

ENVIRONMENTAL ASSESSMENT REPORT

Waste Tyre Storage Depot and Waste Tyre Processing Facility

8 Cavalry Road, Mowbray

Phoenix Rubber Products Pty Ltd

Board of the Environment Protection Authority

March 2018



Environmental Assessment Report	
Proponent	Phoenix Rubber Products Pty Ltd
Proposal	Waste Tyre Storage Depot and Processing Facility
Location	8 Cavalry Road, Mowbray
NELMS no.	PCE No 9740
Permit application no.	DA 0370/2017 (Launceston City Council)
Folder	EN-EM-EV-DE-252646
Document.	H811240
Class of Assessment	2A

Assessment process milestones	
28/07/2017	Permit application submitted to Council
01/08/2017	Referral received by Board
30/08/2017	EER Guidelines issued
03/02/2018	Start of public consultation period
19/02/2018	End of public consultation period

Acronyms

AMM	<i>Approved Management Method for the Reuse and Storage of Waste Tyres (AMM) issued by EPA Tasmania, June 2017</i>
Board	Board of the Environment Protection Authority
EER	Environmental Effects Report
dBA	A-Weighted decibels
DPIPWE	Department of Primary Industries, Parks, Water and Environment
EIA	Environmental impact assessment
ELT	End of Life Tyre
EMPC Act	<i>Environmental Management and Pollution Control Act 1994</i>
EMPCS	Environmental management and pollution control system
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999 (Cth)</i>
LUPA Act	<i>Land Use Planning and Approvals Act 1993</i>
RMPS	Resource management and planning system
SD	Sustainable development

Report summary

This report provides an environmental assessment of Phoenix Rubber Products Pty Ltd's proposed waste tyre storage depot and tyre processing facility at 8 Cavalry Road, Mowbray.

The proposal involves the delivery and storage of up to 1500 tonnes of end of life (waste) tyres in outdoor storage on a block of land within an Industrial area of Launceston. A tyre shredder and moulding plant will also be established within a purpose built shed to process up to 8640 tonnes per annum of waste tyres. The shed will store another 10 tonnes of tyres awaiting processing.

This report has been prepared based on information provided by the proponent in the Environmental Effects Report (EER). Relevant government agencies and the public have been consulted and their submissions and comments considered as part of this assessment.

Further details of the assessment process are presented in section 1 of this report. Section 2 describes the statutory objectives and principles underpinning the assessment. Details of the proposal are provided in section 3. Section 4 reviews the need for the proposal and considers the alternatives to the proposal. Section 5 summarises the public and agency consultation process and the key issues raised in that process. The detailed evaluation of environmental issues is contained in section 6. The report conclusions are contained in section 7.

Appendix 1 contains details of comments made and issues raised in the consultation process. Appendix 2 contains the environmental permit conditions for the proposal.

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1 Approval process

An application for a permit under the *Land Use Planning and Approvals Act 1993* (LUPA Act) in relation to the proposal was submitted to Launceston City Council on 28 July 2017.

The proposal is defined as two 'level 2 activities' under schedule 2 of the *Environmental Management and Pollution Control Act 1994* (EMPC Act), being:

- A waste tyre storage depot (clause 3(ab)); and
- The crushing, grinding or milling of rubber of 200 tonnes or more per year (clause 6(a)(i)).

Section 25(1) of the EMPC Act required Council to refer the application to the Board of the Environment Protection Authority (the Board) for assessment under the Act. The Board received the application on 1 August 2017.

The assessment has been undertaken by the Director, Environment Protection Authority under delegation from the Board.

The Board required that information to support the proposal be provided in the form of an Environmental Effects Report (EER).

Several drafts of the EER were submitted to the Department for comment prior to its finalisation and acceptance on behalf of the Board. The EER was released for public inspection for a 14-day period commencing on 3 February 2018. An advertisement was placed in *The Examiner* and a notice was placed on the EPA website. The EER was also referred at this time to relevant government agencies for comment. One public representation was received.

2 SD objectives and EIA principles

The proposal must be considered by the Director in the context of the objectives of the Resource Management and Planning System of Tasmania (RMPS), and in the context of the objectives of the Environmental Management and Pollution Control System (EMPCS) (both sets of objectives are specified in Schedule 1 the EMPC Act). The functions of the Board are to administer and enforce the provisions of the Act, and in particular to use its best endeavours to further the RMPS and EMPCS objectives.

The Director must undertake the assessment of the proposal in accordance with the Environmental Impact Assessment Principles defined in Section 74 of the EMPC Act.

3 The proposal

The main characteristics of the proposal are summarised in Table 1. A detailed description of the proposal is provided in Part B of the EER.

Table 1: Summary of the proposal's main characteristics

Activity	
The storage of up to 1510 tonnes of waste tyres and processing of up to 8640 tonnes of waste tyres per annum.	
Location and planning context	
Location	8 Cavalry Road, Mowbray, as shown in Figure 1
Land zoning	General Industrial
Land tenure	Private
Existing site	
Land Use	Currently used for the storage of waste tyres under a level 1 temporary permit.
Topography	Site generally flat but slopes to the east up to an embankment on which the railway line is located.
Hydrology	The Newnham Creek is located approximately 2km west of the site. There are three freshwater dams within 500m of the site.
Fauna	None
Flora	Hawthorn hedge along western side of the site providing visual barrier. Most of the site is grass and introduced species. An area of approximately 525m ² along the eastern boundary of the site contains acacia woodland and scrub.
Local region	
Climate	Rainfall approximately 685mm per annum (Launceston, Ti-Tree Bend). Wind direction predominantly north westerlies.
Surrounding land zoning, tenure and uses	General Industrial. Residence located in the house adjacent to the proposed plant, at a distance of less than 100 metres to the south at 59 Remount Road.
Species of conservation significance	None
Proposed infrastructure	
Major equipment	Tyre recycling plant (see Table 4 of EER for details of components) Frame Vulcanizing Press/Recycle Rubber Tile Moulding Machine Firefighting hydrant system
Other infrastructure	Shed for housing recycling plant and moulding machine
Inputs	
Water	Connection to reticulated water supply
Energy	Connection to existing power supply

Other raw materials	Tyres supplied from Tyre Recycle Tasmania Pty Ltd (TRT).
Wastes and emissions	
Liquid	Surface runoff during rain events. Contaminated fire fighting water in the event of a fire. Sewerage to reticulated sewer system.
Atmospheric	Dust from operation of the recycling plant. Odour from moulding equipment.
Solid	General refuse including food scraps, paper and packaging. General inert wastes such as metal waste and fibres to be collected periodically.
Controlled wastes	Oils and lubricants from plant operation.
Noise	From operation of recycling and moulding plant. Movement of vehicles on site and going to and from the site.
Greenhouse gases	Emissions from vehicles, plant, and associated equipment.
Construction and operations	
Proposal timetable	Current storage of tyres onsite will continue under new approval. Construction of recycling and moulding plant to commence on approval. Operation likely 4-5 months after approval.
Operating hours (ongoing)	0600 to 1800 hours Monday to Saturday. Plant will not operate before 0700. No work Sundays or Public Holidays.
Other key characteristics	



Figure 7: Site location (source: theLIST)

Figure 1: Site Location – Figure 7 of the EER



Figure 2 – Site Location (2) – Figure 8 of the EER

4 Need for the proposal and alternatives

According to the EER, several other locations were explored for the proposal. However, these locations did not present a viable proposition either because of the costs associated with securing a site, proximity to residential areas of the site. Additionally, available industrial zoned land within the Northern Tasmanian region was considered but established buildings limited the proposed use and development or there was not sufficient area on the site to contain the waste tyres.

5 Public and agency consultation

One public representation was received. The environmental issue raised in the representation was:

- Fire management and mitigation systems

Other issues raised by the representation were:

- Current and future business practice concerns including potential product markets.

A summary of the public representation is contained in Appendix 1 of this report.

The EER was referred to a number of government agencies/bodies with an interest in the proposal. A response to comment on the representation and EER was received from the following:

- Tasmania Fire Service.

The following Divisions/areas of the Department of Primary Industries, Parks, Water and Environment also provided submissions on the EER:

- Noise Specialist, EPA Tasmania
- Regulator, Northern Regulation Section, EPA Tasmania.

6 Evaluation of environmental issues

The environmental issues considered relevant to the proposal have been evaluated by EPA Tasmania. Details of this evaluation, along with the permit conditions required by the Director, are discussed below.

Issue 1: Fire Management
Description of potential impacts
<p>The storage of used tyres is an inert activity, however in the event of a fire there is the risk to the environment through release of pollutants to air as well as land and water from contaminated firewater. Fires may be caused through the deliberate or accidental lighting of material on-site or from a grass fire on or off the site.</p> <p>The tyre storage site is located within an Industrial area and is enclosed by security fencing. The site is predominantly cleared with a small area of native vegetation on the escarpment on the eastern boundary. The majority of the site is introduced grass and weeds.</p> <p>A bund has been established on the land under the current land use planning permit for the temporary storage of ELTs. The bund is designed to collect run-off of water utilised for firefighting and has a capacity to hold a minimum of 162KL.</p>
Management measures proposed in EER
<p>The management strategy for fire risk detailed in the EER is as follows:</p> <ul style="list-style-type: none"> • Emergency Fire Plan outlining procedure to responding to a fire emergency; • Maintenance of the existing perimeter of the site and bund; • Stacking ELT in a pod formation in accordance with the <i>South Australian Fire Authorities, Community Safety Department (2014) Built Environs Section Guideline No. 13, General Guidelines for Rubber Tyre Storage</i>; • Fire Hydrant providing appropriate flow rates to the site at 10l/s; • Maintaining land in a minimal fuel condition; and • Continued surveillance over the site by employees and persons occupying adjoining properties. <p>Other management measures detailed in the EER are:</p> <ul style="list-style-type: none"> • There will be no hot work activities such as oxy cutting, welding and grinding undertaken within the operations area; • Machinery and vehicles will be inspected on a regular basis in relation to potential fires and sparking. • Smoking will be prohibited within the operations area; • There will be no storage of flammable or combustible liquids, hazardous waste, or other easily ignitable materials in close proximity of the outdoor storage. <p>The following commitments are relevant to the fire management:</p> <p>Commitment 1 - Emergency Fire Plan stored on site. Copies also provided to the TasFire Service.</p> <p>Commitment 2 - Review of Emergency Fire Plan biannually.</p> <p>Commitment 3 - Grass slashed across the site to ensure that the land is kept in low fuel conditions.</p> <p>Commitment 4 - Weeds within the development area removed.</p> <p>Commitment 5 - Ensure fire hydrant and equipment is in good working order for firefighting.</p> <p>Commitment 7 - Bund on the site is maintained.</p> <p>Commitment 8 - Soil sampling and analysis undertaken after a fire incident where bund retained water.</p> <p>Commitment 9 - Scraping site area after a fire event with an excavator.</p>

Public and agency comment

One representation considered the proposed fire management measures to be insufficient. They believed the amount of tyres to be stored on the site would not be manageable in the event of a fire based on proposed fire response measures.

The representation and EER was referred to Tasmania Fire Service for comment. Their reply stated:

- *TFS considers the provision of vehicle hard standing (gravel or similar) around the perimeter of the site would assist both fire fighting operations and allow for a fuel modified/reduced buffer between the site boundary and tyre storage piles.*
- *TFS remains concerned that secure fencing is still needed for the site to prevent access for fire lighting.*
- *A Fire hydrant would also ideally be located adjacent to the site entry, and then located so that no point of the site is greater than 2 hose lengths + Jetstream of water (60+10 = 70m) from a hydrant. [TFS] are happy to review the proposed hydrant locations and provide comment upon receipt of a design.*

TFS notes that 1.1.15 of the attached Environmental effects Report details the following:

Provision of Water Supply: A water hydrant is located at the south-western corner. This provides flow rates at an estimated 10l/s to the site.

[TFS] confirm that 3 hydrant outlets must discharge simultaneously (30l/sec) for the site, this must be the 3 most hydraulically disadvantaged outlets. [TFS] recommend that flow and pressure testing be conducted adjacent to the site connection to confirm that the required water supply 30l/sec at 200kPa is available. If this is not available in the reticulated mains, on-site storage may be required.

In considering the fire related elements of Representation 8 it appears that the submission assumes that this operation will not provide the required systems and resources for fire risk minimisation and response. This would appear to be capable of regulatory intervention and so the likelihood of such an outcome could be considered low.

[TFS] note the recent introduction of the Tyre Stewardship best practice document and that it may eventually become a candidate code of practice however [TFS] don't think it is accepted outside the members of the Tyre Stewardship association.

The TFS subsequently undertook an inspection of the site and found neither the hedge nor the current wire fencing were sufficient for security. They also raised concerns regarding current fuel loads.

Evaluation

A fire at the site poses the highest risk to the environment from air emissions during the fire and through the production of firefighting water, which has the potential to discharge to ground or surface waters and contaminate the environment.

The representation has raised concerns regarding proposed fire management measures including the proposed storage limit. The proposed limit is consistent with the current approval for the site. The additional 10 tonnes relates to storage within the building that forms part of the Land. Tyres are stored here for processing. The total amount of tyres to be stored will be limited by the stacking of ELTs into pod formations outside the proposed building. As these formations are a critical part of the fire management strategy, the type of stacking, dimensions and locations of the pods are restricted under **condition FM1**. The configuration required under the condition is generally consistent with the Site Plan included in Appendix B of the EER.

The proponent has proposed a range of fire mitigation and management measures, consistent with *South Australian Fire Authorities, Community Safety Department (2014) Built Environs Section Guideline No. 13, General Guidelines for Rubber Tyre Storage*. EPA Tasmania currently has no equivalent Guideline but the SA Guideline provides a sound basis for the development of appropriate fire management measures. The *Approved Management Method for the Reuse and Storage of Waste Tyres (AMM)* issued by EPA Tasmania in June 2017 does not apply to this proposal as it exceeds the tyre storage limit specified in the AMM.

The AMM references the *Guideline for bulk storage of rubber tyres (Version 3 dated 5 December 2014)* issued by Fire & Rescue NSW. The proposed storage pods comply with the height limit recommended in this guideline. While tyres are within the 18 metres of a boundary in some cases, they are at least 18 metres from any building or adjacent allotment off site. These distances will require maintenance through condition FM1. The pod formations, including the laced stacking required in condition FM1, are also consistent with the Tyre Stewardship Australia, *Best Practice Guidelines for Tyre Storage and Fire Emergency Preparedness* (May 2017). This Guideline requires separation of 12 metres from combustible boundaries (or 20 metres where the long side of the pod faces the boundary) and at least 6 metres from non-combustible boundaries and buildings on-site. It is noted the western boundary includes a hawthorn hedge and the eastern boundary includes native vegetation. Each establishes a combustible boundary.

An Emergency Fire Plan was included as Appendix D of the EER. This plan includes details of actions in response to a fire but does not include mitigation and management to prevent a fire on the site. The Plan therefore requires amendment to address on-going mitigation, including management of vegetation to minimise fuel loads, maintenance of security fencing, and maintenance of the fire hydrant system and bund integrity. These actions are consistent with management measures and commitments detailed in the EER. Actions post-fire extinguishment also need to be detailed to ensure appropriate management and disposal of waste tyres and firefighting water. These include the sampling for contamination and disposal of contaminated soil. This is consistent with Commitment 8 and 9 of the EER.

Condition FM2 therefore requires the submission of a Fire Management and Response Plan to the Director for approval within 60 days of the permit taking effect. This Plan will incorporate the above requirements. The proponent will be required to implement and act in accordance with the plan. The proponent is also reminded of their responsibilities in relation to the transport of controlled waste in Information condition LO3, this will apply in the event of removal of tyres or contaminated soil after a fire event.

Tasmania Fire Service has raised concerns regarding the absence of a fully enclosed fence. As the greatest environmental risk is from fire, including from those deliberately lit, access to the site needs to be appropriately managed. The EER states the site is secured by fencing but industrial security fencing only exists on the northern and southern boundaries, and a portion of the western boundary. A hawthorn hedge and wire fencing provides a barrier on the rest of the western boundary. The train-line easement and escarpment provides a barrier on the eastern boundary. To ensure that access is limited to the site to prevent the ignition of fires the Land must be secured by fencing under **condition FM3**.

The representation also raises concerns regarding fire suppression. TFS details requirements for fire hydrant system at the site. These requirements are expected to be addressed in the Building Control/permit process in consultation with the TFS. No conditions in relation to this aspect of fire management will be imposed.

Condition G2 requires the proponent to notify EPA Tasmania in the event of an incident, which includes a fire, to allow appropriate environmental management and response during and after the fire.

The conditions above should address the fire management concerns raised in the representation in relation to fire management.

Conclusion

The proponent will be required to comply with the following conditions:

- G2** Incident Response
- FM1** Tyre Storage Configuration
- FM2** Fire Management and Response Plan
- FM3** Site security
- LO3** Controlled waste transport

Issue 2: Noise Emissions
Description of potential impacts
<p>Noise emissions have the potential to cause environmental nuisance, particularly to nearby sensitive receptors. The proposed activity is to be located in an area zoned General Industrial under the Launceston Interim Planning Scheme 2015.</p> <p>The tyre recycling and moulding equipment will be located within a building. Operating hours are 0600 to 1800 hours with operation of the tyre shredder not to occur prior to 0700 hours.</p> <p>The nearest sensitive receptor is located within 100 metres of the site on the adjacent property to the east.</p> <p>A Noise study was completed as part of the EER (Appendix G). The study assessed the predicted noise emission levels from the tyre recycling plant and moulding equipment as well as traffic movements against an emission limit of 65 dBA at the boundary of the Land during daytime hours (0700 to 1800). This limit is consistent with commercial noise limits. The study also assessed noise emission levels at the nearest residence outside of daytime hours but within likely operational hours. The study found noise levels were below 65 dBA at the boundary of the Land based on building design and noise levels between 0600 and 0700 were unlikely to cause environmental nuisance at the residence.</p>
Management measures proposed in EER
<p>Operating the tyre recycling and moulding facility within a building.</p> <p>The proposed building includes a barrier wall, which comprises three shipping containers. The containers will project from the wall of the building on the southern side and have a minimum height of 6m.</p>
Public and agency comment
None
Evaluation
<p>The activity is located within an industrial area with the majority of uses commercial and industrial in nature. However, a building on the adjacent property is still used as a permitted residence and therefore the prevention of noise impacts from the activity must be appropriately mitigated and managed. It is noted that no representation was received from the residence.</p> <p>Operating hours will be imposed consistent with the EER under conditions N1 limiting the potential exposure to noise emissions to appropriate commercial hours consistent with other uses in the area. These operating hours are consistent with those proposed in the EER.</p> <p>Based on the zoning and uses in the area, a commercial noise level of 65 dBA was applied to the assessment of impacts at the residence during daytime hours. The noise study demonstrates that the proposed installation of the tyre recycling and moulding equipment within a building and the construction of a sound barrier is likely to meet the commercial limit of 65 dBA at the boundary of the land. Meeting this noise level, based on the current exposure to ambient noise levels of 45 to 55 dBA, is likely to prevent impacts to the residence. To ensure this is the case a noise emission limit of 65 dBA has been imposed under condition N3 during daylight hours of 0600 to 1800 hours.</p> <p>The tyre shredder produced the highest noise emission levels and therefore the greatest potential to cause nuisance at the residence. To further ensure the absence of impacts and, in particular, during the early hours of the morning, condition N2 will be imposed. This condition prevents operation of the shredder outside the hours of 0700 and 1800 hours. This condition is consistent with operating hours proposed in the EER.</p> <p>A complaints register must be established under condition G6 to allow appropriate management of any complaints in relation to noise emissions.</p>

Conclusion

The proponent will be required to comply with the following conditions:

- G6** Complaints Register
- N1** Operating hours (Waste Tyre Storage Depot, moulding plant and deliveries)
- N2** Operating hours (Shredding of Tyres)
- N3** Noise emission limits

Issue 3: Waste Management, Environmentally Hazardous Materials and Water Quality

Description of potential impacts

Inappropriate management of waste, environmentally hazardous materials, effluent and stormwater has the potential to cause environmental impacts to land and water.

The EER states that ELTs collected from various retailers across Tasmania may have some contamination that could contain elements of hazardous substances and chemicals. The proponent intends to refuse collection of contaminated ELTs.

The tyre recycling plant will be located on a hardstand and contained within a shed. The tyre recycling plant will require minimal oils and lubricants for maintenance of equipment. These will be disposed of appropriately through a licensed contractor.

An external contractor will undertake major maintenance and service of the tyre recycling plant. Oils and lubricants for a major service will be provided by the contractor and not stored on-site. Fuelling or maintenance of vehicles associated with the operation is not expected to be undertaken on site.

According to the EER, the tyre recycling process will generate waste in the form of dust and fibres. These are collected through a ducted dust collection system, with the dust collected in bags and disposed of by a licensed contractor. General waste will be disposed into a skip-bin on-site, which will be removed by a licensed contractor.

Liquid effluent will only be generated in the event of a fire with the production of firefighting water. This water will be directed into an established bund on the site. Surface water is expected to be limited. Any stormwater associated with the tyre recycling and moulding facility building will be directed to the Council's reticulated system.

Management measures proposed in EER

Discharge of firewater to the bund constructed on-site.

Disposal of wastes through licenced contractors.

Public and agency comment

None

Evaluation

Limited surface water is expected to be generated on-site, however high rainfall events may result in surface discharge. To ensure surface water is appropriately collected and treated prior to discharge **condition E1** has been imposed. The existing bund, constructed on site as part of the requirements for the current land use planning permit for the storage of waste tyres, is expected to contain stormwater and assist compliance with this condition.

According to the EER, the bund has been sized to ensure it can contain the expected amounts of firewater in the event of a fire. Maintenance of the bund has not been addressed in the EER. To ensure that the bund retains its integrity and capacity for a fire event, maintenance measures will be included in the Fire Management and Response Plan required under **condition FM2** (see Issue 1).

To manage the potential for contamination from firefighting water, in the event of a fire on-site, **condition E2** requires that firewater not be discharged from the land (this includes through groundwater) and is disposed of in accordance with the Director EPA's requirements. The Fire Management and Response Plan will include details that ensure compliance with this condition.

The EER indicates that small amounts of oils and lubricants will be stored on the site for use within the shed. The expectation of weed management also indicates the storage of some chemicals for this purpose. To ensure that any environmentally hazardous materials are appropriately stored and managed the proponent will be required to comply with **condition H1**. To ensure that any environmentally hazardous materials are appropriately managed in the event in a discharge, spill kits will be required under **condition H2**.

The solid waste management measures are supported. The proponent is reminded of the Waste Management Hierarchy in the Information schedule (OI1).

The intention to not accept contaminated ELTs is supported. However, conditions cannot be imposed on the collection of ELTs as this activity does not form part of the application.

Conclusion

The proponent will be required to comply with the following conditions:

- E1** Stormwater
- E2** Firefighting wastewater
- OI1** Waste management hierarchy
- H1** Storage and handling of hazardous materials
- H2** Spill kits

Issue 4: Air Emissions
Description of potential impacts
<p>Emissions to air, including dust and odour have the potential to cause environmental nuisance if not appropriately managed. Air emissions are expected to include dust from the operation of the tyre recycling plant; and odour from the moulding equipment.</p> <p>The activity is located within an industrial area; however, the building on the adjacent property to the east is still a permitted residence and as such is a sensitive use. According to the EER, the tyre recycling plant and moulding equipment will be contained within a large building on a sealed hardstand area.</p>
Management measures proposed in EER
<p>Operation of the tyre recycling and moulding plant within a building.</p> <p>Operation of a dust extraction system within the building and collection of the dust.</p>
Public and agency comment
None
Evaluation
<p>Air emissions from both the tyre storage depot and tyre recycling and moulding facility are likely to be limited, particularly with the containment of the recycling and moulding equipment within a building and the installation of a dust extraction system. To ensure that dust emissions do not cause environmental nuisance, the proponent will be required to control air emissions to the extent necessary to ensure nuisance does not occur beyond the boundary of the Land under condition A1. A complaints register must be established under condition G6 to allow appropriate management of any complaints in relation to air emissions.</p>
Conclusion
<p>The proponent will be required to comply with the following conditions:</p> <p>G6 Complaints register</p> <p>A1 Control of dust emissions</p>

Issue 5: Decommissioning and Rehabilitation
Description of potential impacts
<p>In the event that the activity ceased, appropriate decommissioning and management would be required to ensure no long-term environmental impacts, including contamination from any fire events.</p> <p>The EER details that in the event of cessation of the activity the proponent would remove the tyre stockpile and decommission the tyre recycling and moulding plant. The shed would remain for an alternative use.</p>
Management measures proposed in EER
<p>The EER states that 'if a tyre fire occurs and there is soil contamination, the Proponent will carry out soil sampling and other work as required to ensure that any contamination can be treated appropriately.'</p>
Public and agency comment
None
Evaluation
<p>The storage and processing of waste tyres poses limited long-term risks to the environment. The proponent will be required to notify in the event of expected permanent cessation of the activity under condition DC1. To ensure that decommissioning and rehabilitation is appropriately managed to allow ongoing use of the land for industrial purposes the proponent must comply with condition DC2. This includes a requirement to remove or mitigate all environmental hazards, which includes the removal of any contaminated soil. This may be from any fire events or spillage of environmentally hazardous materials. Condition DC2 also requires the removal of controlled wastes, which includes tyres to ensure they do not remain on the land if the activity ceases. The Information Schedule reminds the proponent that controlled waste must be transported to and from the site by persons authorised to do so under EMPCA and subordinate legislation.</p>
Conclusion
<p>The proponent will be required to comply with the following conditions:</p> <p>DC1 Notification of cessation</p> <p>DC2 Rehabilitation following cessation</p> <p>LO3 Controlled waste transport</p>

7 Report conclusions

This assessment has been based on the information provided by the proponent, Phoenix Rubber Products Pty Ltd, in the permit application, EER and in correspondence and discussion between EPA Tasmania and the proponent and the proponent's representatives.

This assessment has incorporated specialist advice provided by EPA Tasmania's scientific specialists and regulatory staff, and other government agencies.

This assessment has taken into account issues raised in public submissions.

It is concluded that:

1. the RMPS and EMPCS objectives have been duly and properly pursued in the assessment of the proposal; and
2. the assessment of the proposed activity has been undertaken in accordance with the Environmental Impact Assessment Principles.

It is concluded that the proposed activity is capable of being managed in an environmentally acceptable manner such that it is unlikely that the objectives of the *Environmental Management and Pollution Control Act 1994* (the RMPS and EMPCS objectives) would be compromised, provided that the Permit Conditions - Environmental No. 9740 appended to this report are imposed and duly complied with.

8 Report approval

Environmental Assessment Report and conclusions, including permit conditions, adopted:



Wes Ford

DIRECTOR, ENVIRONMENT PROTECTION AUTHORITY

Acting under delegation from the Board of the Environment Protection Authority

Date: 20 March 2018

9 References

Land Use Planning; *'End of Life' Tyre Processing and Storage, 8 Cavalry Road, Mowbray Environmental Effects Report* (dated 29/01/2018), Phoenix Rubber Products Pty Ltd, Perth, Tasmania.

10 Appendices

Appendix 1 Summary of public and agency submissions

Appendix 2 Permit conditions

Appendix 1 Summary of public and agency submissions

Representation No./ Agency	EER section	Comments and issues
1	Fire Management	Fire mitigation measures insufficient.
		Proponent's history of tyre storage without processing capabilities.
		Absence of an end market for product
		Poor business model
		Incorrect information on current collection volumes.
		Requests prevention of commencement of tyre collection prior to shredder commencement and processing of current stockpiles.

Appendix 2 Permit conditions - Environmental

PERMIT PART B
PERMIT CONDITIONS - ENVIRONMENTAL No. 9740

Issued under the *Environmental Management and Pollution Control Act 1994*

Activity: **The operation of a tyre recycling and moulding facility (ACTIVITY TYPE:
Crushing, Grinding or Milling (Chemicals))
8 CAVALRY ROAD
MOWBRAY TAS 7248**

The above activity has been assessed as a level 2 activity under the *Environmental Management and Pollution Control Act 1994*.

Acting under Section 25(5)(a)(i) of the EMPCA, the Board of the Environment Protection Authority has required that this Permit Part B be included in any Permit granted under the *Land Use Planning and Approvals Act 1993* with respect to the above activity.

Municipality: **LAUNCESTON**
Permit Application Reference: **DA 370/2017**
EPA file reference: **252646**

Date conditions approved: 20 March 2018

Signed: 

DELEGATE FOR THE BOARD OF THE ENVIRONMENT
PROTECTION AUTHORITY

DEFINITIONS

Unless the contrary appears, words and expressions used in this Permit Part B have the meaning given to them in **Schedule 1** of this Permit and in the EMPCA. If there is any inconsistency between a definition in the EMPCA and a definition in this Permit Part B, the EMPCA prevails to the extent of the inconsistency.

ENVIRONMENTAL CONDITIONS

The person responsible for the activity must comply with the conditions contained in **Schedule 2** of this Permit Part B.

INFORMATION

Attention is drawn to **Schedule 3**, which contains important additional information.

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Attachments

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Schedule 1: Definitions

In this Permit Part B:-

Activity means any environmentally relevant activity (as defined in Section 3 of EMPCA) to which this document relates, and includes more than one such activity.

Authorized Officer means an authorized officer under section 20 of EMPCA.

Controlled Waste has the meaning described in Section 3(1) of EMPCA.

Director means the Director, Environment Protection Authority holding office under Section 18 of EMPCA and includes a person authorised in writing by the Director to exercise a power or function on the Director's behalf.

EMPCA means the *Environmental Management and Pollution Control Act 1994*.

Environmental Harm and **Material Environmental Harm** and **Serious Environmental Harm** each have the meanings ascribed to them in Section 5 of EMPCA.

Environmental Nuisance and **Pollutant** each have the meanings ascribed to them in Section 3 of EMPCA.

Environmentally Hazardous Material means any substance or mixture of substances of a nature or held in quantities which present a reasonably foreseeable risk of causing serious or material environmental harm if released to the environment and includes fuels, oils, waste and chemicals but excludes sewage.

laced stacked means tyres are stacked overlapping to create a woven or laced arrangement.

Person Responsible is any person who is or was responsible for the environmentally relevant activity to which this document relates and includes the officers, employees, contractors, joint venture partners and agents of that person, and includes a body corporate.

Stormwater means water traversing the surface of the land as a result of rainfall.

Tasmanian Noise Measurement Procedures Manual means the document titled *Noise Measurement Procedures Manual*, by the Department of Environment, Parks, Heritage and the Arts, dated July 2008, and any amendment to or substitution of this document.

The Land means the land on which the activity to which this document relates may be carried out, and includes: buildings and other structures permanently fixed to the land, any part of the land covered with water, and any water covering the land. The Land falls within the area defined by Certificate of Title 128392/1 and as further delineated at Attachment 1.

Schedule 2: Conditions

Maximum Quantities

Q1 Regulatory limits

- 1 The activity must not exceed the following limits :
 - 1.1 8,640 tonnes per year of chemicals or rubber processed.
 - 1.2 1,510 tonnes of waste tyres stored or likely to be stored.

General

G1 Access to and awareness of conditions and associated documents

A copy of these conditions and any associated documents referred to in these conditions must be held in a location that is known to and accessible to the person responsible for the activity. The person responsible for the activity must ensure that all persons who are responsible for undertaking work on The Land, including contractors and sub-contractors, are familiar with these conditions to the extent relevant to their work.

G2 Incident response

If an incident causing or threatening environmental nuisance, serious environmental harm or material environmental harm from pollution occurs in the course of the activity, then the person responsible for the activity must immediately take all reasonable and practicable action to minimise any adverse environmental effects from the incident.

G3 No changes without approval

- 1 The following changes, if they may cause or increase the emission of a pollutant which may cause material or serious environmental harm or environmental nuisance, must only take place in relation to the activity if such changes have been approved in writing by the EPA Board following its assessment of an application for a permit under the *Land Use Planning and Approvals Act 1993*, or approved in writing by the Director:
 - 1.1 a change to a process used in the course of carrying out the activity; or
 - 1.2 the construction, installation, alteration or removal of any structure or equipment used in the course of carrying out the activity; or
 - 1.3 a change in the quantity or characteristics of materials used in the course of carrying out the activity.

G4 Change of responsibility

If the person responsible for the activity intends to cease to be responsible for the activity, that person must notify the Director in writing of the full particulars of any person succeeding him or her as the person responsible for the activity, before such cessation.

G5 Change of ownership

If the owner of The Land upon which the activity is carried out changes or is to change, then, as soon as reasonably practicable but no later than 30 days after becoming aware of the change or intended change in the ownership of The Land, the person responsible must notify the Director in writing of the change or intended change of ownership.

G6 Complaints register

- 1 A public complaints register must be maintained and made available for inspection by an Authorized Officer upon request. The public complaints register must, as a minimum, record the following detail in relation to each complaint received in which it is alleged that environmental harm (including an environmental nuisance) has been caused by the activity:
 - 1.1 the date and time at which the complaint was received;
 - 1.2 contact details for the complainant (where provided);
 - 1.3 the subject-matter of the complaint;
 - 1.4 any investigations undertaken with regard to the complaint; and
 - 1.5 the manner in which the complaint was resolved, including any mitigation measures implemented.
- 2 Complaint records must be maintained for a period of at least 3 years.

Atmospheric

A1 Control of dust emissions

Dust emissions from The Land must be controlled to the extent necessary to prevent environmental nuisance beyond the boundary of The Land.

Decommissioning And Rehabilitation

DC1 Notification of cessation

Within 30 days of becoming aware of any event or decision which is likely to give rise to the permanent cessation of the activity, the person responsible for the activity must notify the Director in writing of that event or decision. The notice must specify the date upon which the activity is expected to cease or has ceased.

DC2 Rehabilitation following cessation

- 1 Following permanent cessation of the activity, and unless otherwise approved in writing by the Director, The Land must be rehabilitated including:
 - 1.1 stabilisation of any land surfaces that may be subject to erosion;
 - 1.2 removal or mitigation of all environmental hazards or land contamination, that might pose an ongoing risk of causing environmental harm, including any controlled waste; and
 - 1.3 decommissioning of any equipment that has not been removed.

Effluent Disposal

E1 Stormwater

- 1 Polluted stormwater that will be discharged from The Land must be collected and treated prior to discharge to the extent necessary to prevent serious or material environmental harm, or environmental nuisance.
- 2 Notwithstanding the above, all stormwater that is discharged from The Land must not carry pollutants such as sediment, oil and grease in quantities or concentrations that are likely to degrade the visual quality of any receiving waters outside the Land.
- 3 All reasonable measures must be implemented to ensure that solids entrained in stormwater are retained on The Land. Such measures may include appropriately sized and maintained sediment settling ponds or detention basins.

- 4 Stormwater discharged in accordance with this condition must not be directed to sewer without the approval of the operator of the sewerage system.

E2 Firefighting wastewater

Firefighting wastewater must not be discharged from the The Land, unless it is for the purpose of removal for disposal to a facility approved to receive such material or in accordance with any direction provided in writing by the Director.

Fire Management

FM1 Tyre Storage Configuration

- 1 Unless otherwise approved by the Director, tyres stored on the Land, and outside of any building, must be laced stacked to form pods that are no greater than 20 metres in length, no greater than 6 metres wide, no greater than 3 metres high and at a distance of no less than 20 metres from any other pod.
- 2 All tyres must be located to the east of the onsite bund.
- 3 Tyres must not be stored within:
 - 3.1 20 metres of the northern, southern or eastern boundaries of the Land; or
 - 3.2 12 metres of the western and south eastern boundary of the Land; or
 - 3.3 12 metres of any building on the Land.

FM2 Fire Management & Response Plan

- 1 A Fire Management & Response Plan must be submitted to the Director for approval within 60 days from the date on which these conditions take effect.
- 2 The Plan, and any amendment to the Plan, must be prepared in accordance with any reasonable guidance provided by the Director.
- 3 The person responsible must implement and act in accordance with the approved plan.
- 4 In the event that the Director, by notice in writing to the person responsible, either approves a minor variation to the approved plan or approves a new plan in substitution for the plan originally approved, the person responsible must implement and act in accordance with the varied plan or the new plan, as the case may be.

FM3 Site Security

The Land must be fenced to prevent entry by unauthorised persons and these fences must be adequately maintained for this purpose.

Hazardous Substances

H1 Storage and handling of hazardous materials

- 1 Unless otherwise approved in writing by the Director, environmentally hazardous materials held on The Land must be:
 - 1.1 stored within impervious bunded areas, spill trays or other containment systems; and
 - 1.2 managed to prevent unauthorised discharge, emission or deposition of pollutants:
 - 1.2.1 to soils within the boundary of The Land in a manner that is likely to cause serious or material environmental harm;
 - 1.2.2 to groundwater;
 - 1.2.3 to waterways; or
 - 1.2.4 beyond the boundary of The Land.

H2 Spill kits

Spill kits appropriate for the types and volumes of materials handled on The Land must be kept in appropriate locations to assist with the containment of spilt environmentally hazardous materials.

Noise Control**N1 Operating hours (Waste Tyre Storage Depot, Moulding Plant and Deliveries)**

- 1 Unless otherwise approved by the Director, activities associated with the waste tyre storage depot, moulding plant and deliveries to and from The Land must not be undertaken outside the following times:
 - 1.1 0600 hours to 1800 hours Monday to Saturday.
- 2 Notwithstanding the above paragraph, the above activities must not be carried out on Public Holidays that are observed State-wide (Easter Tuesday excepted) without the written approval of the Director.

N2 Operating hours (Shredding of tyres)

- 1 Unless otherwise approved by the Director, the shredding of tyres on The Land must not be undertaken outside the following times:
 - 1.1 0700 hours to 1800 hours Monday to Friday.
- 2 Notwithstanding the above paragraph, the above activities must not be carried out on Public Holidays that are observed State-wide (Easter Tuesday excepted) without the written approval of the Director.

N3 Noise emission limits

- 1 Noise emissions from the activity when measured at the boundary of the Land and expressed as the equivalent continuous A-weighted sound pressure level must not exceed:
 - 1.1 65 dB(A) between 0600 hours and 1800 hours.
- 2 Where the combined level of noise from the activity and the normal ambient noise exceeds the noise levels stated above, this condition will not be considered to be breached unless the noise emissions from the activity are audible and exceed the ambient noise levels by at least 5 dB(A).
- 3 The time interval over which noise levels are averaged must be 10 minutes or an alternative time interval specified in writing by the Director.
- 4 Measured noise levels must be adjusted for tonality, impulsiveness, modulation and low frequency in accordance with the Tasmanian Noise Measurement Procedures Manual.
- 5 All methods of measurement must be in accordance with the Tasmanian Noise Measurement Procedures Manual.

Schedule 3: Information

Legal Obligations

LO1 EMPCA

The activity must be conducted in accordance with the requirements of the *Environmental Management and Pollution Control Act 1994* and Regulations thereunder. The conditions of this document must not be construed as an exemption from any of those requirements.

LO2 Storage and handling of dangerous goods, explosives and dangerous substances

1 The storage, handling and transport of dangerous goods, explosives and dangerous substances must comply with the requirements of relevant State Acts and any regulations thereunder, including:

1.1 *Work Health and Safety Act 2012* and subordinate regulations;

1.2 *Explosives Act 2012* and subordinate regulations; and

1.3 *Dangerous Goods (Road and Rail Transport) Act 2010* and subordinate regulations.

LO3 Controlled waste transport

Transport of controlled wastes to and from The Land must be undertaken only by persons authorised to do so under EMPCA or subordinate legislation.

Other Information

OI1 Waste management hierarchy

1 Wastes should be managed in accordance with the following hierarchy of waste management:

1.1 waste should be minimised, that is, the generation of waste must be reduced to the maximum extent that is reasonable and practicable, having regard to best practice environmental management;

1.2 waste should be re-used or recycled to the maximum extent that is practicable; and

1.3 waste that cannot be re-used or recycled must be disposed of at a waste depot site or treatment facility that has been approved in writing by the relevant planning authority or the Director to receive such waste, or otherwise in a manner approved in writing by the Director.

OI2 Notification of incidents under section 32 of EMPCA

Where a person is required by section 32 of EMPCA to notify the Director of the release of a pollutant, the Director can be notified by telephoning 1800 005 171 (a 24-hour emergency telephone number).

Attachment 1: The Land

