Government of Western Australia
Department of Water and Environmental Regulation

Works Approval

Works approval number	W6625/2021/1
Works approval holder	4M Waste Pty Ltd
ACN	631 452 492
Registered business address	57 Forrest Street SUBIACO WA 6008
DWER file number	DER2021/000538
Duration	10/03/2022 to 09/03/2027
Date of issue	10/03/2022
Premises details	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

Prescribed premises category description (Schedule 1, ***Environmental Protection Regulations 1987***)	**Assessed design capacity**
Category 57: Used tyre storage – premises (other than premises within category 56) on which used tyres are stored.	*Up to 500 whole tyres at any one time*
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.	*Up to 50,000 tyres per year*

This works approval is granted to the works approval holder, subject to the attached conditions, on 10 March 2022, by:

Steve Checker

Digitally signed by Steve Checker
Date: 2022.03.10 17:40:11 +08'00'

STEPHEN CHECKER
MANAGER WASTE INDUSTRIES
REGULATORY SERVICES
an officer delegated under section 20 of the *Environmental Protection Act 1986* (WA)

Works approval history

Date	Reference number	Summary of changes
04/03/2022	W6625/2021/1	Works approval issued

Interpretation

In this works approval:

(a) the words ‘including’, ‘includes’ and ‘include’ in conditions mean “including but not limited to”, and similar, as appropriate;

(b) where any word or phrase is given a defined meaning, any other part of speech or other grammatical form of that word or phrase has a corresponding meaning;

(c) where tables are used in a condition, each row in a table constitutes a separate condition;

(d) any reference to an Australian or other standard, guideline, or code of practice in this works approval:

  (i) if dated, refers to that particular version; and

  (ii) if not dated, refers to the latest version and therefore may be subject to change over time;

(e) unless specified otherwise, any reference to a section of an Act refers to that section of the EP Act; and

(f) unless specified otherwise, all definitions are in accordance with the EP Act.

NOTE: This works approval requires specific conditions to be met but does not provide any implied authorisation for other emissions, discharges, or activities not specified in this works approval.

Works approval conditions

The works approval holder must ensure that the following conditions are complied with:

Construction phase

Infrastructure and equipment

1. The works approval holder must:

(a) construct and/or install the infrastructure and/or equipment;

(b) in accordance with the corresponding design and construction / installation requirements; and

(c) at the corresponding infrastructure location; and

Table 1: Design and construction / installation requirements

	Infrastructure	Design and construction / installation requirements	Infrastructure location
1.	Surface water containment infrastructure	To be constructed as detailed in Department of Fire and Emergency Services (DFES) *'Guidance Note:GN02 Bulk Storage of Rubber Tyres Including Shredded and Crumbed Tyres'* (GN02). The external hardstand and building area is to be constructed of impervious graded concrete with the capability to contain at least 432,000 L of firewater[1].	Concrete yard area with graded bunding (Figure 2)
2.	Tyre processing equipment	Installation of tyre processing equipment within warehouse, including rubber crusher, mill, conveyors, fibre separator and shredder.	Warehouse tyre processing equipment location
3.	Drain filter catch bags	Installation of drain filter catch bags to each stormwater sump.	Drain sumps (Figure 2)

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

2. The works approval holder must not depart from the requirements specified in Table 1 except:

(a) where such departure does not increase risks to public health, public amenity or the environment; and

(b) all other Conditions in this works approval are still satisfied.

3. Within 30 days of the completion of the works specified in Table 1, the works approval holder must provide to the CEO an engineering certification from a Suitably Qualified Structural Engineer confirming each item of infrastructure or component of infrastructure specified in Table 1 below has been constructed with no material defects and to the requirements specified in Table 1.

4. Where a departure from the requirements specified in Table 1 occurs and is of a type allowed by condition 2, the works approval holder must provide to the CEO a description of, and explanation for, the departure along with the certification required by condition.

Time limited operations phase

Commencement and duration

5. The works approval holder may conduct time limited operations for an item of infrastructure specified in condition 1:

(a) for a period not exceeding 180 calendar days from the day the works approval holder meets the requirements of condition 1 for that item of infrastructure; or

(b) until such time as a licence for that item of infrastructure is granted in accordance with Part V of the *Environmental Protection Act 1986*, if one is granted before the end of the period specified in condition 5(a).

Fire and emergency management

6. The works approval holder must implement a Fire and Emergency Management Plan that is consistent with Australian Standard AS 3745. The plan must include, but is not limited to:

(a) notification procedures for fire and major spill incidents;

(b) how fires will be prevented, detected, responded to, suppressed, contained and controlled for all approved activities addressing all waste types and for all stages of the waste handling, sorting and storage process;

(c) in the event of a fire occurring at the premises, how impacts to the environment and human health will be mitigated;

(d) how staff will be trained in fire and emergency response on an ongoing, annual basis;

(e) details on the firefighting equipment in place and/or accessible at the premises and the fire response capabilities and responsibilities;

(f) a premises map displayed at the front of the premises depicting an after hours contact details, plus the location and layout of:

(i) fire hose reels, hydrants, sprinklers and isolation points;

(ii) electrical isolation points;

(iii) sub-surface drainage infrastructure, including details on flow direction and off-site discharge locations (if applicable);

(iv) system shutdown points; and

(v) fire response access points to the premises; and

(g) hazmat manifest displayed at front of the premises.

7. The works approval holder must ensure the fire and emergency management requirements in Table 2 are complied with in the event of a fire.

Table 2: **Fire and emergency management requirements**

Management Requirement		Fire and emergency management requirements
1.	Fire hydrants	The fire suppression system: • must be operated and maintained in accordance with AS 2419.1; and AS 1851-2012. • must have a minimum of three fire hydrants are to be located close to the premises boundary, for use in the event of a fire within the container storage area or workshop area. • must provide the maximum hydraulic demand for a minimum of four hours; and • minimum hydrant flow rate of 10L/s is provided at suitable pressure in accordance with AS2419.1.
2.	Firewater containment	(a) Firewater that may result at the premises from fire-fighting activities must be: (i) contained on the premises within the capacity of hardstand and low permeability infrastructure. (ii) does not escape to the premises' stormwater system, adjacent premises or exposed soil areas; and (b) The containment capacity for firewater must be calculated with the fire hydrant flow rates prescribed in Australian Standard AS 2419.1 and cumulatively the discharge densities prescribed in Australian Standard AS 2118.1 where automatic sprinklers are used: (i) for all fully-enclosed structures; and (ii) individually for each outside hardstand and low permeability catchment area. (c) The containment capacity for firewater, no less than the volumes calculated in Table 2, row 2(b), must be permanent or achieved automatically when the fire system is activated on the premises. (d) Bunding must be available to prevent firewater from entering the onsite soak well system. (e) Bunding must be available to prevent firewater from entering other drains and discharge points. (f) Contingency arrangements must exist for the removal of firewater, in excess of the containment capacity, by a carrier licensed under the *Environmental Protection (Controlled Waste) Regulations 2004* within 24 hours of the extinguishment of a fire at the premises within 24 hours of the extinguishment of a fire at the premises, to ensure firewater does not discharge to the environment.
3.	Fire management	(a) The premises must operate an on-site fire detection system e.g. aspirating smoke detection system designed and installed in accordance with AS1670.1. (b) The size of stockpiles of recycled material (tyre crumb) that could cause a fire hazard must be minimised. (c) A sufficient number of fire hoses on the premises must be provided such that all areas of the premises can be reached. (d) Ensure that any fire on the premises is extinguished as soon as possible.
4.	Spill management	(a) Spill kits are to be provided, be stocked and maintained. (b) Adequate spill management practices are to be conducted on an as needs basis.

Management Requirement		Fire and emergency management requirements
5.	Notifications	Notifications must follow procedures outlined in the Fire and Emergency Management Plan required by Condition 6.

Infrastructure and equipment

8. During time limited operations, the works approval holder must ensure that the premises infrastructure and equipment listed in Table 3 is maintained and operated in accordance with the operational requirement set out in Table 3.

Table 3: Infrastructure and equipment requirements during time limited operations

Infrastructure	Operational requirements
Premises external carpark, yard, pavement and driveway	• Shall not be used to store any whole tyres or tyre crumb; • Impervious hardstand construction. • Must be sloped or the perimeter sufficiently bunded, to contain surface run-off and firewater generated within the premises boundary.
Warehouse (tyre storage and crumbing building)	• Must be secure at all times to prevent unauthorised access to the building from persons not employed on the premises; • On site spill kit (including sorbent socks) to be maintained and in good working order at all times.
Warehouse - Internal tyre storage	All tyres will be stored internally in the warehouse at the location shown in Schedule 1 Figure 2 in accordance with DFES GN02 as follows: • Individual tyre stacks within the warehouse will not exceed 3.7 m in height and 30 m^2 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; • A minimum clearance of 3 m will be provided between tyre stacks and any load bearing building elements; and • The maximum storage on the site at any one time will be 500 whole tyres and no more than 100 tonne of rubber tyre crumb.
Warehouse - External tyre storage	All tyres will be stored externally at the location shown in Schedule 1 Figure 2 in accordance with DFES GN02 as a 'small tyre facility' follows: • Tyre stacks should be no closer than 6m to all buildings on the same allotment having non-combustible external walls. • Tyre stacks should be 6m back from the allotment boundary or boundaries facing public roads. • Tyre stacks should be no closer than 6m from boundaries that have non-combustible walls/windows/doors e.g., masonry, of equal or greater height to the tyre stacks (3.7 m).

Infrastructure	Operational requirements
Trye crumb storage	Tyre crumb is to be stored internally in the warehouse at the locations specified in Schedule 1 Figure 2 in accordance with DFES GN02 as a 'small tyre facility' follows: • Processed tyre crumb is to be stored in the warehouse only within 1 or 2 tonne bulka bags. • Tyre crumb stored in stockpiles of stacked bulka bags not exceeding 2.5 m in stockpile height and a combined maximum volume of 70 m^3.
Equipment used for processing tyre crumb (including rubber crushing machine, conveyor belts, shaker table, magnet, fibre separator)	• Must only be housed and operated inside the Tyre storage and crumbing building on the premises (as depicted in Schedule 1, Figure 1); and • Must be operated in a manner that ensures that noise emissions comply with the *Environmental Protection (Noise) Regulations 1997.*
All on-site fire management and prevention equipment	• All on-site fire management and prevention equipment to be stored so access is not impeded by infrastructure or equipment used in site operations; and • All on-site fire management and prevention equipment must be maintained and in good working order at all times.
Front end loader, various tools and ancillary equipment equivalent to a mechanics workshop	• None specified.

9. The works approval holder must only allow waste to be accepted onto the Premises if:

(a) It is of a type listed in Table 4;

(b) The quantity accepted is below any limit listed in Table 4; and

(c) It meets any specification listed in Table 4.

Table 4: Waste acceptance

Waste type	Quantity limit	Specification[1]
Inert Waste Type 2 (tyres only)	Up to 50,000 tyres per annual period	Up to 500 whole tyres may be stored on the premises at any one time.

Note 1: Additional requirements for the acceptance of controlled waste (including asbestos and tyres) are set out in the *Environmental Protection (Controlled Waste) Regulations 2004.*

10. The works approval holder may only perform time limited operational activities from 0600 to 1600 Monday to Sunday.

Monitoring

11. The works approval holder must undertake the monitoring specified in Table 5 during time limited operations.

Table 5: Monitoring of inputs and outputs during time limited operations

Inputs/Outputs	Parameter	Averaging period	Frequency
Used tyres	Number of tyres received	Annual Period	Each load entering the premises

Compliance reporting

12. The works approval holder must within 30 calendar days of an item of infrastructure or equipment required by condition 1 being constructed and / or installed:

(a) Undertake an audit of their compliance with the requirements of condition 1; and

(b) Prepare and submit to the CEO an Environmental Compliance Report on that compliance.

13. The Environmental Compliance Report required by condition 12, must include as a minimum the following:

(a) Certification by a Qualified, Competent Civil or Structural Engineer that the items of infrastructure or component(s) thereof, as specified in condition 1, have been constructed in accordance with the relevant requirements specified in condition 1;

(b) As constructed plans and a detailed site plan for each item of infrastructure or component of infrastructure specified in condition 1;

(c) Evidence of consultation with the Department of Fire and Emergency Services confirming the adequacy of fire management infrastructure and systems for the volumes of combustible material proposed to be processed and stored onsite;

(d) Where they have not been met, measures proposed to meet the manufacturer's design specifications and the conditions of this works approval, together with timeframes for implementing the proposed measures; and

(e) Be signed by a person authorised to represent the works approval holder and contains the printed name and position of that person.

Records and reporting

14. The works approval holder must record the following information in relation to complaints received by the works approval holder (whether received directly from a complainant or forwarded to them by the Department or another party) about any alleged emissions from the premises:

(a) the name and contact details of the complainant, (if provided);

(b) the time and date of the complaint;

(c) the complete details of the complaint and any other concerns or other issues raised; and

(d) the complete details and dates of any action taken by the works approval holder to investigate or respond to any complaint.

15. The works approval holder must maintain accurate and auditable books including the following records, information, reports, and data required by this works approval:

(a) the works conducted in accordance with condition 1.

(b) any maintenance of infrastructure that is performed in the course of complying with condition 8;

(c) monitoring programmes undertaken in accordance with condition 11; and

(d) complaints received under condition 14.

16. The books specified under condition 15 must:

(a) be legible;

(b) if amended, be amended in such a way that the original version(s) and any subsequent amendments remain legible and are capable of retrieval;

(c) be retained by the works approval holder for the duration of the works approval; and

(d) be available to be produced to an inspector or the CEO as required.

Definitions

In this works approval, the terms in Table 6 have the meanings defined.

Table 6: Definitions

Term	Definition
annual period	a 12-month period commencing from 1 February until 31 January of the immediately following year.
Australian Standard AS 1851	means Standards Australia *AS 1851.2012 Routine service of fire protection systems and equipment*
Australian Standard AS 2419.1	means Standards Australia *AS 2419.1 Fire hydrant installations Part 1: System design, installation and commissioning*
Australian Standard AS 3745	means Standards Australia *AS 3745 Planning for emergencies in facilities*
books	has the same meaning given to that term under the EP Act.
CEO	means Chief Executive Officer. CEO for the purposes of notification means: Director General Department administering the *Environmental Protection Act 1986* Locked Bag 10 Joondalup DC WA 6919 info@dwer.wa.gov.au
Department	means the department established under section 35 of the *Public Sector Management Act 1994* and designated as responsible for the administration of Part V Division 3 of the EP Act.
discharge	has the same meaning given to that term under the EP Act.
emission	has the same meaning given to that term under the EP Act.
Environmental Compliance Report	means a report to satisfy the CEO that the conditioned infrastructure and/or equipment has been constructed and/or installed in accordance with the works approval.
EP Act	*Environmental Protection Act 1986* (WA).
EP Regulations	*Environmental Protection Regulations 1987* (WA).
Fire and Emergency Management Plan	means a Fire and Emergency Management Plan that meets the requirements specified in condition 6 of this approval
fire management consultant	means a person who: (a) has a minimum of five years of experience working in a supervisory area of fire control system design, installation and

Term	Definition
	commissioning; and (b) is employed by an independent third party external to the licence holder's business; or is otherwise approved in writing by the CEO to act in this capacity.
firewater	means water that, in the event of a fire, has been used to extinguish a fire, and all materials and combusting products dissolved or suspended within such water, and includes other fire suppressant substances such as foams.
premises	the premises to which this works approval applies, as specified at the front of this works approval and as shown on the premises map (Figure 1) in Schedule 1 to this works approval.
prescribed premises	has the same meaning given to that term under the EP Act.
time limited operations	refers to the operation of the infrastructure and equipment identified under this works approval that is authorised for that purpose, subject to the relevant conditions.
waste	has the same meaning given to that term under the EP Act.
works approval	refers to this document, which evidences the grant of the works approval by the CEO under section 54 of the EP Act, subject to the conditions.
works approval holder	refers to the occupier of the premises being the person to whom this works approval has been granted, as specified at the front of this works approval.

END OF CONDITIONS

Schedule 1: Maps

Premises map

The boundary of the prescribed premises is shown in the map below (Figure 1).

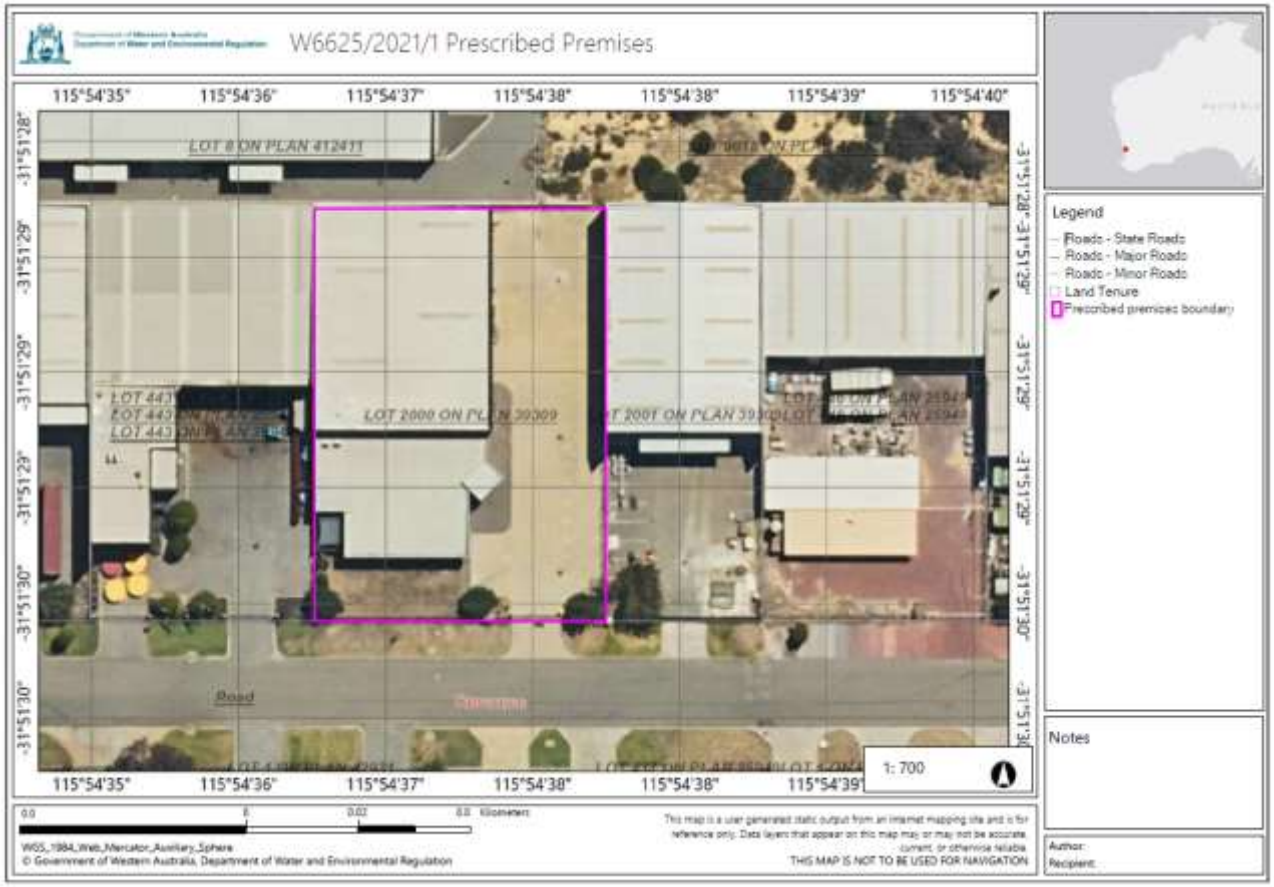

Figure 1: Map of the boundary of the prescribed premises

Tyre storage locations

Tyre storage locations are shown in the map below (Figure 2).

Figure 2: Tyre storage locations