Licence number L6832/1997/14

Licence holder Cell 6 (WA) Pty Ltd

ACN 658 779 885

Registered business address 48 Wickham Street

EAST PERTH WA 6004

DWER file number 2011/000651-5

Duration 21/06/2021 to 20/06/2023

Date of amendment 18/05/2023

Premises details 115 Furniss Road

DARCH WA 6065

Legal description -

Lot 1 on Deposited Plan 69382

Prescribed premises category description (Schedule 1, <i>Environmental Protection Regulations 1987</i>)	Assessed production / 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	Less than 50 000 tonnes per year
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.	80 000 tonnes per year

This licence is granted to the licence holder, subject to the attached conditions, 15 May 2023, by:

Abbie Crawford A/MANAGER, WASTE INDUSTRIES REGULATORY SERVICES

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

Licence history

Date	Reference number	Summary of changes
15/06/2012	L6832/1997/12	Licence re-issue.
04/12/2015	L6832/1997/12	Licence amendment – removal of Category 63 from the licence and amendments to the monitoring program
30/08/2016	L6832/1997/13	Licence Amendment Notice 1 – change to premises address and addition of annual reporting requirement for recycled output sampling and testing results
17/06/2020	L6832/1997/13	Licence amendment – extension of expiry date for 12 months
18/06/2021	L6832/1997/13	Licence renewal – new licence for a 2-year period, with reduction in category throughputs
14/09/2022	L6832/1997/14	Transfer of Licence
18/05/2023	L6832/1997/14	Licence amendment – change from Category 62 to Category 61A, and revision of infrastructure table and dust emission management procedures

Interpretation

In this licence:

- (a) the words 'including', 'includes' and 'include' in conditions mean "including but not limited to", and similar, as appropriate;
- (b) where any word or phrase is given a defined meaning, any other part of speech or other grammatical form of that word or phrase has a corresponding meaning;
- (c) where tables are used in a condition, each row in a table constitutes a separate condition;
- (d) any reference to an Australian or other standard, guideline, or code of practice in this licence:
 - (i) if dated, refers to that particular version; and
 - (ii) if not dated, refers to the latest version and therefore may be subject to change over time;
- (e) unless specified otherwise, any reference to a section of an Act refers to that section of the EP Act; and
- (f) unless specified otherwise, all definitions are in accordance with the EP Act.

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

Licence conditions

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

Premises management

- 1. The licence holder is authorised to accept clean fill if it is raw, excavated, natural material such as clay, gravel, sand, soil or rock fines that:
 - (a) has been excavated or removed from the earth in areas that have not been subject to potentially contaminating industries, activities and land; and
 - (b) has not been processed except for the purposes of:
 - (i) achieving desired particle size distribution; and/or
 - (ii) removing naturally occurring organic materials such as roots; and
 - (c) does not contain any acid sulfate soil; and
 - (d) does not contain any other type of waste.
- 2. The licence holder must maintain a clearly visible sign specifying "No Asbestos" at the entry to the premises.
- **3.** The licence holder is not permitted to burn waste at the premises.
- **4.** The works approval holder shall not allow windblown litter to escape from the premises.

Fire management

- **5.** The licence holder must:
 - (a) ensure that firefighting equipment as outlined in Condition 18, Table 3, and located as per Figure 5, is maintained in good working order and capable of controlling a fire on the premises.
 - (b) have a fire suppression system in place with a minimum water supply and capacity that provides control of fire emissions until such time as emergency services can attend the premises.
 - (c) ensure that the premises is secured by a chain-link fence around the perimeter of the site and that gates are locked whilst unattended to prevent unauthorised access onto the site.

Waste storage

- **6.** The licence holder shall only store waste at the premises if:
 - (a) it is of a type listed in Table 1;
 - (b) the quantity stored is at or below the quantity limit listed in Table 1; and
 - (c) it meets any specification listed in Table 1.

Table 1: Waste storage

Waste Type	Quantity limit	Specification	
Inert Waste Type 1	50 000 tonnes per annual period	(a) Limited to waste that is already located at the premises as of 21 June 2021;	
		(b) For the purpose of storage prior to and post mechanical sorting and crushing;	

Waste Type	Quantity limit	Specification		
		(c) Processed (crushed/screened) materials may be discharged to the unfilled Area B as depicted in Schedule 1, Figure 7; and		
		(d) A depth of at least 600mm must be maintained from the top of processed materials placed in Area B and the proposed finished ground levels of the site.		
Timber Plastic	30 000 tonnes per annual period	(e) For the purpose of storage prior to and post mechanical sorting.		
Waste mineral oils unfit for their intended purpose (J100)	2 000 litres	(f) All liquid wastes to be stored within self- bunded containers or within secondary containment systems.		

7. The licence holder must remove all timber and plastics found during mechanical sorting of Inert Waste Type 1 from the premises every seven days and dispose of it at a landfill authorised to accept that waste type.

Waste inspection

- 8. The licence holder must store each Classified Load within a sorting area at the site for further inspection. The sorting area must be appropriately designed and constructed to ensure the Classified Load will not mix with other waste prior to inspection for asbestos and ACM.
- 9. At the sorting area, the licence holder must keep all waste wetted down throughout the inspection process using the infrastructure specified in row 7 of Table 3 set out in condition 18. The licence holder must visually inspect loads classified as Low Risk Loads, while the material is being sorted at the sorting area to determine whether any asbestos or ACM can be identified.
- 10. If asbestos or ACM 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.
- **11.** High Risk Loads must be visually inspected and handled in accordance with the procedure set out in Attachment 2.
- 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 and ACM identified at any stage of the process must be handled in accordance with the procedure set out in Attachment 2.

Waste processing restrictions

- **13.** The licence holder must only process waste at the premises if:
 - (a) it is of a type listed in Table 2;
 - (b) the quantity crushed is at or below the quantity limit listed in Table 2; and
 - (c) it meets any specification listed in Table 2.

Table 2: Waste processing restrictions

Waste Type	Quantity limit	Specification
Inert Waste Type 1	50 000 tonnes per annual period	(a) Only Inert Waste Type 1 stored within the premises boundary may be processed by mechanical sorting; and
		(b) Only Inert Waste Type 1 classified as a Low Risk Load may be processed by crushing.
Timber Plastics	30 000 tonnes per annual period	(a) Processing by mechanical sorting (screening) only.

Stockpile management

- **14.** The licence holder must ensure that:
 - (a) material on the premises is maintained in at least three separate stockpiles for unprocessed waste, products tested for asbestos or ACM and products awaiting testing for asbestos and ACM; and
 - (b) unprocessed waste and product stockpiles are kept clearly separated at a minimum three metre distance from the stockpile base; and
 - (c) products tested for asbestos or ACM and products awaiting testing for asbestos or ACM are clearly separated by a minimum three metre distance from the toe of the stockpile; and
 - (d) clearly visible and legible signage is erected on individual stockpiles to clearly identify and delineate tested products, untested products and unprocessed waste.
- 15. The licence holder must ensure that each stockpile of timber and plastics resulting from mechanical sorting (screening) and each stockpile of crushed products either awaiting testing or post-testing to determine asbestos content, does not exceed 4 000 tonnes per stockpile.

Product testing

- **16.** The licence holder must ensure that testing of all products is undertaken in accordance with the product testing procedures specified in Attachment 3.
- 17. The licence holder is not authorised to implement a reduced product testing rate as per the reduced sampling criteria section of Attachment 3.

Infrastructure and equipment

18. The licence holder must ensure that the infrastructure and equipment specified in Table 3 is maintained in good working order and operated in accordance with the operational requirements specified in Table 3.

Table 3: Infrastructure and equipment controls table

	Site infrastructure and equipment	Operational requirements		
1.	Mobile crushing plant (including attached spray/sprinkler system)	(a) Must be located and operated at the location depicted in Schedule 1, Figure 6.		
		(b) Maintained in accordance with the manufacturer's specifications; and		
		(c) Must have a functioning water sprays/sprinkler system		
2.	3 x Tertiary 2 deck screen	(a) Maintained in good working order		
3.	3 x excavators	(a) Maintained in good working order		
4.	3 x front end loaders	(a) Maintained in good working order		
5.	Above ground diesel storage tank	(a) A maximum of 4,500 L of diesel stored at any one time;		
		(b) Surrounded by an earthen bund to contain any diesel spills and to minimise the risk of trucks driving into the tank.		
	Fire, dust and asbestos controls			
6.	Mobile reticulation lines and water buffer tanks with a total storage capacity of 60,000 L	(a) Located around the premises, mobile reticulation lines must have the ability to be set automatically at varying cycles depending on seasonal weather and water availability.		
7.	2 x Watercarts (minimum 15,000 L capacity each) with sprays and cannon	(a) Used to wet down all roadways, and product and waste stockpiles during mechanical sorting, handling of material, stockpiles being relocated within the premises and all outgoing loads prior to removal.		
		(b) Roadways and all product and waste stockpiles must remain in a damp state at all times to prevent dust lift off.		
		(c) Used to wet down unprocessed waste ready for processing through the crusher and maintain it in a damp state prior to it being crushed.		
8.	Water sprays on mobile crushing plant	(a) Series of sprays at dust emission points on mobile crushing plant to prevent fugitive dust from crushing of wastes and products;		
		(b) Sprays on machines need to produce water droplets that are fine enough to form a droplet cloud and interact with dust particles effectively. Water must be effectively delivered to wastes and products and not blown away by wind; and		
		(c) Sprays are to be maintained in good working order to ensure availability during operation of equipment. Sprays must be operational at all		

		times when equipment is operating.		
9.	Mobile sprinklers on top of product and waste stockpiles	(a) Series of sprinklers on top of product and waste stockpiles to supplement wetting by water truck sprays which are capable of wetting down the entire surface of all stockpiles evenly to maintain the stockpiles in a damp state;		
		(b) Sprinklers on the stockpiles need to effectively wet the surface and suppress airborne dust particles. The positioning and setup of sprinklers must effectively deliver water to stockpiles and must not be blown away by wind;		
		(c) Sprinklers must have the ability to be set automatically to maintain stockpiles in a damp state outside of operational hours; and		
		(d) Sprinklers are to be maintained in good working order to ensure continuous availability.		
10.	Wheel washing facilities	(a) Capable of removing sediment from the wheels and the underside of trucks and vehicles leaving the premises.		
11.	Portable fire extinguishers	(a) Located in all work vehicles and at the Workshop, Office and bulk diesel bund as per Figure 5.		
		(b) Must be readily accessible, clearly signposted, in good condition and fully charged.		
		(c) Must be tested every 6 months by a competent person and pressure tested/refilled at least once every 5 years.		
12.	Spill kit	(a) Located at the Workshop and in work vehicles.		
		(b) Available with absorbent boom to prevent fire- fighting wash-water from entering stormwater drains in the event of a fire and to prevent hydrocarbon spills from entering stormwater drains/the environment.		
13.	Two-way radios	(a) Fitted on all mobile equipment to report fires and emergencies		
	Groundwater monitoring			
14.	Groundwater monitoring bores: NODGW01, NODGW02, NODGW03,	(a) Located in accordance with the groundwater monitoring bores depicted in Figure 4; and		
	NODGW04, NODGW06, DDW13, GW1, GW2, GW3	(b) Bores must be capable of monitoring groundwater in accordance with the requirements of condition 31.		
<u> </u>				

	Landfill gas monitoring		
15.	Landfill gas monitoring wells: G30 (G30R), G33, G35, G36, G37, G38, GA1, GA2, GA3, GA4, GA5, GA6, GA7, GA8, GA9, GA10, GA11	(a) Located in accordance with the landfill gas monitoring wells depicted in Figure 4; and(b) Wells must be capable of monitoring landfill gas in accordance with the requirements of condition 32.	

Dust emission controls

- **19.** The licence holder must ensure that:
 - (a) all product and waste stockpiles; and
 - (b) all unsealed access roads

are maintained in a damp state at all times by use of infrastructure and equipment specified in rows 6, 7 and 9 inclusive, of Table 3 condition 18 or are managed in accordance with the requirements of condition 20.

- **20.** The licence holder must prevent the visible uplift of dust at all times on product and waste stockpiles through the use of:
 - (a) automated sprinklers on top of stockpiles in accordance with row 9 of Table 3 of condition 18.
 - (b) effective chemical dust suppressant application on stockpiles.
- 21. The licence holder must apply an effective chemical dust suppressant to prevent the visible uplift of dust from all soil bunds within the premises.
- 22. The licence holder must reapply the chemical dust suppressant required by conditions 20(b) and 21 to relevant stockpiles and all soil bunds within the premises as per the manufacturer's instructions to ensure it remains effective at preventing the visible uplift of dust.
- 23. The licence holder must ensure that all products moved within the premises and removed from the premises are wetted down prior to loading and again prior to unloading using the infrastructure and equipment specified in row 7 of Table 3 set out in condition 18.
- 24. The licence holder must ensure that the wheel wash specified in row 10 of Table 3 set out in condition 18 is used for all vehicle movements exiting the premises.
- **25.** The licence holder must ensure that all vehicles operate at speeds of less than 10km/hr through the premises.

Noise emission controls

- **26.** The licence holder must comply with relevant assigned levels in Table 1 of Regulation 8 in the *Environmental Protection (Noise) Regulations 1997.*
- 27. The licence holder must ensure machinery and vehicles associated with crushing activities and stockpiling for waste storage only occur between the hours of 07:00 to 16:00 Monday to Friday and 07:00 to 12:00 on Saturdays.
- **28.** The licence holder must maintain the noise bund located on the western side of the premises boundary as depicted in Figure 3.

Monitoring requirements

- 29. All sample analysis required by condition 31 and condition 32 must be undertaken by laboratories with current accreditation from the National Association of Testing Authorities (NATA) for the relevant parameters, unless otherwise specified in that table.
- **30.** The licence holder must undertake the monitoring in Table 4 according to the specifications in that table.

Table 4: Monitoring of inputs and outputs

Parameter	Units	Frequency
Product Inputs – Clean Fill	Tonnes – as measured by certified load scales on wheel loaders.	Each load arriving at the premises.
Waste Outputs – Inert Waste Type 1, High Risk Loads or product Timber Plastic Waste Oil	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 premises.

Groundwater monitoring

31. The licence holder must undertake the monitoring in Table 5 according to the specifications in that table.

Table 5: Ambient groundwater monitoring table

Location	Parameter	Averaging period	Frequency	Method
NODGW01 NODGW02	Standing water level in m(AHD) and m(BGL)	Spot sample	Six monthly (at least five months	AS/NZS 5667.11
NODGW03	pH¹		apart)	
NODGW04	Electrical conductivity			
NODGW06 DDW13 GW1	Arsenic, Cadmium, Chromium, Copper, Manganese, Nickel, Lead, Mercury, Zinc, Iron			
GW2	Total ammonia			
GW3 As depicted	Total nitrogen			
in Figure 4	Total phosphorus			
	Total dissolved solids			
	COD (chemical oxygen demand)			
	Potassium			
	Chloride			
	Sulphate			

Location	Parameter	Averaging period	Frequency	Method
	Sulfite			
	Hardness (CaCO ₃)			
	Benzene			
	Ethyl benzene			
	Toluene			
	Xylenes			
	Total recoverable hydrocarbons			
	Organochlorines			
	Organophosphates			
	Phenols			
	Polycyclic aromatic hydrocarbons (PAHs)			
	Polychlorinated biphenyls (PCBs)			
	Dissolved methane			

Note 1: In-field non-NATA accredited analysis permitted.

Landfill gas monitoring

32. The licence holder must undertake the monitoring in Table 6 according to the specifications in that table.

Table 6: Monitoring of landfill gas

Monitoring reference point	Parameter	Units	Frequency	Method		
G30 (G30R)	Volumetric flow	L/hr	Quarterly	Guideline:		
G33	rate	m ³ /day	_	Assessment and management of		
G35	Methane	%v/v		contaminated		
G36	Carbon Dioxide	%v/v		sites		
G37						
G38	Oxygen	%v/v				
GA1						
GA2	Hydrogen sulfide	%v/v				
GA3						
GA4						
GA5						
GA6						
GA7						
GA8						
GA9						
GA10						

Monitoring reference point	Parameter	Units	Frequency	Method
GA11				
As depicted in Figure 4				

Record-keeping

- 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) the maintenance of infrastructure required to ensure that it is kept in good working order in accordance with condition 18;
 - (c) the application of chemical dust suppressant in accordance with conditions 20 and 21, and any reapplication in accordance with condition 22, including the type of suppressant, location, time and date;
 - (d) visual waste inspections of all Low Risk Loads in accordance with condition 9 and any loads reclassified as High Risk in accordance with condition 10.
 - (e) asbestos product testing undertaken in accordance with condition 16, that must include:
 - (i) details of sample size;
 - (ii) a statement of limit of detection of the analysis;
 - (iii) results in relation to asbestos detected (positive result exceeding the 0.001% w/w limit) or not;
 - (iv) description of any asbestos detected; and
 - (v) an estimate of the concentration of asbestos detected if practical to do so.
 - (f) monitoring of inputs and outputs undertaken in accordance with condition 30, that must include:
 - (i) The address of the source of each load of clean fill received;
 - (ii) The name and address of the landfill, landfill disposal receipts and Controlled Waste Carrier transport dockets for each load of Inert Waste Type 1, timber, plastic and waste oil leaving or rejected from the premises:
 - (g) Groundwater monitoring undertaken in accordance with condition 31;
 - (h) Landfill gas monitoring undertaken in accordance with condition 32;
 - (i) complaints received under condition 34; and

In addition, the Books must:

- (j) be legible;
- (k) if amended, be amended in such a way that the original and subsequent amendments remain legible and are capable of retrieval;
- (I) be retained for at least 3 years from the date the Books were made; and
- (m) be available to be produced to an Inspector or the CEO.

- 34. 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 complete details and dates of any action taken by the licence holder to investigate or respond to any complaint.

Reporting

- **35.** The licence holder must immediately notify the CEO of any fire on the premises.
- **36.** The licence holder must:
 - (a) undertake an audit of their compliance with the conditions of this licence during the preceding annual period; and
 - (b) prepare and submit to the CEO by no later than 31 January, an Annual Audit Compliance Report in the approved form.
- 37. The Compliance Report required by condition 36 must include a summary of the groundwater monitoring results in accordance with condition 31 and the landfill gas monitoring results in accordance with condition 32 including:
 - (a) a tabulated summary of results as well as all raw data provided in an excel document;
 - (b) an interpretive summary and assessment of the results against relevant assessment levels for water, as published in the *DER Guideline: Assessment and management of contaminated sites*;
 - (c) an interpretive summary and assessment of results against previous monitoring results; and
 - (d) trend graphs to support the interpretive summary.
- 38. The licence holder must comply with a Department Request, within 14 days from the date of the Department Request or such other period as agreed to by the Inspector or the CEO.

Definitions

In this licence, the terms in Table have the meanings defined.

Table 7: Definitions

Term	Definition		
ACM	means asbestos containing material		
ACN	Australian Company Number		
Annual Audit Compliance Report (AACR)	means a report submitted in a format approved by the CEO (relevant guidelines and templates may be available on the Department's website).		
annual period	a 12 month period commencing from 1 January until 31 December in the same year.		
asbestos	as defined in the DWER Asbestos Guidelines		
Assessment and management of contaminated sites guideline	means the document titled <i>Guideline: Assessment and management of contaminated sites</i> , published by the Department of Environment Regulation, as amended from time to time.		
AS/NZS 5667.11	means the Australian Standard AS/NZS 5667.11 Water quality - sampling - guidance on sampling groundwater.		
AS3745:1995	means the Australian Standard AS 3745:1995 Emergency Control Organisation and Procedures for Buildings.		
books	has the same meaning given to that term under the EP Act.		
CEO	means Chief Executive Officer of the Department.		
	"submit to / notify the CEO" (or similar), means either:		
	Director General Department administering the Environmental Protection Act 1986 Locked Bag 10 Joondalup DC WA 6919		
	or:		
	info@dwer.wa.gov.au		
Classified Load	means the classification of waste loads, in accordance with the DWER Asbestos Guidelines, 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		
damp	means moist to the touch.		
Department	means the department established under section 35 of the <i>Public Sector Management Act 1994</i> (WA) and designated as responsible for the administration of the EP Act, which includes Part V Division 3.		
DER Asbestos Guidelines	means the document titled <i>Guideline: Managing asbestos at construction</i> and demolition waste recycling facilities, published by the Department of Water and Environmental Regulation, as amended from time to time.		

Term	Definition	
discharge	has the same meaning given to that term under the EP Act.	
emission	has the same meaning given to that term under the EP Act.	
EP Act	Environmental Protection Act 1986 (WA)	
EP Regulations	Environmental Protection Regulations 1987 (WA)	
High Risk Loads	refers to loads classified as "high risk" in accordance with the DER Asbestos Guidelines <i>Risk Classification Matrix</i> included in Attachment 1 of this licence.	
Landfill Definitions	Landfill Waste Classification and Waste Definitions 1996 (as amended from time to time).	
licence	refers to this document, which evidences the grant of a licence by the CEO under section 57 of the EP Act, subject to the specified conditions contained within.	
licence holder	refers to the occupier of the premises, being the person specified on the front of the licence as the person to whom this licence has been granted.	
Low Risk Loads	refers to loads classified as "low risk" in the DER Asbestos Guidelines <i>Risk Classification Matrix</i> included in Attachment 1 of this licence.	
potentially contaminating industries, activities and land uses	refers to the industry, activity or land use listed in Appendix B of the DER 2014 Guideline: Assessment and management of contaminated sites	
premises	refers to the premises to which this licence applies, as specified at the front of this licence and as shown on the premises maps in Schedule 1 to this licence.	
prescribed premises	has the same meaning given to that term under the EP Act.	
products	refers to Inert Waste Type 1 which has undergone crushing and is either awaiting testing or post-testing to determine asbestos content in accordance with Attachment 3 of this licence.	
sediment	means any naturally occurring material (e.g. sand, mud, soil, silt) or processed waste-derived material that has the potential to be transported by the action of wind, water or through vehicular movement.	
stockpile base	refers to the toe of a stockpile, being the furthest point at the base of the stockpile that the material extends to.	
waste	has the same meaning given to that term under the EP Act.	

END OF CONDITIONS

Schedule 1: Maps

Premises map

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

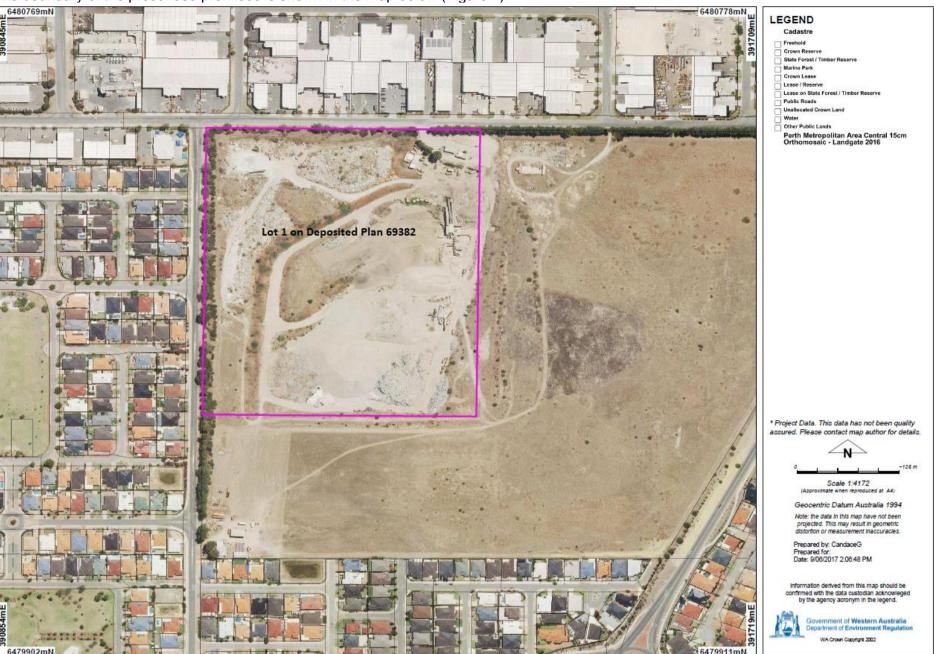


Figure 1: Map of the boundary of the prescribed premises

Site plan

The general layout of the premises is shown in the map below (Figure 2).

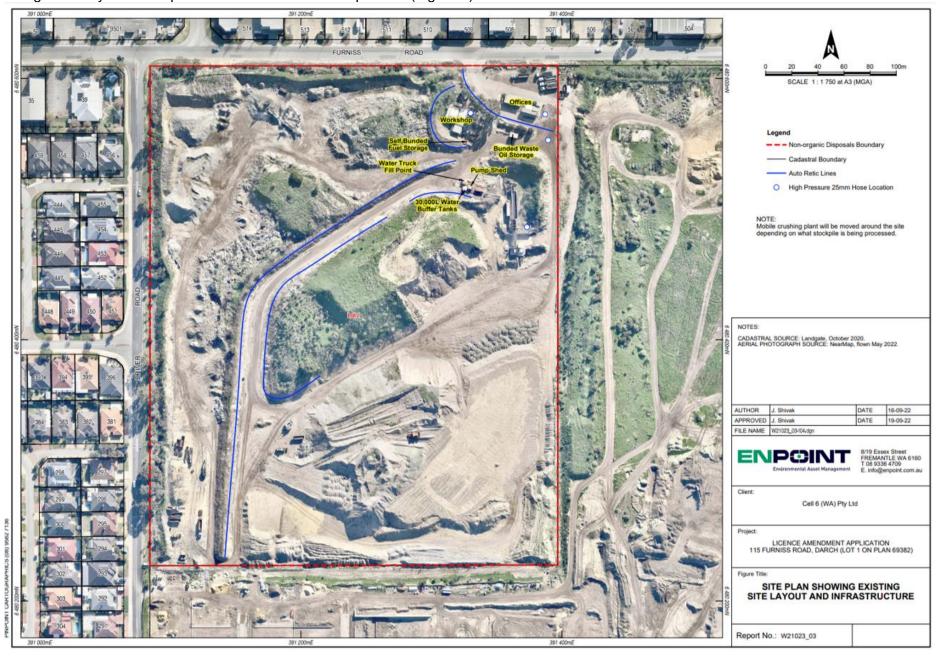


Figure 2: Map of the general layout of the prescribed premises

Noise bund location

The location of the noise bund is shown in the map below (Figure 3).



Figure 3: Map of the noise bund at the prescribed premises (shown by the green rectangle labelled bund)

Monitoring locations

The wells for groundwater and landfill gas are shown in the map below (Figure 4).

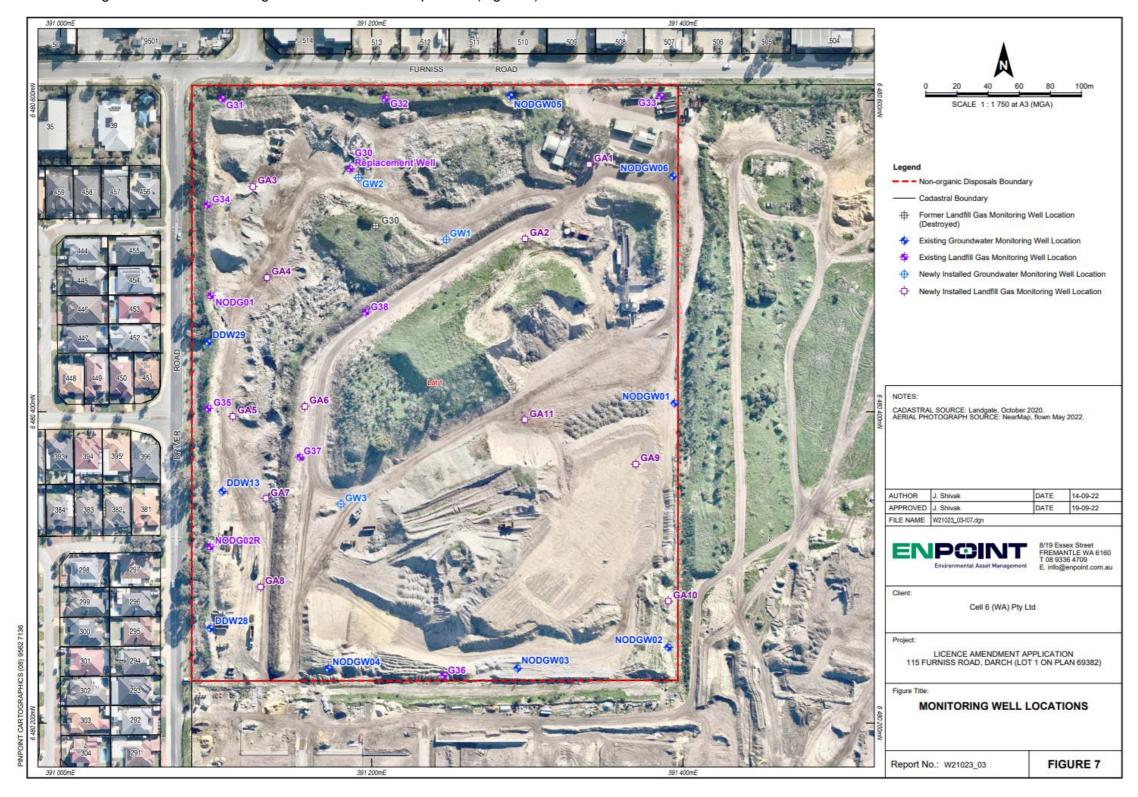


Figure 4: Map of the groundwater monitoring bores and landfill gas monitoring wells

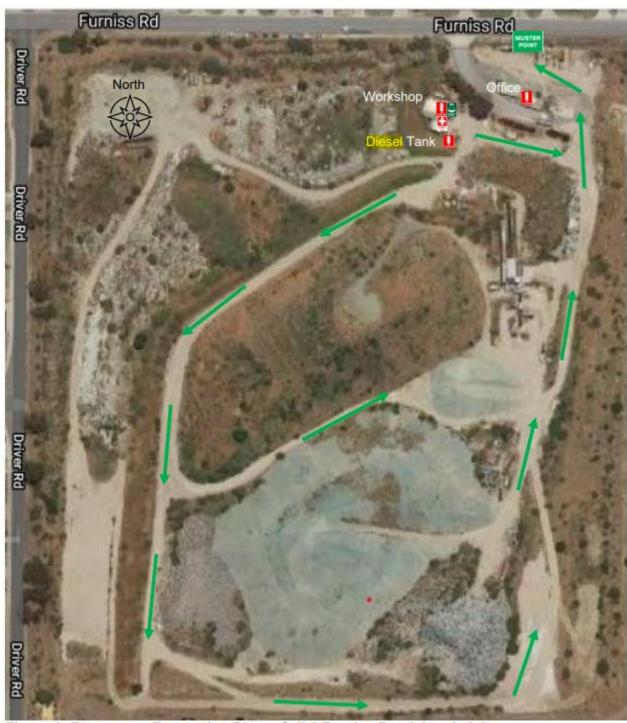


Figure 1: Emergency Evacuation Plan - Cell 6 Furniss Road, Landsdale.



Figure 5: Emergency Evacuation Plan

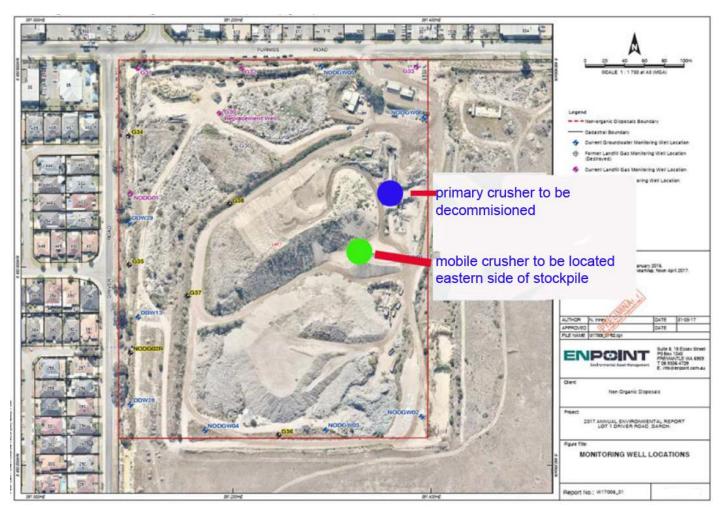


Figure 6: Location of mobile crusher

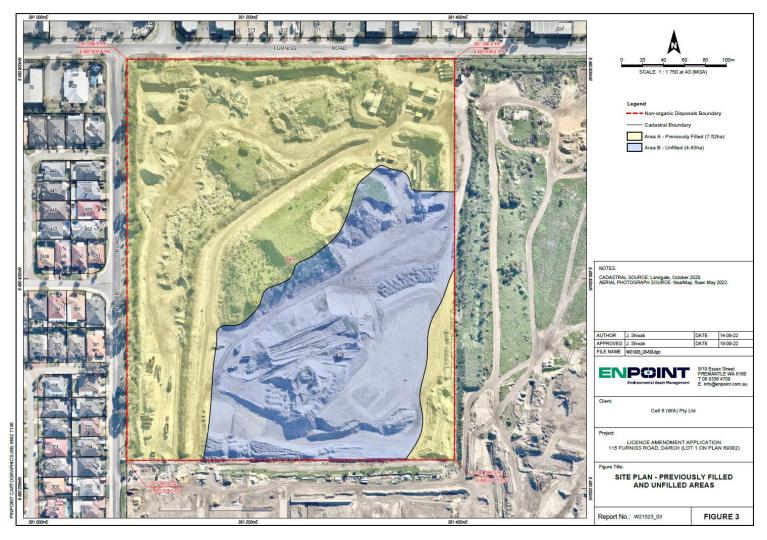


Figure 7: Map showing filled (yellow area A) and unfilled areas (blue area B)

Attachment 1- Asbestos Risk Classification Procedure

To determine the risk of an incoming load containing asbestos, the Gatehouse operator shall 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 and managed as outlined in the following section. 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.

Once classified, each load must be directed to the appropriate area for unloading and further inspection in line with the following sections.

Risk Classification Matrix						
	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 (e.g. 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 DWER Managing asbestos at construction and demolition waste recycling facilities Guideline 2021, page 7)

Attachment 2 - High Risk Load Procedure

Loads classified as 'high risk' must be unloaded and spread over a sufficiently large area to enable a comprehensive visual inspection of all sides of the material. One method of achieving this is to spread the material to a depth of less than 30 cm and to turn over the material with the use of an excavator or similar. Where appropriate, larger sections of concrete should be inverted to permit a visual check for embedded or underlying asbestos product debris.

If suspect fibrous asbestos or asbestos fines/fibres are detected, the load must be isolated and kept wet. Once appropriately contained in accordance with the asbestos factsheet in Attachment 4, it should be 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 and kept wet. Once appropriately contained in accordance with the asbestos factsheet in Attachment 4, it should be 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:

- 1. 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 can be traced back to the customer and originating site.

(Derived from Section 3.4 of the DWER Managing asbestos at construction and demolition waste recycling facilities Guideline 2021, page 9)

Attachment 3 – Asbestos Monitoring and Testing

Product testing and supply

To ensure recycled products have been produced to the required specification in relation to asbestos content it is necessary for product testing to be undertaken. The testing procedures detailed in this section have application for the three main recycled products:

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

Product specification

To ensure the health of those using or coming into contact with recycled C&D products is protected, the asbestos content (in any form) of any recycled products must not exceed 0.001 per cent asbestos weight for weight (w/w).

Inspection and sampling requirements

All types of recycled product must be inspected and/or sampled and tested for ACM, FA and AF, as outlined below. Inspections and sampling may be undertaken by staff employed by the licensee as long as they have received the required asbestos training for operational staff set out in section 5.2.

ACM and FA are subject to visual inspection and sampling procedures since they are larger in size (>7 mm). AF (<7 mm) is assessed by submitting samples for laboratory analysis.

Recycled products may be sampled from conveyors or stockpiles. Whichever approach is adopted, the operator will need to ensure they have appropriate systems in place to allow them to identify where in the product stockpiles each sample is from to allow further testing or separation to occur if required.

Stockpile inspection and sampling

In the case of recycled drainage rock and recycled road base, a visual inspection should be undertaken in a systematic grid fashion over any new stockpile to identify any suspect asbestos material.

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 asbestos material 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 1000 m³ of product.

Conveyor sampling

Sampling of road base and screened sand products must occur at a minimum rate of 1 sample per 70 m³ of a product output. Suspect asbestos material 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 two size fractions (>7 mm and <7 mm) in the field by sieving though a 7 mm screen or spread out for inspection on a contrasting colour fabric. The >7 mm fraction should be examined for any suspect asbestos material and this be retained to calculate the level of contamination.

The <7 mm 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 AsbestosContaminated 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 (AS 4964-2004) or be demonstrated to be able to achieve the equivalent level of results to this Australian Standard.

AS 4964-2004 is currently the only method in Australia that has NATA certification; however the practicable level of detection for this standard polarised 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 500 mL 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
- 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. A number of laboratories have developed such semi-quantitative methods for the analysis of low levels of asbestos. Techniques include:
 - the extraction and weighing of fibre bundles or fibre cement material from the total sample
 - 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.

The use of either of these methods is considered acceptable to the department.

Whatever analysis methods are adopted by an operator, the department expects a number

of assessment-based statements to be included in all laboratory analytical reports. These include:

- details of the sample size
- a statement of limit of detection of the analysis
- results in relation to asbestos detected or not note that AS 4964-2004 allows for a
 nil detection if the asbestos is less than a certain concentration and is nonrespirable; however, the department would consider a positive result to exceed the
 0.001% w/w limit
- a description of any asbestos detected
- an estimate of the concentration of asbestos detected if practical to do so.

Interpreting inspection and sampling results

If the visual inspection, sieve sample or analytical results identify asbestos above or possibly 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.

As a guide, in the case of recycled drainage rock, identification of a piece of ACM or FA per 10 m² of surface would be deemed to exceed the specification for that area, and for the whole stockpile if repeated in two or more other separate areas. A single fragment exceedance can be considered an isolated occurrence in the absence of other contamination evidence and the stockpile allowed for beneficial use. If there is multiple contamination only of a localised area then that area can be excavated to the extent of any visible asbestos and then the remainder of the stockpile considered to be suitable for use.

For laboratory analysis it is important that each result be considered on its own merits in regard to the asbestos control specification and that there is no averaging across samples. In the case of a single exceedance at a level less than 0.01% w/w, the stockpile (nominally 4000 tonnes) may not be deemed contaminated if repeat samples of immediately adjacent areas do not demonstrate specification exceedances.

The same approach as indicated in the preceding paragraph can be applied to the results of the >7 mm sieve sampling in regard to recycled sand material and road base. In this case a 1 cm³ fragment of ACM or FA would be deemed to exceed the specification for a 10-litre sample.

It should be noted that specification exceedances in regard to different assessment methods for the same type of stockpile should not be viewed in isolation from each other.

(Derived from Section 4.3 of the DWER Managing asbestos at construction and demolition waste recycling facilities Guideline 2021, pages 12 - 16)

Attachment 4 – Asbestos Factsheet

Transportation and disposal of asbestos containing material

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

The Controlled Waste Regulations define what is considered to be ACM for the purposes of the Controlled Waste Regulations. This definition includes material which contains 0.001 per cent 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 (DoH) and WorkSafe requirements. Contact the relevant authority for further information (refer to the end of this factsheet).

Transportation of ACM

The Controlled Waste Regulations require ACM to be:

- 1. separated from other material for disposal where that is reasonably practicable
- **2.** wrapped and contained in a manner that prevents asbestos fibres entering the atmosphere during transportation on a road
- 3. labelled or marked with the words 'CAUTION ASBESTOS' in letters no less than 50 mm high on the individual packages and the transport container.

Further guidance on the transportation of ACM 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
- 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 into 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 before removal and loading onto a 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 (EP Act) 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 EP Act and Controlled Waste Regulations.

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 DoH website or phone 9222 4222.

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 or phone 1300 307 877.