10. 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**  
**INDUSTRY REGULATION**

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

## Appendix 1: Key documents

Document title	Availability
Licence (L9230/2019/1) application form and supporting documentation (December, 2019)	DWER records (DWERDT238441)
DER, July 2015. <i>Guidance Statement: Regulatory principles</i> . Department of Environment Regulation, Perth.	accessed at <a href="http://www.dwer.wa.gov.au">www.dwer.wa.gov.au</a>
DER, October 2015. <i>Guidance Statement: Setting conditions</i> . Department of Environment Regulation, Perth.	
DER, August 2016. <i>Guidance Statement: Licence duration</i> . Department of Environment Regulation, Perth.	
DER, February 2017 <i>Guidance Statement: Risk Assessments</i> . Department of Environment Regulation, Perth.	
DER, February 2017. <i>Guidance Statement: Decision Making</i> . Department of Environment Regulation, Perth.	