



## Application for Works Approval

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

---

<b>Works Approval Number</b>	W6625/2021/1
<b>Applicant</b>	4M Waste Pty Ltd
<b>ACN</b>	631 452 492
<b>File number</b>	DER2021/000538
<b>Premises</b>	4M Waste 39 Resources Way MALAGA WA 6090 Legal description – Lot 2000 on Deposited Plan 9309 being the whole of the land in certificate of Title Volume 2552 Folio 636 As defined by the premises map attached to the issued works approval
<b>Date of report</b>	10 March 2022
<b>Decision</b>	Works approval granted

**STEPHEN CHECKER**  
**MANAGER, WASTE INDUSTRIES**  
**REGULATORY SERVICES**

an officer delegated under section 20 of the *Environmental Protection Act 1986* (WA)

# Table of Contents

<b>1. Decision summary</b>	<b>2</b>
<b>2. Scope of assessment</b>	<b>2</b>
2.1 Regulatory framework	2
2.2 Application summary and overview of premises	2
<b>3. Infrastructure construction</b>	<b>2</b>
<b>4. Risk assessment</b>	<b>7</b>
4.1 Source-pathways and receptors	7
4.1.1 Emissions and controls	7
4.1.2 Fire management	8
4.1.1 Noise and vibration	9
4.1.2 Contaminated fire water	9
4.1.3 Receptors	10
4.2 Risk ratings	13
4.3 Detailed risk assessment	18
4.3.1 Noise and vibration emissions	18
<b>5. Consultation</b>	<b>19</b>
<b>6. Conclusion</b>	<b>20</b>
<b>7. References</b>	<b>20</b>
<b>Appendix 1: Summary of applicant’s comments on risk assessment and draft conditions</b>	<b>21</b>
<b>Appendix 2: Application validation summary</b>	<b>22</b>
Table 1: Infrastructure construction works	2
Table 2: Proposed applicant controls	7
Table 3: Sensitive human and environmental receptors and distance from prescribed activity	10
Table 4: Risk assessment of potential emissions and discharges from the premises during construction and operation	14
Table 5: Measured noise and vibration levels (Lloyd George Acoustics Pty Ltd 2021)	19
Table 6: Consultation	20
<b>Figure 1: Prescribed Premises</b>	<b>4</b>
Figure 2: Site layout and fire fighting equipment	5
Figure 3: Site Layout and Separation Distances	6
<b>Figure 4: Distance to sensitive receptors</b>	<b>12</b>
Figure 5: Site location (Lloyd George Acoustics Pty Ltd 2021)	18
Figure 6: Site layout (not to scale; Lloyd George Acoustics Pty Ltd 2021)	19

## 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 W6625/2021/1 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 and overview of premises

On 10 September 2021, 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 the storage and reprocessing of used tyres at the premises to generate tyre crumb at the premises. The premises is approximately 465 km south of the residential suburb of Ballajura.

The premises relates to the categories and assessed design capacity under Schedule 1 of the *Environmental Protection Regulations 1987* (EP Regulations) which are defined in works approval W6625/2021/1. 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 W6625/2021/1.

## 3. Infrastructure construction

The proposed infrastructure construction is to include concrete graded bunding (retaining wall) on the external perimeter of the premises to provide fire-fighting water containment to the premises. Tyre processing equipment will be installed in the existing warehouse. The installation involves the relocation and placement of recycling and processing equipment from a previous premises. An overview of the infrastructure, Premises layout and firefighting equipment is included in Table 1, and Figure 2 and Figure 3 below.

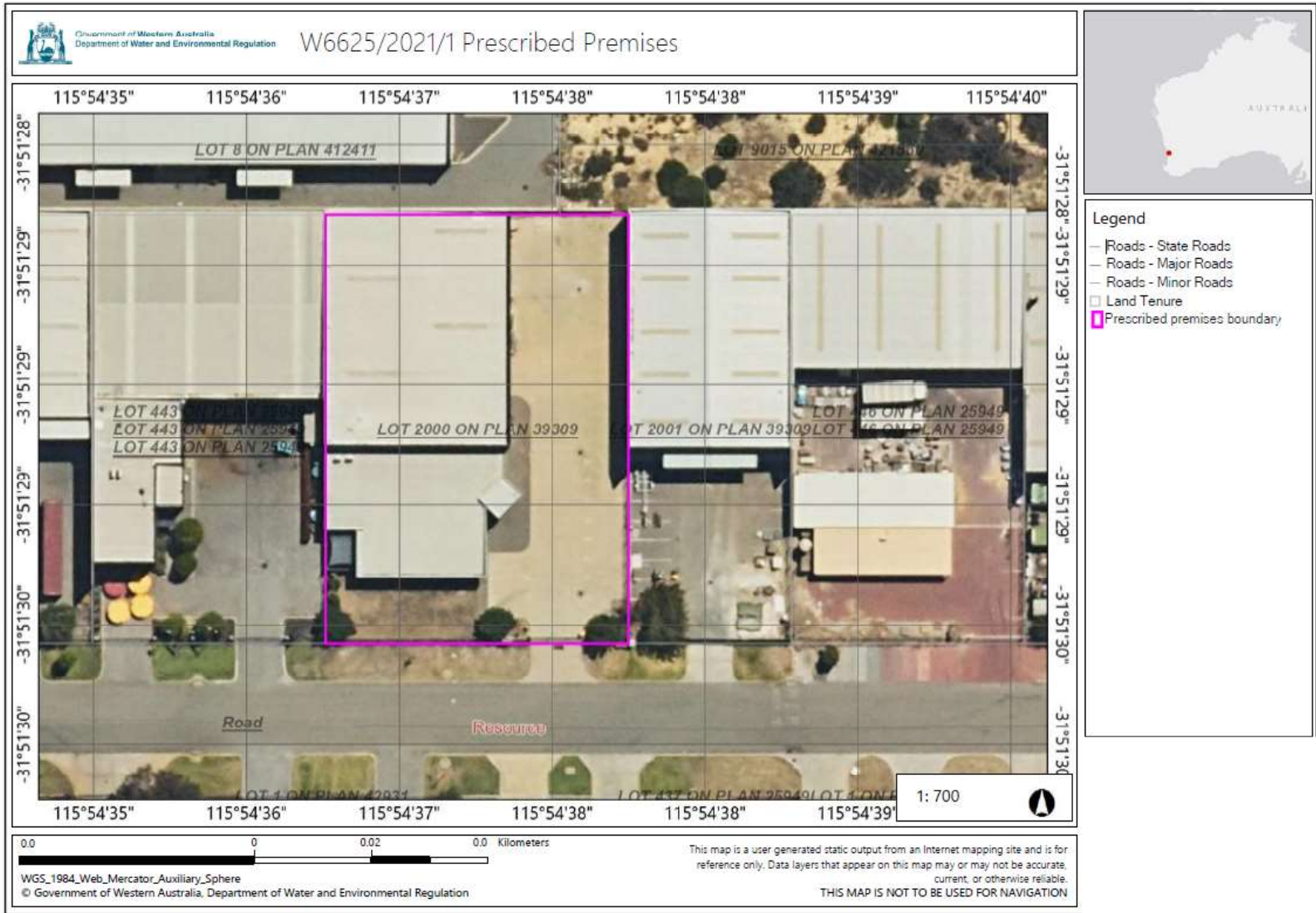
No commissioning of infrastructure or equipment is required. The tyre reprocessing equipment will be installed and immediately available for operation.

**Table 1: Infrastructure construction works**

Infrastructure / equipment	Design and construction / installation specifications
Surface water containment infrastructure	<p>The design has been based on <i>DFES Guidance Note:GN02 Bulk Storage of Rubber Tyres Including Shredded and Crumbed Tyres</i>.</p> <p>The external hardstand and building area is to be concrete with concrete graded bunding with the capability to contain at least 432,000 L of firewater (see Figure 2).</p>

<b>Infrastructure / equipment</b>	<b>Design and construction / installation specifications</b>
Tyre processing equipment	Install tyre processing equipment within the warehouse (see Figure 2), including 2 rubber crushing machines, 2 conveyor belts, 2 magnetic separator conveyors, 2 shaker screens and a fibre separator.
Drain filter catch bags	Installation of stormwater drain filter catch bags to each soak well drainage system.

Note 1: Based on three fire hydrant outlets 10 L/s for four hours



**Figure 1: Prescribed Premises**



### Location of Bunding

Bunding is required to cover exits to the warehouse.

Exit 1: Roller door exit 1 & 2. —————

Exit 2: Fire Safety doors and doors to office. —————

150mm Site Perimeter Bunding: —————

Adjoining Building: —————

**Figure 2: Site layout and firefighting equipment**



**Figure 3: Site Layout and Separation Distances**

## 4. 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.

### 4.1 Source-pathways and receptors

#### 4.1.1 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
<b>Construction</b>			
Noise	Placement of processing equipment, installation of containment infrastructure (bundling).  Vehicle and equipment movements.	Air/windborne pathway and ground/adjoining walls causing impacts to health and amenity	Location of equipment installation activities within an enclosed building.
Dust			
<b>Operation</b>			
Dust	Tyre delivery, handling and tyre Operation of tyre processing equipment and machinery	Air / windborne pathway	Minimal dust generated by whole tyres.  Tyre processing and crumb storage take place in an enclosed building. Dust generating activities take place in enclosed building.  Regular cleaning and housekeeping.
Noise and vibration	Operation of equipment and machinery (Rubber crusher and shaker screens, mill, conveyors, fiber separator and shredder)	Air/windborne pathway and ground/adjoining walls causing impacts to health and amenity	Location of tyre processing activities within an enclosed building.  Placement of magnet conveyor prior to crumbing to reduce steel going through the crushing machine.  Proposed operational hours are from 6am to 4pm Monday to Sunday.



Emission	Sources	Potential pathways	Proposed controls
Smoke (particulates and noxious gases)	Uncontrolled fire (tyres and crumb stockpiles)	Air/windborne pathway causing impacts to health and amenity	<p><i>Tyres stored in accordance with DFES Guidance Note: GN02 Bulk Storage of Rubber Tyres</i> (see Section 4.1.2 below).</p> <p>Preparation and implementation of Emergency Plan for the premises.</p> <p>Tyres received stacked on mobile pallet stackers, maximum of 3.7m high. Only 1 stack intended to be in use.</p> <p>Tyre crumb to be stored in 1 or 2 tonne bulka bags.</p> <p>External yard and access way to be kept clear for emergency service vehicle access, if required.</p> <p>Provision of on-site fire extinguishers and fire hose reels.</p>
Fire debris and washwater	Firefighting activities in the event of an uncontrolled tyre or crumb fire	Overland flow to stormwater infrastructure and infiltration to groundwater	<p>205 mm height concrete graded bunding (retaining wall) to be constructed, including driveway and building entrance.</p> <p>900 mm x 900 mm stormwater sump with inbuilt sand trap fitted with temporary PVC drain sealing mats in the event of a fire.</p> <p>As part of the end of day procedures drain covers will be placed in case a fire event occurs after hours.</p> <p>Fire wastewater will be removed by contractor Advanced Liquid Waste as per Fire Water Containment Plan. This is a 24/7 service.</p>

#### 4.1.2 Fire management

The applicant proposes to store tyres externally in the premises yard and internally in the main warehouse in accordance with section 8 and section 9 of the Department of Fire and Emergency Services (DFES) '*Guidance Note: GN02 Bulk Storage of Rubber Tyres Including Shredded and Crumbed Tyres*' (GN02). Internal tyre storage requirements include:

- Individual tyre stack within the warehouse will not exceed 3.7 m in height and 30 m<sup>2</sup> in area.
- Stored tyres will remain at least 1 m clear in all directions from the underside of the warehouse roof, roof structure members, and lights (including light fixtures).
- A minimum clearance of 1 m will be maintained along paths of travel to required exits and firefighting equipment (e.g. fire hose reels, fire extinguishers & fire hydrants). The paths of travel will always be kept clear and unobstructed.
- Rubber crumb will be stored in either 1m<sup>3</sup> bulker bags (1m x 1m x 1m) or 2m<sup>3</sup> bulker bags (1m x 1m x 2m high).
- The bags will be placed on pallets for air flow below the bags.

- The bags will be placed next to each other up to 30m<sup>2</sup> with the biggest storage being 10m x 3m x 2m in height.
- The design is set to allow for maximum maneuverability in the warehouse to allow safe work practices, whilst also allowing for adequate airflow around, between, below and over the storage areas to minimise fire risk.

The main warehouse building designated for general industry and to be used to store tyres has a fire compartment floor area of 620 m<sup>2</sup> (Figure 3). The applicant has proposed in accordance with the DFES Guidance Note (GN02), as the fire compartment floor area is less than 2,000 m<sup>2</sup> a sprinkler protection system is not proposed to be installed. As a non-sprinkler protected building, a minimum clearance of 3 m will be provided between tyre storage and baling areas and any load-bearing building elements as required by Section 9.4 of the DFES guidance note (GN02).

The tyres stacked outside will have a clearance of 6m from the building and boundary walls.

The application further details that tyres will be stored in a stack configuration as set out in section 7.1 of the DFES Guidance Note (GN02).

The premises will have the following firefighting and fire extinguisher equipment installed:

- 6 x portable dry chemical extinguishers
- 1 x hose reel
- 3 x hydrants capable of 10 L/s. One hydrant is located immediately adjacent to premises entrance and 50 m west and east of the site entrance.

The number and capacity of hydrants and outlets for non-sprinklered at the proposed premises meets the requirements of Section 12 of the DFES GN02.

#### 4.1.1 Noise and vibration

The processing of used tyres into tyre crumb has the potential for noise and vibration emissions from the crushing of tyres, shaker tables to separate rubber, steel and nylon and use of conveyor systems. The *Environmental Protection (Noise) Regulations 1997* (Noise Regulations) specify the maximum assigned noise levels authorised to be emitted from a premises in relation to receiving receptors and siting. As the premises is located within an industrial area, the assigned noise levels for “industrial and utility premises” are considered applicable. These levels set an assigned noise level of 60dB LA10, 75dB LA1 and 90dB LAMax for all hours.

Amenity and health impacts can also be assessed against the general provisions of the EP Act, specifically whether noise emissions unreasonably interfere with the health, welfare, convenience, or comfort of any person. The premises occupies an industrial lot within the Malaga industrial centre; with the existing warehouse and office space sharing a wall with an adjoining business to the west, and non-combustible boundary walls separating commercial premises to the north and east. These three immediately abutting premises are the most likely receptors for emissions associated with premises activities.

#### 4.1.2 Contaminated fire water

The 4M Waste Pty Ltd premises comprises a concrete hardstand floor within the building and a bitumen hardstand area externally that slopes and drains into two stormwater sumps situated within the external yard of the premises.

If ignited, tyre fires are very difficult to extinguish and have the potential to produce large volumes of smoke and very high temperatures. Fire-fighting foams used to extinguish a fire can also contain hazardous materials including surfactants, emulsifiers and modifiers. Fire-water run-off may comprise solids (e.g. particulates, burnt rubber), Volatile Organic Compounds (VOCs), Polycyclic Aromatic Hydrocarbons (PAHs), benzene, dioxins, furans, heavy metals,

nitrous oxides, pyrolitic oil and fuel oils. In the event of a fire, firefighting wastewater (fire water) and pyrolytic oil may discharge into onsite unlined stormwater soak wells, or offsite onto land or into stormwater drains, subsequently reaching local environmental receptors.

The 4M Waste Pty Ltd premises is located within the Malaga industrial area. Groundwater is approximately 8 m below ground level, and appears to flow in a south-south easterly direction.

The Department of Fire and Emergency Services (DFES, 2020) *Guidance Note No. 2 – Bulk Storage of Rubber tyres including shredded and crumbed tyres* provides for acceptable storage, fire-prevention and fire water containment measures for tyre storage and processing facilities.

### 4.1.3 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 4 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**

Receptor ID	Human receptors	Distance from prescribed activity
H1	Adjoining industrial unit	Immediately west of premises boundary (shared wall)
H2	Light industrial and service commercial businesses	Immediately adjacent to premises boundary
H3	Residential Premises – Guadalupe Way, Ballajura.	Approximately 465 m north of northern premises boundary
H4	Residential Premises – Mitra Loop, Bennett Springs	Approximately 680 m east of eastern premises boundary
H5	South Ballajura Primary School, Wyperfeld Gardens, Ballajura and Karijini Oval.	Approximately 670 m north of northern premises boundary
Receptor ID	Environmental receptors	Distance from prescribed activity
E1	Compensation basin – surface expression of underlying groundwater	Approximately 120 m east of premises boundary (connected via stormwater drain running along front of premises)  Depth to groundwater is approximately 8 m below ground level. Regional groundwater flow appears to be in a south-south easterly direction.
E2	Victoria Road Swamp – Multiple use sumpland (compensation basin)	Approximately 180 m southeast of southern premises boundary

E3	Gnangara Underground Water Pollution Control Area	Approximately 700 m west of western premises boundary
E4	Bush Forever Area - Lightning Swamp and Adjacent Bushland ad Lightning Park Ovals, Noranda	Approximately 850 m south of southern premises boundary



**Figure 4: Distance to sensitive receptors**

## 4.2 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 4.1. 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 4.1), 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 4.

Works approval W6625/2021/1 that accompanies this decision report authorises construction and time-limited operations. The conditions in the issued works approval, as outlined in Table 4 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. used tyre storage and reprocessing. 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 4: Risk assessment of potential emissions and discharges from the premises during construction and operation**

Risk events					Risk rating <sup>1</sup> C = consequence L = likelihood	Applicant controls sufficient?	Conditions <sup>2</sup> of works approval	Justification for additional regulatory controls
Sources / activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls				
<b>Construction</b>								
Placement of equipment, installation of containment infrastructure	Dust	Air/windborne pathway and ground/adjoining walls causing impacts to health and amenity	Adjoining and adjacent light industrial and service commercial businesses	Refer to Section 4.1	C = Slight L = Unlikely <b>Low Risk</b>	Y	N/A	The Delegated Officer considers dust emissions associated with construction activities can be adequately regulated by the general provisions of the EP Act.
	Noise		Residences approximately 465 m north and 680 m east  Primary school 670 m north		Refer to Section 4.1			C = Slight L = Unlikely <b>Low Risk</b>
<b>Operation</b>								
Unloading and storage of used tyres, and tyre crumb.  Operation of equipment and machinery (Rubber crusher and shaker screens, mill, conveyors, fiber separator and shredder)  Vehicle and equipment \ movements	Noise and vibration	Air/windborne pathway and ground/adjoining walls causing impacts to health and amenity	Adjoining and adjacent light industrial and service commercial businesses  Residences approximately 465 m north and 680 m east  Primary school 670 m north	Refer to Section 4.1	C = Moderate L = Unlikely <b>Medium Risk</b>	N	Condition 8	Noise verification monitoring is required to verify that the proposed noise barriers have assisted in complying with the EP Noise Regulations at the residence located 420m north of the premises.  The Delegated Officer considers that noise emissions can be sufficiently managed through the Environmental Protection (Noise) Regulations 1997.
	Fire (smoke) – particulates and noxious gases from fire / tyre		Air/windborne pathway causing impacts to health and amenity		Adjoining and adjacent light industrial and service commercial businesses  Residences approximately 465 m north and 680 m east			Refer to Section 4.1

Risk events					Risk rating <sup>1</sup> C = consequence L = likelihood	Applicant controls sufficient?	Conditions <sup>2</sup> of works approval	Justification for additional regulatory controls
Sources / activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls				
			Primary school 670 m north				<p>The Delegated Officer considers that the smaller internal tyre crumb stockpiles with 1m separation proposed still meets the minimum requirements in DFES GN02 since combined, they are smaller than the max 20 x 5 x 3.5 m stockpile length rubber requiring 6m separation from adjacent stockpiles and can be considered a single stockpile of under maximum size.</p> <p>Further, adherence to DFES 'Guidance Note:GN02 Bulk Storage of Rubber Tyres Including Shredded and Crumbed Tyres' relates to managing fires on site and having appropriate procedures to extinguish any unauthorised fire should be sufficient to control any fire incidents at the premises.</p> <p>The Delegated Officer notes that the internal tyre crumb storage floor area is under the 2000m<sup>2</sup> required for automatic sprinklers and smoke/heat vents. Given the storage so significant quantities of both whole and crumbed tyres internally and in a manner not expressly covered in the guidelines (bulka bags), the Delegated Officer has required that the applicant consults with DFES with regard to the adequacy of storage, infrastructure and management systems in relation to fire risk on site.</p> <p>Conditions have also been</p>	



Risk events					Risk rating <sup>1</sup> C = consequence L = likelihood	Applicant controls sufficient?	Conditions <sup>2</sup> of works approval	Justification for additional regulatory controls
Sources / activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls				
								added to the works approval to require the implementation of a Fire and Emergency Management Plan to adequately manage emergency events, documentation for which is to be lodged with the Licence application for assessment of effectiveness of the controls.
	Wastewaters/ leachate generated from extinguishing of a fire  Contaminated stormwater	Overland flow to stormwater infrastructure and infiltration to groundwater  Seepage through hardstands  Impacts groundwater quality and ecosystem health  Health and amenity impact to nearby residences	Stormwater compensation basin, and water sources  Underlying groundwater and beneficial users	Refer to Section 4.1	C = Moderate  L = Unlikely  <b>Medium Risk</b>	Y	Condition 6, 7, 8	The Applicant is concrete lining all external areas of the warehouse which will prevent leachate to groundwater. Any surface water, stormwater that is collected or created within the premises will be contained and collected onsite.  Additional conditions for placement of temporary bunding around soak wells have been added to the works approval to prevent firefighting water collection in soak wells system and infiltration into groundwater.  As this risk is mitigated by adequate implementation of these Applicant controls, the Delegated Officer shall enforce these controls via operational and maintenance conditions on the works approval, and via operational conditions on the Licence.  In addition, conditions have been added to the works approval to require the implementation of a Fire and Emergency Management Plan to prevent discharges of contaminated firewater into stormwater systems, documentation for which is to be lodged with the Licence

Risk events					Risk rating <sup>1</sup> C = consequence L = likelihood	Applicant controls sufficient?	Conditions <sup>2</sup> of works approval	Justification for additional regulatory controls
Sources / activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls				
								<p>application for assessment of effectiveness of the controls.</p> <p>Discharges of hydrocarbons and other chemicals within contaminated stormwater may also be subject to the provisions of the <i>Environmental Protection (Unauthorised Discharges) Regulations 2004</i>.</p>

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

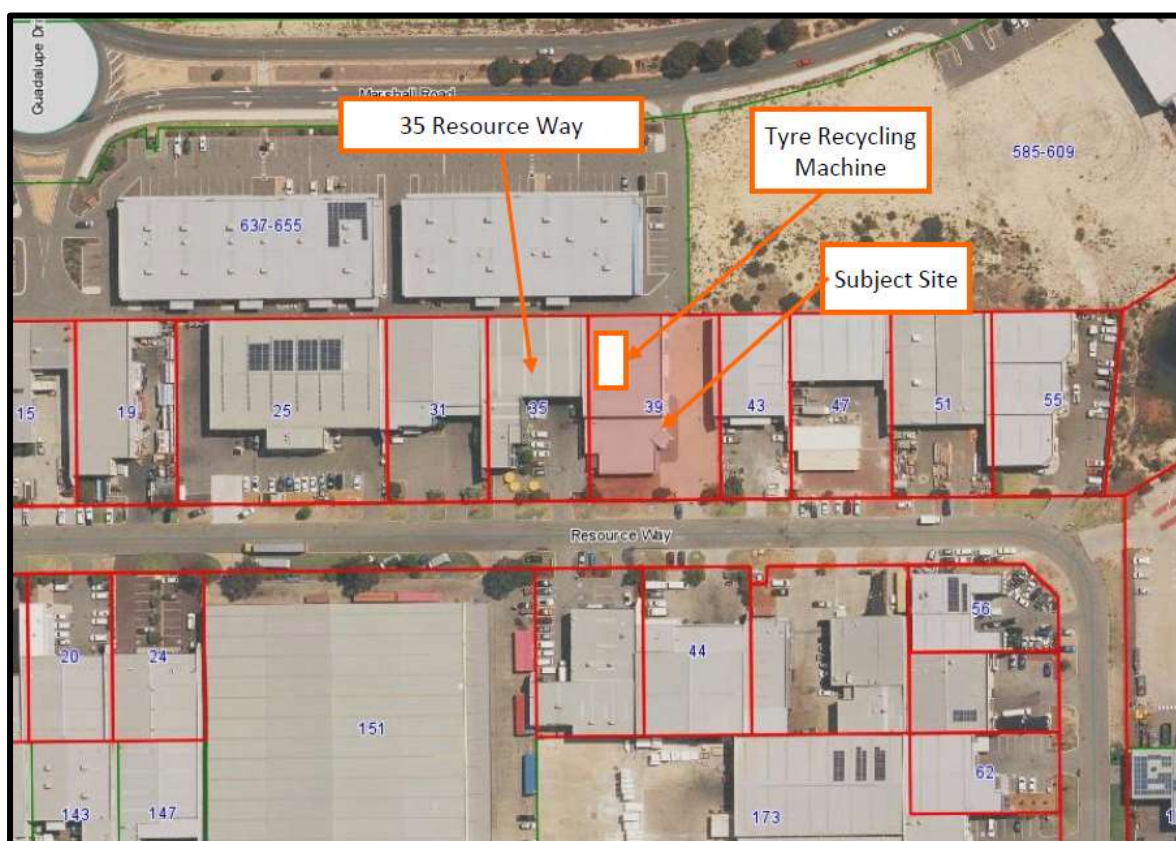
Note 2: Proposed applicant controls are depicted by standard text. **bold and underline text** depicts additional regulatory controls imposed by department.

## 4.3 Detailed risk assessment

### 4.3.1 Noise and vibration emissions

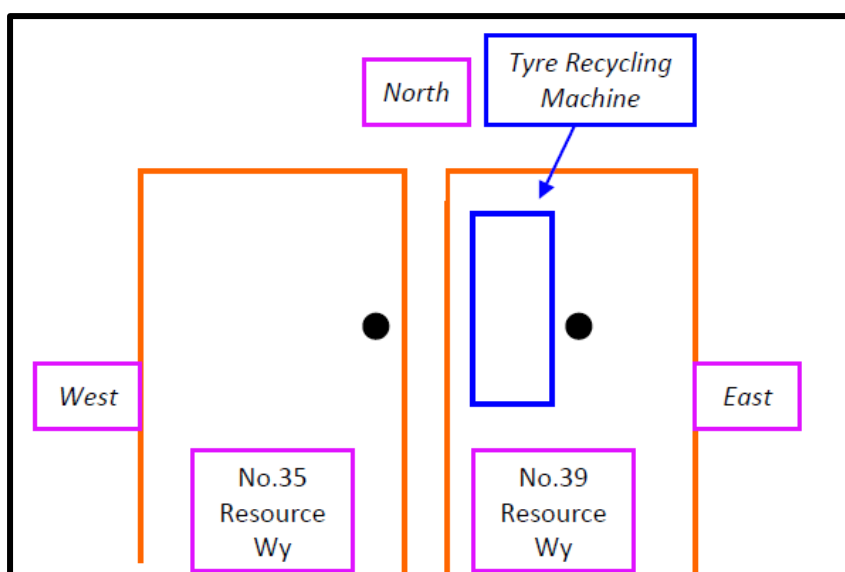
In response to a request from the Department, 4M Waste Pty Ltd provided a noise and vibration survey prepared by Lloyd George Acoustics Pty Ltd (2021) to the Department on 10 November 2021 to support the works approval application relating to the storage and reprocessing of used tyres at 39 Resource Way, Malaga. A noise management plan (4M Waste 2021) for 39 Resource Way, Malaga, was also submitted with the works approval application.

Lloyd George Acoustics Pty Ltd (2021) was engaged by 4M Waste Pty Ltd to record noise and vibration levels of tyre reprocessing equipment at 39 Resource Way, Malaga. The premises is situated within an industrial area of Malaga and surrounded by other industrial premises, with commercial receivers to the north. Noise and vibration measurements were recorded inside the proposed processing building at the premises and inside the neighbouring industrial building located at 35 Resource Way (Figure 5). This is the closest property to premises and therefore compliance at the measurement location should imply compliance at other receivers located further away from the premises (Lloyd George Acoustics Pty Ltd 2021).



**Figure 5: Site location (Lloyd George Acoustics Pty Ltd 2021)**

Figure 6 presents the basic layout of the workshop, showing the location of the tyre recycling equipment and measurement locations denoted as black dots (Lloyd George Acoustics Pty Ltd 2021). A summary of noise and vibration levels of the tyre processing equipment is provided in Table 5



**Figure 6: Site layout (not to scale; Lloyd George Acoustics Pty Ltd 2021)**

**Table 5: Measured noise and vibration levels (Lloyd George Acoustics Pty Ltd 2021)**

Location	Noise level, dB LA <sub>10</sub>	Vibration level (vector sum)	Radial vibration	Longitudinal vibration	Vertical vibration	Comment
No.39 Resource Way at 2 m from tyre recycling machine	78	0.055 mm/s	0.004	0.004	0.012	Tyre recycling machine "on"
No.35 Resource Way at 3 m from east wall	31	0.013 mm/s	0.009	0.039	0.038	Tyre recycling machine "on"

The measured level recorded inside 35 Resources Way was 31 dB LA<sub>10</sub>, which was adjusted to 46 dB LA<sub>10</sub> to compare to the external assigned noise level of 65 dB LA<sub>10</sub> (Lloyd George Acoustics Pty Ltd 2021). No adjustments were applicable for intrusive characteristics and as such, noise levels were deemed compliant (Lloyd George Acoustics Pty Ltd 2021). Compliance with the assigned level of 60 dB LA<sub>10</sub> for a commercial building were also noted (Lloyd George Acoustics Pty Ltd 2021). Vibration levels recorded near the tyre recycling machine are below the preferred vibration value of 0.56 mm/s for commercial buildings (Lloyd George Acoustics Pty Ltd 2021). Given that the other premises are located further away from 39 Resources Way, lower ground vibration levels than those measured are expected within the adjacent premises (Lloyd George Acoustics Pty Ltd 2021).

A technical review of the Lloyd George Acoustics Pty Ltd (2021) survey report conducted by the Department concluded that the methodology of the noise and vibration measurements including the type of measuring equipment, measurement locations and the assessment criteria used in the assessment appear reliable and correct (DWER 2022). The noise and vibration assessment and conclusions are reliable and accurate and indicate that the noise generated from the proposed tyre reprocessing operations complies with the assigned noise levels at the neighbouring industrial premises (DWER 2022). Vibration levels meet the acceptable vibration criteria at the closest industrial building (DWER 2022).

## 5. Consultation

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

**Table 6: Consultation**

Consultation method	Comments received	Department response
<i>Application advertised on the department's website on 9 December 2021.</i>	<i>No comments were received.</i>	<i>N/A</i>
<i>Local Government Authority advised of proposal on 13 December 2021.</i>	<i>No comments received.</i>	<i>The delegated officer has determined that it is the applicant's responsibility to ensure all relevant approvals are in place prior to commencing works, in line with the Industry Regulation: Guide to Licensing.</i>
<i>Applicant was provided with draft documents on 28 February 2022.</i>	<i>Refer to appendix 1.</i>	<i>Refer to appendix 1.</i>

## 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. 4M Waste Pty Ltd 2021, *Noise Management Plan 4M Waste Pty Ltd 39 Resources Way, Malaga (Attachment 6A)* (DWERDT502695)
2. Department of Environment Regulation (DER) 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.
3. Department of Water and Environmental Regulation (DWER) 2020, *Guideline: Environmental Siting*, Perth, Western Australia.
4. DWER 2020, *Guideline: Risk Assessments*, Perth, Western Australia.
5. DWER 2021, *4M Waste Pty Ltd – Noise and Vibration Assessment for a Works Approval Application for Tyre Storage and Reprocessing at 39 Resource Way, Malaga* (DWERDT547376), dated 16 December 2021.
6. Department of Fire and Emergency Services (DFES) 2020, *Guidance Note (GN02) Bulk storage of rubber tyres including shredded and crumbed tyres Version 1. 2020*, November 2019, Perth, Australia.
7. Lloyd George Acoustics Pty Ltd 2021, *Noise and Vibration Survey 39 Resource Way, Malaga Reference: 21106773-01, prepared for: 4M Waste Pty Ltd* (A2062780)

## Appendix 1: Summary of applicant's comments on risk assessment and draft conditions

Condition	Summary of applicant's comment	Department's response
Front page cover & Condition 9	Requested to have the assessed design capacity increased from 20,000 to 50,000 tyres per year	Request accepted – initial figure considered an oversight. The Delegated Officer notes that the premises design capacity is around 7000 tonnes /year (140,000 tyres) and that the works approval holder has agreed to implementing a Fire Management Plan.

## Appendix 2: Application validation summary

SECTION 1: APPLICATION SUMMARY (as updated from validation checklist)				
<b>Application type</b>				
Works approval	<input checked="" type="checkbox"/>			
Licence	<input type="checkbox"/>	Relevant works approval number:		None <input type="checkbox"/>
		Has the works approval been complied with?	Yes <input type="checkbox"/> No <input type="checkbox"/>	
		Has time limited operations under the works approval demonstrated acceptable operations?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>	
		Environmental Compliance Report / Critical Containment Infrastructure Report submitted?	Yes <input type="checkbox"/> No <input type="checkbox"/>	
		Date report received:		
Renewal	<input type="checkbox"/>	Current licence number:		
Amendment to works approval	<input type="checkbox"/>	Current works approval number:		
Amendment to licence	<input type="checkbox"/>	Current licence number:		
		Relevant works approval number:		N/A <input type="checkbox"/>
Registration	<input type="checkbox"/>	Current works approval number:		None <input type="checkbox"/>
Date application received	10/09/2021			
<b>Applicant and premises details</b>				
Applicant name/s (full legal name/s)	4M Waste Pty Ltd			
Premises name	4M Waste (none nominated)			
Premises location	39 Resources Way, MALAGA WA 6090			
Local Government Authority	City of Swan			
<b>Application documents</b>				
HPCM file reference number:	DER2018/001042-6~24			
Key application documents (additional to application form):	<i>Application form</i> <i>Lease</i> <i>Maps</i> <i>Proposed activities</i> <i>Noise management plan</i> <i>Waste acceptance details</i> <i>Siting and location information</i> <i>Emergency plan</i> <i>Water containment plan</i> <i>Noise and vibration survey</i>			
<b>Scope of application/assessment</b>				

## SECTION 1: APPLICATION SUMMARY (as updated from validation checklist)

Summary of proposed activities or changes to existing operations.

### Works approval

Construction of used tyre shredding facility (relocated from existing premises L9250/2020/1).

The aim of the facility is to recycle 50,000 end of life tyres per annum which equates to 2,500 tonnes of tyres and 1,500 tonne of reusable rubber crumb annually. The rubber crumb (our main product) has two main uses:

- Use in bitumen and asphalt mix
- Use in soft fall play areas, rubber moulded products and sporting complexes

The expectation would be to have no more than 500 whole tyres on the premises at any stage and up to 100 tonne of rubber crumb.

Proposed operational hours are from 6am to 4pm Monday to Sunday.

Category number/s (activities that cause the premises to become prescribed premises)

Table 1: Prescribed premises categories

Prescribed premises category and description	Proposed production or design capacity	Proposed changes to the production or design capacity (amendments only)
Category 57: Used tyre storage (general): premises (other than premises within category 56) on which used tyres are stored.	500 whole tyres and 100 tonne of crumb/shred. 500 + 12,500 = 13,000 "tyres" on site.	N/A
Category 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.	7,000 tonnes per annum (equating to 140,000 end of life tyres per annum).	N/A

### Legislative context and other approvals

Has the applicant referred, or do they intend to refer, their proposal to the EPA under Part IV of the EP Act as a significant proposal?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Referral decision No: Managed under Part V <input type="checkbox"/> Assessed under Part IV <input type="checkbox"/>
Does the applicant hold any existing Part IV Ministerial Statements relevant to the application?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Ministerial statement No: EPA Report No:
Has the proposal been referred and/or assessed under the EPBC Act?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Reference No:



**SECTION 1: APPLICATION SUMMARY (as updated from validation checklist)**

<p>Has the applicant demonstrated occupancy (proof of occupier status)?</p>	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>	<p>Certificate of title <input type="checkbox"/>                  General lease <input checked="" type="checkbox"/> Expiry: 31/07/2024                  Mining lease / tenement <input type="checkbox"/> Expiry:                  Other evidence <input type="checkbox"/> Expiry:</p>
<p>Has the applicant obtained all relevant planning approvals?</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/></p>	<p>Approval:                  Expiry date:                  If N/A explain why?</p>
<p>Has the applicant applied for, or have an existing EP Act clearing permit in relation to this proposal?</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>	<p>No clearing is proposed.</p>
<p>Has the applicant applied for, or have an existing CAWS Act clearing licence in relation to this proposal?</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>	<p>No clearing is proposed.</p>
<p>Has the applicant applied for, or have an existing RIWI Act licence or permit in relation to this proposal?</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>	<p>Licence / permit not required.</p>
<p>Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the EP Act)?</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>	<p>Name: N/A                  Type: Proclaimed Groundwater Area/Surface Water Area                  Has Regulatory Services (Water) been consulted?                  Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>                  Regional office: Swan Avon</p>
<p>Is the Premises situated in a Public Drinking Water Source Area (PDWSA)?</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>	<p>Name: N/A                  Priority: N/A                  Are the proposed activities/ landuse compatible with the PDWSA (refer to <u>WQPN 25</u>)?                  Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/></p>
<p>Is the Premises subject to any other Acts or subsidiary regulations (e.g. <i>Dangerous Goods Safety Act 2004, Environmental Protection (Controlled Waste) Regulations 2004, State Agreement Act xxxx</i>)</p>	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>	<p>Controlled waste facility</p>

**SECTION 1: APPLICATION SUMMARY (as updated from validation checklist)**

Is the Premises within an Environmental Protection Policy (EPP) Area?	Yes <input type="checkbox"/> No <input type="checkbox"/>	
Is the Premises subject to any EPP requirements?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Is the Premises a known or suspected contaminated site under the <i>Contaminated Sites Act 2003</i> ?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<p>CSS_SITE_ID 10462</p> <p>Classification: possibly contaminated – investigation required (PC-IR)</p> <p>Date of classification: 07/09/2017</p>