



Licence

Environmental Protection Act 1986, Part V

Licensee: Lomwest Enterprises Pty Ltd

Licence: L8784/2013/1

Registered office: 836 Cockburn Road
HENDERSON WA 6166

ACN: 107 322 645

Premises address: Lomwest Enterprises Pty Ltd
836 Cockburn Road
HENDERSON WA 6166
Being Lot 10 on Diagram 33950 as depicted in Schedule 1.

Issue date: Thursday, 26 September 2013

Commencement date: Monday, 30 September 2013

Expiry date: Thursday, 31 August 2023

Prescribed premises category

Schedule 1 of the *Environmental Protection Regulations 1987*

Category number	Category description	Category production or design capacity	Approved Premises production or design capacity
57	Used tyre storage (general): premises (other than premises within category 56) on which used tyres are stored	100 tyres or more per year	No more than 1,344 tyre bales stored onsite at any one time
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	1000 tonnes or more per year	11, 000 tonnes per annual period
77	Concrete batching or cement products manufacturing: premises on which cement products or concrete are manufactured for use at places or premises other than those premises	100 tonnes or more per year	12, 045 concrete tyre bales per annual period

Conditions

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

Date signed: 1 September 2016

.....
Alan Kietzmann

MANAGER – LICENSING (WASTE INDUSTRIES)

Officer delegated under section 20
of the *Environmental Protection Act 1986*



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Introduction

This Introduction is not part of the Licence conditions.

DER's industry licensing role

The Department of Environment Regulation (DER) is a government department for the state of Western Australia in the portfolio of the Minister for Environment. DER's purpose is to advise on and implement strategies for a healthy environment for the benefit of all current and future Western Australians.

DER has responsibilities under Part V of the *Environmental Protection Act 1986* (the Act) for the licensing of prescribed premises. Through this process DER regulates to prevent, control and abate pollution and environmental harm to conserve and protect the environment. DER also monitors and audits compliance with works approvals and licence conditions, takes enforcement action as appropriate and develops and implements licensing and industry regulation policy.

Licence requirements

This Licence is issued under Part V of the Act. Conditions contained within the Licence relate to the prevention, reduction or control of emissions and discharges to the environment and to the monitoring and reporting of them.

Where other statutory instruments impose obligations on the Premises/Licensee the intention is not to replicate them in the licence conditions. You should therefore ensure that you are aware of all your statutory obligations under the Act and any other statutory instrument. Legislation can be accessed through the State Law Publisher website using the following link:

<http://www.slp.wa.gov.au/legislation/statutes.nsf/default.html>

For your Premises relevant statutory instruments include but are not limited to obligations under the:

- *Environmental Protection (Unauthorised Discharges) Regulations 2004* – these Regulations make it an offence to discharge certain materials such as contaminated stormwater into the environment other than in the circumstances set out in the Regulations.
- *Environmental Protection (Controlled Waste) Regulations 2004* - these Regulations place obligations on you if you produce, accept, transport or dispose of controlled waste.
- *Environmental Protection (Noise) Regulations 1997* – these Regulations require noise emissions from the Premises to comply with the assigned noise levels set out in the Regulations.

You must comply with your licence. Non-compliance with your licence is an offence and strict penalties exist for those who do not comply.



Licence holders are also reminded of the requirements of section 53 of the Act which places restrictions on making certain changes to prescribed premises unless the changes are in accordance with a works approval, licence, closure notice or environmental protection notice.

Licence fees

If you have a licence that is issued for more than one year, you are required to pay an annual licence fee prior to the anniversary date of issue of your licence. Non-payment of annual licence fees will result in your licence ceasing to have effect meaning that it will no longer be valid and you will need to apply for a new licence for your Premises.

Ministerial conditions

If your Premises has been assessed under Part IV of the Act you may have had conditions imposed by the Minister for Environment. You are required to comply with any conditions imposed by the Minister.

Premises description and Licence summary

Lomwest Enterprises Pty Ltd (Lomwest) operates a used tyre storage and solid waste facility, as well undertaking cement products manufacturing at Lot 10 on Diagram 33950 Cockburn Road in Henderson under licence L8784/2013/1 for prescribed premises categories 57, 61A and 77. The premises accepts and stores used tyres onsite for the purpose of baling and covering with concrete to produce concrete tyre bales called C4M blocks, or for export.

The premises is located within a 'Special Use' zoning of Henderson in the City of Cockburn under the Town Planning Scheme No. 3. Retrospective change of the land use from non-conforming use to general (licensed) industry was provided on 6 May 2014 (Reference no: 3411444 – DA14/0042); it is noted that the development subject of this approval needs to be substantially commenced within a period of 2 years. Advice received from the City of Cockburn on 26 July 2016 verified the validity of the approval. There are no residential properties within 1.28 kilometres of the Premises. The Indian Ocean (Cockburn Sound) is the closest surface water body to the Premises and is located 615m west of the Premises. Other surface water bodies within the premises locality are located 640m northeast, 840m east, and 930m southeast of the Premises.

Using the Department of Water's software system Perth Groundwater Atlas, groundwater has been identified between 11 to 15m below ground level with an aquifer thickness of 31m and is considered marginally brackish (Total Dissolved Solids are 1000 -1500 mg/L), has a low risk of iron staining, and has no known risk of Acid Sulfate Soils. The Premises is not in any Public Drinking Water Source Areas. These areas contain pockets of threatened fauna.

WTMG Pty Ltd (WTMG) is a subsidiary company of Lomwest and located on the same premises. WTMG receive, store and bale loose tyres which are either used in the construction of C4M blocks undertaken by Lomwest, or baled and stored for export purposes. WTMG holds the Controlled Waste Carrier Licence (T00808) and Lomwest is the entity responsible for all prescribed premises activities being undertaken by both companies on the site.

The main emissions from this site include emissions to air, land and groundwater in the event of a fire, as well as dust and odour from the concrete batching and production of the C4M blocks.

This licence is the result of an occupier initiated licence amendment to remove the requirement to store tyre bales in sea containers. The application was referred to the Department of Fire and Emergency Services (DFES) for advice relating to the proposal tyre bale storage. DFES provided information specifying minimum separation distances between tyre bales and tyre bale sizes which assist in fire prevention, and to limit the extent and duration in the event of a fire. This information has been considered as part of the amendment proposal and is discussed within the Decision Document.

This amendment also includes additional administrative changes as required to bring the licence into line with the new licence format, as well as reflecting current site operations.

The licences and works approvals issued for the Premises since 23/09/2013 are:



Instrument log		
Instrument	Issued	Description
W5509/2013/1	23/09/2013	New application
L8784/2013/1	30/09/2013	New application
L8784/2013/1	27/08/2015	Amendment to extend expiry date
L8784/2013/1	29/04/2016	Amendment to extend expiry date
L8784/2013/1	01/09/2016	Amendment to tyre storage conditions

Severance

It is the intent of these Licence conditions that they shall operate so that, if a condition or a part of a condition is beyond the power of this Licence to impose, or is otherwise *ultra vires* or invalid, that condition or part of a condition shall be severed and the remainder of these conditions shall nevertheless be valid to the extent that they are within the power of this Licence to impose and are not otherwise *ultra vires* or invalid.

END OF INTRODUCTION

Licence conditions

1 General

1.1 Interpretation

1.1.1 In the Licence, definitions from the *Environmental Protection Act 1986* apply unless the contrary intention appears.

1.1.2 For the purposes of this Licence, unless the contrary intention appears:

‘**Act**’ means the *Environmental Protection Act 1986*;

‘**annual period**’ means the inclusive period from 1 July until 30 June in the following year;

‘**averaging period**’ means the time over which a limit is measured or a monitoring result is obtained;

‘**CEO**’ means Chief Executive Officer of the Department of Environment Regulation;

‘**CEO**’ for the purpose of correspondence means;

Chief Executive Officer
Department Administering the Environmental Protection Act 1986
Locked Bag 33
CLOISTERS SQUARE WA 6850
Email: info@der.wa.gov.au

‘**controlled waste**’ has the definition in *Environmental Protection (Controlled Waste) Regulations 2004*;

‘**hardstand**’ means a surface with a permeability of 10^{-9} metres/second or less;

‘**Inert waste Type 2**’ has the meaning defined in the Landfill Definitions;

‘**Landfill Definitions**’ means the document titled “Landfill Waste Classification and Waste Definitions 1996” published by the Chief Executive Officer of the Department of Environment as amended from time to time.



‘Licence’ means this Licence numbered L8784/2013/1 and issued under the Act;

‘Licensee’ means the person or organisation named as Licensee on page 1 of the Licence;

‘Lomwest tyre bale’ means tyre bales used in the construction of C4M blocks;

‘Premises’ means the area defined in the Premises Map in Schedule 1 and listed as the Premises address on page 1 of the Licence;

‘Schedule 1’ means Schedule 1 of this Licence unless otherwise stated;

‘Schedule 2’ means Schedule 2 of this Licence unless otherwise stated;

‘tyre bale’ means a collection of used tyres that have been compressed together and bound to form a solid structure;

‘usual working day’ means 0800 – 1700 hours, Monday to Friday excluding public holidays in Western Australia; and

‘WTMG tyre bale’ means tyre bales used for the purpose of transport off-site.

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

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

1.2 Premises operation

1.2.1 The Licensee shall only accept waste on to the Premises if:

- (a) it is of a type listed in Table 1.2.1; and
- (b) the quantity accepted is below any quantity limit listed in Table 1.2.1; and
- (c) it meets any specification listed in Table 1.2.1.

Table 1.2.1: Waste acceptance

Waste type	Quantity limit	Specification ¹
Inert Waste Type 2	Combined limit of 11,000 tonnes per annual period for loose tyres and tyres bales, with the maximum of 1,344 Lomwest tyre bales stored onsite at any one time, and a maximum number of 350 WTMG tyre bales stored onsite at any one time.	Limited to tyres (both loose and baled)

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*

1.2.2 The Licensee shall ensure that where waste does not meet the waste acceptance criteria set out in condition 1.2.1 it is removed from the Premises by the delivery vehicle or, where that is not possible, stored in a quarantined storage area or container and removed to an appropriately authorised facility as soon as practicable.

1.2.3 The Licensee shall ensure that wastes accepted onto the Premises are only subjected to the process requirements set out in Table 1.2.2 and in accordance with any process limits described in that Table.



Table 1.2.2: Waste processing

Waste type	Process	Process limits
Inert Waste Type 2	Receipt, handling, mechanical processing and storage prior to removal offsite or use in the manufacture of C4M blocks	<ul style="list-style-type: none">Concrete batching and/or cement products manufacturing processes are limited to the construction of C4M blocks; andTyre bales are only authorised to be stored onsite prior to being processed into C4M blocks or removed offsite.

- 1.2.4 The licensee shall ensure that all tyres are stacked on level ground, on their side walls, laced or if stored on their treads, are baled with a non-combustible securing device.
- 1.2.5 The Licensee shall ensure tyre (loose and bales) storage complies with the following:
- stored on a hardstand area that is capable of containing all wastewater generated in the event of a fire;
 - no more than four individual stockpiles or bales to be grouped together;
 - each stockpile or bale is located at a minimum of 18 metres from any boundary, building or other tyre groups;
 - each stockpile or bale has a maximum of 60 square metres (60 m²) in area;
 - each stockpile or bale has a maximum weight of 12.5 tonnes; and
 - each stockpile or bale has a maximum of 3.7 metres in height.
- 1.2.6 Where the Licensee is unable to comply with the tyre storage requirements specified in condition 1.2.5, tyre stockpiles and bales must be stored in sea containers that are fully enclosed and lockable.
- 1.2.7 The Licensee shall ensure that tyre stacks do not obscure fire protection equipment (including fire hydrants and fire hoses) or related signage.
- 1.2.8 The Licensee shall completely enclose the premises by a fence or wall that is entirely constructed from non-combustible material and that offers emergency access to the premises in the event of a fire.

2 Monitoring

2.1 Monitoring of inputs and outputs

- 2.1.1 The Licensee shall undertake the monitoring in Table 2.1.1 according to the specifications in that table.

Table 2.1.1: Monitoring of inputs and outputs

Input/Output	Parameter	Units	Frequency
Waste Inputs	Inert Waste Type 2 (tyres)	Tonnes	Each load arriving at Premises
Waste Outputs	Waste type as defined in the Landfill Definitions.	Tonnes	Each load leaving or rejected from the Premises
Product outputs	C4M blocks	Individual blocks	Each block leaving the Premises



3 Improvements

3.1 Improvement program

- 1.1.5 The Licensee shall complete the improvement in Table 3.1.1 by the date of completion in Table 3.1.1.

Table 3.1.1: Improvement program		
Improvement reference	Improvement	Date of completion
IR1	The Licensee shall construct a full or partial wall made of non-combustible material around the tyre stockpiles and tyre bale storage areas for the purpose of containing fire wastewater.	30/09/2016
IR2	The Licensee shall notify the CEO following completion of the wall required in IR1, supported by photographs or other documentation to support that the requirements of IR1 have been met.	Within three business days of IR1 being completed.

4 Information

4.1 Records

- 4.1.1 All information and records required by the Licence shall:
- (a) be legible;
 - (b) if amended, be amended in such a way that the original and subsequent amendments remain legible or are capable of retrieval;
 - (c) except for records listed in 4.1.1(d) be retained for at least 6 years from the date the records were made or until the expiry of the Licence or any subsequent licence; and
 - (d) for those following records, be retained until the expiry of the Licence and any subsequent licence:
 - (i) off-site environmental effects; or
 - (ii) matters which affect the condition of the land or waters.
- 4.1.2 The Licensee shall complete an Annual Audit Compliance Report indicating the extent to which the Licensee has complied with the conditions of the Licence, and any previous licence issued under Part V of the Act for the Premises for the previous annual period.
- 4.1.3 The Licensee shall implement a complaints management system that as a minimum records the number and details of complaints received concerning the environmental impact of the activities undertaken at the Premises and any action taken in response to the complaint.

4.2 Reporting

- 4.2.1 The Licensee shall submit to the CEO an Annual Environmental Report within 28 calendar days after the end of the annual period. The report shall contain the information listed in Table 4.2.1 in the format or form specified in that table.

Table 4.2.1: Annual Environmental Report		
Condition or table (if relevant)	Parameter	Format or form
-	Summary of any failure or malfunction of any pollution control equipment and any environmental incidents that have occurred during the annual period and any action taken	None specified



Table 2.1.1	Monitoring data for inputs and outputs	None specified
4.1.2	Compliance	Annual Audit Compliance Report (AACR). Form available at DER website www.der.wa.gov.au under publication section
4.1.3	Complaints summary	None specified

4.3 Notification

4.3.1 The Licensee shall ensure that the parameters listed in Table 4.3.1 are notified to the CEO in accordance with the notification requirements of the table.

Table 4.3.1: Notification requirements

Condition or table (if relevant)	Parameter	Notification requirement ¹	Format or form ²
-	Breach of any limit specified in the Licence	Part A: As soon as practicable but no later than 5pm of the next usual working day. Part B: As soon as practicable	N1
-	Any fire on the premises	As soon as practicable but no later than 5pm of the next usual working day.	None specified

Note 1: Notification requirements in the Licence shall not negate the requirement to comply with s72 of the Act

Note 2: Forms are in Schedule 2



Schedule 1: Maps

Premises map

The Premises is shown in the map below. The pink line depicts the Premises boundary.





Schedule 2: Reporting & notification forms

These forms are provided for the proponent to report monitoring and other data required by the Licence. They can be requested in an electronic format.

Licence: L8784/2013/1
Form: N1

Licensee: Lomwest Enterprises Pty Ltd
Date of breach:

Notification of detection of the breach of a limit.

These pages outline the information that the operator must provide.

Units of measurement used in information supplied under Part A and B requirements shall be appropriate to the circumstances of the emission. Where appropriate, a comparison should be made of actual emissions and authorised emission limits.

Part A

Licence Number	
Name of operator	
Location of Premises	
Time and date of the detection	

Notification requirements for the breach of a limit	
Emission point reference/ source	
Parameter(s)	
Limit	
Measured value	
Date and time of monitoring	
Measures taken, or intended to be taken, to stop the emission	



Part B

Any more accurate information on the matters for notification under Part A.	
Measures taken, or intended to be taken, to prevent a recurrence of the incident.	
Measures taken, or intended to be taken, to rectify, limit or prevent any pollution of the environment which has been or may be caused by the emission.	
The dates of any previous N1 notifications for the Premises in the preceding 24 months.	

Name	
Post	
Signature on behalf of Lomwest Enterprises Pty Ltd	
Date	



Decision Document

Environmental Protection Act 1986, Part V

Proponent: Lomwest Enterprises Pty Ltd

Licence: L8784/2013/1

Registered office: 836 Cockburn Road
HENDERSON WA 6166

ACN: 107 322 645

Premises address: Lomwest Enterprises Pty Ltd
836 Cockburn Road
HENDERSON WA 6166
Being Lot 10 on Diagram 33950 as depicted in Schedule 1.

Issue date: Thursday, 26 September 2013

Commencement date: Monday, 30 September 2013

Expiry date: Thursday, 31 August 2023

Decision

Based on the assessment detailed in this document the Department of Environment Regulation (DER) CEO's delegated officer has decided to grant an amended licence. The DER delegated officer considers that in reaching this decision, he has taken into account all relevant considerations.

Decision Document prepared by: Lauren Fox
A/Senior Licensing Officer

Decision Document authorised by: Alan Kietzmann
Delegated Officer



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1 Purpose of this Document

This decision document explains how the DER delegated officer has assessed and determined the application and provides a record of the decision-making process and how relevant factors have been taken into account. Stakeholders should note that this document is limited to DER's assessment and decision making under Part V of the *Environmental Protection Act 1986*. Other approvals may be required for the proposal, and it is the proponent's responsibility to ensure they have all relevant approvals for their Premises.



2 Administrative summary

Administrative details		
Application type	Works Approval <input type="checkbox"/> New Licence <input type="checkbox"/> Licence amendment <input checked="" type="checkbox"/> Works Approval amendment <input type="checkbox"/>	
Activities that cause the premises to become prescribed premises	Category number(s)	Assessed design capacity
	57	No more than 1,694 tyre bales stored onsite at any one time
	61A	11,000 tonnes per annual period
	77	12,045 concrete tyre bales per annual period
Application verified	Date: N/A	
Application fee paid	Date: N/A	
Works Approval has been complied with	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>	
Compliance Certificate received	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>	
Commercial-in-confidence claim	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Commercial-in-confidence claim outcome	N/A	
Is the proposal a Major Resource Project?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Was the proposal referred to the Environmental Protection Authority (EPA) under Part IV of the <i>Environmental Protection Act 1986</i> ?	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"/>
Is the proposal subject to Ministerial Conditions?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Ministerial statement No: EPA Report No:
Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the <i>Environmental Protection Act 1986</i>)?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Department of Water consulted Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Is the Premises within an Environmental Protection Policy (EPP) Area Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Is the Premises subject to any EPP requirements? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		



3 Executive summary of proposal and assessment

Lomwest Enterprises Pty Ltd (Lomwest) operates a used tyre storage and solid waste facility, as well as undertaking cement products manufacturing at Lot 10 on Diagram 33950 Cockburn Road in Henderson under licence L8784/2013/1 for prescribed premises categories 57, 61A and 77. The premises accepts and stores used tyres onsite for the purpose of baling and covering with concrete to produce concrete tyre bales called C4M blocks, or for export.

The premises is located within a 'Special Use' zoning of Henderson in the City of Cockburn under the Town Planning Scheme No. 3. Retrospective change of the land use from non-conforming use to general (licensed) industry was provided on 6 May 2014 (Reference no: 3411444 – DA14/0042); it is noted that the development subject of this approval needs to be substantially commenced within a period of 2 years. Advice received from the City of Cockburn on 26 July 2016 verified the validity of the approval. There are no residential properties within 1.28 kilometres of the Premises. The Indian Ocean (Cockburn Sound) is the closest surface water body to the Premises and is located 615m west of the Premises. Other surface water bodies within the premises locality are located 640m northeast, 840m east, and 930m southeast of the Premises.

Using the Department of Water's software system Perth Groundwater Atlas, groundwater has been identified between 11 to 15m below ground level with an aquifer thickness of 31m and is considered marginally brackish (Total Dissolved Solids are 1000 -1500 mg/L), has a low risk of iron staining, and has no known risk of Acid Sulfate Soils. The Premises is not in any Public Drinking Water Source Areas. These areas contain pockets of threatened fauna.

WTMG Pty Ltd (WTMG) is a subsidiary company of Lomwest and located on the same location. WTMG receive, store and bale loose tyres which are either used in the construction of C4M blocks undertaken by Lomwest, or baled and stored for export purposes. WTMG holds the Controlled Waste Carrier Licence (T00808) and Lomwest is the entity responsible for all prescribed premises activities being undertaken by both companies on the site.

The main emissions from this site include emissions to air, land and groundwater in the event of a fire, as well as dust and odour from the concrete batching and production of the C4M blocks. Inspections undertaken by DER officers in 2014 and 2015 have identified non-compliances with licence conditions, specifically failure to provide the geotechnical certification required in conditions 2.5.1 and 5.3.1, as well as storing tyres outside of sea containers in contravention of condition 1.3.3.

On 14 April 2015, DER received an amendment application to remove the following conditions:

- 1.3.1 *The licensee shall ensure that tyre bales are stored in sea containers ensuring that:*
 - (a) *no more than 14 sea containers are stored at the premises;*
- 2.5.1 *The licensee shall obtain written certification by a qualified professional civil engineer, stating that a minimum of 162,000 litres (10 litres per second for 3 hydrants for 90 minutes) of fire wastewater will be effectively contained within the banded tyre storage area on the premise;*
- 2.5.2 *The licensee shall ensure that the tyre storage area catchment is maintained free of accumulated storm water to ensure that it will contain a minimum of 162,000 litres of fire water at any time; and*
- 5.3.1 *The Licensee shall ensure that the parameters listed in Table 5.3.1 are notified to the Director in accordance with the notification requirements of the table.*



Table 5.3.1: Notification requirements			
Condition or table (if relevant)	Parameter	Notification requirement	Format or form
2.5.1	Written certification by a qualified professional engineer stating that 162,000 litres of fire waste water will be effectively contained within the bunded tyre storage area	16 December 2013	None specified

During a site visit in February 2016, DER officers identified that two operations are being undertaken on the site: The tyre storage and baling is being undertaken by WTMG Pty Ltd (WTMG) with the storage of tyre bales and processing into C4M blocks undertaken by Lomwest. WTMG is a subsidiary company of Lomwest. WTMG holds the Controlled Waste Carrier Licence (T00808) and Lomwest is the entity responsible for all prescribed premises activities being undertaken by both companies on the site. The occupier advised DER officers that he may look at transferring the licence to WTMG, with his belief that Lomwest would not then require a licence for the C4M processing, or for WTMG to obtain their own separate licence. This proposal has not yet been provided to DER and has therefore not been considered as part of this amendment.

DER officers clarified the amendment request with the occupier, during the site visit, who confirmed that it is the intent to completely remove condition 1.3.1 so that tyre bales can be stored out in the open, with no requirement of sea container storage. On 29 March 2016, DER received a Fire and Safety Report, dated 11 February 2016. The report only proposed recommendations to reduce fire risk and did not address how the premises could contain wastewater in the event of a fire, and it is noted that the information required under former condition 2.5.1, in regards to the premises being able to contain sufficient fire wastewaters, has not been provided to DER.

Subsequent supporting documentation was provided to DER on 6 May 2016 to advise that any fire wastewaters will be contained upon completion of the retaining wall surrounding the premises, including information regarding the implementation of a fire risk mitigation plan. The proposed controls were referred to the Department of Fire and Emergency Services (DFES) for advice relating to the proposed tyre bale storage. DFES provided information specifying separation distances between tyre bales and tyre bale sizes which assist in fire prevention, and to limit the extent and duration in the event of a fire. This information has been considered as part of the amendment proposal and is discussed within this Decision Document.

This amendment also includes additional changes as required to bring the licence into line with the new licence format, as well as reflecting current site operations. Concrete batching operations are regulated under the *Environmental Protection (Concrete Batching) Regulations 1998*, therefore this decision document has not specifically reviewed this aspect of the Premises operation.



4 Decision table

All applications are assessed in line with the *Environmental Protection Act 1986*, the *Environmental Protection Regulations 1987* and DER's Operational Procedure on Assessing Emissions and Discharges from Prescribed Premises. Where other references have been used in making the decision they are detailed in the decision document.

DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L = Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
Interpretation	N/A	<p>The following definitions have been removed from the licence as they are no longer referenced within licence conditions and are therefore not applicable:</p> <ul style="list-style-type: none">• 'Code of Practice for the Storage and handling of dangerous goods';• 'dangerous goods';• 'environmentally hazardous material'; and• 'fugitive emissions'. <p>The definition of 'Director' has been replaced with 'CEO' and has been updated with the current contact details.</p> <p>The following definitions have been included as they are referenced in the conditions and have been included to provide clarification on their application:</p> <ul style="list-style-type: none">• 'Inert waste Type 2';• 'Landfill Definitions';• 'Lomwest tyre bale';• 'Tyre bale'; and• 'WTMG tyre bale'.	
General conditions	N/A	<p>Condition 1.2.1 of the previous licence, which related to the licence not authorising pollution or unreasonable emissions, has been removed from the licence. It was an explanatory statement, not a condition. Provisions in section 49 of the <i>Environmental Protection Act 1986</i> apply (is an offence to cause pollution and unreasonable emissions) therefore it is not required to be duplicated in the licence.</p>	<p><i>Environmental Protection Act 1986</i></p> <p><i>Environmental Protection</i></p>



DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
General conditions continued		<p>Condition 1.2.2 of the previous licence required the occupier to operate and maintain all pollution control and monitoring equipment in accordance with the manufacturer's specifications. This condition is not sufficiently clear and as the occupier does not have specific pollution control or monitoring equipment, it is not relevant and has therefore been removed from the licence. It is the occupier's responsibility to maintain any firefighting equipment as required by the manufacturer and this responsibility is not negated by the removal of this condition. This condition has been removed in accordance with administration changes implemented by DER.</p> <p>Conditions 1.2.3 and 1.2.4 the previous licence, which related to the requirements for the storage of environmentally hazardous and spill management, have been removed from this licence as the condition was unclear and not enforceable. It is the occupier's responsibility to ensure that any environmentally hazardous materials are sufficiently contained to prevent discharges to the environment. Any offsite discharges into the environment may be subject to the <i>Environmental Protection (Unauthorised Discharges) Regulations 2004</i>. This condition has been removed in accordance with administration changes implemented by DER.</p> <p>Previous condition 1.2.5 required the occupier to undertake actions to prevent stormwater becoming contaminated from site activities. This condition was not clear as it did not refer to any specific stormwater infrastructure or what specific management action should be undertaken. This condition has been removed in accordance with administration changes implemented by DER.</p> <p>If any stormwater does become contaminated from site activities (i.e. the concrete batching operations) and is discharged offsite or into the environment via stormwater drains, the provisions of the <i>Environmental Protection (Unauthorised Discharges) Regulations 2004</i> may apply. Fire waster is considered separately under Appendix A.</p>	(Unauthorised Discharges) Regulations 2004
General		There are no longer any conditions within this section, therefore this section has been	



DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
conditions continued		removed and the consecutive section, 'Premises operation', has been renumbered as section 1.2.	
Premises operation	L1.2.1 – L1.2.8	Please refer to Appendix A	Application supporting documentation
Emissions general	L2.1.1	The previous licence contained the 'Emissions general' section which did not include any conditions, however each sub-section specifically stated that there were 'no specified conditions'. These provisions are not conditions. They were previously included as a drafting instruction that was used to retain consistent numbering in templates as part of the implementation of the licence. These have been removed from the licence, which has resulted in the condition re-numbering. There are no longer any conditions within this section.	N/A
Emissions to land including monitoring	N/A	Former conditions 2.6.1 and 2.6.2 have been removed from the licence. This is discussed in Appendix A.	
Monitoring (general)		The previous licence contained the 'Monitoring' section which did not include any conditions, however each sub-section specifically stated that there were 'no specified conditions'. These provisions are not conditions. They were previously included as a drafting instruction that was used to retain consistent numbering in templates as part of the implementation of the licence. These have been removed from the licence.	
Monitoring of inputs and outputs	L2.1.1	Condition 2.1.1 (and Table 2.1.1) has been included on the licence to specify the monitoring requirements for Premises inputs and outputs. The outputs include wastes that have been rejected or have left the premises, and product outputs by way of C4M blocks. The waste inputs are related to tyres. This condition has been included as a means of checking compliance with Condition 1.2.1 (waste acceptance).	N/A
Improvements	L3.1.1	Condition 3.1.1 has been added to the licence to require the construction of a full or partial wall around the tyre storage areas that is sufficient to contain any wastewater	Application supporting



DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
		generated as a result of fire (IR1). The occupier advised DER that the wall they are constructing to assist in fire water containment will be completed in August 2016. Therefore, DER has allowed the completion of this to be undertaken by the end of September 2016, to allow an additional four weeks to be completed from the end of August. IR2 of this condition requires the occupier to notify DER with photographs within three business days of the wall being completed.	documentation
Information	L4.1.1 – L4.1.3, L4.2.1 and L4.3.1	<p>Condition 5.1.2 of the previous licence, requiring knowledge of licence conditions, has been removed from the licence. It is not a defence to offences under the EP Act for the Licensee or its agents to claim they were unaware of licence conditions. Moreover, knowledge does not ensure compliance and the obligation to comply with conditions of the Licence must remain with it and its agents. This condition has been removed in accordance with administration changes implemented by DER.</p> <p>Table 4.2.1 (formerly 5.2.1) has been amended to remove the requirement for design capacity/throughput of tyre bales to be provided in the Annual Environmental Report and has been replaced with the requirement to provide information on the monitoring of inputs and outputs required under condition 2.1.1.</p> <p>Table 4.3.1 (formerly 5.3.1) has been amended to remove reference to the former requirement to submit a geotechnical report to state that a minimum 162,000 litres of fire wastewater can be contained onsite. It is the occupier's responsibility to ensure that fire wastewaters are contained; this is supported by the improvement requirement IR1 in Table 3.1.1. This condition has also been amended to remove the requirement to report any failures of malfunctions onsite as this is required under section 72 of the <i>Environmental Protection Act 1986</i> and is therefore not required to be duplicated on the licence.</p> <p>Table 4.3.1 requires the occupier to notify the CEO if there is a breach of any licence limit (i.e. processing limits). The notifications required under this condition give DER sufficient notice of any environmental impacts at the premises so that DER can</p>	N/A
Information continued			



DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
		determine if any further action is required to address the incident.	
Licence Duration	N/A	In accordance with DER's <i>Guidance Statement: Licence duration</i> (revised may 2015), this licence was amended to extend the duration until 31 August 2023. This came into effect on 29 April 2016. This amendment has been updated to reflect the extended licence duration.	N/A



5 Advertisement and consultation table

Date	Event	Comments received/Notes	How comments were taken into consideration
28/7/2016	Proponent sent a copy of draft instrument	Comments received on 18/08/2016 advised number of WTMG tyre bales stored onsite at any one time.	Table 1.2.1 was updated to include 350 WTMG tyre bales authorised to be stored onsite at any one time.



6 Risk Assessment

Note: This matrix is taken from the DER Corporate Policy Statement No. 07 - Operational Risk Management

Table 1: Emissions Risk Matrix

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



Appendix A

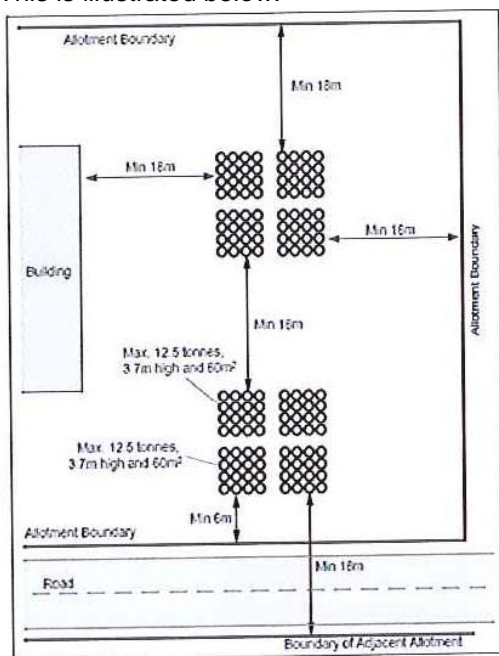
Premises Operation

While there are no direct air emissions, it is likely that significant amounts of wastewater and smoke will be generated in the event of a fire. The premises stores both loose tyres and tyre bales onsite. The occupier has advised that up to 1994 (1,344 C4M and 350 WTMG) tyre bales are stored onsite at any one time, to be stored in accordance with the details specified in the 'controls' section below.

DER referred the proposed controls to the Department of Fire and Emergency Services (DFES) for advice. DFES responded to advice that the following storage for tyres in an open yard should be implemented as minimum requirements:

- Individual tyre stacks to not exceed:
 - 3.7m in height;
 - 60m² in area; and
 - 12.5 tonnes in weight.
- Grouped tyre stacks should:
 - Have no more than 4 tyre stacks together;
 - Have a minimum clearance of 2.5m between each tyre stack within the group;
 - Have a minimum clearance of 18m each stacked group of four; and
 - Should be stored a minimum 18m from any building or boundary.

This is illustrated below.



Further correspondence with a DFES Fire Safety Officer outlined concerns with the proposed fire partition walls and confirmed that the above separation distances must be applied. DFES also raised concerns with the containment of fire wastewater and that a fire onsite, based on the proposed volume of tyre bales stored in the open according to the occupier's below proposed controls, would take a significantly long time to extinguish.



The occupier engaged a consultant to undertake a Fire and Safety (F&S) report for the Premises. In regards to the storage of tyres, the F&S report stated the following:

- *"...the intent is to store the tyres in small, manageable stockpiles such that fire breaks are created between piles"*
- *"Maximum pile dimensions of 20m long x 6m wide x 3m high is recommended."*
- *"A minimum separation distance of 20m between piles is recommended, but is not guaranteed to prevent fire spread."*
- *"Separation distance to boundaries facing public roads should be not less than 6m and not less than 20m to the far boundary of the public road. Separation distance between the edge of storage piles to other boundaries should be no less than 20m."*

Emission Description

Emission: Tyre fires can break down the tyres into hazardous compounds including gases, heavy metals and oil. Air emissions can also be generated including polycyclic aromatic hydrocarbons (PAHs), benzene, styrene, phenols, butadiene and some heavy metals. Firefighting foam may contain hazardous materials including surfactants, emulsifiers and modifiers which can be discharged offsite.

Impact: Tyre fires can result in polluted soil and surface water from both fallout and runoff from firefighting waters/foams discharged to the environment via drainage systems. In addition, toxic gases from fire smoke can significantly impact on the respiratory systems of the community through inhalation of particulates.

Controls: Firefighting equipment, such as seven extinguishers and a fire hose reel, is available at the premises. Hydrants are also present at the site.

The occupier has advised that loose tyres are not stored on the ground as they have an internal policy where tyres are required to be baled and the yard to be cleared of loose tyres by the end of each day. The occupier proposes to store tyre bales in stockpiles (comprised of 244 bales) that meet the following specifications:

- 6.6m wide;
- 3.12m high; and
- 20.3m long.

It is noted that the proposed separation distances are contrary to what the occupier's F&S report recommends.

Where two or more bale stockpiles will be stored together, the occupier proposes to construct a wall made of C4M blocks to separate stockpiles, built to the following specifications:

- 0.9m wide;
- 4.5m high; and
- 23.14m long.

The occupier undertakes a Monthly Fire Risk Assessment Report which includes the site to be checked for dry grass and vegetation, storage of flammable liquids and dangerous goods (including gas cylinders), oil spills to be cleaned, and integrity of fencing to be maintained.

The occupier proposes to contain fire wastewater on site through the construction of a concrete C4M wall surrounding the Premises, expected to be completed in August.



Risk Assessment

Consequence: Severe

Likelihood: Unlikely

Risk Rating: High

Regulatory Controls

Condition 1.2.1 (and Table 1.2.1) has been included on the licence to limit the types and quantities of waste for acceptance at the premises to only used tyres, as these have been assessed by DER and can be adequately managed under the occupier's infrastructure, process controls, or additional regulatory controls for tyre storage. Any additional wastes types are not authorised and are required to be removed from the Premises under condition 1.2.2, which assists in mitigating the potential leachate risk of runoff from stockpiling non-conforming waste, as well as reducing fire risk in storing combustible material onsite.

Condition 1.2.3 has been included on the licence to specify the processes that are authorised to be undertaken at the Premises. This is limited to the activities currently undertaken at the site which include mechanical processing (baling), storage and undertaking the construction of the C4M blocks. This condition limits concrete batching operations to those required to undertake the C4M block manufacturing. This condition also specifies that tyre bales are only to be stored onsite for the purpose of being used in the C4M block construction or for removal offsite. This condition has been included to limit the processes being undertaken onsite to those that have been assessed as suitable.

Condition 1.2.4 requires tyres to be stored on their side walls, laces or stored on their treads, tyres to be stored on level ground, and for baled tyres to be secured with non-combustible material. This replaces in part, former condition 1.3.4. This condition assists in fire prevention.

Former condition 1.3.3, requiring tyre bales to be stored within sea containers, has been replaced with conditions 1.2.5 and 1.2.6. The previous licence condition did not adequately address the requirements for storage of tyres as it only focused on external tyre bale storage and did not address loose tyre storage. Although the occupier does not intend to have loose tyres stored onsite, the licence (condition 1.2.5 addresses the potential for loose tyre storage in the event of mechanical fail or other situations as required. These conditions have been addressed below in further detail.

Condition 1.2.5 is specific to outside tyre storage of both bales and loose tyres. This condition includes the requirement to store tyres on a hardstand area capable of containing all wastewater in the event of a fire. This assists in reducing the risk of any offsite discharges to the environment (land, surface water, and groundwater) in the event of a fire. The occupier has committed to constructing a wall at the premises to contain fire wastewater (discussed in 'Improvements' section) and this condition reflects the current and future onsite operations and infrastructure. This requirement replaces conditions 2.5.1 and 2.5.2 of the previous licence in regards to maintaining a minimum catchment capacity of 162,000 litres.

The other requirements specified in condition 2.5.1 relate to separation distances and stockpiles dimensions. These specifications have been provided by DFES and have been included to address the fire risk posed by the storage of tyres on site. The occupier does not currently store tyres in an enclosed building or shed therefore there is no internal storage of tyres authorised under the licence.

Condition 1.2.6 replaces, in part, condition 1.3.3 of the previous licence which specifies that when the prescribed tyre storage specifications required under condition 1.2.5 cannot be met, tyre stockpiles and bales are to be stored in enclosable and lockable sea containers to reduce fire risk through containment.

Condition 1.2.7 replaces condition 1.3.4 of the previous licence and has been retained as it relates to the accessibility of firefighting equipment which is essential in fire management at the Premises.



Conditions 1.3.1 and 1.3.2 of the previous licence required the premises to be enclosed with a fence or wall of non-combustible material with sufficient access for fire fighting vehicles in the event of a fire. These conditions assist in allowing fires to be more easily extinguished and prevent unauthorised access to the site. These conditions have been retained on the licence, merged as one condition and have been renumbered as condition 1.2.8.

Any discharges into the environment may also be subject to the *Environmental Protection (Unauthorised Discharges) Regulations 2004*. Fire wastewater and any other wastes generated in the event of a fire may be subject to the *Environmental Protection (Controlled Waste) Regulations 2004*. It is the occupier's responsibility to ensure that these regulations and any other environmental legislation are complied with.

Residual Risk

Consequence: Severe

Likelihood: Rare

Risk Rating: High