Application for licence

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

Licence number	L9239/2020/1
Applicant	City of Fremantle
DWER file number	DER2020/000077
Premises	City Works Depot 81 Knutsford Street FREMANTLE WA 6160 Legal description Lot 11, Part Lot 12 and 13 on Plan 6600 Certificate of Title Volume 1530 Folio 614, 615 and 616 Part road reserve 3718338 As defined by the coordinates and Premises maps in Schedule 1 of the Issued Licence
Date of report	29 June 2020
Decision	Licence granted

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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 Fremantle
Category / categories	Categories of prescribed premises as set out in Schedule 1 of the EP Regulations.
Decision Report	refers to this document.
Delegated Officer	An officer delegated under section 20 of the EP Act.
Department	The department established under section 35 of the *Public Sector Management Act 1994* 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 *Public Sector Management Act 1994* and is responsible for the administration of the *Environmental Protection Act 1986* along with other legislation.
E-waste	means discarded electrical or electronic devices and includes white goods.
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)
Green waste	means biodegradable waste comprising of plants and their component parts such as flower cuttings, hedge trimmings, branches, grass, leaves, plants, seeds, shrub and tree loppings, tree trunks, tree stumps and similar materials and include any mixture of those materials.
Household hazardous waste	means the chemicals and hazardous materials listed in Appendix 3 of the HHW Guidelines and accepted under the Household Hazardous Waste Program.
HHW	Household hazardous waste
HHW Guidelines	means the *Guidelines for the design and operation of facilities for the acceptance and storage of household hazardous waste* published by the department, as amended from time to time.

Term	Definition
Noise Regulations	*Environmental Protection (Noise) Regulations 1997* (WA)
Occupier	has the same meaning given to that term under the EP Act.
Prescribed premises	This 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. Licence and amendment history

Table 2 provides the instrument history for L9232/2020/1.

Table 2: Instrument history

Instrument	Issued	Nature and extent of works approval, licence or amendment
L9239/2020/1	29/06/2020	Initial licence

3. Purpose and scope of assessment

City of Fremantle (the Applicant) submitted a licence application (the Application) to the Department of Water and Environmental Regulation (DWER) on 26 February 2020 to operate a Category 62: solid waste depot at Lot 11, Part Lot 12 and Part Lot 13 on Plan 6600, 81 Knutsford Street, Fremantle (the Premises). The Premises also extends partially onto the adjoining road reserve. The Delegated Officer has assessed the operational impacts of these activities and these are documented through this Decision Report.

The Decision Report explains how DWER has assessed and determined the application and provides a record of DWER's decision-making process and how relevant factors have been taken into account. Stakeholders should note that this documented is limited to DWER's assessment and decision-making under Part V of the *Environmental Protection Act 1986*. Other approvals may be required for the proposal, and it is the Applicant's responsibility to ensure that they have all relevant approvals for their Premises.

4. Application details

The Applicant has operated the premises for a number of years as a waste facility adjoining their operational works depot. The Premises has not previously been licensed as the waste quantities accepted were generally below the threshold of 500 tonnes per year for a Category 62: solid waste depot, as specified in the *Environmental Protection Regulations 1987* (EP Regulations). The Applicant is seeking to licence the Premises as a solid waste depot with a capacity of up to 5,000 tonnes per year.

Table 2 lists the documents submitted during the assessment process which form the basis for this Decision Report.

Table 2: Documents and information submitted during the assessment process

Document/information description	Date received
Application form and supporting documentation	26 February 2020

5. Overview of Premises

The Premises is currently used for two purposes by the Applicant; storage of waste associated with the adjacent depot operations and deposition of limited residential waste by residents of the City of Fremantle and Town of East Fremantle. Some residential waste is sold at a recycling centre which is open to the public 12pm to 4pm Friday and 8am to 4pm Saturdays and Sundays. Waste not sold at the recycling centre is continuously removed from the Premises to another facility for final disposal.

The Applicant proposes to licence their current activities and to begin accepting household hazardous waste (HWW) as part of the Waste Authority's Household Hazardous Waste Program.

5.1 Description of current activities

The Premises accepts and stores, pending final disposal, the wastes in Table 3 below from residents of the City of Fremantle and the Town of East Fremantle. Table 3 lists the type of the storage infrastructure and process relevant to each waste type.

Table 3: Waste acceptance and processes from residents at the recycling centre

Waste Material Type	Total tonnes 2018/19	No. of Collections 2018/19	Average tonnes removed per collection	Storage infrastructure and process
Batteries – Car (HWW)	23	3	7.67	Bunded container on pallet made available for drop-off and pick-up.
Batteries – Household (HWW)	12.5	2	12.25	Metal container with intake opening.
Cardboard	61.1	8	7.64	Collected in cages and 1,100L bins, baled and then presented for offsite disposal.
Clothing Bins	9.5	12	0.79	Specialised metal containers with opening slot, sourced from the service provider.
E-waste	26.4	6	4.4	Collected in small specialised blue containers for collection by a recycling company.
Fire Extinguisher (HWW)	0.3	1	0.3	Collected and stored under cover in specialised cages near the site office.
Gas Bottles (HWW)	2	4	0.5	Collected and stored under cover in specialised cages near the site office.
Green waste	398.5	13	30.66	Open drop-off area at the southern corner of the recycling centre.
Light globes (HWW)	0.3	1	0.3	Specialised open metal cage for storage and collection.
Mattresses	16	11	1.45	Designated location on the eastern part of the recycling centre for drop off and collection.
Metals	111.2	10	11.12	Designated skip bins provided for drop-off and collection.
Paint (HWW)	24	1	24	Specialised containers provided for disposal by residents and businesses. Oil and water based paints are separated. Stillages are provided and collected through the 'Paintback' scheme.
Phones and chargers	0.1	1	0.1	Stored in specialised receptacles and collected by Cleanaway on request.
Polystyrene	5.2	6	0.86	Collected in bulk bags and made available for collection.
Recyclables	124.3	52	2.39	Bins – 240L and 660L for collection. Once full they are lined on the northwest are of the Premises for collection on days when the Recycling Centre is not open to the public.
Tyres	1.6	1	1.6	Stored on a trailer between the whitegoods and metal storage area.
Furniture and house fittings	114.9	26	4.42	Accepted in the drop off area north of the exit gate. Residents drop-off junk on pallets that are carried into pick-up trucks for offsite disposal.
White goods	8.4	9	0.93	Designated area provided in south-east corner of site for drop-off. If required, sent for de-gassing and placed in allocated skips for collection.
Total	**946**			

The Premises accepts and stores, pending final disposal, the wastes in Table 4 below. The wastes are derived from operations out of the adjacent local government works depot. Table 4 lists the type of the storage infrastructure and process relevant to each waste type.

Table 4: Waste acceptance and processes relating to the works depot

Waste Material Type	Total tonnes 2018/19	No. of Collections 2018/19	Average tonnes removed per collection	Storage infrastructure and process
Green waste	28	2	14	Green waste pruning from parks and gardens maintenance operations. Waste is dropped off in a designated area at the south-western corner of the Premises.
Metals – Illegally dumped	41	16	2.6	Illegally dumped metals collected by the City and recycled. Metal skip bins are provided for storage.
Street-sweepings small truck - CBD (includes litter)	104	104	1	Street sweepings from the City collection truck, emptied into a skip bin with drainage onto a hardstand area with drainage sump. The sump is cleaned out on a regular basis.
Street-sweepings large truck – gutter clean up materials (suburbs)	724	96	7.5	Currently placed on hardstand on the north western part of the proposed licensed area, away from the main recycling centre operations. The waste is picked up by the City of Fremantle using a tipper and removed for offsite disposal.
Tyres – Illegally dumped	0.5	1	0.5	Illegally dumped tyres collected during City operations, placed at the southern area of the Premises. Kept separate from the recycling centre tyres.
Waste – Illegally dumped	98.1	36	2.7	Illegally dumped or littered materials collected by the City and emptied into skip bins for pick-up.
Total	**996**			

The Premises does not accept the following wastes:

- mixed general waste
- sand, soil, concrete or rocks
- wood off-cuts or timber
- hardy fencing

Prior to opening to the public, staff at the Premises conduct the following activities:

- Dropped off household furniture and goods are scanned and useful, reusable items are taken to the tip shop for sale.
- Items that are not able to be re-used are placed on pallets as waste for collection.
- Collections of recyclables and waste material types are organised with the appropriate service provider on an as needed basis.
- Cardboard, soft plastics and aluminium cans are baled and placed in designated areas for collections.
- Materials stored in bunded containers (eg. paint), are removed by licenced contractors and replacement empty containers are provided.

Residents accessing the Premises for waste deposition follow the process below:

- Visitors are met by a senior staff member at the service booth, where the staff member:
    - seeks personal details including the suburb where the resident lives; and
    - inspects items in vehicles, informing them of the location for drop-off for the particular material types;
- Visitors then proceed around the Premises to the appropriate sign posted locations and drop-off materials as required.
- Visitors can also choose to buy materials from the tip shop or pick-up free mulch, bricks and tile materials from the designated locations on site.

5.2 Description of proposed activities

In addition to the waste types in Table 3 (some of which are considered HWW), the Applicant is proposing to accept approximately 10 tonnes per annum in total of the following HHW types:

- Acids and alkalis
- Engine coolants and glycols
- Flammable liquids
- Flares
- Household chemicals
- Pesticides/herbicides
- Poisons
- Pool chemicals
- Smoke detectors
- Unknown chemicals

Inclusive of the waste types listed Table 3 this will result in a total HHW acceptance of up to 100 tonnes per annual period, of which less than 10% is expected to be in a liquid form.

These new HHW types will be accepted in up to 20kg or 20L containers and received by staff on bunded pallets located at the front of a proposed HHW shed. The waste will be checked for integrity of the packaging material and classified according to its type. The wastes will then be transferred to the HHW shed for storage within the relevant segregated area.

The new HHW types are proposed to be stored within an enclosed shed situated above an existing concrete hardstand in the southeast corner of the Premises (Figure 2). The HHW shed will contain dangerous goods storage cupboards and segregated storage racking. Containers suspected of being damaged will be stored in HDPE containers to prevent spillage within the facility. An example of the proposed HHW shed is shown in Figure 1 below. The images are taken from a similar LGA facility which was used as the basis for design along with the design requirements in the DER document *Guidelines for the design and operation of facilities for the acceptance and storage of household hazardous waste*. The Applicant is proposing to construct the HHW shed after receiving funding through the Waste Authority HHW Program.

Figure 1: Example segregated storage racking and receptacles (left) and dangerous goods cupboards (right)

The Applicant is also proposing to improve storage of street sweepings by constructing improved bunding and hardstand with an oily water separator around the area currently used for storage.

5.3 Infrastructure and equipment

The existing and proposed infrastructure and equipment are outlined in Table 5 below. The site layout is shown in Figure 2.

Table 5: Existing and proposed infrastructure and equipment

Infrastructure or Equipment	**Site Layout Plan reference**
Cardboard baler • 80db sound power level	Figure 2: Balers – cardboard
Metal stillages	As denoted by waste type in Figure 2
Metal skip bins	
Storage cages	
Self-bunded pallets	
Street sweeping containment and storage	
Bitumen sealed hardstand	Figure 3
Compacted road base hardstand	Figure 3
Drainage network	Not shown

Infrastructure or Equipment	Site Layout Plan reference
Household hazardous waste facility comprised of: • 6m x 6m lockable storage shed • 7m x 8m base for shed and drop off point laid to fall to ensure any spillage is contained • Containers for chemical storage inside the shed • Bunded pallet for drop off • Class 5.1 cabinet • Class 5.2 cabinet • Flares cabinet • PPE locker • Safety shower and eye wash • Shower stillage • Electricity supply and lighting to shed and service area • Fire fighting equipment • Fire alarm • Area customer identification signage • Hazardous waste classification signs • Materials accepted notice board / not accepted notice board • Materials not accepted notice board • Customer use signage • Oil and fuel spill kit • Hazchem spill kit	Figure 2: Proposed HHW Storage

Solid Waste Depot – Licence Area Map and Key

Recycling Centre Licensed Area Key	
1. Baled cardboard	2. Tyres
3. Car bays	4. HH Batteries, phones, globes, e-waste
5. Light globes	6. Car batteries, extinguishers & gas bottles
7. Paint	8. Mulch pick-up
9. Mattresses	10. Whitegoods
11. Metals	12. Site office
13. Hire shed	14. Storage shed
15. Depot storage container	16. Tip-shop storage container
17. Dome roof sea container Tip-shop	18. Recycle bins
19. Mulch	20. Street-sweepings (CBD & Suburbs)
Licensed Area Boundary Line	Security gates

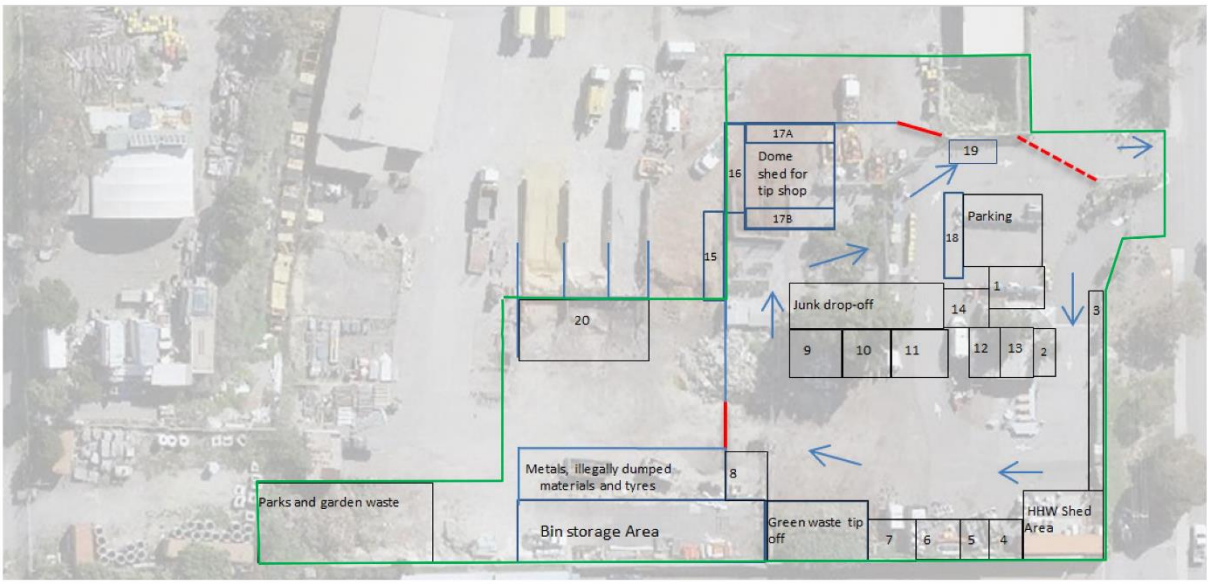

Figure 2: Proposed site layout

Figure 3: Hardstand layout at the Premises and works depot. Bitumen sealed hardstand is shown in blue and road base hardstand is shown in green.

6. Legislative context and other approvals

6.1 Planning

The Applicant is also the relevant planning authority for this facility. The Applicant has advised that the facility is considered a public work which is subject to Public Works Exemption under the *Planning and Development Act 2005*.

6.2 Contaminated Sites Act 2003

The Premises and adjacent City of Fremantle works depot areas have been reported to DWER as a contaminated site. The site was reported due to its historical use as a blacksmith, works depot and mechanical servicing yard by the City of Fremantle since 1947. The site is yet to be classified and a voluntary auditor has been appointed by the City of Fremantle.

Investigations undertaken to date indicate that soil contamination is present predominately in the works depot area outside of the proposed Premises boundary. The source of contamination is interpreted to be related to the historical locations of the blacksmith and vehicle workshops.

Groundwater monitoring has been undertaken at the site with the only exceedances of applicable tier 1 screening criteria being nitrogen in all bores and chromium, copper and zinc in one monitoring bore. Elevated nitrogen in groundwater was considered to be from offsite sources to the east. The source of elevated metals was not determined.

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 during premises operation which have been considered in this report are noise, odour, leachate and liquid waste spillage from waste acceptance and storage activities. Emissions in the event of a fire have also been considered.

The Applicant has proposed measures to assist in controlling these emissions, where necessary. The control measures are outlined in Section 8 below and have been considered when undertaking the risk assessment detailed in Section 9.

7.2 Environmental Siting

The Premises is located in a predominately light industrial area, approximately 14 km southwest of the Perth CBD and 2.3 km inland from the coast. Surrounding land uses are comprised of:

- The associated City of Fremantle works depot immediately to the north;
- Light industrial to the south and west;
- Public open space to the east and southeast which was formerly a quarry and landfill; and
- Residential development further to the north and south.

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. Figure 4 and the table 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 9 considers these receptors in the context of emissions and potential pathways.

Table 7: Distance to receptors

Human receptors	**Description**	**Distance from prescribed premises**
Sensitive receptors	Residential development	Approximately 115 m north of the Premises boundary
	Residential development	Approximately 155 m south of the Premises boundary
Industrial receptors	Light industrial premises	Adjacent to the south of the Premises
	Light industrial premises	Adjacent to the west of the Premises
Environmental receptors	**Description**	**Distance from activity / prescribed premises**
Surface water	Indian Ocean	Approximately 2.3km west of the Premises boundary
	Swan-Canning Estuary	Approximately 1.6km northwest of the Premises boundary
Groundwater	Unconfined Swan Coastal Aquifer. Regional groundwater flow direction is inferred to be towards the northwest. Groundwater monitoring undertaken as part of a Detailed Site Investigation (360 Environmental, 2019) on the Premises indicates that local groundwater flow is towards the west. The nearest registered groundwater bore is located approximately 20m downgradient of the Premises to the west. As the area is connected to the Integrated Water Supply System, groundwater use in the area would be for non-potable purposes.	Approximately 27 mbgl at the Premises.
Threatened/Priority Ecological Community	Tuart (*Eucalyptus gomphocephala*) woodlands and forests of the Swan Coastal Plain. The TEC is located up hydraulic and topographic gradient and will not be considered further.	Approximately 670m east of the Premises boundary

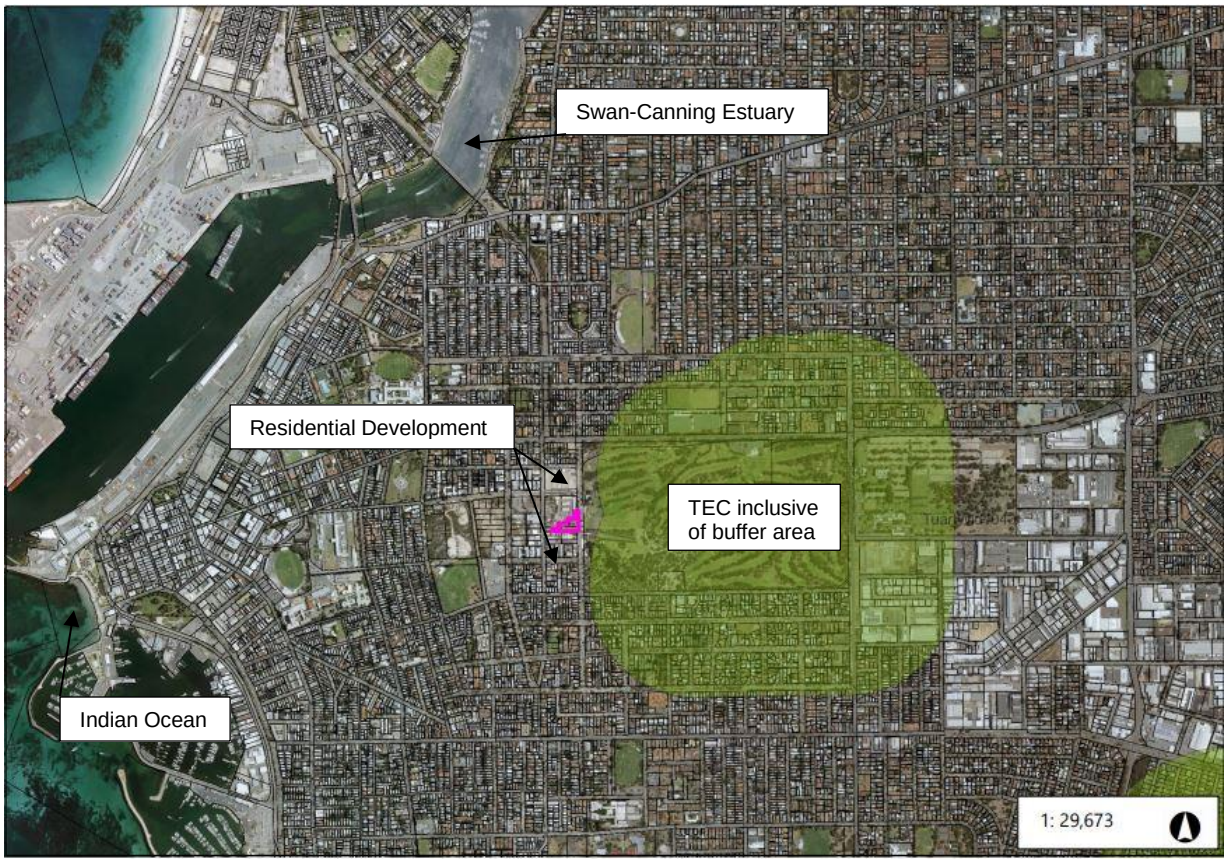

Figure 4: Potential receptors surrounding the Premises (Premises marked in pink)

7.3 Pathways

Due to the type of emissions identified in Section 7.1 air, soil, surface run-off and groundwater have been considered potential pathways during the assessment. The meteorological, geological and drainage conditions at the Premises have been presented in the subsections below and this information has been considered in the risk assessment table in Section 9. Groundwater information is contained in Section 7.2.1 above, as it is considered both a potential pathways and receptor.

7.3.1 Soil type and geology

Table 9: Geology and soil information at and surrounding the Premises

Factor	Details
Soil type and surface geology	The Premises is located within the Spearwood System, described as sand dunes and plains with yellow deep sands, pale deep sands and yellow/brown shallow sands. The 1:50,000 Fremantle Sheet of the Geological Survey of Western Australia map describes the geology of the Premises as LS1 Limestone– pale yellowish brown, fine to coarse-grained, subangular to well-rounded quartz, trace of feldspar, shell debris, variably lithified.

The Delegated Officer considers the surface geology to be readily permeable and may allow a potential pathway to superficial groundwater.

7.3.2 Topography and drainage

The Premises is situated within a depression between undulating coastal limestone hills. The highest elevation at the Premises is in the southwest corner at approximately 31 mAHD. The Premises slopes down towards the northeast (Figure 5), with the northeastern corner of the Premises being the lowest elevation at 26 mAHD.

Stormwater water in the northern portion of the Premises is directed to a sump located adjacent to the works depot, with runoff in the southern area being directed to a series of soak-wells. A storm water sump associated with a low point in the landscape is also located adjacent to the northeast of the Premises boundary. This sump is the end point of the roadside drainage nework.

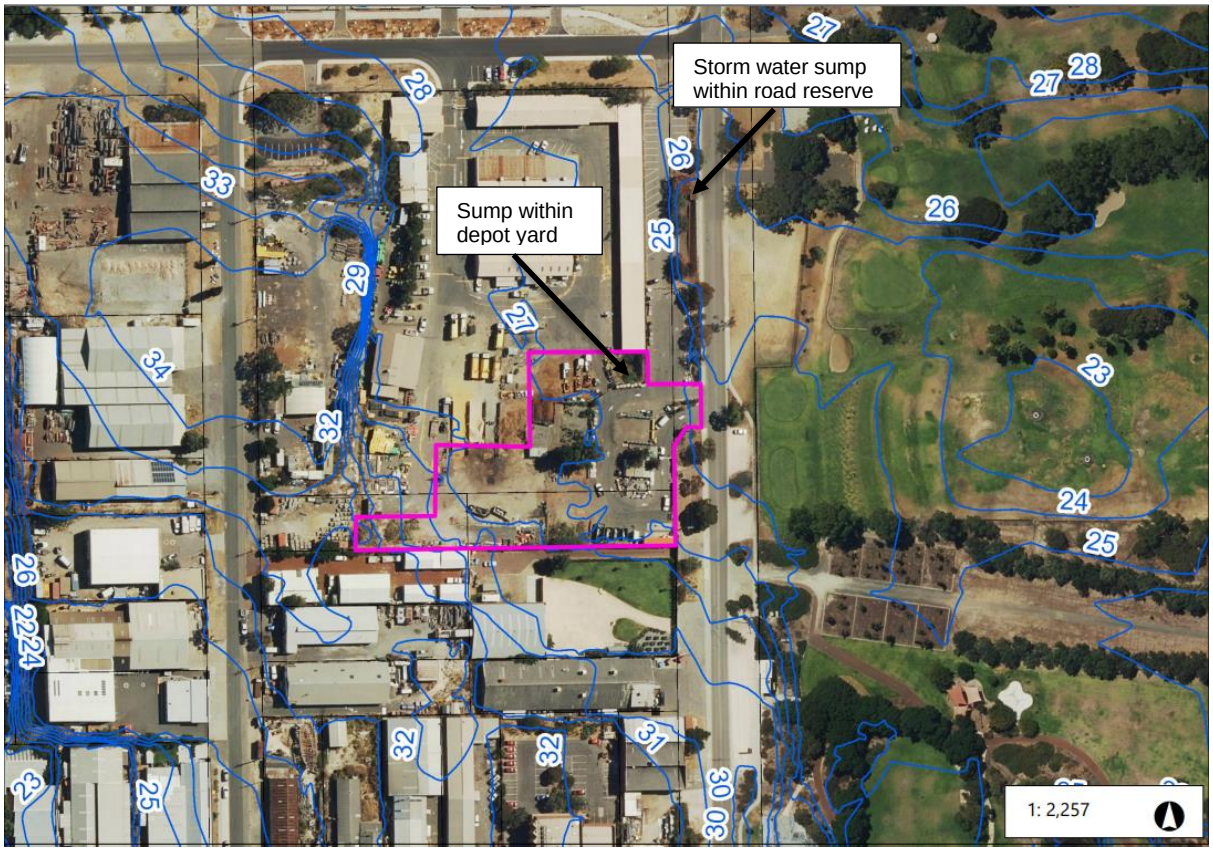

Figure 5: Topography of the Premises and surrounding land

7.3.3 Meteorology

Using information available on the Bureau of Meteorology's website, the closest available weather station for meteorological data is Jandakot Aero (No. 009172). This weather station is located approximately 11.5 km southeast of the Premises and is considered an accurate representation of average climatic conditions.

Wind frequency data collected at the Jandakot station from February 1989 to August 2019, shows the prevailing wind direction is east to north-easterly in the morning and south-westerly to westerly in the afternoon (Figure 6). The predominant wind speed is between 20 - 29 km/hr.

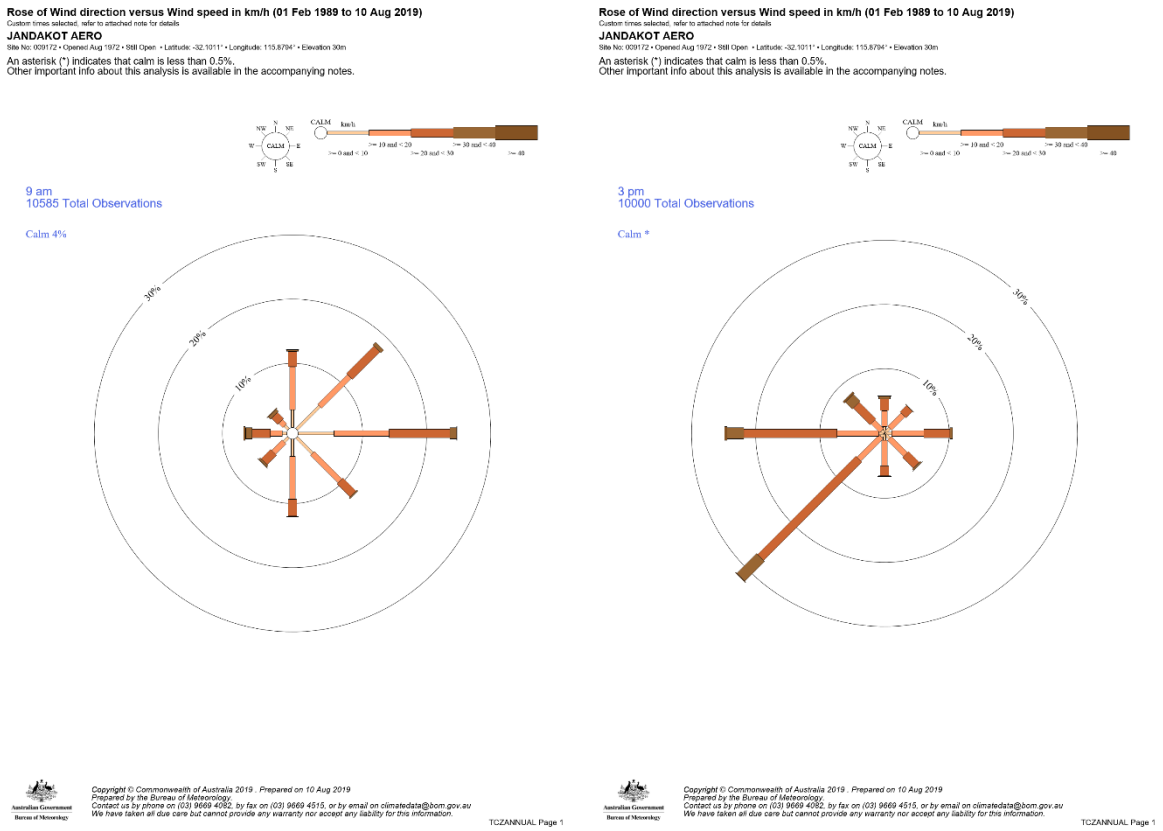

Figure 6: Mean annual wind speeds and direction at 9am (left) and 3pm (right) recorded at Jandakot Aero Source: Bureau of Meteorology website www.bom.gov.au

8. Applicant controls

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

Table 7: Summary of emissions and applicant controls

Source	Emission (as identified above)	Proposed controls
Acceptance and storage of green waste Acceptance and storage of HHW Acceptance and storage of street sweepings Acceptance and storage of liquid HHW	Leachate / contaminated stormwater. Spillage of liquid waste or loss of containment.	Inspection of HHW for packaging integrity and material classification. HHW storage area comprised of a bunded and enclosed shed above a concrete hardstand. DG Class 5.1 and 5.2 cabinets for relevant HHW storage. HHW will not be accepted in containers larger than 20kg or 20L. HDPE containers on segregated racking for HHW storage. Oil, fuel and Hazchem spill skits within the HHW shed. Self-bunded pallets for car battery storage. Enclosed metal stillages for paint storage. Storage of CBD street sweepings within a metal skip with contained drainage sump. Storage of residential street sweepings on hardstand. Further containment on the hardstand is proposed. Storage skips, cages and pallets.
Storage of waste (in particular green waste and chemical waste)	Odour	Low quantities of green waste stored on the Premises. Frequent removal of green waste from the Premises. Potentially odourous chemical waste stored within an enclosed shed and dangerous goods cabinets. Low throughput and storage volumes of chemical waste.

Source	Emission (as identified above)	Proposed controls
Waste deposition and collection by heavy vehicles Machinery operation	Noise	Limited hours of operation Machinery operation is approximately 10% of operational time only
Abnormal operations (combustion of stored tyres, HHW and other wastes)	Smoke, particulates and noxious vapors in the event of a fire or other incident. Wastewater and leachate generation from extinguishing a fire.	Inspection of HHW for packaging integrity and material classification. Segregation of incompatible chemical types. DG Class 5.1 and 5.2 cabinets for relevant HHW storage. Flare cabinet. Fire alarm Firefighting equipment

9. Risk assessment

The identification of the sources, pathways and receptors to determine Risk Events are set out in Table 6 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 6, have been determined in accordance with the *Guidance Statement: Setting Conditions*.

9.1 Risk assessment – operation

Table 6: Identification of emissions, pathway and receptors

Risk Event				Consequence rating[1]	Likelihood rating[1]	Risk[1]	Reasoning	Regulatory controls (refer to conditions of the granted instrument)
Source/Activities*	**Potential emissions**	**Potential receptors, pathway and impact**	**Applicant controls**					
Acceptance and storage of green waste Acceptance and storage of street sweepings Acceptance and storage of HHW	Leachate and contaminated storm water	Infiltration through soil to groundwater causing deterioration of water quality and potential impacts to down-gradient non-potable groundwater users Overland flow causing degradation of surface water quality at: • Swan Canning Estuary (1.6 km) northwest • Indian Ocean (2.3 km) west	Refer to Section 8	**Moderate –** low level offsite impacts at a local scale and minimal offsite impacts at a wider scale	**Unlikely**	**Medium**	Given the depth to groundwater of approximately 27m, the relatively small quantities of waste materials stored at the Premises at any one time and the presence of hardstand and containment receptacles for potential leachate generating wastes, infiltration of leachate or contaminated storm water is unlikely to occur in most circumstances. A Detailed Site Investigation (360 Environmental, 2019) conducted at the greater site area included soil bores within the proposed Premises boundary. The DSI found that contamination at the Premises was related to historical workshop and blacksmith activities and not to the acceptance and storage of waste. The Premises slopes from the southwest to the northeast where a storm water sump is located. Overland flow resulting in discharge to a specified ecosystem such as the Swan-Canning Estuary and Indian Ocean is unlikely given the topography and distance to these receptors. The Delegated Officer considers that the existing and proposed Applicant controls sufficiently mitigate the potential for leachate or contaminated storm water emissions from the Premises. Applicant controls relating to the storage of wastes will be specified in the Issued Licence as regulatory controls.	Conditions 1 - 7: *Waste acceptance* Condition 8: *Infrastructure and equipment* Condition 12: *Storm water* Condition 16: *Bunding around street sweepings storage area* Condition 17: *Household hazardous waste shed*
Acceptance and storage of liquid HHW	Spillage of liquid waste or loss of containment			**Moderate –** low level offsite impacts at a local scale and minimal offsite impacts at a wider scale	**Rare**	**Medium**	Given the minor quantities of liquid HHW proposed for acceptance, along with the proposed containment infrastructure and equipment, the risk event from spillage of liquid waste may only occur in exceptional circumstances. The Delegated Officer considers that the existing and proposed Applicant controls sufficiently mitigate the potential for liquid waste spillages to occur at the Premises. Applicant controls relating to waste containment and inspection will be specified in the Issued Licence as regulatory controls.	Conditions 1 - 7: *Waste acceptance* Condition 9: *Infrastructure and equipment* Condition 10 – 11: *Containment loss recovery* Condition 17: *Household hazardous waste shed*
Acceptance and storage of wastes (in particular green waste and chemical wastes)	Odour	Air/windborne pathway causing impacts to amenity of closest human receptors: • Adjacent industrial premises • Residential receptors located 115 m north • Residential receptors located 155 m south		**Slight –** minimal impacts to amenity	**Unlikely**	**Low**	Fugitive odour emissions at the Premises are expected to be minimal due to the small quantities of green waste stored and the continual removal of waste from the Premises for final disposal. Green waste is the only potential odour generating waste stored outside an enclosure at the Premises. Sensitive receptors surrounding the Premises are located outside of the prevailing morning and afternoon wind directions and are unlikely to be impacted in most circumstances. The Delegated Officer considers that further regulatory control regarding odour emissions from the Premises are not required.	Conditions 1 - 7: *Waste acceptance* Condition 9: *Infrastructure and equipment*

Risk Event				Consequence rating[1]	Likelihood rating[1]	Risk[1]	Reasoning	Regulatory controls (refer to conditions of the granted instrument)
Source/Activities*	**Potential emissions**	**Potential receptors, pathway and impact**	**Applicant controls**					
Waste deposition and collection by heavy vehicles Machinery operation Vehicle movement	Noise	Air/windborne pathway causing impacts to amenity of closest human receptors: • Adjacent industrial premises • Residential receptors located 115 m north • Residential receptors located 155 m south	Refer to Section 8	**Slight –** minimal impacts to amenity	**Unlikely**	**Low**	The Applicant's Environmental Health Officers have conducted noise monitoring at sensitive receptors to the north and south of the Premises. The Applicant stated that the monitoring was inclusive of operations at the adjacent works depot and found the facility to conform to the requirements of the Noise Regulations. Operational activities at the Premises will also generally occur during daytime hours when assigned levels are higher. The Delegated Officer considers that noise emissions are effectively regulated under the *Environmental Protection (Noise) Regulations 1997* and provided that waste balers are operated during daytime hours, further regulatory controls are not required.	Condition 9: *Baler operation during daytime hours*
Abnormal operations (combustion of stored tyres, HHW and other wastes)	Smoke, particulates and noxious vapors in the event of a fire or other incident	Air/windborne pathway causing impacts to health and amenity of surrounding human receptors		**Major:** mid-level health impacts; mid to high level impact to amenity.	**Rare**	**Medium**	Although impacts to receptors are considered major, the likelihood of an adverse event occurring would only be in exceptional circumstances. The Delegated Officer considers that the Applicant's proposed classification and segregation along with other storage controls are generally suitable for mitigating fire incident risks. These will be included in the Issued Licence as regulatory controls.	Condition 8: *Waste processing* Condition 9: *Infrastructure and equipment* Condition 15*: Fire and fire washwater management*
	Washwater and leachate generation from extinguishing a fire	Infiltration through the soil profile causing impact to underlying groundwater. Overland flow causing degradation of surface water quality at: • Swan Canning Estuary (1.6 km) northwest • Indian Ocean (2.3 km) west		**Moderate –** low level offsite impacts at a local scale and minimal offsite impacts at a wider scale	**Rare**	**Medium**	The Application does not specify any controls relating specifically to the containment of washwater in the event of a fire at the facility. However it is noted that a storm water sump intercepts surface runoff in the north of the premises and soak-wells contain runoff from the southern area. The Applicant has indicated that a storm water drainage sump located to the northeast of the Premises boundary forms a depression in the landscape and is the end point of the associated drainage network. Accordingly there is no pathway for the discharge of surface runoff to the Swan-Canning Estuary or Indian Ocean. The Delegated Officer considers that further regulatory control for the containment of fire washwater is required. A condition requiring the collection and removal of fire washwater by an authorised controlled waste carrier will be included in the Issued Licence. The Applicant will also be required to develop an Emergency Management Plan within 3 months of the instrument being granted.	

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

10. Consultation

Table 7: Summary of consultation

Method	Comments received	DWER response
Application advertised on DWER website (12/03/2020)	None received	N/A
Applicant referred draft documents (24/04/2020)	Refer to Appendix 2	Refer to Appendix 2

11. 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.

DRAFT

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

Appendix 1: Key documents

Document title	Availability
Licence (L9239/2020/1) application form and supporting documentation (February, 2020)	DWER records (A1871876)
360 Environmental, 2019. Detailed Site Investigation – *17 Montreal Street, 81 Knutsford Street and 10A Wood Street, Fremantle, Western Australia*. Unpublished report prepared for the City of Fremantle.	DWER records (A1868194)
DER, August 2013. *Guidelines for the design and operation of facilities for the acceptance and storage of household hazardous waste*. Department of Environment Regulation, Perth	accessed at www.walga.asn.au
DER, July 2015. *Guidance Statement: Regulatory principles.* Department of Environment Regulation, Perth.	accessed at www.dwer.wa.gov.au
DER, October 2015. *Guidance Statement: Setting conditions.* Department of Environment Regulation, Perth.	
DER, August 2016. *Guidance Statement: Licence duration.* Department of Environment Regulation, Perth.	
DER, February 2017 *Guidance Statement: Risk Assessments*. Department of Environment Regulation, Perth.	
DWER, June 2019. *Guideline: Decision Making*. Department of Water and Environmental Regulation, Perth.	

Appendix 2: Summary of applicant's comments on risk assessment and draft conditions

Condition or aspect	Summary of applicant's comment	Department's response
Risk assessment		
Fire and fire wash-water	The drainage sump within the works depot has now been included within the revised premises boundary. This sump only receives water from the northern part of the premises and not the southern area, surface run-off in the southern area is collected via soak-wells. The other stormwater drainage sump outside the property on the north eastern boundary collects water from the stormwater drains of Montreal Street. This sump is the end point of the network and is not further connected to other drainage infrastructure.	Noted. This information will be incorporated into the risk assessment relating to fire wash-water. The revised premises boundaries will be incorporated into the granted licence.
Licence		
6 (removed) and 19 (Table 4)	The City of Fremantle does not have set suppliers for receipt of recycling material and solid waste onsite. The Recycling Centre is a community service aimed at increasing material recovery. If the specifics listed in the condition are requested of each individual it would make the process onerous and impractical for both the community and the City. The City currently visually inspects incoming loads and ensures that only waste and recyclable material acceptable by the City is permitted for drop-off. This will be extended to waste acceptance under the licence. Only directly re-usable construction materials such as surplus whole pavers, tiles and bricks are saved for pick-up by residents. C&D waste is not accepted at the premises. Hazardous materials such as asbestos and others not included in the licence will not be permitted onsite. Staff will be trained and the procedure will be documented. The City has developed robust protocols for recording invoice data, receipts and tipping docket information for loads going out of the facility, This is also required for the local government annual mandatory reporting. The City is further developing a means to quantify the volume and weight of materials being sold from the tip-shop which do not get recycled or disposed at landfill. With the above in place, DWER is urged to consider removing Condition 6 from the licence.	Condition 6 relating to the signed declaration from the deliverer of waste will be removed. This condition is more applicable to a commercial operation rather than a community recycling centre. Incoming waste monitoring conditions are required as the definition of Category 62 in the EP Regulations is related to incoming waste in an annual period. Condition 19 Table 4 will be modified from '*tonnes*' to '*tonnes or m^3 and calculated tonnes*'. An associated definition for calculated tonnes will also be added to the licence. Calculated tonnes will be defined as '*tonnage calculated using the default values listed in Appendix B of the CEO Notice of information required for an annual return of liable local governments that provide waste services, gazetted in that reporting period*' This will allow for operators to estimate tonnage based on the volume of the material coming. For example an estimated volume of $1m^3$ of bricks would be 1.2 tonnes of bricks when applying the conversion factor listed in Appendix B of the CEO notice.

Condition or aspect	Summary of applicant's comment	Department's response
8 (now 7)	The site layout for the Recycling Centre has been modified as per the attached plan. It is to be noted that the area for drop-off of household bulk waste materials has been amended and will now be closer to the site office at the Recycling Centre.	Condition 8 will be updated to reflect changes made in the revised site layout plan.
9 (now 8) - Aluminium baler	The City will no longer be using the aluminium can baler at the Recycling Centre. Only the cardboard baler will remain onsite and will be used between 7am and 4pm Monday to Saturday.	The aluminium baler will be removed from the infrastructure and equipment list.
9 (now 8) - Street sweepings storage area	The amended site layout shows that the City will now combine street sweepings from the CBD area and the suburbs. The area will be modified with a hard-stand and have a bund to ensure drainage into an underground oil-separator apparatus before discharge into a soak well. The Detailed Site Investigation report shows that contamination levels from the street sweepings were low.	Condition 9 will be updated to reflect the proposed infrastructure changes. DWER notes that the current area used for CBD street sweeping storage has not been included in the modified premises boundary. This is due to the proposed consolidation of the street sweepings into one storage area. As the consolidated storage area has not yet been constructed, the current area used for storage of CBD street sweepings should remain within the premises boundary. If required, the area can be removed from the premises through a licence amendment once it is no longer in use.
15 (now 14)	A condition requiring fire wash-water to be contained for removal by an authorised controlled waste carrier would also mean that stormwater during a downpour would need to be regularly pumped out, adding significant costs to the City's operations. Therefore, in the unlikely event of a fire, the City commits to cleaning-up the contamination as a result of fire wash-water from the site, soak-wells and surrounding areas that collect the fire wash-water. The City will formalise this information into a formal procedure and submit to the DWER.	Due to the potential fire risk from Category 62 waste facilities, management of potential fire wash-water is necessary. Generally containment of wash-water is achieved without needing to also pump out rainfall during winter by having a valve or isolation system on stormwater outlets to prevent discharge during fire events. The intent to submit an emergency management plan addressing the procedures during a fire event has been noted. Accordingly an additional condition will be added into the Specified Actions section of the licence for submission of the plan within 3 months of licence issue. The commitments regarding the clean-up of fire wash-water should be captured in the Emergency Management Plan. Condition 15(b) will be changed to '*must collect and remove all fire wash-water and other waste that may result from firefighting on the Premises*'.