Government of Western Australia
Department of Water and Environmental Regulation

Decision Report

Application for Works Approval

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

Works Approval Number	W3097/2025/1
Applicant	Auswaste Recycling (WA) Pty Ltd
ACN	675 254 083
File number	APP-0030048
Premises	Auswaste Paper and Cardboard Recycling Facility Street address Legal description Lot 23 on Deposited Plan 424921 Certificate of Title Volume 4036 Folio 986 As defined by the coordinates in Schedule 2 of the works approval
Date of report	27/01/2026
Decision	Works approval granted

Michael Greenslade

Digitally signed by Michael Greenslade
Date: 2026.01.27 08:44:30 +08'00'

A/SENIOR MANAGER, HEAVY INDUSTRIES
an officer delegated under section 20 of the *Environmental Protection Act 1986* (WA)

Table of Contents

1. Decision summary

This decision report documents the assessment of potential risks to the environment and public health from emissions and discharges during the construction and operation of the premises. As a result of this assessment, works approval W3097 has been granted.

2. Scope of assessment

2.1 Regulatory framework

In completing the assessment documented in this decision report, the Department of Water and Environmental Regulation (the department; DWER) has considered and given due regard to its regulatory framework and relevant policy documents which are available at https://dwer.wa.gov.au/regulatory-documents.

2.2 Application summary

On 7 July 2025, Auswaste Recycling (WA) Pty Ltd (the applicant) submitted an application for a works approval to the department under section 54 of the *Environmental Protection Act 1986* (EP Act).

The application is to undertake construction works relating to a dry pulp wastepaper and cardboard recycling paperboard production facility at the premises. The premises is located within the City of Rockingham approximately 800 metres northeast from the residential area of Hillman.

The premises relates to the category and assessed design capacity under Schedule 1 of the *Environmental Protection Regulations 1987* (EP Regulations) which are defined in works approval W3097/2025/1. The infrastructure and equipment relating to the premises category and any associated activities which the department has considered in line with *Guideline: Risk Assessments* (DWER 2020) are outlined in works approval W3097/2025/1.

2.3 Premises overview

The proposed facility consists of a paper and cardboard processing line with a design capacity of 168,000 tonnes per annum and expected annual production of 80,000 tonnes. The facility will process commercial and industrial cardboard waste and bales of clean cardboard produced by Material Recovery Facilities (MRFs).

The proposed facility uses a dry pulping paper production process. This type of paper production is novel to Western Australia and differs from traditional pulp, paper or paperboard manufacturing operations which use water instead of mechanical means to separate and reduce the size of feedstock fibres. This approach is considered preferrable given its reduced water consumption and the lack of wastewater as compared to traditional pulp manufacturing processes.

2.3.1 Manufacturing Process

Activities at the premises will involve the sorting of feedstock involving the removal of any contaminants present in the feedstock (minor quantities of residual wastes from the material recovery process), processing feedstock into smaller fibres, the baling of these smaller fibres into recycled paperboard and the export of this paperboard from the premises. Waste present as contaminants in feedstock will be baled and stored at the premises prior to disposal at a licenced facility.

The facility infrastructure is separated into 3 distinct pieces, a sorting line, dry pulping line and a waste baler. This infrastructure is proposed to be contained within a fully enclosed processing shed, equipped with fast acting doors.

The sorting line involves the manual and automatic sorting of contaminants from feedstock prior to input into the primary processing line. This portion of the process is expected to produce noise emissions and most of the waste generated by the facility.

The dry pulping line has feedstock pass through two sizes of shredders and then a hammer mill. This produces fibres of a size that can be baled into paperboard. The process of reducing fibre size is expected to produce large quantities of dust. Water introduced into the process as mist to control dust is evaporated prior to baling within a dryer. No wastewater emissions are expected to be produced from the facility.

The waste baler will compact metal and plastic contaminants removed from the feedstock. The waste baler is expected to solely produce noise emissions.

2.3.2 Feedstock and waste acceptance

The facility will process commercial and industrial carboard, as well as bales of clean cardboard produced by Material Recovery Facilities (MRFs) in Western Australia. All loads of feedstock delivered to the facility will undergo visual inspection to identify contamination. Should largescale feedstock contamination be identified the load will be rejected. Accepted feedstock will be stored within the processing shed.

The accepted cardboard and paper feedstock will contain small quantities of residual waste. The waste will be separated through automatic screening (airflow and magnetic) and manual sorting. This residual waste will be further classified and baled (plastic and metal) or stored within 660L and 240L mobile garbage bins located within the processing shed prior to removal from the premises. An outline of waste streams and estimated amount is outlined below within Table 1.

Table 1: Expected contaminant waste production

Waste stream	Estimated monthly amount (tonnes)
Plastic – containers, film wrap and strapping	1
Metal – baling wire and aluminium cans	2
Glass – bottles and jars	0.05
Residual waste – food scraps, textiles and general waste	<0.05

2.3.3 Feedstock and waste storage

The premises will possess the capacity to store the equivalent to one day's processing volume of 267 tonnes of cardboard and paper feedstock. However, during normal operations the actual volume of feedstock stored at the premises is not expected to exceed 75 tonnes. The product storage area has an anticipated maximum storage volume of 300 tonnes of baled product. It is expected that the actual volume of product stored will not exceed 150 tonnes at any one time.

The waste accepted to the facility will be stored on-site within storage areas outlined in Schedule 1 of the works approval. Waste is to be removed weekly, and it is expected that only small volumes of waste will be present within the facility at any given time.

2.3.4 Fire and firewater management

The premises will process large volumes of combustible material in the form of process feedstock and paperboard product; however, the applicant proposes that relatively minor quantities of paper and cardboard feedstock and recycled fibre sheets will be stored on the premises at any one time (as detailed above in section 2.3.3). The facility will be designed and constructed as a National Construction Code class 8 building with the facility being fully sprinkled with external hydrants and dual perimeter access. The applicant has advised the design of the facility also considers requirements within DFES *Guidance Note: GN04 Fire Prevention and Management in a Recycling Facility*. A Fire Prevention and Management Plan (FPMP) will be produced prior to the facility beginning operation.

2.3.5 Potentially contaminated stormwater

As the storage and processing of recyclable wastes and feedstock occur within an enclosed primary processing shed, the applicant considers that there is minimal risk of stormwater contamination. The stormwater infrastructure is designed such that grading and channelling for the concrete hardstand surrounding the building do not allow for stormwater to ingress into the primary processing shed. In a similar manner, this external grading and channelling is designed to prevent stormwater egress from the premises. Stormwater is intended to drain via onsite drainage sumps/soak wells with interceptor traps.

2.3.6 Operational dust controls

Areas external to the processing shed within premises are bitumen/concrete sealed, and vehicle movements are not expected generate dust emissions. The primary dust emitting processes (from shredders and hammer mills) are within the dry pulping line. The dry pulping process is designed to minimise fugitive dust emissions through integrated dust controls. The dry pulp process lines are equipped with covered conveyors to prevent dust escaping during transfer between shredders, hammer mill and baler. The applicant has committed to weekly maintenance of the dust abatement equipment to ensure effectiveness.

The secondary shredders and hammer mill units are also equipped with a built-in water misting function for dust suppression. The dry pulping line possesses two separate blower and dust collection units. The first of these units is a pulse dust collector and associated blower located after the secondary shredder connected to the primary shredder through piping. The second unit consists of two cyclone dust collectors and associated blower following the hammer mills. The dust collected within the cyclone dust collectors is reinjected into the process within the hammer mills. The layout of dust abatement infrastructure present within the dry pulping line is outlined in Figure 1 below. There are no direct emissions outside of the enclosed shed.

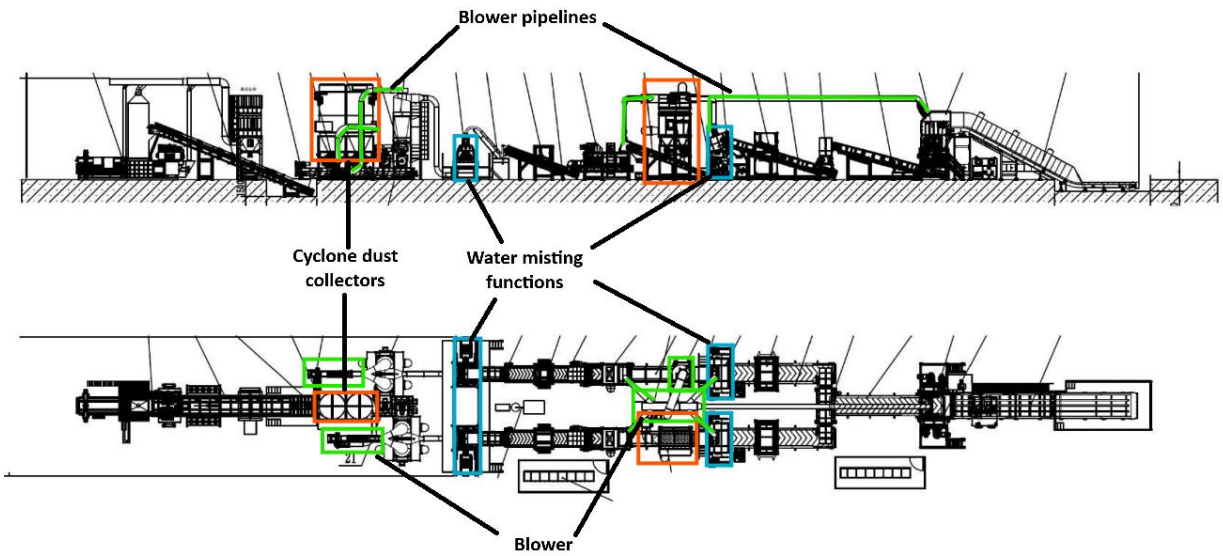

Figure 1: Dry pulping line dust abatement infrastructure

2.4 Associated Approvals

2.4.1 Native vegetation clearing

The facility is located within areas previously cleared and no further clearing of native vegetation is proposed.

2.4.2 LGA development approval

The proposed development gained Development Approval from the City of Rockingham on 6 January 2026.

2.4.3 Department of Fire and Emergency Services

The Department of Fire and Emergency Services (DFES) - Land Use Planning, Built Environment and Special Operations (HAZMAT) branches were contacted for comment relating to the application. DFES Land Use Planning advised the department that a Bushfire Management plan was not required as the proposed development was in an area of BAL-29 or lower and as such State Planning Policy (SPP) 3.7 was not applicable. No comment was received from DFES HAZMAT branch.

3. Risk assessment

The department assesses the risks of emissions from prescribed premises and identifies the potential source, pathway and impact to receptors in accordance with the *Guideline: Risk Assessments* (DWER 2020). To establish a risk event there must be an emission, a receptor which may be exposed to that emission through an identified actual or likely pathway, and a potential adverse effect to the receptor from exposure to that emission.

3.1 Source-pathways and receptors

3.1.1 Emissions and controls

The key emissions and associated actual or likely pathway during premises construction and operation which have been considered in this decision report are detailed in Table 2 below. Table 2 also details the control measures the applicant has proposed to assist in controlling these emissions, where necessary.

Table 2: Proposed applicant controls

Emission	Sources	Potential pathways	Proposed controls
Construction			
Dust	Crushing material, vehicle movements, lift-off from stockpiles and/or stored products, earthworks etc.	Air / windborne pathway	Dust generating areas will be watered to limit emissions. Where practicable, earth moving and/or excavation works are to be limited during high wind events.
Noise	Crushing and screening of material	Air / windborne pathway	Works to occur between the hours of 0700 and 2200 Monday to Friday and 0700 to 2200 on Saturday. Plant and equipment to be maintained in accordance with manufacturer requirements. Internal combustion engines are to be fitted with suitable mufflers.
Wastewater / sediment	Earthworks, excavation works and stockpiles	Overland flow	Sediment control measure to be installed along identified natural and constructed drainage lines prior to construction commencement. Stockpiles to be located at least 20 metres from drainage lines, natural waterways and waterbodies Stockpiles and batters that remain exposed for longer than 30 days shall be stabilised.

Emission	Sources	Potential pathways	Proposed controls
Operation			
Dust	Dry pulping mill and material handling activities	Air / windborne pathway	Operations Environmental Management Plan to be developed. Enclosed building and conveyors. Dust collection equipment – air compressor, blower, rotary valve, cyclone silos x 2, double cyclone, and pulse dust collector. Paper fibre dust is reincorporated into the recycled paper fibre sheet product.
Noise			Paper shredding and baling machinery are located entirely within a fully enclosed building. Handling vehicles (Telehandler and Medium wheel loader) are fitted with mufflers. Facility will operate only between the hours of 0700 and 2200 hours Monday to Saturday excluding public holidays.
Odour	Decomposition of stored feedstock or sorted waste	Air / windborne pathway	Feedstock and waste will be stored within the enclosed processing shed. Residual waste will be removed weekly.
Sediment contaminated stormwater/ leachate	Storage of premises input material and waste	Overland flow and subsurface seepage	The entire processing facility will be constructed and operated on a concrete/bitumen pad. Drainage infrastructure will be constructed including interceptor traps and soak wells. Feedstock, product and waste will be stored within enclosed processing shed.
Contaminated firewater	Extinguishing of fires within the facility		The entire processing facility will be constructed and operated on a concrete/bitumen pad.
Fire- smoke particulates and potentially noxious gases from fire	Fire emanating from: unloading and storage of wastepaper and cardboard operation of equipment and machinery to process wastepaper and cardboard vehicle and equipment movements	Air / windborne pathway	The waste facility will be designed and constructed as a NCC Class 8 building. A Fire Prevention and Management Plan for the facility will be developed in consultation with DFES. The appointed D&C contractor has assumed responsibility for preparing the plan. Waste will be inspected prior to receival. A sorting line is incorporated within the process line to remove any contamination. Staff will be appropriately trained on operating the processing equipment and action in case of fire. Regular fire drills will be conducted. Equipment will be regularly cleaned and maintained. Appropriate fire-fighting equipment and infrastructure established in accordance with the Fire Prevention and Management Plan. Limited quantities of wastepaper, cardboard and recycled paper fibre sheets will be stored on site in accordance with the Fire Prevention and Management Plan.

3.1.2 Receptors

In accordance with the *Guideline: Risk Assessment* (DWER 2020), the Delegated Officer has excluded the applicant's employees, visitors, and contractors from its assessment. Protection of these parties often involves different exposure risks and prevention strategies and is provided for under other state legislation.

Table 3 and Figure 2 below provides a summary of potential human and environmental receptors that may be impacted as a result of activities upon or emission and discharges from the prescribed premises *(Guideline: Environmental Siting* (DWER 2020)).

Table 3: Sensitive human and environmental receptors and distance from prescribed activity

Human receptors	**Distance from prescribed activity**
R1: Rockingham Holiday Village	500 m from southeastern corner of the premises
R2: Closest residential receptor	800 m from southwestern edge of the premises
Light Industry	Directly adjacent to the premises
Environmental receptors	**Distance from prescribed activity**
Groundwater	2.3 meters below ground level
TECs/PECs	Priority 3 – Tuart (*Eucalyptus gomphocephala*) woodlands and forests of the swan coastal Plain – approximately 100 m west of the premises boundary. Woodlands over Sedgelands in Holocene dune swales of the southern Swan Coastal Plain – approximately 300 m west of the premises boundary
Threatened and priority fauna	There are six threatened and priority fauna known to occur within 1km of the premises boundary, including • One occurrence of Carnaby's cockatoo and endangered bird species; • One occurrence of Peregrine falcon a specially protected bird species; and • 10 occurrences of Quenda, southwestern brown bandicoot, a Priority 4 mammal species.
Geomorphic wetlands	Sumpland – located approximately 250m northwest of the premises boundary
Rights in Water Irrigation Act Groundwater area	Premises located within Cockburn Groundwater Area

Figure 2: Recycling facility location and nearest sensitive human receptors

Map sourced from Herring Storer Acoustics Auswaste Cardboard Recycling Plant 14 Exchange place, East Rockingham acoustics assessment

3.2 Noise

3.2.1 Construction noise

Noise and vibration emissions during construction of the facility are expected during a range of civil, structural and mechanical installation activities. Noise emissions during the construction activities are required to comply with the *Environmental (Noise) Regulations 1997*.

3.2.2 Operational acoustics assessment

In accordance with published departmental guidelines, the applicant commissioned consultant Herring Storer Acoustic to undertake an assessment of noise emissions associated with the premises. The assessment included:

- identification of individual operations and associated noise levels;
- measurement of existing background noise levels;
- an assessment of predicted noise levels at nearby sensitive receptors for compliance with the Environmental Protection (Noise) Regulations 1997; and
- comments on potential noise amelioration options if exceedances at receptors are determined.

The assessment considered noise emissions associated with the primary activities within the premises as well as those associated with noise emissions from vehicles operating within the premises (medium wheel loader, telehandler) and transport vehicles. The results of the assessment are outlined below

within Table 4. Noise contours for facility operations (excluding vehicle movement) are displayed in Figure 3.

Table 4: Herring Storer Acoustics Assessment noise level assessment results

Scenario	Noise level dB(A)		
	R1	R2	Exceedance (L_{A10})
Main building operations	28	23	Complies
Handling vehicles outside	40	15	Complies
Truck movements	34	30	Complies

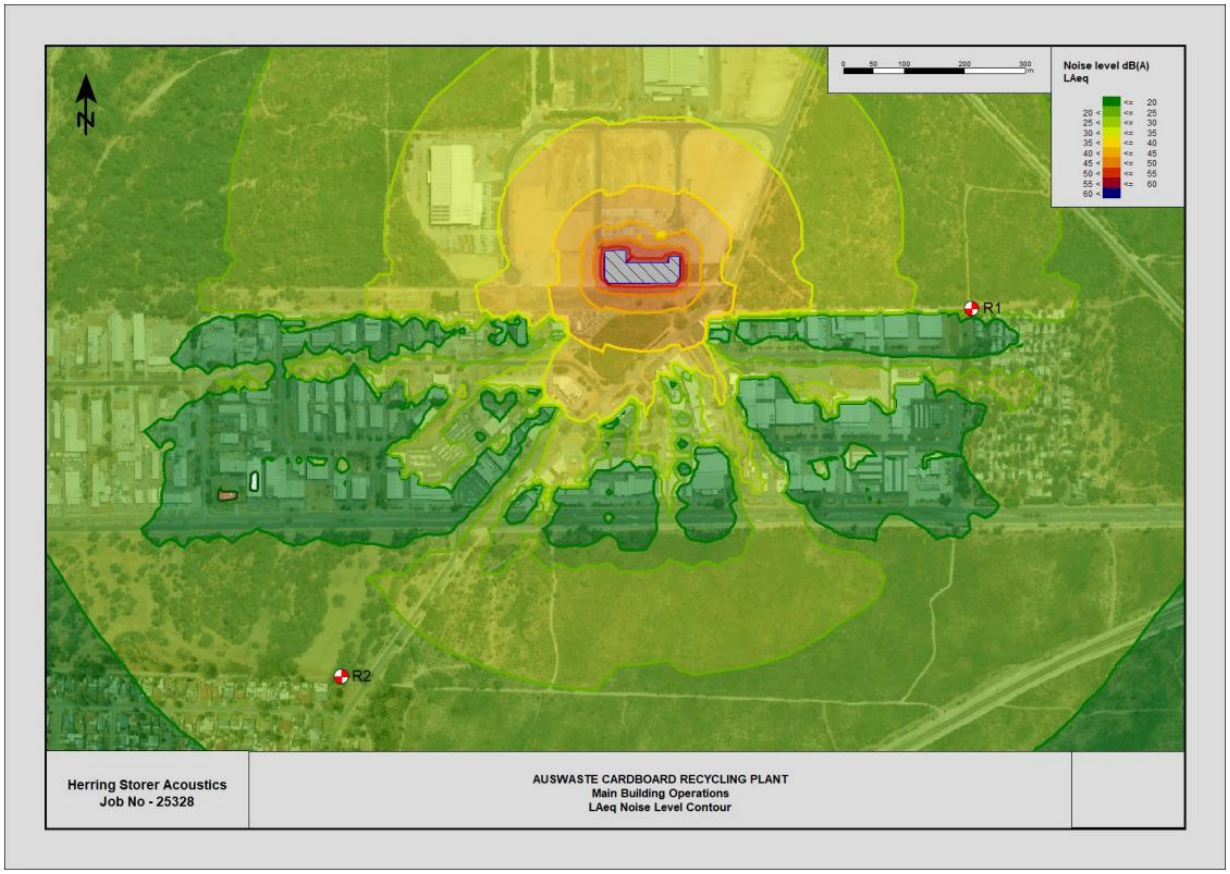

Figure 3: Herring Storer acoustics report facility operational noise contours

3.2.3 Environmental Noise Branch Review

As part of the assessment of the application, technical advice was obtained from the department's Environmental Noise Branch (ENB). The technical review concluded that the results of the acoustic assessment undertaken were reliable and considered to be acceptable.

Given the facility operates between 7:00am and 22:00pm Monday to Saturday excluding public holidays, expected noise will fall at least 5 dB(A) below the LA_{10} assigned noise level of 45 at all neighbouring residences. The review determined that noise emissions from the proposed operations will likely comply with the assigned noise levels, and not 'significantly contribute' to a level of noise which exceeds the assigned levels at neighbouring noise sensitive premises.

3.3 Risk ratings

Risk ratings have been assessed in accordance with the *Guideline: Risk Assessments* (DWER 2020) for each identified emission source and takes into account potential source-pathway and receptor linkages as identified in Section 3.1. Where linkages are in-complete they have not been considered further in the risk assessment.

Where the applicant has proposed mitigation measures/controls (as detailed in Section 3.1), these have been considered when determining the final risk rating. Where the delegated officer considers the applicant's proposed controls to be critical to maintaining an acceptable level of risk, these will be incorporated into the works approval as regulatory controls.

Additional regulatory controls may be imposed where the applicant's controls are not deemed sufficient. Where this is the case the need for additional controls will be documented and justified in Table 5.

Works approval W3097/2025/1 that accompanies this decision report authorises construction and time-limited operations. The conditions in the issued works approval, as outlined in Table 5 have been determined in accordance with *Guidance Statement: Setting Conditions* (DER 2015).

A licence is required following the time-limited operational phase authorised under the works approval to authorise emissions associated with the ongoing operation of the premises i.e. paperboard manufacture. A risk assessment for the operational phase has been included in this decision report, however licence conditions will not be finalised until the department assesses the licence application.

Table 5: Risk assessment of potential emissions and discharges from the premises during construction and operation

Risk events					Risk rating [1] C = consequence L = likelihood	Applicant controls sufficient?	Conditions [2] of works approval	Justification for additional regulatory controls / DWER comments
Sources / activities	**Potential emission**	**Potential pathways and impact**	**Receptors**	**Applicant controls**				
Construction								
Crushing of material, vehicle movements, lift-off from stockpiles and/or stored products, earthworks etc.	Dust	Air / windborne pathway causing impacts to health and amenity	TEC 100m east Residences 500m southeast 800m southwest Adjacent industrial premises	Refer to Section 3.1.1	C = Slight L = Possible **Low Risk**	Y	N/A	The delegated officer considers the limited timeframe associated with construction activities and the controls proposed by the applicant are sufficient to manage risks posed.
	Noise			Refer to Section 3.1.1	C = Slight L = Possible **Low Risk**	Y	N/A	The delegated officer considers the controls proposed by the applicant are sufficient to manage the risk posed. The delegated officer also notes that construction noise emissions are required to comply with the *Environmental Protection (Noise) Regulations 1997.*
Operation (including time-limited-operations operations)								
Operation of dry pulping facility including handling vehicle and delivery trucks.	Dust	Air / windborne pathway causing impacts to health and amenity	Residences 500m southeast 800m southwest Adjacent industrial premises	Refer to Section 3.1.1	C = Minor L = Possible **Medium Risk**	Y	1 & 8	The delegated officer considers that the design of the proposed production facility (enclosed processing shed) alongside integrated dust controls and the distance to receptors are sufficient to manage the risk of dust emissions to sensitive receptors. Applicant proposed controls have been included as conditions on the works approval.
	Noise	Air / windborne pathway causing impacts to health and amenity		Refer to Section 3.1.1	C = Slight L = Unlikely **Low Risk**	Y	1 & 8	Based on the outcome of the noise modelling discussed within Section 3.2, the delegated officer considers that the operation of the plant will likely comply with the *Environmental Protection (Noise) Regulations 1997.* Applicant proposed controls have been included as conditions on the works approval.

Risk events					Risk rating [1] C = consequence L = likelihood	Applicant controls sufficient?	Conditions [2] of works approval	Justification for additional regulatory controls / DWER comments
Sources / activities	**Potential emission**	**Potential pathways and impact**	**Receptors**	**Applicant controls**				
Decomposition of stored feedstock and sorted waste	Odour	Air / windborne pathway causing impacts to health and amenity	Residences 500m southeast 800m southwest Adjacent industrial premises	Refer to Section 3.1.1	C = Slight L = Unlikely **Low Risk**	Y	8 & 9	The delegated officer considers the risk posed by odour emissions as low, noting that only minor quantities of residual wastes are likely to be stored on the premises at any one time and process feedstock to be stored for short timeframes. The proposed controls to manage the storage and removal of this material is considered suitable to mitigate odour emissions. The controls proposed by the applicant have been included as conditions on the works approval.
Storage of feedstock and sorted waste on premises	Leachate	Overland flow and subsurface seepage	Surrounding soil and surface water Geomorphic wetland sumpland 250m northwest Groundwater 2.3 mbgl	Refer to Section 3.1.1	C = Minor L = Rare **Low Risk**	Y	1, 8 & 13	The delegated officer considers that risk associated with leachate emissions from stored or processed feedstock and residual wastes are not significant, considering the controls proposed by the applicant in managing these wastes, the low storage volumes and the dry nature of the material. As feedstocks and residual wastes are proposed to be stored within the enclosed shed, they are not expected to be subject to rainfall or stormwater. Applicant proposed controls are conditioned within the works approval.
	Potentially contaminated stormwater				C = Minor L = Unlikely **Medium Risk**	Y	1 & 8	The delegated officer considers the risks associated with potentially stormwater will be adequately managed to prevent adverse impacts to the surrounding land and surface water through the applicants proposed storage procedures and stormwater containment infrastructure. The applicant's proposed controls are included as conditions on the works approval.
Fire	Potentially contaminated fire wash water			Refer to Section 3.1.1	C = Moderate L = Unlikely **Medium Risk**	N	**4 & 5** 1, 6, 11 & 12	The delegated officer considers potentially contaminated fire water runoff to present a medium level risk. While the event is considered unlikely with the controls proposed (internal shed storage, low volumes of feedstock and waste stored,

Risk events					Risk rating [1] C = consequence L = likelihood	Applicant controls sufficient?	Conditions [2] of works approval	Justification for additional regulatory controls / DWER comments
Sources / activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls				
								level of contaminants likely to be present in the waste), the consequence of the event are considered to be moderate, acknowledging the proximity of relevant environmental receptors. To manage this risk, the delegated officer has conditioned requirements for the works approval holder to construct infrastructure capable of containing fire-fighting water and implement a fire prevention and management plan.

Note 1: Consequence ratings, likelihood ratings and risk descriptions are detailed in the *Guideline: Risk Assessments* (DWER 2020).

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

4. Consultation

Table 6 provides a summary of the consultation undertaken by the department.

Table 6: Consultation

Consultation method	Comments received	Department response
Application advertised on the department's website on 23 October 2025	Comments received on 10/11/2025, summarised within Appendix 1	Refer to Appendix 1: Summary of stakeholder comments on the application
City of Rockingham advised of proposal on 23 October 2025	On 3 November 2025 the city informed the department that a development application for the facility was currently under assessment.	Noted, the department has since received a copy of the final planning approval from the applicant.
Department of Fire and Emergency Services (DFES) advised of proposal on 23 October 2025	On 3 November 2025 DFES Land Use Planning informed the department that DFES provided comment to the City of Rockingham regarding compliance with State Planning Policy 3.7 Bushfire (SPP 3.7) on 28 October 2025. A Bushfire Management Plan was not provided as it was determined the proposed development was in an area of BAL-29 or lower. SPP 3.7 is only applicable to commercial and industrial proposals connected to reticulated water, in bushfire prone areas, where the building will be located in BAL-40/FZ. On 14 November, DFES Built Environment Branch advised the department that advice had been provided regarding the submission process as required by Regulation 18B of the *Building Regulations 2012* (as amended), in that DFES BEB will provide advice under this process as the Building Application Process is followed. To date, no formal submission has been received and no advice given.	Noted, the department expects the applicant to obtain all relevant approval prior to commencement of construction/operations.
Applicant was provided with draft documents on 10 January 2026	Refer to Appendix 2	Refer to Appendix 2

5. Decision

The delegated officer has determined the proposal to construct and operate for a limited time the paper and cardboard recycling facility does not pose an unacceptable risk to public health or the environment. The determination is based on the following:

- The submitted acoustics assessment and operation hours commitments ensuring compliance with the *Noise Regulations 1997*.
- Dust control measures integrated into the dry pulping process line alongside the process line being present within a fully enclosed shed.
- Additional controls conditioned by the department relating to internal firewater controls. The department has conditioned the primary processing shed to be constructed with infrastructure designed to contain firewater. This infrastructure will

prevent the uncontrolled release of firewater within an emergency and allow for the collection and proper disposal of the firewater. The development and implementation of a Fire Prevention and Management Plan is also considered necessary to manage the risk associated with the proposed activity.

Conditions have been included on the works approval commensurate with the assessed risk, consistent with the applicant's proposed controls, and in accordance with *Guidance Statement: Setting conditions.*

6. Conclusion

Based on the assessment in this decision report, the delegated officer has determined that a works approval will be granted, subject to conditions commensurate with the determined controls and necessary for administration and reporting requirements.

7. References

1. Department of Environment Regulation (DER) 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.
2. Department of Water and Environmental Regulation (DWER) 2020, *Guideline: Environmental Siting*, Perth, Western Australia.
3. DWER 2020, *Guideline: Risk Assessments*, Perth, Western Australia.
4. Herring Storer Acoustics 2025, *Auswaste Cardboard Recycling Plant Acoustics Assessment,* Como, Western Australia.

Appendix 1: Summary of stakeholder comments on the application

Summary of public comments on application	Department's response
The proposal lacks sufficient information upon expected dust generation and performance of dust filtration system as such compliance with DWER guidelines cannot be verified without dispersion modelling.	The infrastructure proposed to be installed and operated at the premises in detailed in section 2.3. The delegated officer notes that the processing and baling activities are proposed to be conducted within a fully enclosed shed, and with dust control equipment also located within the enclosed shed. No direct dust emissions outside of the enclosed shed are expected. Due to the nature of the activities, and the controls proposed, the risk of dust emission impacts on sensitive receptors is considered insufficient to necessitate dust dispersion modelling. The conditions included within the works approval relating to equipment installation and maintenance, as well as operation are expected to sufficiently manage the risks posed.
The proposals included Herring Storer Acoustics Assessment provided by the applicant contains several methodological concerns and should be revised. 1. Ambient monitoring was not preformed for a long enough time over a wide enough range of conditions to ensure compliance with the Noise Regulations 1997. 2. Model source data does not include sufficient source data relating to sound power levels of specific equipment and noise emitting activities not included. 3. Assessment does not sufficiently demonstrate compliance methodology with Noise Regulations 1997 lacking frequency analysis, tonality or impulsiveness assessment and worst-case scenario modelling	The department acknowledges the comments regarding the noise assessment undertaken and provided as part of the works approval assessment. The departments review of the acoustic assessment provided by the applicant is detailed in section 3.2. The assessment and technical review determined that the results of the acoustic assessment undertaken were reliable and considered to be acceptable. The review also determined that noise emissions from the proposed operations will likely comply with the assigned noise levels, and also not 'significantly contribute' to a level of noise which exceeds the assigned levels at neighbouring noise sensitive premises The delegated officer considers the conditions posed within the works approval commensurate with risks as assessed within section 3. The works approval holder is also required to comply with the requirements of the Environmental Protection (Noise) Regulations 1997 during construction and operation of the facility.
Proposal makes claims of energy efficiency and reduced effluent in comparison to comparable facilities but lacks sufficient data to support such claims. 1. Proposal lacks information such as annual electricity consumption, fuel consumption for vehicles and equipment, Scope 1 and Scope 2 GHG emission calculation, and comparison with alternative recycling methods 2. Proposal lacks energy source considerations and should include energy efficiency benchmarking against industry best practice, consideration of on-site renewable energy, and commitment to energy monitoring.	The department acknowledges the comments regarding energy consumption and energy efficiency however considers that these aspects fall outside of the scope of the assessment of emissions and discharges for prescribed premises under Part V of the *Environment Protection Act 1986*.

Summary of public comments on application	Department's response
Proposal lacks sufficient consideration of combustible dust risks and should include a quantitative assessment of such risks including mitigation and emergency response measures.	The department acknowledges the comments regarding dust combustion risks however considers that this particular risk falls outside of the scope of the assessment of emissions and discharges for prescribed premises under Part V of the *Environment Protection Act 1986*. Matters relating to combustible dust (and explosion risk) are considered to fall within the scope of occupational safety and health legislation that requires that all workplace hazards are identified, the risks assessed and controls put in place. It is the responsibility of the applicant to ensure that workplace hazards and combustion risks are appropriately managed. The Department of Local Government, Industry Regulation and Safety is the appropriate regulatory authority regarding occupational safety. Notwithstanding this, matters relating to dust emissions and the risk associated with emergency response and the management of potentially contaminated fire water, as relevant to the risk assessment under Part V of the EP Act are detailed in section 3. Applicant proposed controls regarding dust mitigation, along with the implementation of a fire management plan have been conditioned in the works approval, and are considered sufficient to manage these risks.
Proposal lacks waste characterisation and management measures. 1. Proposal lacks information relating to chemical contaminants present upon inputs and potential volatile organic compound release during process. 2. Proposal should include waste audit data from comparable, a characterisation of rejected materials for appropriate classification, waste management plant, contingency for handling unexpected hazardous material.	The department acknowledges the comments regarding waste characterisation and management. As detailed in section 2 of this decision report, feedstock associated with the proposed facility is primarily recyclable wastes from material handling facilities and minor quantities of residual comingled recyclable wastes. Due the scale and nature of reprocessing activities, along with the controls proposed to manage risks associated with dust emissions, as well as the storage and handling of these materials, the release of volatile organic compounds is not expected to be significant. Notwithstanding this, conditions of the works approval require information be collected and submitted to the department on the volume of feedstock and residual wastes accepted, and quantity of wastes removed from the premises. This information will be used to inform the future licence for the premises (at the completion of time limited operations). The works approval also conditions the storage and handling of these materials to minimise the volumes stored at the premises.
The proposal does not effectively assess water usage and the potential for stormwater contamination, 1. Sufficient information relating to premise water usage, source, wastewater generation and potential contamination is not present within proposal. 2. Outdoor handling of paper/cardboard input presents risk to stormwater	Matters regarding access to water and water usage (from source) are managed outside of the assessment under Part V of the EP and are therefore considered out of scope for this assessment. Depending on the specific circumstances, water access is administered via commercial agreement, or via groundwater extraction managed under the *Rights in Water Irrigation Act 1914*.

Summary of public comments on application	Department's response
contamination. 3. A stormwater management plan should be produced including site water balance, contamination prevention measures, pre-treatment prior to discharge and stormwater quality monitoring.	As detailed in section 2, the proposed manufacturing process is a dry process, and limited volumes of water are utilised (for misting), and minimal volumes of wastewater are expected to the produced. The department also notes that the applicant has proposed to store feedstock and residual wastes within the enclosed shed, minimising the likelihood of stormwater contamination. The departments consideration of this risk is detailed in section 3. The assessed risk of stormwater contamination with consideration of applicant and department controls has been determined to be insufficient to warrant the production of a stormwater management plan.
The proposals operation outline describes deliveries from various sources but does not quantify traffic generation or potential amenity impact.	Impacts relating to noise and air emissions (including dust) resulting from vehicle movements within the premises boundary have been included within the risk assessment, as detailed in section 3. Impacts relating to the movement of heavy vehicles and traffic to and from the premises falls outside the scope of the assessment undertaken under Part V of *Environmental Protection Act 1986*. These matters are generally considered and regulated via planning/development applications administered in this case by the Local Government Authority (City of Rockingham).
The proposal lacks consideration of broader cumulative environmental impacts relating to the Rockingham Industrial area, 1. Potentially cumulative impacts of air emissions (particulates, VOCs, odours), combined industrial and traffic noise, shared infrastructure (stormwater, road network), and incremental impact on nearby residential areas. 2. A cumulative impact assessment upon the above factors should be preformed considering air quality impacts from industrial sources within 2km, demographic analysis of affected communities, and engagement with residents regarding concerns.	As detailed elsewhere, the departments consideration of air and noise emission impacts is detailed section 3. Both noise and odour emissions from premises operations are considered to be low risk and as such are not expected to significantly contribute to cumulative impacts as combined with surround premises. Similarly, dust emissions (external from the primary processing shed) are not considered to be significant due to the operations occurring on a bitumen/concrete hardstand. Controls within the works approval are considered to appropriately manage any residual risks associated with these emissions.
The proposal lacks commitment to ongoing environmental performance monitoring. 1. Best practice requires monitoring of air quality, noise, operational activities (dust extraction system performance, equipment maintenance logs, throughput and waste generation record) 2. Environmental reporting should be publicly accessible including, annual environmental performance reports, incident reporting, corrective action tracking, performance against approved conditions.	The works approval includes conditions relating to the reporting of compliance with works approval conditions alongside information relating to equipment installation and waste activities. The risk assessment undertaken for this application considered noise and air quality impacts. Due to the nature of the activity and controls proposed, the department did not consider additional ongoing air quality or noise monitoring was warranted. Information obtained through the works approval compliance and operational reporting process, along with complaint information (if relevant) will be used to inform the risk assessment and relevant condition setting for a future licence for this premises. The delegated officer acknowledges the public interest in matters relating to environmental reporting and performance. Requirements for ongoing submission and

Summary of public comments on application	Department's response
	publication of each premises' compliance with conditions are imposed via licence conditions, in accordance with the Guideline: Annual Audit Compliance Reports (2016). Annual Audit Compliance Reports are published on the Department's website. The review and assessment of compliance with the conditions of the Works Approval is conducted by the Department in accordance with its Compliance and Enforcement Policy. The Works Approval Holder is obligated under the EP Act to comply with the conditions of the Works Approval, which includes reporting requirements to assist with the determination of compliance against the specified conditions.
The proposal lacks key elements required for a comprehensive assessment under Part V of the *EP Act*. 1. Proposal lacks detailed process flow diagrams with mass balance, a comprehensive environmental risk assessment, odour impact assessment, emergency response and contingency plans, and decommissioning and site rehabilitation considerations. 2. A consideration of best available technology or best practicable means has not been provided within the proposal.	The department acknowledges the comments regarding the proposal, and has considered the location for the proposed activity, relevant nearby receptors, along with the scale and type of activity proposed. The risk assessment undertaken determined, based on these factors and the risk associated, that the controls proposed to mitigate these risks is acceptable. In undertaking the assessment, the department recognises that other regulatory requirements (under different legislation) apply to the premises, and where necessary has sought to minimise regulatory duplication. General stormwater management, and emergency response provisions are managed planning and development considerations, while decommissioning and site rehabilitation are considered either through planning instruments, or via closure provisions under the EP Act (as relevant), and considered during licence surrender processes. Applications made under Part V of the EP Act for works approvals and licences are not required to demonstrate best practice, unless published guidance is available. Applicants are however required to propose controls that suitably manage and mitigate the risks associated with emissions and discharges from the prescribed premises. For this assessment, this is outlined in section 3 of this decision report.

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

Condition	Summary of applicant's comment	Department's response
Condition 1, Table 1, Item 1 requirement c – constructed on a bunded concrete hardstand	The applicant challenges the necessity of requiring the primary processing shed infrastructure to be bunded. The applicant raises that there are difficulties in implementing bunding such as the regular entry and exit of heavy vehicles for delivery and export. The applicant raises that any firewater generated is unlikely to be materially contaminated as no chemicals are used or stored on site and the fire management system will not employ fire retardants or foams. The material process is clean cardboard and paper which, in the event of a fire only produce ash. Any firewater that may egress from the facility would be collected by the facilities stormwater management system and remain wholly managed on site. The low volume of waste stored at the premises will also minimise the potential for firewater contamination. The applicant commits to fully implementing the recommendations of the DFES approved Fire Prevention and Management Plan (FPMP).	The departments risk assessment considered that applicants proposed controls did not adequately manage the risk posed by contaminated firewater to the environment. The delegated officer however acknowledges that the specification for bunding (as initially drafted) may impact operations at the premises. As such, conditions of the works approval have been updated, allowing the design and nature of this control to comply with an updated outcomes-based condition that meets the same intent (that firewater is to be contained within the premises). The provision and implementation of a Fire Prevention and Management Plan is also considered a relevant control and is retained in the works approval.
Condition 8, Table 2, Item 1 requirement a – Facility may only operate from 0700 to 1900 hours Monday to Saturday excluding public holidays.	The applicant requests that the operating hours be unrestricted as there are no residences in proximity to the site which is located wholly within an area zoned for industry. The applicant outlines the expected future increase in volumes of waste cardboard and paper being accepted by the facility in accordance with the State Waste Avoidance and Resource Recovery Strategy 2030. In this context, the applicant wishes to retain the flexibility of additional shifts in the event of unexpected levels of feedstock supply.	The department has partially accepted the applicants request and has updated the condition (hours of operation to 0700-2200 Monday to Saturday excluding public holidays). This decision is made based upon the applicant's noise modelling which demonstrated that the premises noise emissions would remain compliant with Noise Regulations between 0700 and 2200. Modelled noise emissions for all hours operation indicated that compliance with the Noise Regulations may achieved however the department considers that noise verification would be required to demonstrate compliance with the Noise Regulations. As such, the department considers that altering the hours of operation to 2200 would be acceptable, however unrestricted hours would not be appropriate at this stage. Notwithstanding this change to the conditions of the works approval, it remains the responsibility of the applicant to ensure that the hours of operation for the premises meet any requirements under other legislation (such as development or local government planning approvals).