

Licence Number L8860/2014/1

Licence Holder Farfield Holdings Pty Ltd (ACN 104 086 320)

Registered business address 32 - 34 Jackson Street

BAYSWATER WA 6053

Duration 20/11/2014 to 19/11/2028

Prescribed Premises

Categories

Category 13 Crushing of building material: premises on which waste building or demolition material (for example, bricks, stones, or concrete) is crushed or cleaned.

Category 62 Solid waste depot: premises on which waste is stored, or sorted, pending final disposal or re-use.

Premises Capital Recycling

35 Briggs Street,

WELSHPOOL WA 6106 CITY OF CANNING

Lot 851 on Deposited Plan 48964 Certificate of Title Volume 2621 Folio 20

And

39 Briggs Street WELSHPOOL WA 6106 CITY OF CANNING

Lot 2 on Deposited Plan 404784 Certificate of Title Volume 2872 Folio 285

And

Part of

41 Briggs Street

WELSHPOOL WA 6106 CITY OF CANNING

Lot 1 on Deposited Plan 404784

Bound by the coordinates -

	Easting	Northing
1	398293.04	6460321.44
2	398287.92	6460316.44
3	398197.91	6460406.21
4	398197.97	6460413.55

Amendment

21 August 2019

This Licence is granted to the Licence Holder, subject to the following conditions, on 21 August 2019, by:

A/MANAGER WASTE INDUSTRIES REGULATORY SERVICES

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

Conditions

Throughput restrictions

- Subject to the stockpile management requirements in *Conditions* 16 to 18 the
 Licence Holder must not accept more than 100,000 tonnes of *Waste* per *Annual Period*.
- 2. The *Licence Holder* must monitor and record the volumes of incoming and outgoing *Waste* and outgoing *Products* at the *Premises* for the parameter stipulated in column 1 of Table 1, using the units specified in column 2 of Table 1 at the frequency specified in column 3 of Table 1.

Table 1. Monitoring of inputs and outputs

Column 1	Column 2	Column 3	
Parameter	Units	Frequency	
Waste Inputs – Clean Fill, Inert Waste Type 1	m³ and calculated tonnes – a conversion factor of 1.3 tonnes in every m³ must be used to calculate tonnage.	Each load arriving at the Premises.	
Waste Outputs – Waste type as defined in the Landfill Definitions	Tonnes – as measured by certified load scales on wheel loaders OR m³ and calculated tonnes – a conversion factor of 1.3 tonnes in every m³ must be used to calculate tonnage.	Each load leaving or rejected from the <i>Premises</i> .	

3. The *Licence Holder* must provide to the CEO within 10 days of the end of each *Quarter*, a summary of the volumes of *Waste* input and *Product* output from the *Premises*.

Waste type restrictions and waste classification

- **4.** The *Licence Holder* must only accept the following types of *Waste* onto the *Premises* for storage, sorting or crushing:
 - (a) Inert Waste Type 1; and
 - (b) Clean Fill.
- **5. Waste** must not be accepted onto the **Premises** where:
 - (a) it contains visible **Asbestos** or **ACM**, inspected and classified in accordance with **Condition** 8; or
 - (b) where 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**.
- 6. The *Licence Holder* must maintain a clearly visible sign specifying "no *Asbestos*" at the entry to the *Premises*.

- 7. The *Licence Holder* must visually inspect all loads of *Waste* when they arrive at the *Gatehouse* of 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 (*Classified Load*).
- **8.** Where the visual inspection identifies that **Waste** is not permitted by the **Licence**, the **Licence Holder** must:
 - (a) reject the Waste for acceptance; and
 - (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**.
- 9. The *Licence Holder* must retain all documentation recorded under *Conditions* 2 and 8 on the *Premises* or at *Head Office* for a period of two years.

Acceptance and unloading inspection

- 10. 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.
- 11. At the unloading area, the *Licence Holder* must keep all stockpiles of *Waste* wetted down throughout the inspection process using the Infrastructure specified in row 1 of Column 1 of *Condition* 19. 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.
- 12. 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.
- **13. High Risk Loads** must be visually inspected and handled in accordance with the procedure set out in Attachment 2.
- 14. 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.
- 15. The *Licence Holder* must continue to visually inspect *Waste* on the *Premises* at all stages of the storage, sorting and screening process. Suspect *Asbestos* identified at any stage of the process must be handled in accordance with the procedure set out in Attachment 2 and records maintained in accordance with *Condition* 14.

Stockpile management

- **16.** In addition to the unloading area specified in **Condition** 10, the **Licence Holder** must:
 - (a) maintain material on the **Premises** in at least three separate stockpile areas for unprocessed **Waste**, **Products** tested for **ACM** and **Products** awaiting testing for **ACM** generally in accordance with the Site Plan set out in Schedule 1.
 - (b) maintain all **Product** stockpiles to the rear of the **Premises**:
 - (c) unprocessed **Waste** and **Product** stockpiles must be kept clearly separated at a minimum 3 metre distance:
 - (d) **Products** tested for **ACM** and **Products** awaiting testing for **ACM** must be clearly separated by permanent impermeable concrete barriers; and
 - (e) clearly visible and legible signage must be erected on individual stockpiles to clearly identify and delineate tested *Products*, untested *Products* and unprocessed *Waste*.
- 17. The *Licence Holder* must ensure that all *Product* stockpiles do not exceed 10 metres in height at any point from the base of the stockpile, whereby the base of the stockpile is defined as 15.72 metres AHD
- 18. The *Licence Holder* must ensure that all stockpiles of *Waste* on the *Premises*:
 - (a) do not exceed 4 metres in height at any point from the base of the stockpile, whereby the base of the stockpile is defined as 26.44 metres AHD; and
 - (b) have a minimum distance of 1.5 metres separation from the base of each stockpile to the *Premises* boundary at all times.

Infrastructure and equipment

19. The *Licence Holder* must ensure that the infrastructure and equipment specified in column 1 of Table 2, are maintained in good working order and operated in accordance with the requirements specified in column 2 of Table 2.

Table 2: Infrastructure and Equipment Controls Table

	Column 1	Column 2		
	Site infrastructure and equipment	Operation details		
	Dust Controls			
1	Water truck fitted with a minimum 10,000L water tank, high volume side and rear spray bars and hose to ensure complete coverage of stockpiles, roadways and to assist while tipping.	Product and Waste stockpiles must remain in a damp state to prevent dust lift off. Targeted wetting must occur during operational hours when material handling such as reclaiming from the stockpiles has the potential to generate fugitive dust. Unsealed access roads must remain in a damp state during operational hours to prevent dust lift-off.		
2	Bore and storage tank Fast fill stand pipe and 40,000ltr water reservoir	To allow fast fill of water truck (approximately 10 minute filling intervals). Capable of filling the water truck in no more than 20 minutes.		
3	Reticulated sprinklers on <i>Product</i> stockpiles	Series of sprinklers on top of <i>Product</i> stockpiles to supplement wetting by water truck sprays ensuring that a protective crust forms preventing fugitive dust from this source. Effective sprinklers on the stockpiles need to		

	Column 1	Column 2
	Site infrastructure and equipment	Operation details
		achieve an appropriate coverage and produce a fine water droplet cloud to effectively suppress airborne dust particles. The positioning and setup of sprinklers must effectively deliver water to <i>Product</i> stockpiles and must not be blown away by wind. Sprinklers to be maintained in good working order to ensure continuous availability.
4	Fixed water sprays on machines (screening, crushing and stacking) and associated conveyors.	Series of sprays at appropriate locations on machines and conveyors to prevent fugitive dust from processing and handling of <i>Product</i> and <i>Waste</i> . Effective sprays on machines need to produce water droplets that are fine enough to form a droplet cloud and interact with dust particles. Water must be effectively delivered to <i>Product</i> and <i>Waste</i> and not blown away by wind. Sprays are to be maintained in good working order to
		ensure availability during operation of equipment.
5	Wheel wash facility	All vehicles must pass through a wheel wash sump prior to exiting the <i>Premises</i> .
		All tyres of vehicles leaving the Premises must be sufficiently free of dirt to prevent tracking of dirt outside of the Premises .
6	Water gantry frame	An automated gantry spray system located at the entrance to thoroughly wet all loads of <i>Waste</i> before they enter the tipping area.
7	Sweeper truck	Road sweeping of main concrete hardstand roadway areas and entry/exit point of the <i>Premises</i> to occur at least once a week. Sweeping of Briggs Street between Downing Street and Planet Street (Welshpool), and the length of Raleigh Street between Briggs Street and Cohn Street (Welshpool) to also occur at least once a week.
8	Dust walls	4.5 metre high dust walls installed around the east and south perimeter of the <i>Premises</i> to prevent fugitive dust from leaving the <i>Premises</i> in combination with wetting practices
9	Stockpile height markers	Height markers must clearly indicate the relevant numerical limit for the stockpiles (4m for waste stockpiles and 10m for product stockpiles). Height markers must also be placed so they are clearly visible to assist with compliance to specified height restrictions.

Dust emission controls

- **20.** The *Licence Holder* must ensure that:
 - (a) all **Product** and **Waste** stockpiles are maintained in a damp state by use of infrastructure and equipment specified in rows 1, 2 and 3 of the Table 2 set out in Condition 19; and
 - (b) all unsealed access roads are maintained in a damp state during operational hours by use of infrastructure and equipment specified in rows 1 and 2 of the Table 2 set out in Condition 19.
- 21. The *Licence Holder* must ensure that all *Products* to be removed from the *Premises* are wetted down prior to loading.
- **22.** The *Licence Holder* must ensure that the wheel wash specified in row 5 of Table 2 set out in *Condition* 19 is used for all vehicle movements from the *Premises*.
- 23. All vehicles must operate at speeds of less than 10km/h throughout the *Premises*.
- **24.** The *Licence Holder* must ensure the *Premises* only operate between the hours of 06:30 to 17:00 Monday to Thursday, 06:30 to 16:30 on Friday's and 06:30 to 12:00 on Saturday's.

Product testing and supply

- **25.** The *Licence Holder* must ensure that testing of all *Products* is undertaken in accordance with the *Product* testing procedures specified in Attachment 3.
- 26. The *Licence Holder* must ensure that *Products* are only supplied to customers that have been tested in accordance with *Condition* 25 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 products.
- 27. The *Licence Holder* must maintain accurate and auditable records of all *Asbestos Product* testing undertaken in accordance with *Condition*25. 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) description of any Asbestos detected; and
 - (e) estimate of the concentration of **Asbestos** detected if practical to do so.
- **28.** The records maintained in accordance with *Condition* 27 must be kept for at least two years and must be made available to DWER and customers on request.
- **29.** The *Licence Holder* is not authorised to implement a reduced *Product* testing rate as per the reduced sampling criteria section of Attachment 3.

Noise Assessment

- **30.** The *Licence Holder* must retain the services of a person competent in environmental noise assessment whose qualifications and experience qualifies them for a membership of the *Australian Acoustical Society* or the *Australian Association of Acoustical Consultants* (Consultant) to:
 - (a) investigate and report on the extent and nature of the noise emissions under worst case conditions, including the extent of noise emissions from rock breaking by means of iack hammering on the **Premises**:
 - (b) identify where improvements are required, and if required, prepare a plan to abate the noise to meet the prescribed standard; and
 - (c) implement the improvement plan if required by paragraph (b) and monitor the effectiveness of the implementation of the plan.
- 31. The *Licence Holder* must submit to the *CEO* within 12 months of this *Licence* a copy of a report prepared by the Consultant setting out the Consultant's activities and demonstrating compliance with Condition 30.

Emissions

- 32. The *Licence Holder* must not cause any *Emissions* from the *Premises* except for *Specified Emissions* and *General Emissions* described in column 1, subject to the exclusions, limitations or requirements specified in column 2, of Table 3.
 - If the *Licence Holder* proves that it has acted in accordance with this *Condition*, it may be a defence under s 74A of the *EP Act* to proceedings for offences under the *EP Act* (including offences under section 56).

Table 3: Authorised Emissions Table

Column 1	Column 2			
Emission Type	Exclusions/Limitations/Requirements			
Specified Emissions				
Fugitive dust	Subject to compliance with: • Conditions 1 to 29			
General Emissions (excluding Specified Emissions which are in compliance with <i>Conditions</i> 1 to 29)				
• arise from the activities on the Premises through matters set out in, or incidental to the matters set out in, the General Description in Schedule 2; • arise from the activities on the Premises through matters set out in, or incidental to the matters set out in, or incidental to the matters set out in, the General Description in Schedule 2;	 Emissions excluded from General Emissions are: Unreasonable Emissions; or emissions that result in, or are likely to result in, Pollution, Material Environmental Harm or Serious Environmental Harm; or Discharges of Waste in circumstances likely to cause Pollution; or emissions that result, or are likely to result in, the Discharge or abandonment of Waste in water to which the public has access; or Emissions or Discharges which do not comply with an Approved Policy; or Emissions or Discharges which do not comply with prescribed standard; or Emissions or Discharges which do not comply with the Conditions in an Implementation Agreement or Decision; or Emissions or Discharges the subject of offences under regulations prescribed under the EP Act, including materials discharged under the Environmental Protection (Unauthorised Discharges) Regulations 2004. 			

Information

- **33.** The *Licence Holder* must maintain accurate and auditable records in relation to:
 - (a) the calculation of fees payable in respect of this *Licence*
- **34.** If an *Emission* that is not a *Specified Emission* or *General Emission* occurs on the *Premises*, then the *Licence Holder* must:
 - (a) investigate why the *Emission* occurred;
 - (b) take all reasonable steps to prevent the *Emission* occurring again;
 - (c) record the details of the investigation and all steps taken; and
 - (d) provide a copy of the record to the *CEO* within 21 days of the date the *Licence Holder* became aware of the *Emission* occurring.
- **35.** The *Licence Holder* must record the number and details of any complaints received by the *Licence Holder* relating to 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.
- 36. The *Licence Holder* must submit to the *CEO* within 90 days after the *Anniversary Date*, a *Compliance Report* indicating the extent to which the *Licence Holder* has complied with the *Conditions* in this *Licence* for the *Annual Period*.
- **37.** The *Licence Holder* must comply with a *CEO Request*, within 7 days from the date of the *CEO Request* or such other period specified in the *CEO Request*.

Definitions and Interpretation

Definitions

In this Licence, the following terms have the following meanings:

ACM means **Asbestos** containing material and has the meaning defined in the Guidelines for Assessment, Remediation and Management of Asbestos Contaminated Sites, Western Australia, (DOH, 2009).

Amendment Notice refers to a notice issued under section 59B(9) of the **EP Act** to amend the **Licence** issued under the **EP Act**.

Anniversary Date means 1 November of each year.

Annual Period means a 12 month period commencing from 1 November until 31 October in the following year.

Approved Policy has the same meaning given to that term under the EP Act.

Asbestos means the asbestiform variety of mineral silicates belonging to the serpentine or amphibole groups of rock-forming minerals and includes actinolite, amosite, anthophyllite, chrysotile, crocidolite, tremolite and any mixture containing 2 or more of those.

AHD means Australian Height Datum as defined by Geoscience Australia

Compliance Report means a report in a format approved by the **CEO** as presented by the Licence Holder or as specified by the **CEO** from time to time.

CEO for the purposes of notification means:

Director General
Department Administering the Environmental Protection Act 1986
Locked Bag 10
JOONDALUP DC WA 6919
info@dwer.wa.gov.au

CEO Request means a request made by the **CEO** to the **Licence Holder** in writing, sent to the **Licence Holder's** address for notifications, as described at the front of this **Licence**, in relation to:

- (a) information, records or reports in relation to specific matters in connection with this *Licence* including in relation to compliance with any *Conditions* and the calculation of fees (whether or not a breach of *Condition* or the *EP Act* is suspected); or
- (b) reporting, records or administrative matters:
 - (i) which apply to all *Licences* granted under the *EP Act*; or
 - (ii) which apply to specified categories of *Licences* within which this *Licence* falls.

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.

Clean Fill has the meaning defined in the Landfill Definitions.

Condition means a condition to which this **Licence** is subject under s 62 of the **EP Act**. **Damp** means material is moist to the touch.

Discharge has the same meaning given to that term under the EP Act.

DER Asbestos Guidelines means the document titled "Guidelines for managing asbestos at construction and demolition waste recycling facilities", published by the Department of Environment and Conservation, 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).

Gatehouse means the gatehouse depicted on the Site Plan in Schedule 1.

General Description means the description of activities and operations carried out on the **Premises** as set out in Schedule 2 of this **Licence**.

General Emission has the meaning set out in Condition 32 of this Licence.

Head Office refers to the Capital Recycling Head Office located at 32 Jackson Street, Bayswater, Western Australia 6053.

High Risk Loads refers to loads classified as "high risk" in accordance with the DER Asbestos Guidelines Risk Classification Matrix included in Attachment 1 of this Licence

Implementation Agreement or Decision has the same meaning given to that term under the *EP Act*.

Inert Waste Type 1 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 refers to this document as amended from time to time including by way of an **Amendment Notice**, which evidences the grant of **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 Loads refers to loads classified as "low risk" in the DER Asbestos
Guidelines Risk Classification Matrix included in Attachment 1 of this Licence.

Material Environmental Harm has the same meaning given to that term under the **EP Act**.

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**.

Products refer to **Wastes** which have undergone crushing, processing or screening to create a useable recycled product and which has been tested and conforms with the specifications of this **Licence**.

Quarter refers to the four inclusive periods from 1 November to 31 January in the following year, 1 February to 30 April, 1 May to 31 July and 1 August to 31 October.

Serious Environmental Harm has the same meaning given to that term under the **EP Act**.

Specified Emission has the meaning set out in Condition 32 of this Licence.

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**; and
- (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*.

Schedule 1: Maps

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



Site Plan



Schedule 2: General Description

At the time of assessment, the following activities and operations were considered in the determination of the risk and related *Conditions* for the *Premises*.

The *Licence Holder* is carrying out activities at the *Premises* which fall within the meaning of Prescribed Premises under the *EP Act*. The *Premises* constitute:

- Category 13 Crushing of building material: *Premises* on which waste building or demolition material (for example, bricks, stones or concrete) is crushed or cleaned; and
- Category 62 Solid waste depot: *Premises* on which waste is stored, or sorted, pending final disposal or re-use.

Infrastructure and equipment

The following infrastructure and equipment are situated on the *Premises*:

Table 4: Infrastructure and equipment

Infras	tructure and Equipment	Plan Reference			
1	Fixed crushing and screening plant	Premises Map: Cone Crusher and Screener			
2	Conveyor belts and radial stackers	Site Plan: Conveyor Belts and Radial Stackers			
3	Concrete walled bunker for storage of products	Site Plan: Concrete Walled Bunker			
4	Mobile impact crusher	Premises Map: Primary Crusher and Screener			
5	Mobile screening unit	Premises Map: Screener			
6	20t – 24t excavators x 3	N/A			
7	14t excavator x 1	N/A			
8	5m³ Wheel loaders x 2	N/A			
9	Telescopic handler x 1	N/A			
10	Bobcat x 1	N/A			
Other	Other Infrastructure				
11	2 x Licensed groundwater bores for dust management	Site Plan: Bores			
12	Water truck	N/A			
13	Fast fill stand pipe and 40,000ltr water reservoir	Site Plan: Standpipe & Water Storage			

Infras	tructure and Equipment	Plan Reference	
14	Reticulated sprinklers on stockpiles and sprays on machines including crushers, screens and stackers	Site Plan: Product Storage, and Radial Stackers,	
		Premises Map: Screener, Cone Crusher and Screener and Primary Crusher	
15	2x Wheel wash facilities including concrete lined water catchment	Site Plan: Wheel Wash	
16	Water gantry frame	Site Plan: Gantry	
17	Water piping including hoses and sprinklers	N/A	
18	Dust walls	Site Plan: Dust Walls	
19	Stockpile Height Markers	N/A	

Site layout

The infrastructure and equipment are set out on the **Premises** in accordance with the site layout specified on the **Premises** Map in Schedule 1.

Waste acceptance

The **Premises** accept construction and demolition **Waste** for sorting, crushing and screening to product a range of **Products** including crushed concrete road base, sand fill, track and drainage material. Table 5 includes the volumes of **Waste** material that has been considered for this assessment.

Waste is received predominantly by trucks which are either owned by the *Licence Holder* or third parties. Upon arrival, each load is registered at the *Gatehouse* and inspected before proceeding into the facility.

Loads are tipped at designated unloading areas and are spread and inspected. Once suitable and accepted, the waste is processed and stockpiled. Stockpiles may require further processing in readiness for crushing or screening.

Undesirable or non-reusable **Wastes** are separated and loaded into bins during processing and/or crushing. Once the non-reusable **Waste** bin is full, it is removed from the **Premises** to a licensed facility for disposal.

Once processed and stockpiled, the **Product** is sampled and tested for quality and cleared for resale. Finished **Products** are also sampled and tested for **Asbestos** to ensure that the resale **Waste** is non-hazardous.

Once certified clean, the **Product** is resold based on its classification.

Table 5: Bulk material volumes assessed

Waste Type	Volume (annual)
Type 1 Waste	100,000 tonnes
Total volume	100,000 tonnes

Attachment 1 - Asbestos Risk Classification Procedure

To determine the risk of an incoming load containing *Asbestos*, the *Gatehouse* operator should 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 should 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 for 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 if necessary 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 1000m³ of **Product**.

Conveyor sampling

Sampling of road base and screened sand *Products* must occur at a minimum rate
of 1 sample per 70m³ of a *Product* output. Suspect *ACM* or areas must be targeted
for sampling.

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 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:

- 1. 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
- 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 Fact Sheet

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:

- 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 2nd 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.
- 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 NUMBER	LANDFILL
Buller Road Refuse					L.
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	11 & 11
City of Cockburn	Rockingham Rd	Henderson	6166	9411 3444	. II
City of Rockingham	Millar Rd	Baldivis	6171	9524 2053	111
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 Council	1700 Marmion Ave	Mindarie	6030	9306 6300	ii
RCG Pty Ltd	Lot 70/717 Hester Ave	Neerabup	6031	9407 5069	. 1
Shire of Gingin	Lot 10 Cockram Rd	Gingin	6503	9575 2211	II
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: www.public.health.wa.qov.au/2/867/2/asbestos.pm 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.