Works Approval

Environmental Protection Act 1986, Part V

Works Approval Holder: Craneswest (WA) Pty Ltd

t/a Western Tree Recyclers

Works Approval Number: W5991/2016/1

Registered office: 30 Rothschild Place

MIDVALE WA 6056

ACN: 117 679 839

Premises address: Western Tree Recyclers

119 McLaughlan Road Crown Reserve 29336 POSTANS WA 6167

Being Part of Lot 2129 on Deposited Plan 173137 within coordinates:

No	Easting	Northing
Α	389358	6434695
В	389449	6434680
С	389429	6434579
D	389429	6434579

Issue date: 23 February 2018

Commencement date: 23 February 2018

Expiry date: 18 July 2019

The following category from the *Environmental Protection Regulations 1987* cause this Premises to be a prescribed premises for the purposes of the *Environmental Protection Act 1986*:

Category number	Category description	Category production or design capacity	Approved premises production or design capacity
61A	Solid waste facility: premises (other than premises within category 67A) on which solid waste produced on other premises is stored, reprocessed treated, or discharged onto land.	1 000 tonnes or more per year	135 000 tonnes per year

Conditions

This Works Approval is subject to the conditions set out in the attached pages.

Date signed: 23 February 2018

Steve Checker

MANAGER LICENSING (WASTE INDUSTRIES)

Officer delegated under section 20 of the Environmental Protection Act 1986

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Works Approval Conditions

1 General

- 1.1 Interpretation
- 1.1.1 In the Works Approval, definitions from the *Environmental Protection Act 1986* apply unless the contrary intention appears.
- 1.1.2 In the Works Approval, unless the contrary intention appears:

'Act' means the Environmental Protection Act 1986;

'CEO' means Chief Executive Officer of the Department of Water and Environmental Regulation;

'CEO' for the purpose of correspondence means;

Chief Executive Officer
Department Div.3 Pt.V EP Act
Locked Bag 33
CLOISTERS SQUARE WA 6850
Email: info-der@dwer.wa.gov.au;

'emergency event' means a 1-in-10 year, 72 hour rainfall event;

'green waste' means biodegradable garden or park waste comprised of grass cuttings, flower, shrub and/ or tree trimmings only;

'hardstand' means a base surface with a permeability of 10-9 metres/second or less;

'hazardous waste' means components of the waste stream which by its characteristics poses a threat or risk to public health, safety or the environment (includes substances which are toxic, infectious, mutagenic, carcinogenic, teratogenic, explosive, flammable, corrosive, oxidising and radioactive);

'low permeability' means a surface with a permeability of 2 x 10⁻¹⁰ metres/second or less;

'non-conforming waste types' means any/ all waste types that are not classified as green waste;

'Premises' means the area defined in the Premises Map in Schedule 1 and listed as the Premises address on page 1 of the Works Approval;

'Schedule 1' means Schedule 1 of this Works Approval unless otherwise stated;

'waste' means section 3(1) of the *Environmental Protection Act 1986* and section 3(1) of the *Waste Avoidance and Resource Recovery Act 2007*;

'Works Approval' means this Works Approval numbered W5991/2016/1 and issued under the *Act*; and

'Works Approval Holder' means the person or organisation named as the Works Approval Holder on page 1 of the Works Approval.

1.1.3 Any reference to an Australian or other standard in the Works Approval means the relevant parts of the standard in force from time to time during the term of this Works Approval.

Environmental Protection Act 1986 Works Approval:W5991/2016/1 File No: DER2016/001830



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1.1.4 Any reference to a guideline or code of practice in the Works Approval means the current version of the guideline or code of practice in force from time to time, and shall include any amendments or replacements to that guidelines or code of practice made during the term of this Works Approval.

1.2 General conditions

- 1.2.1 The Works Approval Holder must ensure that the Works specified in Column 1 of Table 1.2.1 meet or exceed the specifications in Column 2 of Table 1.2.1 for the infrastructure in each row of Table 1.2.1.
- 1.2.2 The Works Approval Holder must not depart from the specifications in Column 1 and 2 for the infrastructure in each row of Table 1.2.1 except:
 - a) where such departure is minor in nature and does not materially change or affect the infrastructure; or
 - b) where such departure improves the functionality of the infrastructure and does not increase risks to public health, public amenity or the environment; and in accordance with all other Conditions in this Works Approval.

	•••
	struction specifications
Infrastructure	Specifications
1) All	 (a) Access to the facility to be through lockable, gated entry/ exit points. (b) No storage of fuels or oils (hydrocarbons) on site; (c) Signage to be installed at entry points identifying waste acceptance types and emergency contact phone numbers; (d) Dust mitigation measures to be implemented during construction (sprinklers/ water carts); (e) Stormwater to be directed away from storage areas towards the stormwater contaminment vessel; (f) Ensure that the entire premises is covered by an asphalt (hot mix) hardstand; (g) Ensure that premises a sufficiently graded to direct all stormwater generated at the premises towards the stormwater containment vessel.
2) Receival, sorting and processing area	The receival, sorting and processing area must be designed and constructed to meet the following specifications: (a) Bunded, hardstand base (minimum 150 mm) to achieve a permeability of ≤ 1x10 ⁻⁹ m/s constructed of bitumen (hot mix); (b) Grinder to be fitted with sprinklers and sprays; (c) Sprinkler system to be installed to around the premises to manage potential dust emissions from all pre- and post-processing stockpiles; (d) Water hose connections with sufficient fire fighting capacity as required to service the requirements for the sorting and processing areas to be installed; and (e) Installation of mobile plant equipment for the purposes of grinding and shredding green waste and associated infrastructure only.
3) Storage bins/ Bunkers	To be designed and constructed to meet the following specifications: (a) Sprinkler system installed along edge of external bunkers/ storage bays (dust management); (b) Enclosed storage bins to be placed on a hardstand for the collection of non-conforming waste types.
Stormwater containment vessel	The stormwater containment vessel is to be constructed to meet the following specifications: (a) Designed to contain a '72 hour duration, '1 in 10' year ARI critical rainfall event without overflow; (b) Freeboard of 0.5 m to be maintained at all times;



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	 (c) Co-located within part of Lot 2127 on Plan 173137 adjoining 'Capital Recycling' premises boundary; (d) Impervious and free from leaks and defects; (e) Constructed of concrete or low permeability (≤2 x 10⁻¹⁰ m/s) liner of adequate size to contain all stormwater, wash down water and/ or waste water (excluding septage/ sewage) generated at the premises, and inclusive of Capital Recycling stormwater, wash down water and waste waters.
5) Sumps	All sumps constructed within the premises boundary for the containment of stormwater, sediment, wash down waters and waste waters (excluding sewage/ septage) are to meet the following specifications: (a) Constructed of concrete with metal grill/ grate; (b) Able to be readily maintained and cleaned out weekly of sediment and contaminated waters; (c) Drain to a low permeability stormwater containment vessel or be pumped out for disposal to a licenced facility.
6) Internal roads and parking area	The proponent must ensure internal roads and parking areas are designed and constructed to meet the following specifications: (a) Constructed of bitumen hot mix or low permeability, compacted hardstand areas; (b) Installation of low speed signage (≤10 km/hr).
7) Security and signage	Premises must include the following: (a) Be fenced with a 1.8 m high security fence along the boundary where there are no other obstructions limiting access to the premises (i.e. noise bunds), with access to the facility through lockable gated entry/ exit points; (b) Signage at entry points stating: 1. waste acceptance types; 2. prohibiting fires; and 3. emergency contact phone numbers.
8) Noise management	The proponent must: (a) construct a noise bund at least 6 m high along the entire southern boundary of the premises and adjoining 'Capital Recycling' premises earth noise bund; (b) construct an earth noise bund on the eastern boundary as far as practicable to allow access into and out of the premises for operational purposes, that is at least 7.5 m high; (c) ensure that the noise bunds are continuous along the southern and eastern boundaries and with all other adjoining premises.

- 1.2.3 The Works Approval Holder must not accept any waste materials for storage at the premises whilst construction of the premises is being undertaken, under this Works Approval.
- 1.2.4 The Works Approval Holder must operate and maintain all dust management equipment (water carts/ sprays or sprinklers) to prevent the generation of visible dust during construction.
- 1.2.5 The Works pproval Holder must only undertake construction activities as follows:
 - (a) Undertaken only Monday to Saturday between the hours of 7 am 5 pm; and
 - (b) No operation is permitted at all on Sundays or Public Holidays.

2 Information

2.1 Reporting

- 2.1.1 The Works Approval Holder must submit a construction compliance document to the CEO, following the construction of the works and prior to operation of the same.
- 2.1.2 The compliance document must:
 - (a) certify that the works were constructed in accordance with the conditions of the works approval; and
 - (b) be signed by a person authorised to represent the Works Approval Holder and contain the printed name and position of that person within the company; and
 - (c) Include a report on the stormwater containment vessel which includes:
 - (i) supporting documentation to verify design and construction against the requirements of conditions 1.2.1 and 1.2.2 of the Works Approval.
- 2.1.3 The Works Approval Holder must provide the CEO with a list of departures which are certified as complying with Condition 1.2.1 at the same time and from the same professional as the certifications submitted in accordance with Conditions 2.1.1 and 2.1.2.
- 2.1.4 The Works Approval Holder must provide the CEO, within one month from the date of issue of the Works Approval, a Stormwater Infrastructure Report which assesses the capacity of the stormwater infrastructure to contain water from a 72 hour duration, 1 in 10 year ARI critical rainfall event without overflow, and which includes a revised mass balance calculation for the stormwater containment infrastructure which:
 - is to be based on rainfall data which includes meterological monitoring from the first 10 years of records from the Medina weather station (i.e. 1983-1993) as representative of a wetter period; and
 - (b) uses appropriate and adequately justified runoff coefficients for the different scenarios modelled.
- 2.1.5 In the event that the report in Condition 2.1.4 shows that stormwater infrastructure will not contain water from a 72 hour duration, 1 in 10 year ARI critical rainfall event without overflow, the Stormwater Infrastructure Report shall contain a programme of works or operational modifications required to be undertaken to ensure that the stormwater infrastructure will contain water from a 72 hour duration, 1 in 10 year ARI critical rainfall event without overflow.

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Schedule 1: Maps

Premises map

The Premises is shown in the maps below. The red square depicts the Premises boundary.



Map of layout



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Decision Document

Environmental Protection Act 1986, Part V

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t/a Western Tree Recyclers

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Registered office: 30 Rothschild Place

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В	389449	6434680
С	389429	6434579
D	389338	6434600

Issue date: 23 February 2018

Commencement date: 23 February 2018

Expiry date: 18 July 2019

Decision

Based on the assessment detailed in this document, the Delegated Officer has decided to issue a works approval. The Delegated Officer considers that in reaching this decision, all relevant considerations have been taken into account.

Decision Document prepared by: Caroline Conway-Physick

Licensing Officer

Decision Document authorised by: Steve Checker

Delegated Officer



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1 Purpose of this Document

This decision document explains how the Department of Water and Environmental Regulation (DWER) Delegated Officer 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 document 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 proponent's responsibility to ensure they have all relevant approvals for their Premises.

2 Administrative summary

Administrative details		
Application type	Works Approval New Licence Licence amendmen Works Approval am	
Activities that cause the premises to become prescribed premises	Category number(s 61A – Solid waste facility	Assessed design capacity 135,000 tonnes per annual period
Application verified	Date: 19/09/2016	
Application fee paid	Date: 10/10/2016	
Works Approval has been complied with	Yes No	N/A⊠
Compliance Certificate received	Yes□ No□	N/A⊠
Commercial-in-confidence claim	Yes□ No⊠	. 47.1
Commercial-in-confidence claim outcome	N/A	
Is the proposal a Major Resource Project?	Yes□ No⊠	
Was the proposal referred to the Environmental Protection Authority (EPA) under Part IV of the Environmental Protection Act 1986?	Yes□ No⊠	Referral decision No: Managed under Part V Assessed under Part IV
Is the proposal subject to Ministerial Conditions?	Yes□ No⊠	Ministerial statement No: EPA Report No:
Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the <i>Environmental Protection Act 1986</i>)?	Yes☐ No⊠ Department of Wate	er consulted Yes No
Is the Premises within an Environmental Protection 1. Environmental Protection (Kwinana) (Atmosphe Area C.		
2. Environmental Protection (Peel Inlet – Harvey E	stuary) Policy 1992.	
Is the Premises subject to any EPP requirements?	Yes⊠ No□	
1. Dust emissions from the operation of the premis	ses will be required to	comply with the Kwinana EPP.
2. The Peel Harvey EPP sets nutrient water quality	y objectives for the en	ntire Peel Inlet and Harvey Estuary.

3 Executive summary of proposal and assessment

3.1 Background

Craneswest (WA) Pty Ltd. (Occupier), trading as Western Tree Recyclers, has applied for a Works Approval and new Licence to operate a prescribed premises in accordance with the *Environmental Protection Act 1986*. The new premises will accept and process green waste for reuse under Category 61A. The maximum design capacity for the premises is 135,000 tonnes per annual period. The premises design capacity has been determined on the capacity of the grinder at 100 tonnes per hour.

The Occupier currently operates at the Armadale Landfill Facility (L6964/1997/11) and the Eclipse Soils Facility.

Part of Lot 2129 on Plan 173137 is operated under Licence (L6543/1991/10) held by Water Corporation who have leased a portion of the same Lot to Capital Recycling Pty Ltd who propose to sub-lease to the Occupier.

3.2 Environmental Setting

The Premises is located on the eastern side of part of Lot 2129 on Plan 173137, at 119 McLaughlan Road, Postans within the City of Kwinana on 10,080 m² to be sub-leased from Capital Recycling (Farfield Holdings Pty Ltd). The proposed activities for the premises include the grinding and shredding of green waste with short term storage only, for reuse off site.

The closest residential sensitive receptors are approximately 877 m south of the premises, within the suburb of Orelia.

The underlying geology at the premises is considered to consist of calcareous eolianite known as 'Tamala Limestone'. Tamala limestone contains varying proportions of quartz sand, shell fragments and clayey lenses. This type of geology is prone to containing solution channels/ cavities and includes karstic structures. The DWER Acid Sulfate Soil (ASS) risk map indicates that the site is located within an area of 'low to no risk of Actual ASS (AASS) and Potential ASS (PASS) generally occurring at depths greater than 3 m'.

A desktop assessment of groundwater identified groundwater depth varies across the premises from 16.82 mBGL in the north (KW8) to 7.54 mBGL in the south (KW2), with monitoring bore 'MW1' being present within the premises. TDS is approximately 617 mg/L (marginal). The premises is located within the Wungong-Southern River Catchment watershed. The proponent has confirmed that groundwater directional flow is considered to be in a north to north-west direction and seasonal groundwater variation is between 0.5-3.0 m seasonally.

The Premises is approximately 3.3 kilometres west of the P1 Public Drinking Water Source Areas and Jandakot underground Water Pollution Control Area within Cockburn Groundwater Area. The applicant has reported in their submission that 'the underlying hydrogeological region of the site is the unconfined Superficial Swan Aquifer. The site is located in the Jandakot Mount. The area is mainly underlain by Bassendean Sand and the aquifer has a maximum saturated thickness of approximately 40.0 metres (Davidson, 1995)'.

The proponent has determined that the premises was entirely cleared as long ago as approximately 1953. The site is contoured allowing surface water (stormwater) to flow south westerly across the premises, over an asphalt apron towards a lined (low permeability) stormwater containment vessel which adjoins the Capital Recycling premises on their southern boundary.

The application area is separated from Beeliar Park by McLaughlan Road, Postans. The site is also located approximately 500 metres west of conservation category wetland (CCW) known as 'The



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Spectacles' that is located within the regional park. The site is approximately 1.5 kilometres from the nearest known occurrence of a threatened ecological community and 1.8 kilometres from the nearest known conservation significant flora species. The site is 600 metres east of the Threatened and Priority Ecological Communities (TEC/PEC) Buffers for *Melaleuca huegelili*.

Surrounding land use north and west of the premises is zoned 'rural' with 'Alcoa Australia's' discharge ponds approximately 780 m north, and Water Corporation's 'Kwinana Wastewater Treatment Plant' approximately 140 m north west of the premises. The 'Spectacles' wetland is located approximately 500 m east, and Department of Agriculture and Food land is to the south of the premises.

According to advice received from the Department of Water (DoW – now part of DWER), there is an existing groundwater licence at Lot 2129 McLaughlan Road, Postans, to extract 35,000kL/annum from the Cockburn Groundwater Area (Valley subarea). This licence expires on 19 December 2016. The extraction bore is not located within the part of Lot 2129 on Plan 173137 associated with the proposed prescribed premises boundary for Western Tree Recyclers.

Due to historical activities at the premises, it is noted that the premises is listed under DWER site classification as 'possibly contaminated – investigation required' as a result of a raw sewerage spill and the operation of the sewage facility since the 1970's, as well as a composting facility being operational on the lot for approximately 10 years. The groundwater is showing elevated concentrations of nutrients beneath the premises.

A report submitted by Farfield Holdings Pty Ltd (undertaken by MDWES, December 2015) for a Detailed Site Investigation (DSI) for the entire Lot 2129 on Plan 173137, provided information on the soil matrix and underlying groundwater quality to provide baseline data. The report identified the following conclusions:

- Intrusive soil investigations undertaken by MDWES did not identify any significant concentrations of contaminants exceeding ecological assessment criteria or human health assessment criteria.
- Soil vapour and direct contact assessment of soils identified all results were of acceptable concentrations.
- Assessment of asbestos did not detect asbestos containing material or asbestos fibres.
- Groundwater assessment indicated elevated concentrations of metals and nutrients, however these may be indicative of regional groundwater quality.

3.4 Proposed works

The proposed process will allow the acceptance and processing of green waste only and not include any composting or bio remediation, with no long term storage of green waste once processed. All non-conforming wastes types are to be contained within enclosed bins for disposal to a licenced landfill.

The premises will consist of:

- 1 x excavator;
- 1 x wood grinder (diesel powered, mobile grinding plant);
- 2 x loaders;
- Weighbridge office;
- Temporary structures including an office and lockable storage areas;
- Asphalt (Hot mix) hardstand across the entire premises.

The premises will accept green waste only from the Perth Metropolitan Area predominantly from the Western Metropolitan Regional Council and the City of Stirling, from public parks and gardens.

No clearing is required for the construction of the premises. The proponent has identified that the premises was cleared in approximately circa 1953.



The premises will have boundary fencing and lockable gates for when it is not manned. Operating hours will be Monday-Saturday, 7:00am to 5:00pm, and Saturday, 7:30am to 12pm (Closed Sundays and Public Holidays), as per planning approval given by the Western Australian Planning Commission (Ref. 26-50104-7).

3.5 Occupancy and planning approval

The premises has been vacant since 2014 however was used for composting and bioremediation activities historically (2000 to 2014).

The applicant submitted an application to the City of Kwinana for planning approval for the proposed activity on 24 January 2017. WAPC approval was granted for the proposed activity on 19 July 2017 for a period of two years.

Approval from the Minister for Lands under Section 18 of the *Land Administration Act 1997* (LAA) for the sub-division was granted on 11 October 2017 (as received by DWER on 24 October 2017).

The primary lease between Water Corporation and Capital Recycling (Farfield Holdings Pty Ltd) for the entire premises was received by DWER on 24 April 2017. Confirmation of a sub-lease agreement, for a portion of the premises with Farfield Holdings Pty Ltd and Craneswest Pty Ltd was received via email on 31 October 2017. Approval from Water Corporation (Primary Lessor) for the sub-lease was received via email on 31 October 2017, as part of the above sub-lease agreement. The sub-lease agreement gives approval (No. B4996) in accordance with the *Land Administration Act 1997* and the *Transfer of Land Act 1893*.

Craneswest (WA) Pty Ltd propose to obtain a sub-lease from Farfield Holdings Pty Ltd. The sub-lease application is proposed for operation for a period ending 17 October 2027, subject to extensions of Lease N294529.

3.6 Consultation

The proponent has undertaken consultation with the City of Kwinana regarding the proposed application and operation of the green waste processing facility.

Details of all consultation undertaken is listed within Section 5 of the Decision Document.

3.7 Risk Assessment and Decision

The applicant has applied for a Licence in conjunction with the works approval which will be completed once compliance of the works approval has been confirmed through the submission of the compliance report.

The primary emissions expected from the construction of the premises is noise (minimal) through the installation of demountable offices and mobile plant infrastructure equipment. Primary emissions during operation are expected to be fugitive emissions (dust, noise and vibration). Any wash down waters, waste water (excluding septage/ sewage) or stormwater is to be contained within a lined, low permeability stormwater containment vessel. These risks and proposed regulatory controls are considered in the decision table below.

No emissions are proposed to air, land, surface water or groundwater as result of construction or operational activities.

Fitness and competency of the applicant has also been considered.

4 Decision table

The overarching legislative framework of this assessment is the *Environmental Protection Act 1986* (Act) and the *Environmental Protection Regulations 1987*. DWER Guidance Statements which inform the assessment in accordance with this legislation include:

- Guidance Statement: Regulatory Principles (July 2015)
- Guidance Statement: Decision Making (February 2017)
- Guidance Statement: Risk Assessments (February 2017)
- Guidance Statement: Setting Conditions (October 2015)
- Guidance Statement: Land Use Planning (February 2017)
- Guidance Statement: Licence duration (August 2016)

Where other references have been used in making the decision they are detailed in the decision document.

DECISION TABLE				
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents	
Occupier	N/A	Craneswest Pty Ltd have confirmed that a sub-lease agreement is still pending from Farfield Holdings Pty Ltd which is dependent on compliance with the <i>Environmental Protection (Noise) Regulations 1997</i> . The Delegated officer has determined that a copy of the final lease agreement will need to be submitted to the CEO prior to works being undertaken.		
Fitness and competency	N/A	A search of DWER's Incidents and Complaints Management System (ICMS) has been undertaken in relation to previous instruments and/or compliance issues regarding Craneswest Pty Ltd or Western Tree Recyclers. No records were identified in relation to any historical activities undertaken by the occupier. There are no issues or concerns for consideration.	N/A	



DECISION TAB	LE		
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
Interpretation	W1.1.1 – W1.1.4 L8996/2016/1	Construction Conditions 1.1.1 – 1.1.4 require that terminology used within the Works Approval is referenced to the appropriate definitions where applicable and that any reference to a standard or guideline is to the most current version of that standard or guideline. Operation Operation Operation is subject to the general provisions of the Environmental Protection Act 1986 (Act). A category 61A activity falls under Schedule 1 Part 1 of the Environmental Protection Regulation 1987 and may be subject to Licence. An application for a licence under Section 57 of the Environmental Protection Act 1986 has been received concurrently with the Works Approval. The Licence application will be progressed on receipt of the works approval compliance documentation, in accordance with the Works Approval, and in consideration of Section 52 of the Act.	Application supporting documentation – Environmental Site Management Plan, Ref. 0629-ESMP-01 (DWER Ref. A1164909), pg. 5-24, including Tables, Plates, Figures and Appendices.
General conditions	W1.2.1 W1.2.2 W1.2.4	Emission Description Emission: Hydrocarbons from wash down water from truck/ vehicle cleaning, waste water (excluding septage/ sewage) from ablution or workshop basins containing surfactants/ cleaning chemicals, non-conforming wastes (any waste other than green waste) accidentally received or stormwater discharged during the construction or operation of the premises. Impact: Potential contamination of surrounding land or groundwater (7.5-16.8 mBGL) from wash down water, waste water, non-conforming wastes or contaminated stormwater. Controls: Any discharge from the construction/ operation area is to be captured within a concrete or lined (low permeability) stormwater containment vessel designed to contain a 72 hour continuous rainfall, '1-in-10' year ARI critical rainfall event. Any sumps will be cleaned out through regular maintenance (weekly), and waste removed to a licenced landfill. Truck wash down areas are constructed of concrete with concrete silt traps to contain all wash down wasters and sediments prior to discharge to the stormwater	Application supporting documentation – Environmental Site Management Plan, Ref. 0629-ESMP-01 (DWER Ref. A1164909), pg. 5, 16-19, 21-22 and plate i. Environmental Protection (Unauthorised



Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
		containment vessel. The entire premises is constructed of a hot mix asphalt hardstand. The applicant has determined that "given the nature of the processes on site processing of green waste and the asphalt layer that covers the entire site footprint, it is anticipated that stormwater runoff will not transport significant material from the works area to the drainage system. However, as part of the ongoing maintenance, the surface drains will be inspected and cleaned regularly (removal of sediment and leaf matter) to allow unrestricted flow to the evaporation pond [stormwater containment vessel]." The applicant proposes to direct surface/stormwater generated on site into a surface drain system (spoon drains) located on the east, south and west of the site area, which will direct the flow towards the stormwater containment vessel. The proponent has developed a signed surface water agreement identifying responsibility of the ongoing management, costs and maintenance for the spoon drains and evaporation pond (stormwater containment vessel) as that of both Capital Recycling and Western Tree Recyclers for both premises During operation, the proponent proposes to accept green waste for processing on site only, therefore the potential for pollution or environmental harm occurring is considered low from the waste being received to the premises. The proponent has confirmed that "material other than green waste as prescribed will not be accepted at the facility under any circumstance. If any non-compliant substance/material is inadvertently received in a load of green waste then actions will be taken to isolate and remove the offending material from the premises and return it to the source". The management of waste accepted has been defined within the 'Material Acceptance Plan' (MAP) within the Environmental Site Management Plan, 0629-ESMP-01-MB v3, revised 23/1/2017, Section 2.2 and Appendix C). Material acceptance will undergo the following process: • Waste material arrives at the facility via council trucks and WTR ve	Discharges) Regulations, 2004

Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
Section	L= Literioe	 The load is weighed (quantity). Customer "signing docket" is presented. Information and acknowledging type of material. The truck then proceeds to the designated unloading area(s) within the WTR work area. Specific areas will be sign posted, and will be under the direction and scrutiny of WTR employees to place incoming green waste. The premises will consist of a boundary fence, high earthen bunds and lockable gates that will control unauthorised entry into the premises. The applicant has confirmed that "Capital Recycling and Western Tree Recyclers have agreed to share control [maintenance] of the surface spoon drains and evaporation pond. Capital Recycling will maintain and service the spoon drains/evaporation ponds as part of the head lessor on the contract with Water Corporation" (Email: Mathew Bulmer, 23/2/2017). Risk Assessment Consequence: Slight Likelihood: Possible Risk Rating: Low Regulatory Controls The proponent is required to ensure compliance to the requirements of the Environmental Protection (Peel Inlet – Harvey Estuary) Policy 1992. The Peel Harvey EPP sets nutrient water quality objectives for the entire Peel Inlet and Harvey Estuary. The proposed activities to be undertaken at the premises are not considered to result in the addition of nutrient contamination from the premises. No discharges to land, surface water, air or groundwater are proposed as a result of operation of the premises. 	

Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
	L= LICCINC	Residual risk Consequence: Slight Likelihood: Possible Risk Rating: Low Construction and operation Condition 1.2.1 and 1.2.2 within the works approval defines the specifications for the construction of the facility within the proposed prescribed premises. Controls have been specified under Condition 1.2.1, 1.2.2, Table 1.2.1 within the Works Approval, for the construction phase and will be considered within the development of Licence conditions for the premises, as listed from Table 1.2.1: 1)(e) & 1)(g): Requires the proponent to ensure that the premises directs all stormwater to a containment vessel located within the premises boundary, and that the premises is sufficiently graded to assist in the flow of stormwater towards the stormwater containment vessel, ensuring no discharge to the environment; 4)(a)-(e): Requires the construction and operation of a suitable stormwater containment vessel for the capture of all stormwater, wash down waters or waste water (excluding sewage/ septage) that will ensure no discharges to the environment. 5)(a)-(c): Requires the proponent to ensure that all wash down water, waste water,	
		stormwater and/or sediment is adequately contained and directed to the stormwater containment vessel within the premises boundary. This will assist in ensuring no discharge to the environment occurs or potential pollution from residual hydrocarbons. The proponent has determined that the premises is sufficiently graded to direct the flow of stormwater within the premises boundary for capture within a stormwater containment vessel, and has committed to the construction of a lined (low permeability) containment vessel for the capture of all stormwater. The proponent is proposing that, as the stormwater will be fully captured and contained (closed system), and that it be reused from the stormwater containment vessel for the suppression of dust within the premises	

Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
		 boundary, if required. Within Table 1.2.1, additional construction requirements imposed by DWER (not included within the application supporting documentation), include: 1)(e): Stormwater to be directed away from storage areas towards the stormwater containment vessel; 2)(d): Water hose connections with sufficient firefighting capacity (as required to service the sorting and processing areas) to be installed in the event of green waste catching alight. Green waste poses a fire hazard when dried out. Although storage of green waste post processing will be short (no more than 7 days), it is unclear what length of time stockpiled green waste at the premises prior to processing will stay within the premises. Limitations on stockpile volumes and length of time will be considered within the Licence; 3)(b): Enclosed storage bins to be placed on concrete hardstand for the collection of non-conforming waste types. This is to manage non-conforming waste types that inadvertently occur within the green waste that are identified after screening of the received waste to the premises; 4)(a)-(d): Stormwater containment vessel to be constructed and able to contain all stormwater, wash down water, sediment and / or waste water (excluding septage/ sewage) generated at the premises, at all times. Discharge of stormwater, wash down water, sediment or waste waters is the responsibility of the proponent and is to be contained within the premises boundary of Lot 2129 on Plan 173137; 5)(b)-(c): No management of sediment or wash down waters was identified within the application. Additional conditions have been proposed within this section and are considered appropriate to ensure effective management of potential issues of pollution or environmental harm from hydrocarbons/sediments. Condition 2.1.2(d) requires the proponent to confirm that the design and construction of the stormwater containment vessel is able to receive and contain all discharges specified from both	



DECISION TABL	.E		
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
		The Delegated Officer considers the additional construction requirements are appropriate to ensuring that all potential emission risks are adequately addressed as a result of the proposed operation activities, and will be considered within the Licence instrument as conditions.	
		Condition 1.2.4 within the works approval requires the proponent to operate dust mitigation measures during the construction phase should it be required.	
		Residual Risk Consequence: Slight Likelihood: Possible Residual Risk Rating: Low	
	L8996/2016/1	Operation Conditions will be placed within the Premises Operation section of the licence in line with regulatory controls determined as part of this risk assessment under the Works Approval. Specifically there will be a requirement for the infrastructure in condition 1.2.1 and Table 2.2.1 to be maintained to the specification required by condition 1.2.2.	
Dust Emission Risk	W1.2.1 W1.2.2 W1.2.4	Construction Emission Description Emission: Dust emissions from location and installation of demountable offices/ stores, mobile plant equipment and associated infrastructure, and the construction of the earth noise bund. Impact: Reduced local air quality. Controls: The proponent will utilise a water cart and sprinkler system as required to reduce dust emissions from any of the construction areas within the premises. Ongoing visual assessment of the site will be undertaken to ensure measures are implemented timeously to minimise the amount of dust lift off. Low speed signage will be constructed at the premises to further reduce dust lift off from any road surfaces (10 km/h) as a result of vehicle movement.	Application supporting documentation – Environmental Site Management Plan, Ref. 0629-ESMP-01 (DWER Ref. A1164909), pg. 15,19, 22 and Appendix D. AS/NZS3580.9.11



DECISION TAE	BLE		
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
section	L= Licence	The construction phase is considered to generate short term, intermittent amounts of dust due to the small amount of equipment required for the operation and with the premises using a mobile plant not requiring any significant construction activities in order to make it operational. The premises is already cleared and has a asphalt hardstand across the entire area. Activities under the construction phase include location and installation of equipment and construction of the earth noise bund only. The proponent is proposing that, as all waters generated at the premises (excluding sewage/ septage) will be directed to the stormwater containment vessel and will be fully captured and contained within the premises boundary (closed system), that it be reused for the suppression of dust within the premises boundary. Risk Assessment Consequence: Slight Likelihood: Possible Risk Rating: Low Regulatory Controls Controls have been specified under Conditions 1.2.1, 1.2.2, Table 1.2.1 and condition 1.2.4 within the Works Approval. Controls have been specified under Condition 1.2.2, Table 1.2.1 within the Works Approval, for the construction phase and will be considered within the development of Licence conditions for the premises, as listed: 1)(d): operation of water sprays/ sprinklers during construction to reduce potential impacts of dust emissions as a result of works (earth bund); 1)(f): Commitment made by the proponent which will assist in the reduction of fugitive dust lift off through the operation of asphalt surfaces in place of in-situ soils;	- 2008 Methods for sampling and analysis for ambient air – Determination PM10. Environmental Protection (Kwinana) (Atmospheric Wastes) Policy and Regulations 1992 – Atmosphere, Area C.

Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
ection	L= Licence	of fugitive dust emissions; 2)(d): Requirement to ensure that water supply and hose connections are in place to assist in the reduction of fugitive dust emissions; 6)(a): Low speed signage, as committed by the proponent, will assist in reducing fugitive dust lift off from trafficable areas. The proponent is required to ensure compliance to the requirements of the Environmental Protection (Kwinana) (Atmospheric Wastes) Policy and Regulations 1992 – Atmosphere, Area C. The regulation of fugitive emissions through the provisions of Section 49 of the Environmental Protection Act, 1986 (Act) and the Environmental Protection (Unauthorised Discharges) Regulations 2004 are also considered appropriate for the regulation of dust emissions during the construction of the premises. The construction phase is expected to result in a short term, low emissions of localised dust as construction at the premises is considered to be minimal as opposed to long term emissions from the operation phase of the premises (approximately 21 years) for grinding of green waste. Residual Risk Consequence: Slight Likelihood: Possible Residual Risk Rating: Low	
		The measures proposed by the proponent for the control and management of dust emissions are considered appropriate and adequate to manage emissions from the construction and operation of the premises, for the activity proposed, in conjunction with the requirements of the Act and subsidiary legislation.	
	L8996/2016/1	Operation Emission Description	

DECISION TAE	DECISION TABLE				
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents		
		 Emission: Fugitive dust emissions from operation of the wood grinder, un-/ loading of green waste/ recycled material. Impact: Reduced local air quality. Controls: The proponent will utilise a water cart and sprinkler system as required to reduce dust emissions from any operation areas within the premises. Ongoing visual assessment of the site will be undertaken to ensure measures are implemented timeously to minimise the amount of dust lift off. Low speed signage will be constructed at the premises to further reduce dust lift off from any road surfaces (10 km/h). Regular sweeping of surfaces, damping down of stockpiles and covering of all materials removed from the premises will be undertaken. The proponent has developed a 'Dust Management Plan' (Appendix D within the application supporting documentation) for the operation of the premises. The proponent has made the following commitments in the management of dust: Ensure that no adverse changes occur to air quality inside and outside the premises boundary as a result of the processing and stockpiling green waste. Ensure that soils and materials are controlled through dust suppression. Ensure that air quality at the site is monitored periodically through a year. Ensure the health and safety of site workers and the wider environment (off Site receptors). 			
		 Onsite application of the dust management approach, during operation, will include: 1) Utilisation of waters from the stormwater containment vessel through sprays and sprinklers to damp down surfaces, receival and storage stockpiles and access areas; 2) Regular sweeping of the sealed trafficable areas; 3) Ensure high volume mains water for emergency requirements (dust/ fire); 4) Reticulated sprinklers and sprays to grinder; 5) Vehicles onsite will be cleaned regularly with wheels and arches cleaned to reduce dust build-up; 6) Vehicles leaving the premises will be required to wet/ damp down loads prior to departure and ensure loads are covered with dust mats/ tarpaulins; 			

Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
		 Stockpiled pre- and post-processed materials will be kept damp at all times; Halting production in the event of dust emissions sighted during operational activities; Maintaining all dust control equipment; Issuing of 'Dust Abatement Warnings' to any offender (contractors/ staff); Undertake independent biannual air quality monitoring, in accordance with relevant Australian Standards, for submission to DWER and local Council. The above measures will be considered in the construction of the Licence conditions for 	
		the premises. The proponent is proposing that, as the stormwater will be fully captured and contained within the premises boundary (closed system), that it be reused from the stormwater containment vessel for the suppression of dust within the premises boundary during operation.	
		Risk Assessment Consequence: Slight Likelihood: Possible Risk Rating: Low	
		Regulatory Controls The proponent is required to ensure compliance to the requirements of the Environmental Protection (Kwinana) (Atmospheric Wastes) Policy and Regulations 1992 – Atmosphere, Area C during operation of the premises.	
		The regulation of low risk fugitive emissions is considered adequately regulated through the provisions of Section 49 of the <i>Environmental Protection Act, 1986</i> (Act) and the <i>Environmental Protection (Unauthorised Discharges) Regulations 2004</i> .	
		Residual Risk Consequence: Slight Likelihood: Possible	



DECISION TABL	.E		
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
		Residual Risk Rating: Low The measures proposed by the proponent for the control and management of dust emissions are considered appropriate and adequate to manage emissions from the construction and operation of the premises, for the activity proposed, in conjunction with the requirements of the Act and subsidiary legislation.	
Noise Emission Risk	W1.2.1 W1.2.2 W1.2.5	Construction Emission Description Emission: Noise from heavy vehicle and equipment movement (Front end loaders and excavators). Impact: Interference with the health, welfare, convenience, comfort or amenity of sensitive residential receptors approximately 877 m south from noise impacts from trucks or equipment operation. Controls: The construction period at the premises is expected to be short term, intermittent and low impact with minimal construction required to make the site operational (fencing, location and installation of mobile offices/ stores and mobile plant equipment, and construction of sprinkler system and earth noise bund). Risk Assessment Consequence: Slight Likelihood: Possible Risk Rating: Low Regulatory Controls It is considered that the provisions of the Environmental Protection (Noise) Regulations 1997 will be sufficient to regulate the noise emissions during construction. Controls have been specified under Conditions 1.2.1 and 1.2.2, Table 1.2.1 within the Works Approval, for the construction phase. These controls have been included to ensure that the risk assessment undertaken adequately relates to what is being proposed under construction (as defined within the application supporting documentation and additional information	Application supporting documentation – Environmental Site Management Plan (DWER Ref. A1164909), pg. 15, 20 and Appendix E. Environmental Protection (Noise) Regulations 1997. DWER Internal records (A1490403)

Approval / r Licence \	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
section	L= Licence	submitted by the proponent), as listed: • 2)(e) – limiting of what may be located/ installed at the premises; • 1)(f) & 6)(a): assists in the reduction of noise generation from the trafficable areas; • 7) (a)-(c): requires the construction of a noise bund to assist in the management of noise impacts to the east of the premises, during operation. Condition 1.2.5 has been incorporated within the Works Approval in accordance with requirements as stated within the WAPC Planning Approval dated 19 July 2017 which restricts the hours of operation for any activity at the premises. Residual Risk Consequence: Slight Likelihood: Possible Residual Risk Rating: Low Additional controls considered necessary within the Works Approval for the construction phase include: 1. Addition of an earth noise bund along the eastern premises boundary as far as is practicable to allow access into and out of the premises for operational needs. Other regulatory controls include the verification of noise emissions from the premises on completion of works and within 6 months of operation (under full operation). Operation Conditions will be placed within the Premises Operation section of the licence in line with regulatory controls determined as part of this risk assessment. Specifically there will be a requirement for the infrastructure in conditions 1.2.1 and 1.2.2, Table 1.2.1 to be maintained to the specification required by condition 1.2.1.	

Vorks	Condition	Justification (including rick description & decision methodology where relevant)	Reference
Approval / Licence Section	number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	documents
	L8996/2016/1	Emission Description Emission: Noise from heavy vehicle movement to and from the premises and transfer of recycled waste materials from the sorting, crushing, processing activities. Impact: Interference with the health, welfare, convenience, comfort or amenity of sensitive residential receptors approximately 877 m south of the premises. Controls: The premises will have low speed signage (< 10 km/h) in place and all waste materials will be unloaded from the lowest possible height. The proponent has made the following commitments in the management of noise emissions: • All site machinery/mobile plant will be compliant and serviced regularly (including exhaust systems) to ensure no additional noise or vibration. • Personnel have access at all times to operational manuals for equipment being utilised and must be familiar with the procedures detailed in the operations manuals. • A "Complaints Register" will be maintained on site to record any complaints received. This register will include the date, nature and resolution actions of any complaints. • If a complaint is received the source of any excessive noise, will be identified and removed from operational work until further notice. The proponent will amend work practices or rescheduled operational hours to reduce or eliminate the risk of future events or re-occurrence. These commitments will be considered in the construction of Licence conditions for the premises. A noise assessment has been undertaken by 'Herring Storer Acoustics' (Appendix E – 'Environmental Noise Assessment' within the application supporting documentation) for compliance against the Environmental Regulations (Noise) Regulations 1997. Modelling was undertaken with consideration of cumulative noise emissions from all activities proposed, and worst case wind conditions, within Lot 2129 on Plan 173137. 'Herring Storer Acoustics' determined that the proposed green waste recycling facility at 119 McLaughlin Road "complies with the requirements of the Environmental Protection	

Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
		(Noise) Regulations 1997 in conjunction with pre-existing demolition recycling and glass recycling operations. Although not a consideration in assessing compliance, it is noted that the most affected noise sensitive receptors are currently exposed to significant traffic noise during weekdays, so any noise emissions from the proposed facility are unlikely to have any impact at the receptors."	
		DWER Environmental Sciences review of the noise assessment undertaken by Herring Storer Acoustics (HSA) determined that:	
		 Operational hours proposed (7am-7pm, Monday-Friday) fall entirely within the daytime period for the assigned levels under the <i>Environmental Protection (Noise) Regulations 1997</i>; Contribution of noise to residences is not considered significant and suggests that the noise risk is low to first row residences located to the south of the premises; Cumulative emissions from the entire Lot 2129 on Plan 173137 to the wetland (east of the premises) shows a significant increase to noise emissions that may exceed allowable levels of up to 10 dB (with tonality). Reduction of noise emissions by approximately 5 dB may be possible with the inclusion of an eastern bund, however this will not ensure compliance as the tonality is a likely noise characteristic for this location. A predicted exceedence of the assigned levels remains likely. See 'Appendix A, point 1' of the Decision Document for additional information on the noise emission risk and assessments. 	
		Consequence: Moderate Likelihood: Possible Risk Rating: Medium	
		Regulatory Controls The Licence may require additional noise mitigation measures to ensure compliance	

Works Approval / Licence	Condition number W = Works Approval	Justification (including risk description & decision methodology where relevant)	Reference documents
section	L= Licence	against the Environmental Regulations (Noise) Regulations 1997 for the proposed operation pending the outcome of the verification study to be undertaken by the proponent. This will include recommendations from DWER Environmental Sciences review of the HSA noise assessment for the premises. The Licence will include: 1. Limitation of operating hours between 7am-5pm Monday-Saturday only; 2. Limitation of equipment in operation at any given time, at the premises; 3. Inclusion of an eastern noise bund; and 4. Recording, reporting and management of noise complaints. Controls have been specified under Conditions 1.2.1, 1.2.2, Table 1.2.1 within the Works Approval, which will influence the development of related Licence conditions, as listed: • 1)(f) & 6)(a) – assists in the reduction of noise generation from the trafficable areas. The proponent has identified these controls within the application supporting documentation, as part of their mitigation measures for the premises. The proposed verification study is to be carried out within 6 months of full operation. The verification study is required to confirm the validity of the noise modelling and assessment undertaken by Herring Storer Acoustics against the Environmental Protection (Noise) Regulations 1997. The proposed condition to be included within the Licence will define the following: The Licence Approval Holder must: (a) undertake a noise verification study within six months after submission of the compliance report for the Works Approval. The noise verification study is to be undertaken during full operation of the premises; and (b) submit a report to the CEO confirming the outcome of the noise verification study which: (i) compares the results of the noise verification study to the initial and cumulative noise modelling assessments submitted for the Work Approval; (ii) states compliance to the Environmental Protection (Noise)	



DECISION TABL	DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents	
		Regulations 1997; and (iii) confirms timeframes for implementation of mitigation measures, where compliance has not been met.		
		Issues of cumulative noise impacts from the premises have been identified as a result of the overall operations within Lot 2129 on Plan 173137, which have caused concerns for potential exceedence of the <i>Environmental Protection (Noise) Regulations 1997</i> . The study is required to verify the noise modelling submitted as part of the application supporting documentation (See 'Appendix A, point 1' of the Decision Document for additional information on the noise emission risk and assessment).		
		Residual Risk Consequence: Minor Likelihood: Possible Residual Risk Rating: Medium		
Nutrient Emission Risk	W1.2.1 W1.2.2	Emission Description Emission: Potential risk of emission of nutrients from stockpiled green waste to land, surface water or groundwater. Impact: Nutrient enrichment of land, surface water or groundwater. Controls: Any discharge from the construction area is to be captured within a concrete or lined (low permeability) stormwater containment vessel. Any sumps will be cleaned out through regular maintenance (weekly), and waste removed to a licenced landfill. Truck wash down areas are constructed of concrete with concrete silt traps to contain all wash down wasters and sediments prior to discharge to the stormwater containment vessel. The entire premises is constructed of a hot mix asphalt hardstand.	Application supporting documentation – Environmental Site Management Plan (DWER Ref. A1164909) and letter dated 30 September 2016, Ref. 0629-LTR-01-MB (DWER Ref. A1172889).	
		No green waste will be accepted or stored at the premises during the construction of the premises therefore no emissions will result to land, surface water or groundwater as a result of construction.		

Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
		Risk Assessment Consequence: Slight Likelihood: Rare Risk Rating: Low	
		Regulatory Controls The Works Approval does not permit the acceptance of any waste type to the premises during construction. Controls have been enseified under Conditions 1.2.1 and 1.2.2. Table 1.2.1 within the	
		 Controls have been specified under Conditions 1.2.1 and 1.2.2, Table 1.2.1 within the Works Approval which will be considered within the related Licence, as listed: 1)(f) & 1)(g): requirement to ensure the entire premises is constructed of a hardstand and adequate management of stormwater flow (graded surface) which may contain contaminants or additional nutrients; 2)(a): requirement to ensure that the receival, sorting and processing area is constructed with a bund to contain all waters generated within the premises boundary that may contain contaminants or additional nutrients. 	
		See 'Appendix A, point 2' within the Decision Document for additional information in relation to the construction commitments for the stormwater containment vessel.	
		Residual risk Consequence: Slight Likelihood: Rare Risk Rating: Low	
	L8996/2016/1	Operation Emission Description Emission: Potential risk of emission of nutrients from stockpiled green waste to land,	



Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
		surface water or groundwater. Impact: Nutrient enrichment of land, surface water or groundwater from stockpiling of green waste (under abnormal operations, i.e. breach in low permeability hardstand areas or intregrity loss of concrete or asphalt surfaces). Controls: The entire premises is constructed of a hot mix asphalt hardstand. Any discharge from the operation area is to be captured within a concrete or lined (low permeability) stormwater containment vessel. Truck wash down areas and sumps are constructed of concrete with concrete silt traps to contain all wash down wasters and sediments prior to discharge to the stormwater containment vessel. Any sumps will be cleaned out through regular maintenance (weekly), and waste removed to a licenced landfill. Processed stockpiles of green waste will not be stored at the premises for any longer than 7 days. The proponent proposes to accept green waste for processing (grinding/ shredding, no	
		bioremediation or composting) on site only, therefore the potential for pollution or environmental harm occurring is considered low from the waste being received to the premises. Risk Assessment Consequence: Slight Likelihood: Unlikely	
		Risk Rating: Low Regulatory Controls The proponent is required to ensure compliance to the requirements of the Environmental Protection (Peel Inlet – Harvey Estuary) Policy 1992. The Peel Harvey EPP sets nutrient water quality objectives for the entire Peel Inlet and Harvey Estuary.	
		The proposed Licence will include limitations on the type of waste to be received and processed at the premises, under the defined Category 62 for the processing of green waste. In addition, consideration of the controls specified under Conditions 1.2.1, 1.2.2,	

DECISION TAE	BLE		
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
		Table 1.2.1 within the Works Approval, will influence the development of the related Licence conditions.	
		The proposed activities to be undertaken at the premises are not considered to result in the addition of nutrient contamination from the premises, as a result of normal operations. No discharges to land, surface water, air or groundwater are proposed as a result of operation of the premises.	
		Residual risk Consequence: Slight Likelihood: Unlikely Risk Rating: Low	
Information	W2.1.1 – W2.1.5	Construction Conditions 2.1.1 to 2.1.3 require the submission of a compliance document on completion of the construction phase and prior to operation of the premises.	DWER records A1594143/ A1615528 & A1618841.
		Conditions 2.1.4 and 2.1.5 within the works approval requires the proponent to confirm that a mass balance calculation has been undertaken that confirms that the stormwater containment vessel has been sufficiently designed in size to contain:	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
		 all potential volumes of wash down and waste water (excluding septage/sewage) generated; and any potential stormwater captured within the premises boundary. 	
	L8996/2016/1	Operation The Licence may require the recording and reporting of all waste received to the premises and its management and disposal, in accordance with relevant DWER guidance.	
		In addition, the Licence will limit the volume and type of waste to be received to the premises on the appropriate design limitations of the treatment area, as defined within	

DECISION TAB	LE		
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
		the works approval.	
Monitoring of inputs and outputs	W1.2.3	Construction Condition 1.2.3 of the works approval does not permit the acceptance of waste therefore during the construction phase of the premises, therefore no monitoring conditions are required on the works approval.	
	L8996/216/1	Operation Licence conditions will be imposed requiring the applicant to record the volume of waste accepted, leaving or rejected from the premises to enable DWER to monitor compliance with waste acceptance and throughput criteria. These conditions are valid and are nesssesary administration and reporting requirements to ensure compliance.	
Information	W2.1.1-W2.1.5	Construction The Works Approval includes reporting conditions for submission of a compliance report at the end of all construction works and prior to operation. The compliance report is to be submitted to DWER for review. On review of the compliance report DWER will determine compliance to the conditions of the works approval, and the ability of the proponent to operate under Licence, in accordance with sections 52 and 57 of the Act. Additional information on the construction of the stormwater containment infrastructure was received on 12 January and 13 February 2018 from the applicant, however review of the stormwater balance calculations by DWER Urban Water Branch determined additional considerations relating to assessment against a wetter period. As such conditions 2.1.4 and 2.1.5 have been included to ensure adequate modelling is undertaken using appropriate runoff coefficients and representative (wetter) conditions to validate that the infrastructure will contain all contaminated stormwater in a 1 in 10, 72 hour ARI event.	
	L8996/2016/1	Operation Licence conditions will be imposed requiring the reporting of non-compliances occurring for the premises within the Annual Audit Compiance Report submission for the annual	

DECISION TABI	DECISION TABLE					
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents			
		Licence conditions will be imposed for the reporting of all monitoring, emergency events (fire), incidents, complaints or related operational processes at the premises within the Annual Environmental Report for submission on an annual basis. These conditions are valid and are necessary administration and reporting requirements to review compliance in accordance with the conditions of the Licence.				
Works Approval and Licence Duration	N/A	The Works Approval duration is proposed for a period of three years (unless planning approval is issued for a lessor period) which is considered sufficient time to complete the minor works required (relocation of mobile plants, construction of fencing and completion of stormwater containment vessel) and for any potential delays in construction. Planning approval consent from Western Australian Planning Commission (WAPC) was given on 19 July 2017 for a period of two years. The Licence duration will be determined in accordance with DWER Guidance statement, Licence duration, August 2016 on: • completion of the works and submission of the compliance report in accordance with the Works Approval.				

5 Advertisement and consultation table

Date	Event	Comments received/Notes	How comments were taken into consideration
24/10/2016	Application advertised in West Australian (or other relevant newspaper)	Nil	N/A
12/09/2016	Application sent to interested parties	Nil	N/A
24/10/2016	City of Kwinana	DWER Letter sent to City of Kwinana for comment sought on application by Western Tree Recyclers for both works approval and licence applications. City of Kwinana, Jessica Birbeck, confirmed via email on 15/11/2016 that an application had been submitted by the applicant and was being processed (DWER Ref. 1325543).	See Appendix B of the Decision Document.
21/03/2017	Applicant submitted Cumulative Noise Assessment (Herring Storer, March 2017. Ref 21536-5-16031) to DWER.	Assessment identified potential for exceedence of <i>Environmental Protection</i> (Noise) Regulations 1998 where tonality characteristics may be an issue from Perth Bin Hire, under worst case scenario. No issues of concern were identified for Western Tree Recyclers operation.	Document submitted to DWER Noise Branch for comment on 28/03/2017. See Appendix A within the Decision Document.
1/05/2017	Applicant submitted Surface Water	The agreement relates to the ongoing	The submission gives confirmation of



Date	Event	Comments received/Notes	How comments were taken into consideration
	Agreement, as signed 19/1/2017 by Capital Recycling and Western Tree Recyclers.	maintenance and management of the spoon drains and evaporation pond (stormwater containment vessel) between the two premises.	control of the stormwater across the two premises proposed for operation (DWER internal record A1422057).
27/7/2017	Confirmation of Planning Approval received via email from Chris Roberts	Planning approval given for a period of two years as of 19 July 2017.	DWER has incorporated the relevant information into the Decision Report (See Appendix B).
24/10/2017	Confirmation of Minister for Lands consent to sub-lease received via email from Ian Watkins.	Subject to registration requirements of the Transfer of Land Act 1893, for lodgement within Landgate.	Incorporated into the Decision Report (DWER internal record A1546983).
31/10/2017	Confirmation of sub-lease agreement received via email from Ian Watkins, as approved between Farfield Holdings Pty Ltd, Craneswest Pty Ltd and Water Corporation.	Sub-lease agreement has been completed in accordance with the <i>Land Administration Act 1997</i> and the <i>Transfer of Land Act 1893</i> .	Incorporated into the Decision report (DWER internal record A1552636).
7/11/2017	Proponent sent a copy of draft instrument	Comments received on draft documents from Ian Watkins, inlucing attachment on Stormwater Design, via email on 12/01/2018: "Further to the issue of the draft Works Approval and our subsequent discussions, I provide the following comments: 1) Stormwater management - Attached please find a letter addressing the theoretical assessment of the likely stormwater generation on site and the proposed infrastructure development. 2) Decision Document Page 6 - First paragraph. The Planning Approval allows work to occur on site until 5.00 pm on Saturdays, can the document be amended to mirror the Planning Approval?	DWER has determined the folloinwg in response to the three points raised: 1) An additional condition will be incorporated within the Works Approval which requires the applicant to review the submitted stormwater design calculations with consideration of a wet period as the submitted calculations have raised a number of queries regarding the validation of the assumptions made and data used from a dry period. 2) The hours of work will be checked and standardised across all documents to reflect the planning approval conditions as submitted and approved and in consideration of the Environmental Protection (Noise) Regulations 2002 and Appendix A – Noise assessment of the

Date	Event	Comments received/Notes	How comments were taken into consideration	
		3) Decision Document Page 12 - Second dot point. "No more than 7 days" storage of processed greenwaste. Can this be pushed out to 30 days to allow for marketing and transport coordination?"	Decision Report. 3) DWER considers that the extension of the holding/ storage time from 7 days to 30 days is reasonable. However, this aspect is for consideration under the Licence and not within the Works Approval and will therefore be risk assessed further for operation under the proposed Licence. Consideration in this regard will relate to fire risk management and water on site for the green waste mulch. The applicant is required to submit further risk assessment clarifying how the extended holding/ storage time will be adequately managed regarding increased fire risk at the premises. No change will be addressed within the Works Approval relating to storage timeframes of green waste, as per point three raised by the applicant.	



6 Risk Assessment

Note: This matrix is taken from the DWER Guidance Statement: Risk Assessments (February 2017)

Table 1: Emissions Risk Matrix

Likelihood Consequence					
	Slight	Minor	Moderate	Major	Severe
Almost Certain	Medium	High	High	Extreme	Extreme
Likely	Medium	Medium	High	High	Extreme
Possible	Low	Medium	Medium	High	Extreme
Unlikely	Low	Medium	Medium	Medium	High
Rare	Low	Low	Medium	Medium	High



Appendix A

1. Noise assessment

The proponent submitted noise modelling and survey (undertaken by Herring Storer Acoustics, July 2016) for the proposed premises which was submitted within the Site Environmental Management Plan (SEMP), Appendix E, which stated the following:

"Noise and vibrations will be generated by the mobile and fixed plant (grinding and shredding) located on site as well as by truck movements in and out of the facility. However, given the facility will only operate Monday to Saturday from 7:00am to 7:00pm, in a light industrial area, noise and vibration are believed to be of a low order" (section 6.6.1, pg. 20).

The proponent determined that all equipment that is to be used at the premises will comply with the *Environmental Protection (Noise) Regulations 1997* with all equipment serviced regularly to ensure "no additional noise or vibration" occurs.

DWER Environmental Sciences review

DWER Environmental Sciences reviewed the submitted Noise modelling and assessment titled: "MDW Environmental Services Environmental Noise Assessment, 119 McLaughlin Road Recycling Facility, (Demolition Recycling & Sub-Lease Glass Recycling) Addition of Western Tree Recyclers July 2016, Our Reference: 20676-1-16031" (the Acoustic Report) prepared by Herring Storer Acoustics (HSA), and concluded that:

- "Western Tree Recyclers operations have proposed to operate for 7am to 7pm Monday to Saturday, and fall entirely within the daytime period for the assigned levels under the Environmental Protection (Noise) Regulations 1997 (Noise Regulations). For this period, the advice provided in relation to the Predicted Noise level after 7am for the proposals for Capital Recycling and Perth Bin Hire are relevant.
- The additional Western Tree Recyclers operations have been considered in relation to the noise impacts on residences to the south and the wetland reserve to the east, as these locations would appear to be the most sensitive to the changes."

Assessment of noise impacts to:

Residences

"Typically, the additional operations are considered to contribute approximately 3 dB to the emissions received at the southern residences, however the modelling suggests the extension of the 5m bund along the southern site boundary to screen the new operations reduces this contribution. The noise contours presented in Appendix B [of the Acoustics Report] would suggest the new operations add only 1 dB approximately, while Table 4.1 indicates no change for R3 and +1 dB for R4. The contribution is not significant, although Scenarios 1 and 2 referred to in the previous Postans advice [related to Perth Bin Hire and Capital Recycling operating from the Lot 2129 on Plan 173137] might take this up to 2 dB more than was modelled without Western Tree Recyclers.

This suggests the [noise] emission could exceed the assigned level by up to 1 dB for the first row residences if the emissions are tonal, although it is considered that the risk is low.

In relation to the second row houses, HSA have modelled the screening provided by buildings in the first row, but there is not sufficient resolution in the noise contour map to determine the level and no tabulated noise levels have been provided for these receivers. A 2 dB increase above the levels previously predicted suggest that an exceedence would still be dependent upon the emissions being



tonal; the first row screening will reduce the levels; and tones during the daytime may be masked by traffic noise."

It is considered that "the risk of exceeding the assigned levels at the second row residences remains low."

Wetland to the East

"The revised [cumulative] modelling shows an increase of 5 dB above that modelled for the [Capital Recycling and Perth Bin Hire premises] processing previously, which is considered significant. The predicted level at the boundary to the reserve has increased from 60 dB to 65 dB (5 dB above the assigned level of 60 dB). With consideration of tonality (+5dB adjustment) that exceedance may be up to 10dB.

The noise contours show the presence of a low barrier on the eastern boundary of the site (which is not mentioned in the acoustic report), without which the received levels may be 2 – 3 dB higher. The barrier is probably a colour bond fence or alike, but is not as substantial as the 5m bund along the southern site boundary, which achieves almost 5 dB greater reduction as shown by the diminished noise contours south compared to those to the east in the second figure in Appendix B [of the Acoustics Report].

Reducing the noise levels to the east by 5 dB would see the emissions predicted to meet the assigned level at the reserve boundary (without consideration of tonality) and this may be a relevant consideration for regulatory controls. The modelling would suggest that this may be achieved by extending the proposed 5m high bund along the eastern boundary in addition to the southern boundary, at least to the extent as is practicable while maintaining site access. Such a measure will not ensure compliance as the tonality is a likely noise characteristic for this location, so a predicted exceedence of the assigned levels remains likely."

A revised noise assessment was submitted to DWER for review (*Cumulative Noise Assessment, Herring Storer Acoustics, Ref. 21536-5-16031, March 2017*) on 21 March 2017, which considered the cumulative noise emissions from the operation of the entire premises (Lot 2129 on Plan 173137) and was modelled using the following parameters for Western Tree Recyclers:

- An eastern bund of at least 7.5 m high; and
- A southern bund of at least 6 m high.

The modelling was determined against worst case wind conditions using sound power levels of normally operating equipment measured on site, with proposed materials and product stockpiles. The assessment identified Perth Bin Hire as potentially having noise issues. No determination or outcome was defined against Western Tree Recyclers that showed concerns against the *Environmental Protection (Noise) Regulations 1998* within the assessment.

The assessment was submitted to DWER Noise Branch for review on 28/3/2017. Comment was received back on 31 May 2017 as follows, in the context of all three operators (cumulative noise assessment):

"While the Western Tree Recycler operations include the highest sound power source, the noisiest equipment will be operating behind, and close to, a 7.5 m barrier, therefore providing substantial noise mitigation at the source for some directions.

No background level data has been presented to justify the possibility of tonality not being measurable at the residential receivers due to existing background noise, however, the noise levels



will comply at the residents to the south and to the north of the site regardless of the existence of tonality in the emissions.

The parks and recreation (Bush Forever) land to the east would be considered noise sensitive (area other than a highly sensitive area) under the Environmental Protection (Noise) Regulations 1997 (Noise Regulations). This requires a L_{A10} assigned level of 60 dB to be met, or a level of 55 dB if the noise source is tonal. The cumulative noise scenario incorporating the 5 m high barrier to the east of the Perth Bin Hire operations indicates possible marginal (+1 dB) exceedance of the assigned levels at the Bush Forever site boundary, if the noise source is tonal. Should the source be tonal, the model incorporating the 8 m high barrier to the east of the Perth Bin Hire operations indicates likely compliance. Given the amount of land on which the Perth Bin Hire operations are located the footprint required for a 8 m high earth bund seems to be able to be accommodated, if required.

The Department of Agriculture and Food agricultural research station land to the south would be considered noise sensitive (area other than a highly sensitive area) under the Noise Regulations, with an L_{A10} assigned level of 60 dB. The modelling indicates general compliance for this receiver.

The land on which the three operations are located is a defined area situated inside WaterCorp land. The WaterCorp land is unzoned but controlled via a management order by WaterCorp. The balance of the WaterCorp land is therefore assumed to be industrial and a separate premises, with an L_{A10} assigned level of 65 dB. Both cumulative noise scenarios indicate compliance at the current WaterCorp operations to the north but indicate some small areas of possible non-compliance at the boundary to the west, south and east. This may not be an issue if WaterCorp intend for the abutting WaterCorp land to act as a buffer and not to be occupied.

Alcoa to the west however is a separate premises with a separate occupier. Approximately half of the Alco premises lies within the Kwinana Industrial Area (KIA), with the half to the east, near to the project site, being outside the KIA. Industrial premises within the KIA have a L_{A10} assigned level of 75 dB while industrial premises outside the KIA have a L_{A10} assigned level of 65 dB. Both cumulative noise scenarios indicate levels marginally above 65 dB will be received near the boundary on the Alcoa premises. Given that a substantial portion of the Alcoa premises is allowed to receive levels 10 dB higher, this may not be an issue."

In conclusion, Western Tree Recyclers are not considered significant contributors to the noise emissions from their proposed activities. However, the assessment of the entire premises noise emissions does identify potential marginal cumulative noise risk to the east, as a result of potential (but not confirmed) tonality from operational activities. The overall risk criteria rating for cumulative noise risk, as a result of this assessment, is considered *medium*.

2. <u>Stormwater containment vessel</u>

The initial application submitted by the proponent identified the use of 'Capital Recycling' premises stormwater containment vessel which is not within the proposed premises boundary for 'Western Tree Recyclers'. This approach was not approved due to the inability to manage the construction and operation of the stormwater containment vessel.

The proponent (letter dated 30 September 2016, Ref. 0629-LTR-01-MB) committed to the following in relation to the construction of a stormwater containment vessel within the premises boundary:

• "Surface water management and collection of surface water will be redesigned so that it is retained within the premise boundary of Western Tree Recyclers. This will require a recalculation of the water balance calculation of the site."

- "Western Tree Recyclers are committed to controlling all surface water runoff on their premises and will provide the design plan and calculation once the licence for Capital Recycling is resolved as this directly links to the design plans."
- "...all surface water will be collected in a dam on within the premise boundary. The design will allow sufficient capacity to collect storm water and surface run off for dust suppression needs. If dust suppression water is not sufficient then alternate solutions may be sort such as application for a groundwater abstraction bore on Site. This will be clarified in the surface water design plans once the agreement between Capital and Western Tree Recyclers has been confirmed pending Capitals Licence."



Appendix B

Excerpt: Western Australian Planning Commission (WAPC) – Planning Approval (dated 19/7/2017)

"CONDITIONS

- 1. This approval is for a period of two years from the date of this approval. Subsequent to that date the facility is to cease unless a fresh approval is granted by the Western Australian Planning Commission.
- 2. The hours of operation shall be between the hours of 7am and 5pm Monday to Saturday and not at all on Sundays or Public Holidays.
- 3. The facility is to be implemented and operated in accordance with the Environmental Site Management Plan, 119 McLaughlan Road, Postans, dated August 2016 and date stamped 24 January 2017, prepared by MDW Environmental Services; the Site Layout Plan dated 18 May 2017; and the Cumulative Environmental Noise Assessment, dated March 2017, prepared by Herring Storer Acoustics, to the satisfaction of the Western Australian Planning Commission on the advice of the City of Kwinana.
- 4. The facility is to be implemented and operated in accordance with the Bushfire Management Plan, Vegetation Processing & Recycling, No. 119, Lot 2129, McLaughlan Road, Postans, prepared by WABAL Bushfire Assessment Logic, dated 22 June 2017(Rev. 2, 14-07-17)
- 5. The southern boundary of the facility site is to be screened with vegetation to the satisfaction of the Western Australian Planning Commission on the advice of the City of Kwinana.
- 6. All stormwater drainage shall be contained within the facility site.
- 7. All vehicle parking is to be accommodated within the facility site.

If the development the subject of this approval is not substantially commenced within a period of two years from the date of this letter, the approval shall lapse and be of no further effect. Where an approval has so lapsed, no development shall be carried out without the further approval of the responsible authority having first been sought and obtained."