Government of Western Australia
Department of Water and Environmental Regulation

Licence

Licence number	L8470/2010/2
Licence holder	Karratha Environmental Crushing Pty Ltd
ACN (if applicable)	140 078 431
Registered business address	Unit 16 Lakeside Corporate Centre 24 Parkland Road OSBORNE PARK WA 6017
DWER file number	2010/005710-1
Duration	27/09/2013 to 26/09/2040
Date of amendment	02/07/2020
Premises details	Karratha Environmental Crushing Site Crown Lease GE J-287979 Dampier Road GAP RIDGE WA 6714 Legal description - Lot 4599 on Deposited Plan 192297 As defined by the coordinates in Schedule 1

Prescribed premises category description (Schedule 1, *Environmental Protection Regulations 1987*)	**Assessed production / design capacity**
Category 13: Crushing of building material	50 000 tonnes per annual period

This Licence is granted to the Licence holder, subject to the attached conditions, on 2 July 2020, by:

Jarrod Abrahams 2020.07.02 13:44:01 +08'00'

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
24/09/2010	L8470/2010/1	Licence granted.
19/09/2013	L8470/2010/2	Licence reissued.
24/06/2020	L8470/2010/2	Amendment to extend licence duration.

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:

(e) if dated, refers to that particular version;

(f) if not dated, refers to the latest version and therefore may be subject to change over time;

(g) unless specified otherwise, any reference to a section of an Act refers to that section of the EP Act; and

(h) 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

Waste acceptance

1. The Licence Holder must only accept onto the Premises waste of a waste type, which does not exceed the corresponding rate at which waste is received, and which meets the corresponding acceptance specification set out in Table 1.

Table 1: Types of waste authorised to be accepted onto the premises

Waste type	Rate at which waste is received	Acceptance specification
Clean fill	Combined total of no more than 50 000 tonnes per annual period	C&D Waste only. Waste containing asbestos or ACM must not be accepted.
Inert Waste Type 1		

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, stored in a quarantined storage area or container and removed to an appropriately authorised facility as soon as practicable.

Asbestos management

3. The Licence Holder must ensure that any waste that does not conform to the waste acceptance criteria in Table 1 due to asbestos content, is covered or bagged and kept within a clearly identified, labelled, segregated and secure container prior to being removed off site to an appropriate authorised facility within 48 hours.

4. The Licence Holder must advise all source material providers that asbestos or potentially asbestos contaminated material is not accepted at the Premises.

5. The Licence Holder must include a ‘no asbestos’ clause in all contracts with all source material providers.

6. 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.

7. Where the inspection required by condition 6 confirms that the load does contain asbestos or ACM, the Licence Holder must:

(i) reject the waste for acceptance;

(ii) maintain accurate records of all rejected loads on the Premises and the documentation must be made available to DWER officers upon request;

(iii) record the details of the waste source, material carrier, registration number of the vehicle and date of rejection.

8. The Licence Holder must direct each accepted and Classified Load to an unloading area at the site for further inspection. The unloading area shall be appropriately designed and constructed to ensure the waste will not mix with other waste.

9. The Licence Holder must dampen all Classified Loads prior to unloading and maintain the waste in a damp state throughout the inspection process using appropriate dust suppression measures.

10. The Licence Holder must inspect and maintain records for all unloaded waste in accordance with the low risk and high-risk load procedure as outlined in Attachment 2.

11. 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 high-risk load procedure outlined in Attachment 2.

12. The Licence Holder must maintain waste and processed waste on the Premises in at least two separate stockpile areas for unprocessed waste, processed waste tested for ACM and:

    (i) unprocessed waste and processed waste areas must be kept clearly separated at a minimum 3 m distance;

    (ii) processed waste tested for ACM and processed waste awaiting testing for ACM must be clearly separated by a minimum 3 m distance OR clearly delineated and separated with impermeable barriers;

    (iii) clearly visible and legible signage must be erected on individual stockpiles to clearly identify and delineate tested processed waste, untested processed waste and unprocessed waste.

13. The Licence Holder must ensure that the asbestos content of any recycled output originating from Inert Waste Type 1 does not exceed the contamination limit of 0.001% w/w for asbestos (in any form).

14. The Licence Holder must ensure that recycling outputs originating from Inert Waste Type 1 are sampled and tested in accordance with Attachment 3.

Waste processing

15. The Licence Holder must ensure that the waste types specified in Table 2 are only subjected to the corresponding processes, subject to the corresponding process limits and/or specifications.

Table 2: Waste processing

Waste type	Process(es)	Process limits and/or specifications
Clean fill	Receival handling, storage, crushing and screening	All installed dust collection and dust control systems on plant equipment must be maintained to minimise the generation of dust
Inert Waste Type 1		

Emissions and discharges

16. The Licence Holder must ensure that all areas on the Premises from which dust may be generated are maintained so that no visible dust emissions are discharged from the Premises.

17. The Licence Holder must not discharge water from dust suppression and rain events from the Premises.

18. The Licence Holder must ensure that the Premises are drained such that contaminated stormwater is diverted to the settling pond and retained within the Premises boundary.

19. The Licence Holder shall ensure that the treated wastewater used for dust suppression meets the following:

(a) pH is in the range of 6.5 to 8.5;

(b) Total Dissolved Solids (TDS) is not greater than 2000 mg/L (or higher concentration approved by the CEO on a case by case basis); and

(c) Total Petroleum Hydrocarbon (TPH) is not greater than 15 mg/L.

20. The Licence Holder must maintain a constant freeboard of no less than 500 mm on the settling pond.

Monitoring

21. The Licence Holder must undertake the monitoring in Table 3 according to the specifications in that Table.

Table 3: Monitoring of inputs and outputs

Input/Output	Parameter	Units	Frequency
Waste Inputs	Clean fill, Inert Waste Type 1	m^3	Each load arriving at the Premises
Waste Outputs	Waste type as defined in the Landfill Definitions		Each load leaving or rejected from the Premises
Processed waste	Crushed product		Each load leaving the Premises

Records and reporting

22. The Licence Holder must complete an Annual Audit Compliance Report indicating the extent to which the Licence Holder has complied with the conditions of the Licence, and any previous Licence issued under Part V of the Act for the Premises for the previous annual period.

23. The Licence Holder must submit to the CEO an Annual Environmental Report within 90 calendar days after the end of the annual period. The report must contain the information listed in Table 4 in the format or form specified in that Table.

Table 4: Annual Environmental Report

Condition or table (if relevant)	Parameter	Format or form
-	Summary of any failure or malfunction of any pollution control equipment and any environmental incidents that have occurred during the annual period and any action taken	None specified
Condition 13 and 14	Recycled outputs sampling and testing data	None specified
Condition 21 (Table 3)	Summary of inputs and outputs data	None specified

Condition or table (if relevant)	Parameter	Format or form
Condition 22	Compliance	Annual Audit Compliance Report (AACR). Form available at the DWER website: www.dwer.wa.gov.au under the publications section.

Definitions

In this licence, the terms in Table 5Table have the meanings defined.

Table 5: 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
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
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
C&D Waste	means 'Construction and Demolition Waste' as defined in the Landfill Definitions.
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. Classification of waste loads shall be undertaken in accordance with the provisions outlined in Section 3.3 and 3.4 DER Asbestos Guidelines
Clean fill	has the meaning defined in the Landfill Definitions
Department	means the department established under section 35 of the *Public Sector Management Act 1994* (WA) and designated as responsible for the administration of the EP Act, which includes Part V Division 3.
DER Asbestos Guidelines	means 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
discharge	has the same meaning given to that term under the EP Act.

Term	Definition
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)
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, 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.
mg/L	means milligrams per litre
Premises	refers to the premises to which this licence applies, as specified at the front of this licence and as shown on the premises map in Schedule 1 to this licence.
Prescribed Premises	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.

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

Schedule 2: Premises boundary

The premises boundary is defined by the coordinates in Table 1 and Figure 2.

Table 1: Premises boundary coordinates (GDA94)

Easting	Northing	Zone
20.73456	116.77193	50
20.73420	116.77626	
20.74156	116.77701	
20.74231	116.76890	
20.74211	116.76881	
20.77268	116.77268	

Figure 2: Map of Premises coordinates

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.

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 (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:
    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 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^3 of Product.

Conveyor sampling

- Sampling of road base and screened sand Products must occur at a minimum rate of 1 sample per 70m^3 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^3) 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:

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. 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;
2. Wrapped and contained in a manner that prevents asbestos fibres entering the atmosphere during transportation on a road; and
3. 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.
- 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.