

# Licence

Licence Number	L8757/2013/1	
Licence Holder ACN	Eco Resources Pty Ltd 148 991 315	
Registered business address	62 Farmer Street North Perth WA 6006	
File Number	2013/001928-1	
Duration	17/07/2013 to 11/04/2022	
Date of amendment	30/10/2019	
Prescribed Premises	Category 13: Crushing of building material Category 57: Used tyre storage (general) Category 61A: Solid waste facility	
Premises	Eco Resources Recycling Transfer Station 165 Postans Road, Hope Valley WA 6165 Being Lot 572 and part of Lot 571 on Plan 3475. Certificate of Title Volume 2891 Folio 160 and 159 As defined by the coordinates in Schedule 1	

This Licence is granted to the Licence Holder, subject to the following conditions, on 30 October 2019, by:

# Jarrod Abrahams A/MANAGER WASTE INDUSTRIES REGULATORY SERVICES

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

# **Definitions and interpretation**

# **Definitions**

In this Licence, the terms in Table 1 have the meanings defined.

## Table 1: Definitions

Term	Definition
АСМ	means Asbestos containing material and has the meaning defined in the <i>Guidelines for Assessment, Remediation and Management</i> <i>of Asbestos Contaminated Sites</i> , Western Australia (DOH, 2009)
ACN	Australian Company Number
Amendment Notice	means an amendment granted under s.59 of the EP Act in accordance with the procedure set out in s.59B of the EP Act.
Annual Audit Compliance Report	means a report in the format as specified by the CEO (guidelines and templates are available on the Department's website).
Annual Period	means a 12 month period commencing from 1 July until 30 June.
Asbestos	means the asbestiform variety of mineral silicates belonging to the serpentine or amphibole groups of rocking forming minerals and includes actinolite, amosite, anthophyllite, chrysotile, crocidolite, tremolite and any mixture containing 2 or more of those.
Condition	means a condition to which this Licence is subject under s.62 of the EP Act.
Books	has the same meaning given to that term under the EP Act.
CEO	means Chief Executive Officer.
	CEO for the purposes of notification means:
	Director General Department administering the <i>Environmental Protection Act</i> <i>1986</i> Locked Bag 10 Joondalup DC WA 6919
	info@dwer.wa.gov.au
Classified Load	means the classification of waste loads during acceptance and post acceptance based on the risk of waste material containing Asbestos or ACM and through visual inspection.
Construction and Demolition Waste (C&D Waste)	has the meaning defined in the Landfill Definitions

Term	Definition	
Conversion Factor	means the default bulk densities shown in Appendix B Table 2 of the Western Australian Government Gazette No. 97, 28 June 2019.	
Damp	means moist to the touch	
Department	means the department established under section 35 of the <i>Public Sector Management Act 1994</i> and designated as responsible for the administration of Part V, Division 3 of the EP Act.	
Department Request	means a request for Books or other sources of information to be produced, made by an Inspector or the CEO to the Licence Holder in writing and sent to the Licence Holder's address for notifications, as described at the front of this Licence, in relation to:	
	(a) compliance with the EP Act or this Licence;	
	<ul> <li>(b) the Books or other sources of information maintained in accordance with this Licence; or</li> </ul>	
	<ul><li>(c) the Books or other sources of information relating to Emissions from the Premises.</li></ul>	
DFES Guidance Note 2	means the document titled <i>Guidance Note 2: Bulk storage of</i> <i>rubber tyres including shredded and crumbed tyres</i> published by the Department of Fire and Emergency Services, as amended from time to time.	
DWER	Department of Water and Environmental Regulation.	
DWER Asbestos Guideline	means the document titled <i>Guidelines for managing asbestos at construction and demolition waste recycling facilities</i> published by the then Department of Environment Conservation in December 2012, as amended from time to time.	
Emission	has the same meaning given to that term under the EP Act.	
Environmental Harm	has the same meaning given to that term under the EP Act.	
EP Act	means the Environmental Protection Act 1986 (WA).	
EP Regulations	means the Environmental Protection Regulations 1987 (WA).	
Green Waste	means biodegradable waste comprising plants and their component parts such as flower cuttings, hedge trimmings, branches, grass, leaves, plants, seeds, shrub and tree loppings, tree trunks, tree stumps and similar materials and includes any mixture of those materials.	
High Risk Load	refers to loads classified as 'high risk' in accordance with the DWER Asbestos Guideline included in Attachment 1 of this Licence.	

Term	Definition	
Inert Waste Type 1	has the meaning defined in the Landfill Definitions.	
Inspector	means an inspector appointed by the CEO in accordance with s.88 of the EP Act.	
Landfill Definitions	means the document titled <i>Landfill Waste Classification and Waste Definitions 1996</i> published by the Chief Executive Officer of the Department of Environment, as amended from time to time.	
Licence	refers to this document, which evidences the grant of a Licence by the CEO under s.57 of the EP Act, subject to the Conditions.	
Licence Holder	refers to the occupier of the premises being the person to whom this Licence has been granted, as specified at the front of this Licence.	
Low Risk Load	refers to loads classified as 'low risk' in accordance with the DWER Asbestos Guideline in Attachment 1 of this Licence.	
Material Environmental Harm	has the same meaning given to that term under the EP Act.	
Tyre Pile	means a group of four used tyre stacks.	
Pollution	has the same meaning given to that term under the EP Act.	
Premises	refers to the premises to which this Licence applies, as specified at the front of this Licence and as shown on the map in Schedule 1 to this Licence.	
Prescribed Premises	has the same meaning given to that term under the EP Act.	
Primary Activities	refers to the Prescribed Premises activities listed on the front of this Licence as described in Schedule 2, at the locations shown in Schedule 1.	
Product(s)	refers to C&D Wastes which have undergone screening, processing and/or crushing to create a useable recycled product.	
Serious Environmental Harm	has the same meaning given to that term under the EP Act.	
Stockpile Base	refers to the furthest point at the base of a stockpile that the material extends to.	
Unreasonable Emission	has the same meaning given to that term under the EP Act.	
Waste	has the same meaning given to that term under the EP Act.	

# Interpretation

In this Licence:

- (a) the words 'including', 'includes' and 'include' will be read as if followed by the words 'without limitation';
- (b) where any word or phrase is given a defined meaning, any other part of speech or other grammatical form of that word or phrase has a corresponding meaning;
- (c) where tables are used in a Condition, each row in a table constitutes a separate Condition;
- (d) any reference to an Australian or other standard, guideline or code of practice in this Licence means the version of the standard, guideline or code of practice in force at the time of granting of this Licence and includes any amendments to the standard, guideline or code of practice which may occur from time to time during the course of the Licence; and
- (e) unless specified otherwise, any reference to a section of an Act refers to that section of the EP Act.

# Conditions

## Waste acceptance

- **1.** The Licence Holder must only accept waste on to the Premises if:
  - (a) it is of a type listed in Column 1 of Table 2;
  - (b) the combined quantity accepted is below the quantity limit listed in Column 2 of Table 2; and
  - (c) it meets any specification listed in Column 3 of Table 2.

## Table 2: Waste acceptance table

Column 1	Column 2	Column 3
Waste type	Quantity limit	Specification
Inert Waste Type 1 (excluding Special Waste Type 1)		
Inert Waste Type 2 (plastics and tyres only)	330,000 tonnes per annual - period	Waste containing visible asbestos or ACM shall not be accepted at the Premises
Green waste		
Cardboard and paper		
Scrap metal		

- 2. The Licence Holder must ensure that where waste does not meet the waste acceptance criteria set out in Condition 1 it is removed from the Premises by the delivery vehicle or where that is not possible;
  - (a) stored in a quarantined storage area or container and removed to an appropriately authorised facility as soon as practicable; and
  - (b) where waste does not meet the waste acceptance criteria due to asbestos content it is wrapped or otherwise contained in a manner that prevents asbestos fibres entering the atmosphere and is clearly labelled.
- **3.** Waste must only be accepted onto the Premises at the designated tip off bay.
- **4.** Waste must not be accepted on to the Premises when:
  - (a) it contains visible Asbestos or ACM, inspected and classified in accordance with Condition 5; or
  - (b) the Licence Holder has not obtained a signed declaration from the supplier of the source material with each delivery that:
    - (i) sets out the details of the Waste source, carrier, registration number of the vehicle and the date of delivery;
    - (ii) sets out the Waste type and volume being delivered; and
    - (iii) warrants that the load does not contain any Asbestos or ACM.
  - (c) The Licence Holder must maintain a clearly visible sign stating 'No Asbestos' at the entry to the Premises.

- 5. The Licence Holder must visually inspect all loads of Waste when they arrive at the Premises, prior to unloading, to determine the risk of a load containing Asbestos or ACM and each load shall be classified in accordance with the risk classification procedure outlined in Attachment 1 Asbestos Risk Classification Procedure (Classified Load).
- **6.** Where the visual inspection required by Condition 5 identifies that Waste is not permitted by the Licence, the Licence Holder must:
  - (a) reject the Waste for acceptance;
  - (b) record the details of the Waste source, waste carrier, registration number of the vehicle and the date of rejection; and
  - (c) maintain accurate and auditable records of all rejected loads on the Premises.

## Load inspection

- 7. Upon acceptance of Waste, the Licence Holder must direct each Classified Load to an unloading area at the site for further inspection. The unloading area must be appropriately designed and constructed to ensure the Classified Load will not mix with other Waste prior to inspection.
- **8.** At the unloading area, the Licence Holder must keep all Waste wetted down throughout the inspection process. The Licence Holder must visually inspect loads classified as Low Risk Loads, while the material is being unloaded to determine whether any Asbestos can be identified.
- **9.** If Asbestos is suspected or identified, the load must be reclassified as a High Risk Load and the Licence Holder must implement the High Risk Load procedure set out in Attachment 2 High Risk Load Procedure.
- **10.** High Risk Loads must be visually inspected and handled in accordance with the procedure set out in Attachment 2 High Risk Load Procedure.
- **11.** The Licence Holder must maintain accurate and auditable records of all loads that have been inspected and suspected or found to contain Asbestos. Those records must show the source and originating site and actions taken to address the issue with the source customer.
- **12.** The Licence Holder must continue to visually inspect Waste on the Premises at all stages of the storage, sorting and screening process. Suspected Asbestos identified at any stage of the process must be handled in accordance with the procedure set out in Attachment 2 High Risk Load Procedure and records maintained in accordance with Condition 11.

# Waste processing

**13.** The Licence Holder must ensure that wastes accepted onto the Premises are only subjected to the processes set out in Column 2 of Table 3 and in accordance with the process limits described in Column 3 of Table 3.

Column 1	Column 2	Column 3
Waste type	Process	Process limits
Inert Waste Type 1 (excluding Special Waste	Receipt, handling, storage and processing by manual	N/A

### Table 3: Waste processing table

Column 1	Column 2	Column 3
Waste type	Process	Process limits
Type 1)	or mechanical sorting (screening or via other	
Scrap metal	mechanical equipment)	
Inert Waste Type 2 (plastic only)		
Cardboard and paper		
Inert Waste Type 1 (excluding Special Waste Type 1)	Crushing	Not more than 52,000 tonnes per annual period shall be crushed.
Inert Waste Type 2 (tyres only)	Receipt, handling and storage	No more than 200 tyres stored at any one time.
Green Waste	Receipt, handling, storage and processing by shredding	No more than 200 m <sup>3</sup> of processed and 200 m <sup>3</sup> of unprocessed Green Waste can be stored on the Premises at any one time.

# Infrastructure and equipment

**14.** The Licence Holder must ensure that the infrastructure and equipment specified in Column 1 of Table 4 is maintained in good working order and operated in accordance with the requirements specified in Column 2 of Table 4.

Column 1	Column 2
Site infrastructure and equipment	Operational requirements
Crusher	Only concrete and brick may be crushed and the crusher may only operate:
	<ul> <li>for 15 hours per week between the hours of 7:00am to 5:00pm Monday to Friday and 7:00am to 1:00pm Saturday;</li> </ul>
	<ul> <li>when the plants inbuilt dust suppression system is operating; and</li> </ul>
	<ul> <li>in the western portion of the Premises labelled 'Western Premises area' on the Premises map in Schedule 1.</li> </ul>

Column 1	Column 2	
Site infrastructure and equipment	Operational requirements	
Shredder	Shredding shall only occur when the shredder's inbuilt dust suppression system is operating.	
	The shredder shall only operate in the eastern portion of the Premises indicated by the label 'Eastern Premises area' on the Premises map in Schedule 1. While operating, the shredder must be positioned either adjacent to a noise bund wall, sea containers or incoming waste stockpiles to provide mitigation of noise emissions.	

## Stockpile and storage management

- **15.** The Licence Holder must ensure that:
  - (a) material on the Premises is maintained in at least 3 separate stockpile areas for unprocessed Waste, Product tested for Asbestos or ACM and Product awaiting testing for Asbestos or ACM;
  - (b) unprocessed Waste and Product stockpiles are kept clearly separated at a minimum 3 metre distance from the Stockpile Base;
  - (c) Product tested for Asbestos or ACM and Product awaiting testing for Asbestos or ACM are:
    - (i) clearly separated by a minimum 3 metre distance from the Stockpile Base; or
    - (ii) clearly delineated and separated with impermeable barriers; and
  - (d) clearly visible and legible signage is erected on individual stockpiles to identify and delineate tested Product, untested Product and unprocessed Waste.
- **16.** The Licence Holder must ensure that all stockpiles on the Premises:
  - (a) do not exceed 8 metres in height at any point from the Stockpile Base; and
  - (b) have a minimum distance of 1.5 metres separation from the Stockpile Base to the Premises boundary at all times.
- **17.** The Licence Holder must ensure that clean fill that is temporarily stored on the Premises:
  - (a) is only stored within an area provided with dust controls; and
  - (b) is stockpiled at a height that either
    - (i) does not exceed the height of the bund wall, where the stockpile is located immediately adjacent to the bund wall; or
    - (ii) does not exceed 8 metres.

- **18.** The Licence Holder must store used tyres so that;
  - (a) tyres are stacked on their sides or in the laced storage format referred to in DFES Guidance Note 2 and as depicted in Figure 6.1.4 of Attachment 5;
  - (b) individual tyre stacks do not exceed 3.7 metres in height or  $60m^2$  in area;
  - (c) Tyre Piles contain a maximum of four individual tyre stacks with a minimum separation distance of 2.5 metres between each tyre stack in that Tyre Pile;
  - (d) a minimum separation distance of 18 metres is maintained between each Tyre Pile;
  - (e) tyre stacks and Tyre Piles are at least 6 metres from any combustible material, wall, building or fence; and
  - (f) tyre stacks and Tyre Piles are at least 18 metres from the Premises boundary.
- **19.** The Licence Holder must store light fraction paper and plastics inside an enclosed caged bin prior to stockpiling for off-site disposal.
- **20.** The Licence Holder must store non-light fraction paper and cardboard in a bailed form.
- **21.** The Licence Holder must take all reasonable and practical measures to ensure that no windblown litter escapes from the Premises.
- **22.** The Licence Holder must ensure that no waste is burnt on the Premises.
- **23.** The Licence Holder must not bury any waste at the Premises.
- **24.** The Licence Holder must direct all shredded waste to a licensed disposal facility at least once in each seven day period.
- **25.** The Licence Holder shall implement the following security measures at the site:
  - (a) erect and maintain suitable fencing to prevent unauthorised access to the site;
  - (b) ensure that any entrance gates to the premises are securely locked when the premises are unattended; and
  - (c) undertake regular inspections of all security measures and repair damage as soon as practicable.

# **Product testing**

- **26.** The Licence Holder must ensure that testing of all Product is undertaken in accordance with the Product testing procedures specified in Attachment 3 Asbestos Monitoring and Testing.
- **27.** The Licence Holder must ensure that Products are only supplied to customers that have been tested in accordance with Condition 26 and shown to conform to the product specification of 0.001% Asbestos weight for weight (w/w) for Asbestos content (in any form) within any recycled Product.

- **28.** The Licence Holder must maintain accurate and auditable records of all Asbestos Product testing undertaken in accordance with Condition 26. These records must include:
  - (a) details of the sample size;
  - (b) a statement of Limit of Detection of the analysis;
  - (c) results in relation to Asbestos detected (positive result exceeding the 0.001% w/w limit) or not;
  - (d) a description of any asbestos found; and
  - (e) an estimate of the concentration of Asbestos detected if practical to do so.
- **29.** The records maintained in accordance with Condition 28 must be made available to DWER and customers on request.
- **30.** The Licence Holder is not authorised to implement a reduced Product testing rate as per the reduced sampling criteria section of Attachment 3 Asbestos Monitoring and Testing.

# Monitoring

**31.** The Licence Holder must monitor and record the volume of Waste accepted onto the Premises for the waste type listed in Column 1 of Table 5, using the units specified in Column 2 of Table 5 and at the frequency specified in Column 3 of Table 5.

Column 1	Column 2	Column 3
Waste Type	Unit	Frequency
Inert Waste Type 1 (excluding Special Waste Type 1)	Tonnes - as measured by certified load scales (e.g. weighbridge)	Each load arriving at the Premises
Inert Waste Type 2 (plastics and tyres only)	OR m <sup>3</sup> and calculated tonnes – an appropriate Conversion	
Green waste	Factor must be used to	
Cardboard and paper	calculate tonnage.	
Scrap metal		

### Table 5: Waste accepted onto the Premises

**32.** The Licence Holder must record the total amount of Waste and Product removed from the Premises for each type listed in Column 1 of Table 6, using the units specified in Column 2 of Table 6 and at the frequency specified in Column 3 of Table 6.

### Table 6: Waste and Product removed from the Premises

Column 1	Column 2	Column 3
Туре	Unit	Frequency
Recycled Product	Tonnes - as measured by certified load scales (e.g. weighbridge)	Each load leaving the Premises
All Waste types as defined in the Landfill Definitions	OR m <sup>3</sup> and calculated tonnes – an appropriate Conversion Factor must be used to calculate tonnage.	Each load leaving or rejected from the Premises

## **Record-keeping**

- **33.** The Licence Holder must record the number and details of any complaints received by the Licence Holder relating to its obligations under this Licence and its compliance with Part V of the EP Act at the Premises, and any action taken by the Licence Holder in response to the complaint. Details of complaints must include:
  - (a) an accurate record of the concerns or issues raised, for example a copy of any written complaint or a written note of any verbal complaints made;
  - (b) the name and contact details of the complainant, if provided by the complainant;
  - (c) the date of the complaint; and
  - (d) the details and dates of the actions taken by the Licence Holder in response to the complaints.
- **34.** The Licence Holder must maintain accurate and auditable Books including the following records, information, reports and data required by this Licence:
  - (a) the calculation of fees payable in respect of this Licence;
  - (b) details of Waste rejected from the Premises documented in accordance with Condition 6;
  - (c) details of asbestos containing loads documented in accordance with Condition 11;
  - (d) the maintenance of infrastructure required to ensure that it is kept in good working order in accordance with Condition 14 of this Licence;
  - (e) the details of Product testing recorded under Condition 28;
  - (f) monitoring undertaken in accordance with Conditions 31 and 32;
  - (g) complaints received under Condition 33 of this Licence; and

In addition, the Books must:

- (h) be legible;
- (i) if amended, be amended in such a way that the original and subsequent amendments remain legible and are capable of retrieval;
- (j) be retained for at least 3 years from the date the Books were made; and

(k) be available to be produced to an Inspector or the CEO.

# Reporting

- **35.** The Licence Holder must submit to the CEO by no later than 60 days after the end of each annual period, an Annual Audit Compliance Report indicating the extent to which the Licence Holder has complied with the Conditions in this Licence for the preceding Annual Period.
- **36.** The Licence Holder must submit to the CEO by no later than 60 days after the end of each annual period, an Annual Environmental Report for that annual period containing the information listed in Table 7, and which provides information in accordance with the corresponding requirement set out in Table 7.

Column 1	Column 2	Column 3
Condition or Table (if relevant)	Parameter	Format or Form
-	Summary of any failure or malfunction of any pollution control equipment or any incidents that have occurred during the annual period and any action taken	None specified
28	Recycled output sampling and testing	None specified
31 and 32	Summary of inputs and outputs monitoring	None specified
33	Complaints summary	None specified
35	Compliance	AACR format as specified by the CEO (guidelines and templates are available at <u>https://www.der.wa.gov.au/our-</u> work/licences-and-works- approvals/publications)

### Table 7: Annual environmental report requirements

# Schedule 1: Maps

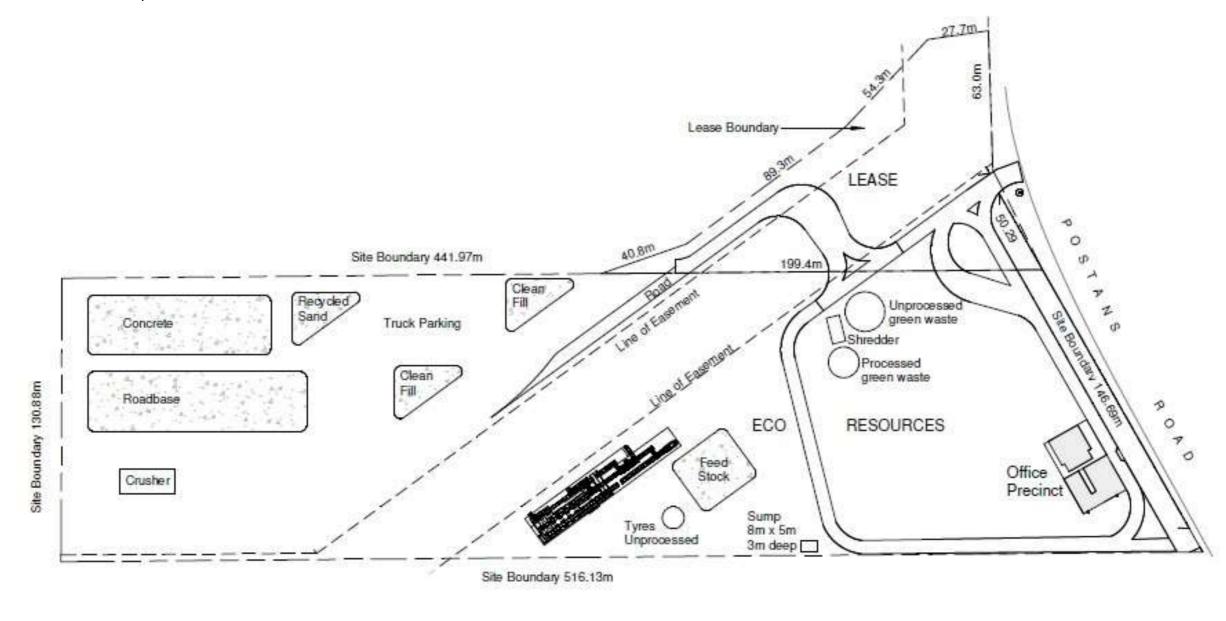
# Premises map

The Premises is shown in red in the map below.



# Site plan

The site layout is shown in the map below.



SITE PLAN 1:2000



# **Premises boundary**

The Premises boundary is defined by the coordinates in Table 8.

 Table 8: Premises boundary coordinates (GDA 1994 MGA Zone 50)

Easting	Northing		
387,434.57	6,438,149.05		
387,693.37	6,438,151.82		
387,719.14	6,438,159.53		
387,791.28	6,438,222.33		
387,824.59	6,438,257.18		
387,852.24	6,438,260.32		
387,851.40	6,438,197.50		
387,876.32	6,438,153.82		
387,950.47	6,438,023.92		
387,434.54	6,438,018.19		

# **Schedule 2: Primary Activities**

At the time of assessment, Emissions and Discharges from the following Primary Activities were considered in the determination of the risk and related Conditions for the Premises.

The Primary Activities are listed in Table 9:

### **Table 9: Primary Activities**

Primary Activity	Premises production or design capacity	
Category 13 – Crushing of building material: premises on which waste building or demolition material (for example bricks, stones or concrete) is crushed or cleaned.	52,000 tonnes per annual period	
Category 57 – Used tyre storage (general): premises (other than premises within category 56) on which used tyres are stored.	200 tyres stored at any one time	
Category 61A – Solid waste facility: premises (other than premises within category 67A) on which solid waste produced on other premises is stored, reprocessed, treated, or discharged onto land.	330,000 tonnes per annual period	

# Infrastructure, equipment and site layout

The Primary Activity infrastructure and equipment is set out on the Premises in accordance with the site layout specified on the site plan in Schedule 1.

# **Attachment 1 - Asbestos Risk Classification Procedure**

To determine the risk of an incoming load containing Asbestos, the Gatehouse operator must establish:

- The source of the load including the site location and if possible, the age of any building or structure from which the Waste originated;
- The content/Waste types within the load; and
- The type of load.

Where the source of the load can clearly be determined to be a building or structure constructed after 1990 then the load can be considered to represent a low risk of Asbestos contamination. Where the Waste originates from a building constructed before 1990 or there is uncertainty over this issue, the risks associated with Asbestos in the load must be established in line with the Risk Classification Matrix below.

	Type of load			
Material Type	Commercial	Public, utes, cars and trailers*	Skip bins	
Clean Concrete (without formwork)	Low	High	High	
Clean Brick	Low	High	High	
Clean Bitumen / Asphalt	Low	High	High	
Mixed Construction waste	High	High	High	
Mixed Demolition waste	High	High	High	

\* if it is possible to view the entire load of incoming C & D material (eg a small trailer with a shallow load, then consideration may be given to classifying these loads as low risk

(Risk Matrix Classification adapted from WorkSafe Victoria 2006 and WMAA 2009)

(Derived from Section 3.3 of the DER Asbestos Guidelines, pages 10 – 11)

# Attachment 2 – High Risk Load Procedure

- High Risk Loads must be unloaded and spread over a sufficiently large area to enable a comprehensive visual inspection of all sides of the material to be undertaken.
- If Asbestos is suspected or detected, the load must be isolated, kept wet and once appropriately contained in accordance with the Environmental Protection (Controlled Waste) Regulations 2004, and redirected to an appropriately authorised disposal facility.
- Where suspect ACM is identified within a load and is not capable of being easily removed by hand, the load must be rejected and must be isolated, kept wet and once appropriately contained in accordance with the Asbestos Factsheet in Attachment 4, and redirected to an appropriately authorised disposal facility.
- Where suspected ACM fragments capable of being easily removed by hand are identified in a load, the suspect ACM must be removed from the load and either:
  - Appropriately isolated and covered for asbestos testing. If testing of representative samples confirms the material is ACM it must be redirected to an appropriately authorised disposal facility. If testing confirms the material is not ACM the Waste can be added to the stockpile awaiting further processing; or
  - 2. Assumed to be ACM and redirected to an appropriately authorised disposal facility.
- All suspected or assumed ACM must be segregated. Material must be clearly labelled, kept secure and sufficiently contained to prevent the release of Asbestos including wind-blown fibres.
- Once all suspected or assumed ACM has been removed from a load in line with the above procedure, the residual Waste can be added to the stockpile waiting further processing.
- Records must be kept to ensure that the process from receipt of C&D material to the completion of the unloading procedure is auditable and that any loads found to contain suspect Asbestos will be traced back to the customer and originating site.

(Derived from Section 4.3 of the DER Asbestos Guidelines, page 12)

# Attachment 3 – Asbestos Monitoring and Testing

## Product testing and supply

The testing procedures detailed in this attachment have application to the three main recycled Products:

- 1. Recycled drainage rock 20-27mm;
- 2. Recycled sand, screened to <10mm; and
- 3. Recycled road-base, <19mm.

### Stockpile inspection and sampling

- No sampling is required for recycled drainage rock, other than to determine by laboratory analysis whether a suspect fragment is Asbestos.
- For recycled road-base and screened sand, sampling is necessary and must be spread evenly over the whole stockpile surface or samples may be taken at regular intervals (as per conveyor sampling) during construction of the stockpile. Suspect ACM or areas must be targeted for sampling.
- Sampling of road base and screened sand Products must occur at a minimum rate of 40 locations per 4000 tonnes or 14 samples per 1000m<sup>3</sup> of Product.

### **Conveyor sampling**

• Sampling of road base and screened sand Products must occur at a minimum rate of 1 sample per 70m<sup>3</sup> of a Product output. Suspect ACM or areas must be targeted for sampling.

### **Reduced sampling criteria**

Once premises have demonstrated that their procedures are able to consistently produce recycled product that meets the product specification and undertake their activities to a high standard, DER may authorise a reduced product testing rate including down to 5 locations per 4000 tonnes (1 sample per 600m<sup>3</sup>) of product.

### Sample treatment

• Each sample collected must be at least 10 litres in volume and then be divided into 2 size fractions (>7mm and <7mm) in the field by sieving through a 7mm screen or spread out for inspection on a contrasting colour fabric. The >7mm fraction should be examined for any suspect ACM and this be retained to calculate the level of contamination.

The <7mm fraction will need to be a minimum 500 ml, be wetted, and submitted for laboratory analysis. This sample size is considered necessary to improve the limit of detection for Asbestos in the analysis procedure.

### Sample analysis method

- >7mm sample fractions
  - Asbestos concentrations (ACM and Asbestos) should be calculated in accordance with the methods detailed in section 4.1.7 of Department of Health (DoH), 2009, Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia. Averaging Asbestos levels across the stockpile is not appropriate and Asbestos levels within each sample should be reported.
- <7mm sample fractions
  - Each <7mm sample fraction must be analysed for Asbestos and ACM.
  - Asbestos analysis must be undertaken by an independent NATA certified laboratory and comply with Australian Standard Method for the Qualitative Identification of asbestos in bulk samples (AS4964-2004) or be demonstrated to be able to achieve the equivalent level of results to this Australian Standard.

AS4964-2004 is currently the only method in Australia that has NATA certification; however the practicable level of detection for this standard polarized light microscopy method (PLM) and dispersion staining (DS) is 0.01% w/w. It is possible however, to measure Asbestos contamination at or lower than 0.001% w/w where an increased sample size is used, however DER recognises that any reporting of concentrations below 0.01% w/w will be outside the conditions set by NATA.

Therefore, to determine whether recycled Products meet the product specifications for Asbestos content, samples must be a minimum of 500mL in size. Proponents must adopt one of the following analytical approaches:

- Detected/non-detected where any quantity of Asbestos is detected by the PLM method it must be assumed, without further analysis, to be in concentrations above the product specification limit of 0.001%w/w. A weight of evidence approach may be adopted i.e. the frequency and occurrence of other positive results in the stockpile can be taken into account to determine whether the stockpile being assessed is considered to meet the product specification or not; or
- 2. Where any quantity of Asbestos is detected by the PLM method, the sample is subject to further testing in the form of a semi-quantitative method with a lower level of detection for Asbestos. Either of the following methods are considered acceptable by DER:
  - The extraction and weighing of fibre bundles or fibre cement material from the total sample; and
  - Measuring the width and length (i.e. volume) of individual fibre by Phase Contrast Microscopy (PCM) and calculating the weight of fibres in the extracted sub-sample.

### Interpreting inspection and sampling results

- If the visual inspection, sieve sample or analytical results identify Asbestos above or possible above the 0.001%w/w criteria, then that stockpile or product process should be deemed potentially contaminated and considered for off-site disposal as Asbestos Waste, or subject to further actions to remediate it or to demonstrate its acceptability by further assessment. A record should be made of the decision-making and action taken (e.g. off-site disposal, further assessment undertaken etc.) in relation to that stockpile.
- In addition to the above, where Asbestos is identified above or possibly above the 0.001%w/w criteria, an investigation into the likely cause for the presence of Asbestos in the product should be undertaken and measures implemented to prevent a reoccurrence. A record of the investigation and its findings together with the details of any preventative measures implemented at the site should be made.

(Derived from Section 4.3 of the DER Asbestos Guidelines, pages 15 - 20)

# Attachment 4 – Asbestos Factsheet

## **Appendix A: Asbestos Factsheet**

#### TRANSPORTATION AND DISPOSAL OF ASBESTOS CONTAINING MATERIAL

The transportation and disposal of asbestos-containing material from commercial, industrial and other activities is regulated by the Environmental Protection (Controlled Waste) Regulations 2004 (Regulations). The Regulations apply obligations on the waste transporter to ensure the waste is safely transported to an approved location.

The Regulations define what is considered to be asbestos containing material for the purposes of the Regulations. This definition includes material which contains 0.001% or more of asbestos fibres weight/weight.

Please note that removal, handling, signage, security and onsite packaging of asbestos contaminated material must be carried out in accordance with the Local Government Authority, Department of Health and WorkSafe requirements. Contact the relevant authority for further information (refer to the end of this factsheet).

### TRANSPORTATION OF ASBESTOS-CONTAINING MATERIAL (ACM)

The Regulations require asbestos containing material to be:

- 1. Separated from other material for disposal where that is reasonably practicable;
- Wrapped and contained in a manner that prevents asbestos fibres entering the atmosphere during transportation on a road; and
- Labelled or marked with the words "CAUTION ASBESTOS" in letters no less than 50 millimetres high on the individual packages and the transport container.

Further guidance on the transportation of asbestos containing materials is set out in the Code of Practice for the Safe Removal of Asbestos 2<sup>nd</sup> Edition [NOHSC:2002(2005)] and the *Health* (Asbestos) Regulations (1992 or as amended). This Code of Practice recommends that:

- ACM is sealed in heavy duty 200 
  µm (minimum thickness) polythene plastic and clearly labelled with the appropriate signage warning.
- All drums or bins used to store and dispose of ACM should be in good condition, with lids and rims in good working order. The drums or bins should be lined with polythene plastic (200 µm minimum thickness) and be clearly labelled.
- If a waste skip bin, vehicle tray or similar container is used, the ACM should be double bagged before being placed in to the container or sealed in double-lined, polythene plastic (200 µm minimum thickness), and be clearly labelled. In the case of bulk loads such as contaminated soil an alternative is to double line the vehicle tray with the polythene and completely cover the load with a close fitting durable material such as the double layered polythene or a tarpaulin.

 In the case of ACM in the form of contaminated soil, it needs to be wetted down prior to removal and loading onto vehicle or bin.

#### DISPOSAL OF MATERIAL CONTAINING ASBESTOS

All material containing asbestos must be disposed at a disposal site appropriately licensed or registered under *Part V* of the *Environmental Protection Act 1986* to accept asbestos waste.

A person who disposes of material containing asbestos other than at a licensed disposal site commits an offence.

Receipts for the disposal of ACM should be retained or passed on to the disposal client to assist any subsequent regulatory investigation.

#### DUTY TO NOTIFY OTHERS OF THE PRESENCE OF ASBESTOS

A person who takes material containing asbestos to a disposal site **MUST** inform the operator of the facility that the material is, or contains asbestos waste. This notification should be provided in a written form however where notification is verbally provided the disposal site should make a written record of the notification.

#### PENALTIES FOR NON-COMPLIANCE

Penalties apply for offences committed under the *Environmental Protection Act 1986* and the Environmental Protection (Controlled Waste) Regulations 2004.

#### DISPOSAL SITES FOR MATERIAL CONTAINING ASBESTOS

For a map of landfills within the Metropolitan area visit the WA Waste Authority website at: www.zerowastewa.com.au/disposal/community/perthlandfills

Please contact the Local Government Authority or the facility on the number provided for more information before visiting the disposal site. In Regional areas contact the Local Government Authority for disposal site locations. Please note this list is subject to change and is only intended as a guide.

COUNCIL OR COMPANY	ADDRESS	SUBURB	POST	PHONE	LANDFILL
Buller Road Refuse	2	S			15
Disposal Site	Lot 1701 Buller Rd	Waroona	6215	9733 1277	11
City of Armadale	Hopkinson Rd	Forrestdale	6112	9399 3935	11
City of Canning	Ranford Rd	Canning Vale	6155	9321 0606	&
City of Cockburn	Rockingham Rd	Henderson	6166	9411 3444	11
City of Rockingham	Millar Rd	Baldivis	6171	9524 2053	HI
City of Stirling	238 Balcatta Rd	Balcatta	6021	9345 8555	Transfer station
Eastern Metro Regional Council	Toodyay Rd (Red Hill)	Gidgegannup	6083	9574 6235	III & IV
Eclipse Resources	Lot 180 Abercrombie Rd	Postans	6167	9381 5600	1
Mindarie Regional		C.1117		Contraction of the second	
Council	1700 Marmion Ave	Mindarie	6030	9306 6300	11
RCG Pty Ltd	Lot 70/717 Hester Ave	Neerabup	6031	9407 5069	. IÎ
Shire of Gingin	Lot 10 Cockram Rd	Gingin	6503	9575 2211	11
South Perth Waste Transfer Station	Cnr Hayman Rd Thelma St	Como	6152	9367 2492	Transfer station
Wastestream Management	Ratcliffe Rd	Kwinana	6167	9439 1300	1
West Australian Landfill Services	Lot 200 and Lot 201 Shale Rd	South Cardup	6201	9525 5355	11
Western Metropolitan Regional Council	Cnr Lemnos & Brockway Rd	Shenton	6008	9384 2544	Transfer station

### FURTHER INFORMATION AND CONTACTS

#### Local Government Authority

For information on demolition licence requirements and household queries contact an Environmental Health Officer at your Local Government Authority.

#### Department of Health

For information on asbestos cement products in your home, asbestos contaminated sites and frequently asked questions on asbestos, visit the Department of Health website at: <a href="http://www.public.health.wa.gov.au/2/867/2/asbestos.pm">www.public.health.wa.gov.au/2/867/2/asbestos.pm</a> or Tel: 9388 4999.

#### Department of Consumer and Employment Protection - Worksafe

For information about asbestos in the workplace, licensed asbestos removalists and appropriate handling of asbestos including safety wear, visit the Worksafe website at:

www.commerce.wa.gov.au/WorkSafe/Content/Safety\_Topics/Asbestos/ or Tel: 1300 307 877.

# Attachment 5 – Used tyre storage configurations

## Laced Storage - For Outdoor Storage Only!

Tyres are stacked in an overlapping manner to create a woven or laced arrangement. This configuration helps limit fire spread as it reduces ability of burning tyres to fall and roll into unignited stock



Fig. 6.1.4 Tyres Stacked in Laced Arrangement - Outdoor Storage Only

### 7. GENERAL REQUIREMENTS

#### 7.1 External Storage

An external storage site should be level, clear of all rubbish and combustible material, and enclosed by fences or walls constructed of non-combustible materials.

The fence or wall should be sufficiently high and secure to keep unauthorised persons from entering the site.

A hydrant system complying with Australian Standard (AS) 2419.1 Fire Hydrants Systems should be provided when total quantity of outdoor storage exceeds 50 tonnes. Where the storage facility has or may be deemed a Special Hazard, i.e. large tyre facility.

NOTE: For further details regarding the provision of an adequate firefighting water supply, refer to; DFES Guidance Note GN 1 Firefighting Water Supply Considerations for Special Hazards

#### 7.2 Size of Tyre Stacks and Piles

Individual stacks should not exceed 3.7m in height, 60m<sup>2</sup> in area and/or 12.5 tonnes in weight.

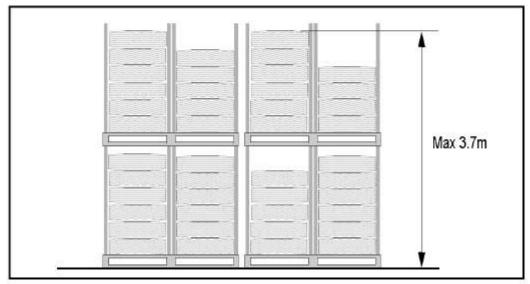


Fig. 7.2.1 Maximum Tyre Stack Height (elevated view)

### 7.3 Stacks and Piles

A maximum of four (4) individual stacks can be grouped. Each group of 4 stacks is referred to as a pile. A clear separation distance of not less than 2.5m at the base must be maintained between each stack.

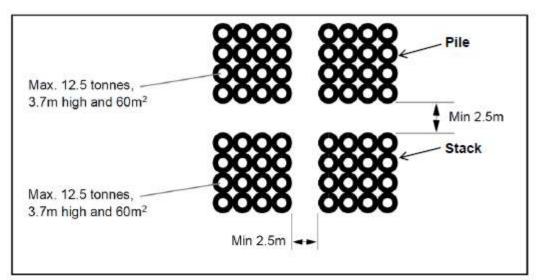


Fig. 7.3.1 Minimum Separation Distances Between 4 Stacks in 1 Pile.

A clear separation distance of not less than 18 metres must be maintained between each pile (4) stacks.

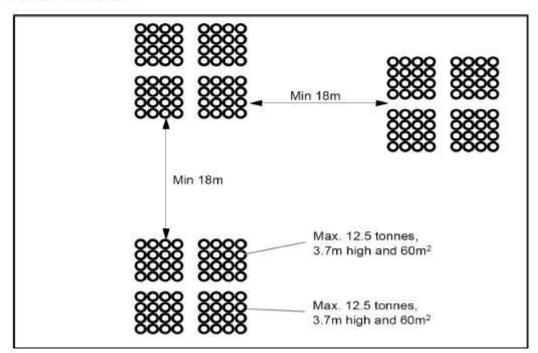


Fig.7.3.2 Minimum Separation Distance Between Piles

# **Explanatory notes**

These explanatory notes do not form part of this Licence.

### Defined terms

Definition of terms used in this Licence can be found at the start of this Licence. Terms which are defined have the first letter of each word capitalised throughout this Licence.

Department of Water and Environmental Regulation

The Department of Water and Environmental Regulation (DWER) is established under section 35 of the *Public Sector Management Act 1994* and designated as responsible for the administration of Part V, Division 3 of the *Environmental Protection Act 1986* (WA) (EP Act). The Department also monitors and audits compliance with licences, takes enforcement action and develops and implements licensing and industry regulation policy.

### Licence

Section 56 of the EP Act provides that an occupier of Prescribed Premises commits an offence if Emissions are caused or increased, or permitted to be caused or increased, or Waste, noise, odour or electromagnetic radiation is altered, or permitted to be altered, from Prescribed Premises, except in accordance with a works approval or licence.

Categories of Prescribed Premises are defined in Schedule 1 of the *Environment Protection Regulations 1987* (WA) (EP Regulations).

This Licence does not authorise any activity which may be a breach of the requirements of another statutory authority including, but not limited to the following:

- conditions imposed by the Minister for Environment under Part IV of the EP Act;
- conditions imposed by DWER for the clearing of native vegetation under Part V, Division 2 of the EP Act;
- any requirements under the Waste Avoidance and Resource Recovery Act 2007;
- any requirements under the *Environmental Protection (Controlled Waste) Regulations* 2004; and
- any other requirements specified through State legislation.

It is the responsibility of the Licence Holder to ensure that any action or activity referred to in this Licence is permitted by, and is carried out in compliance with, other statutory requirements.

The Licence Holder must comply with the Licence. Contravening a Licence Condition is an offence under s.58 of the EP Act.

Responsibilities of a Licence Holder

Separate to the requirements of this Licence, general obligations of Licence Holders are set out in the EP Act and the regulations made under the EP Act. For example, the Licence Holder must comply with the following provisions of the EP Act:

- the duties of an occupier under section 61; and
- 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 (s.53).

Strict penalties apply for offences under the EP Act.

### **Reporting of incidents**

The Licence Holder has a duty to report to DWER all discharges of waste that have caused or are likely to cause Pollution, Material Environmental Harm or Serious Environmental Harm, in accordance with s.72 of the EP Act.

### Offences and defences

The EP Act and its regulations set out a number of offences, including:

- Offence of emitting an Unreasonable Emission from any Premises under s.49.
- Offence of causing Pollution under s.49.
- Offence of dumping Waste under s.49A.
- Offence of discharging Waste in circumstances likely to cause Pollution under s.50.
- Offence of causing Serious Environmental Harm (s.50A) or Material Environmental Harm (s.50B).
- Offence of causing Emissions which do not comply with prescribed standards (s.51).
- Offences relating to Emissions or Discharges under regulations prescribed under the EP Act, including materials discharged under the *Environmental Protection* (Unauthorised Discharges) Regulations 2004 (WA).
- Offences relating to noise under the *Environmental Protection (Noise) Regulations* 1997 (WA).

Section 53 of the EP Act provides that a Licence Holder commits an offence if Emissions are caused, or altered from a Prescribed Premises unless done in accordance with a Works Approval, Licence or the requirements of a Closure Notice or an Environmental Protection Notice.

Defences to certain offences may be available to a Licence Holder and these are set out in the EP Act. Section 74A(b)(iv) provides that it is a defence to an offence for causing Pollution, in respect of an Emission, or for causing Serious Environmental Harm or Material Environmental Harm, or for discharging or abandoning Waste in water to which the public has access, if the Licence Holder can prove that an Emission or Discharge occurred in accordance with a Licence.

This Licence specifies the Emissions and Discharges, and the limits and Conditions which must be satisfied in respect of Specified Emissions and Discharges, in order for the defence to offence provision to be available.

### Authorised Emissions and Discharges

The Specified and General Emissions and Discharges from Primary Activities conducted on the Prescribed Premises are authorised to be conducted in accordance with the Conditions of this Licence.

Emissions and Discharges caused from other activities not related to the Primary Activities at the Premises have not been Conditioned in this Licence. Emissions and Discharges from other activities at the Premises are subject to the general provisions of the EP Act.

### Amendment of licence

The Licence Holder can apply to amend the Conditions of this Licence under s.59 of the EP Act. An application form for this purpose is available from DWER.

The CEO may also amend the Conditions of this Licence at any time on the initiative of the CEO without an application being made.

Amendment Notices constitute written notice of the amendment in accordance with s.59B(9) of the EP Act.

### **Duration of Licence**

The Licence will remain in force for the duration set out on the first page of this Licence or until it is surrendered, suspended or revoked in accordance with s.59A of the EP Act.

### Suspension or revocation

The CEO may suspend or revoke this Licence in accordance with s.59A of the EP Act.

#### Fees

The Licence Holder must pay an annual licence fee. Late payment of annual licence fees may result in the licence ceasing to have effect.