



Mr. Jeremy Hall  
Shire of Broome  
Barker Street Office  
PO Box 44  
BROOME WA 6725

Dear Jeremy

**ENVIRONMENTAL PROTECTION ACT 1986 - AMENDMENT TO LICENCE L8852/2014/1**

**Licence: L8852/2014/1**  
**Premises: Lot 400 Buckleys Road**

Further to my letter dated 5 March 2015, please find enclosed your amended *Environmental Protection Act 1986* Licence.

If you have any questions or objections relating to the licence, please do not hesitate to contact the enquiries officer above on 9168 4218 for clarification or discussion of any grievances you have.

If you are concerned about, or object to any aspect of the amendment, you may lodge an appeal with the Minister for the Environment within 21 days from the date on which this licence is received. The Office of the Appeals Convenor can be contacted on 6467 5190 to find out the procedure and fee.

Members of the public may also appeal the amendments. The Appeals Registrar at the Office of the Appeals Convenor can be contacted after the closing date of appeals to check whether any appeals were received.

If you have any questions please contact Damian Thomas on 9168 4218.

Yours sincerely,

Stephen Checker  
Officer delegated under Section 20  
of the *Environmental Protection Act 1986*

19 March 2015



# Licence

## *Environmental Protection Act 1986, Part V*

**Licensee:** Shire of Broome

**Licence:** L8852/2014/1

**Registered office:** 27 Weld Street  
BROOME WA 6725

**Premises address:** Reserve 51151 Lot 400 Buckley's Road  
BROOME WA 6725  
Being Lot 400 on Plan 72930 Reserve 51151  
(as depicted in Schedule 1)

**Issue date:** Thursday, 15 January 2015

**Commencement date:** Monday, 19 January 2015

**Expiry date:** Saturday, 18 January 2020

**Prescribed premises category**  
Schedule 1 of the *Environmental Protection Regulations 1987*

Category number	Category description	Category production or design capacity	Approved premises production or design capacity
13	Crushing of building material: premises on which waste building or demolition material (for example, bricks, stones or concrete) is crushed or cleaned.	1 000 tonnes or more per year	6 000 tonnes per annual period
57	Used tyre storage (general): premises (other than premises within category 56) on which used tyres are stored.	100 tyres or more	5 000 tyres at any one time
62	Solid waste depot: premises on which waste is stored, or sorted, pending final disposal or re-use.	500 tonnes or more per year	2 000 tonnes per annual period
67A	Compost Manufacturing and Soil Blending: premises on which organic material (excluding silage) or waste is stored pending processing, mixing, drying or composting to produce commercial quantities of compost or blended solids.	1 000 tonnes or more per year	5 000 tonnes per annual period

### Conditions

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

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



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## Introduction

This Introduction is not part of the Licence conditions.

### DER's industry licensing role

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

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

### Licence requirements

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

Where other statutory instruments impose obligations on the Premises/Licensee the intention is not to replicate them in the Licence conditions. You should therefore ensure that you are aware of all your statutory obligations under the Act and any other statutory instrument. Legislation can be accessed through the State Law Publisher website using the following link: <http://www.slp.wa.gov.au/legislation/statutes.nsf/default.html>

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

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

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

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



### Licence fees

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

### Ministerial conditions

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

### Premises description and Licence summary

The Shire of Broome is proposing to operate a new waste management facility to alleviate pressures at the current Broome Refuse Site (BRS). The new premises is located at Lot 400 Buckleys Road, which is approximately 560m south of the existing landfill. It is envisioned that the new facility will operate at this location until the new dedicated Class III lined putrescible landfill is constructed in a few years.

Lot 400 will incorporate the following activities:

- Receipt of unprocessed greenwaste (17 000m<sup>3</sup> per annum);
- Mulching and composting of received greenwaste (10 000m<sup>3</sup> per annum);
- Sale of varying grades of mulch to the general public;
- Stockpiling and processing of inert waste;
- Stockpiling of scrap metal car bodies;
- Car impounding lot;
- Stockpiling of tyres;
- Stockpiling of daily cover material for the BRS (2000m<sup>3</sup> at any one time; daily use at the BRS is approximately 70-100m<sup>3</sup>); and
- Stockpiling of final capping material for the BRS.

The initial proposal is to mulch greenwaste and sell it to the public but within a few years the Shire plan to further process the mulch into a range of products including compost and soil improvers for sale to the public. Accordingly, the proposal and application will include the assessment of Category 67A so that no further assessment (and amendments) is warranted if the Shire elects to compost the greenwaste in the future.

Greenwaste will be delivered to the existing BRS and then transferred to Lot 400 at regular intervals. The BRS has a Greenwaste Management Plan which will be employed at the Lot 400 facility.

Future production of compost / soil at the site (if it occurs) would require the input of manure and lime sands. Should composting occur at the site, water will be applied to the windrows of mulch via a water cart. The windrows will then be turned/aerated and water applied. The process is estimated to take eight weeks before the compost will be ready for sale or transformed into soil conditioner.

Inert waste is stored at Lot 400, and this is predominately Construction and Demolition Waste (C&D). C&D waste will initially report to the BRS and then it will be transported to Lot 400 where the C&D waste is crushed onsite. Mobile crushers will be employed when sufficient volumes warrant crushing.

Lot 400 also accepts scrap metal and car bodies and serves as a location for impounded vehicle storage. As with the other waste streams, waste will initially report to the BRS and then be transferred to Lot 400 for storage / processing.

The Shire will be contracting an external service provider to recycle used tyres so this will avoid the need for tyre disposal at the landfill, hence the Shire requires a site to store tyres prior to recycling. Lot 400 will therefore act as a temporary tyre storage facility. The Shire receives and recycles approximately 3500 tyres per annum. All tyres are tracked under the Controlled Waste Tracking System. The above ground tyre storage area is a designated area separated from all other areas and drains to a basin that collects the contaminated runoff should tyres ever catch fire. Tyres are proposed to be stored in windrows 5m wide by 3m high and up to 40m in length and they will be separated from other tyre windrows and the premises boundary with a 10m buffer. The tyre storage area is kept free of vegetation at all times to reduce fire risk. There will be no tyre burial at Lot 400. Uncontaminated stormwater collected in the basin is discharged from the site in a controlled manner using a low flow discharge point.





The following is noted on potential receptors in the vicinity of the Site:

- There are no permanent or ephemeral surface watercourses located on Lot 400 premises or within 5km of the Lot 400 premises.
- The closest wetland is approximately 950m north west and comprised of saltwater marshes.
- The Lot 400 premises are located 2.5km south west of a Priority 1 drinking water protection area.
- The depth to groundwater is approximately 12m below ground level.
- The Lot 400 premises are located approximately 5km north of the Broome town centre and 2.6km east of the coast.
- The closest residences are approximately 635m to the north east, being residential property at Locke Street, 900m west for dwellings located on Lullfitz Drive and over 1200m east for dwellings located along Broome Road. The Buffer distances recommended by the Environmental Protection, Authority Guidance for the Assessment of Environmental Factors, Separation Distances between Industrial and Sensitive Land Uses No.3 June 2005 documents for category 13, 57, 62 and 67A are 1000m, 100-200m, 200 and 1000m (noting manure is proposed to be used) respectively. The proposal concurs with these buffer distances.
- The Lot 400 premises are also located within the Broome North Development Plan area which identifies the future land use as Neighbourhood Living (residential) and Public Purposes (Water Supply).

The main emissions from the premises are general emission including stormwater, fugitive emissions (leachate from mulching /compositing) and odour.

This Licence is for the operation of a new facility established under works approval W5587/2014/1.

The licences and works approvals issued for the Premises since 31/03/2014 are:

Instrument log		
Instrument	Issued	Description
W5587/2014/1	31/03/2014	New Works Approval
L8852/2014/1	15/01/2015	New Licence application
L8852/2014/1	19/03/2015	Licence amendment to increase greenwaste stockpile length

### Severance

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

## END OF INTRODUCTION



## Licence conditions

### 1 General

#### 1.1 Interpretation

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

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

**‘Acceptance Criteria’** has the meaning defined in Landfill Definitions;

**‘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);

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

**‘annual period’** means the inclusive period from 1 January until 31 December in each year;

**‘AS 4454’** means Australian Standard AS 4454 *Composts, soil conditioners and mulches*;

**‘AS 4964’** means the Australian Standard AS 4964 *Methods for the qualitative identification of asbestos in bulk samples*;

**‘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;

**‘asbestos containing material’** has the meaning defined in the Guidelines for Assessment, Remediation and Management of Asbestos Contaminated Sites, Western Australia, (DOH, 2009);

**‘asbestos fibres’** has the meaning defined in the Guidelines for Assessment, Remediation and Management of Asbestos Contaminated Sites, Western Australia, (DOH, 2009);

**‘asbestos fines’** has the meaning defined in the Guidelines for Assessment, Remediation and Management of Asbestos Contaminated Sites, Western Australia, (DOH, 2009);

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

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

Manager Licensing (Waste North)  
Department of Environment Regulation  
Locked Bag 33 Cloisters Square  
PERTH WA 6850  
Telephone: (08) 9333 7510  
Facsimile: (08) 9333 7550  
Email: [Industry.regulation@der.wa.gov.au](mailto:Industry.regulation@der.wa.gov.au);

**‘code of practice for the storage and handling of dangerous goods’** means document titled “Storage and handling of dangerous goods: Code of Practice” published by the Department of Mines and Petroleum, as amended from time to time;

**‘compost’** means an organic product that has undergone controlled aerobic and thermophilic biological transformation through the composting process;



**'composting'** the process whereby organic materials are microbiologically transformed under controlled aerobic conditions.

**'construction and demolition waste'** has the meaning defined in Landfill Definitions;

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

**'dangerous goods'** has the meaning defined in the *Dangerous Goods Safety (Storage and Handling of Non-explosives) Regulations 2007*;

**'Department of Health Asbestos Guidelines'** means the Guidelines for Assessment, Remediation and Management of Asbestos Contaminated Sites, Western Australia, (DOH, 2009);

**'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;

**'environmentally hazardous material'** means material (either solid or liquid raw materials, materials in the process of manufacture, manufactured products, products used in the manufacturing process, by-products and waste) which if discharged into the environment from or within the premises may cause pollution or environmental harm. Note: Environmentally hazardous materials include dangerous goods where they are stored in quantities below placard quantities. The storage of dangerous goods above placard quantities is regulated by the Department of Mines and Petroleum;

**'feedstock'** means the organic material used in the composting process and listed in Table 1.3.1;

**'fugitive emissions'** means all emissions not arising from point sources identified in Sections 2.2, 2.3, 2.4 and 2.5;

**'green waste'** means waste that originates from untreated trees or plants;

**'hardstand'** means a compacted surface;

**'Inert Waste Type 1'** has the meaning defined in Landfill Definitions;

**'Inert Waste Type 2'** has the meaning defined in 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.

**'leachate'** means liquid released by or water that has percolated through waste and which contains some of its constituents;

**'Licence'** means this Licence numbered L8852/2014/1 and issued under the Act;

**'Licensee'** means the person or organisation named as Licensee on page 1 of the Licence;

**'manure'** means any organic product composed mainly of animal excreta;

**'pasteurisation'** means the process whereby organic materials are treated to significantly reduce the numbers of plant and animal pathogens and plant propagules;

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

**'Schedule 1'** means Schedule 1 of this Licence unless otherwise stated;

**'Schedule 2'** means Schedule 2 of this Licence unless otherwise stated; and

**'Windrow'** means greenwaste or tyre or compost or soil conditioned stockpiles.



- 1.1.3 Any reference to an Australian or other standard in the Licence means the relevant parts of the standard in force from time to time during the term of this Licence.
- 1.1.4 Any reference to a guideline or code of practice in the Licence means the current version of the guideline or code of practice in force from time to time, and shall include any amendments or replacements to that guideline or code of practice made during the term of this Licence.

## 1.2 General conditions

- 1.2.1 Nothing in the Licence shall be taken to authorise any emission that is not mentioned in the Licence, where the emission amounts to:
- (a) pollution;
  - (b) unreasonable emission;
  - (c) discharge of waste in circumstances likely to cause pollution; or
  - (d) being contrary to any written law.
- 1.2.2 The Licensee shall operate and maintain all pollution control and monitoring equipment to the manufacturer's specification or any relevant and effective internal management system.
- 1.2.3 The Licensee shall immediately recover, or remove and dispose of spills of environmentally hazardous materials outside an engineered containment system.
- 1.2.4 The Licensee shall:
- (a) implement all practical measures to prevent stormwater run-off becoming contaminated by the activities on the Premises; and
  - (b) treat contaminated or potentially contaminated stormwater as necessary prior to being discharged from the Premises.<sup>1</sup>

Note1: The *Environmental Protection (Unauthorised Discharges) Regulations 2004* make it an offence to discharge certain materials into the environment.

## 1.3 Premises operation

- 1.3.1 The Licensee shall only accept waste onto the Premises if:
- (a) it is of a type listed in Table 1.3.1; and
  - (b) the quantity accepted is below any quantity limit listed in Table 1.3.1; and
  - (c) it meets any specification listed in Table 1.3.1.

**Table 1.3.1: Waste acceptance**

Waste type	Quantity limit	Specification <sup>1</sup>
Manure (feedstock)	500 t/annual period	None specified
Green waste (feedstock)	5000 t/annual period	None specified
Inert Waste Type 1	8000 t/annual period	Waste containing visible asbestos or ACM shall not be accepted.
Inert Waste Type 2	5000 tyres at any one time	None specified

Note 1: Additional requirements for the acceptance of controlled waste (including animal effluent or residues; and vegetable and food processing waste) are set out in the *Environmental Protection (Controlled Waste) Regulations 2004*.

- 1.3.2 The Licensee shall ensure that where waste does not meet the waste acceptance criteria set out in condition 1.3.1 it is removed from the Premises by the delivery vehicle or, where that is not possible, stored in a segregated storage area or container and removed to an appropriately authorised facility as soon as practicable.





- 1.3.3 The Licensee shall ensure that any waste that does not conform to the waste acceptance criteria in Table 1.3.1 due to asbestos content, is bagged and kept within a clearly identified, labelled, segregated and secure container prior to being removed off site to an appropriate authorised facility.
- 1.3.4 The Licensee shall ensure that wastes accepted onto the Premises are only subjected to the processes set out in Table 1.3.2 and in accordance with any process limits described in that Table.

Table 1.3.2 Processing of materials		
Waste type	Process	Process requirements
Composting material which includes a mixture of greenwaste/ manure (feedstock)	Receipt, handling and storage prior to composting	<ul style="list-style-type: none"><li>Waste shall not be stored for longer than 7 days before being added to the composting process.</li><li>Waste shall not be stored within 20 metres of the Premises boundary.</li></ul>
	Treatment by composting and pasteurisation	<ul style="list-style-type: none"><li>Windrows shall be turned regularly to ensure aerobic conditions are maintained.</li><li>The core temperature of the composting pile is maintained between 55 °C and 65 °C for a period of at least three days.</li><li>Moisture level in the composting piles shall be maintained between 40 to 65 per cent.</li><li>Windrows shall not exceed 3 metres high, 5 metres wide and 20 metres long.</li><li>Windrows shall be separated by at least 10 metres of clear ground.</li><li>Composting leachate is collected and returned to the composting process.</li><li>Ensure that, as a minimum, compost meets physical and chemical requirements set out by AS4454.</li></ul>
Greenwaste only	Receipt, handling, storage prior to re-use	<ul style="list-style-type: none"><li>Windrows shall not exceed 3 metres high, 5 metres wide and 40 metres long.</li><li>Temperatures within windrows are monitored on a weekly basis.</li><li>Windrows with an internal temperature exceeding 80 degrees Celsius are turned/ mixed or otherwise treated, to reduce the temperature.</li><li>A 10 metre fire break shall be maintained around greenwaste windrows.</li></ul>
Inert Waste Type 1	Receipt, handling, storage prior to re-use	None specified
Inert Waste Type 2 - Tyres	Receipt, handling, storage prior to re-use.	To be stored in windrows not exceeding 3 metres high, 5 metres wide and 40 metres long with a 6m separation distance between piles



- 1.3.5 The Licensee shall ensure that waste is stored and/or contained within infrastructure in accordance with Table 1.3.3 and that the integrity of the containment infrastructure is maintained.

**Table 1.3.3: Containment infrastructure**

Containment area/infrastructure	Material	Infrastructure requirements
Waste storage area	Waste types as detailed in Table 1.3.1	Bunded hardstand area.
Composting area		

- 1.3.6 The Licensee shall ensure that the asbestos content of any recycled output originating from construction and demolition waste does not exceed the contamination limits specified in Table 1.3.4.

**Table 1.3.4: Recycled output contamination limits**

Output	Parameter	Limit
Recycled drainage rock	Asbestos (in any form)	0.001%w/w
Recycled sand		
Recycled road base		

- 1.3.7 The Licensee shall ensure that recycled outputs originating from construction and demolition waste are sampled and tested in accordance with Table 1.3.5.

**Table 1.3.5: Recycled output sampling and testing**

Output	Parameter	Limit	Method
Recycled drainage rock	Asbestos (in any form)	0.001%w/w	In accordance with the DER Asbestos Guidelines.
Recycled sand			
Recycled road base			

- 1.3.8 The Licensee shall undertake activities on the Premises and manage asbestos and ACM in accordance with the Asbestos Management Plan Shire of Broome Business Operating Procedure, Procedure for Asbestos Management at the Stockpile Recycling Site, Revision B, 3 November 2014.
- 1.3.9 The Licensee shall implement the following security measures at the site:
- (a) erect and maintain suitable fencing to prevent unauthorised access to the site as far as is practicable;
  - (b) ensure that any entrance gates to the premises are securely locked when the premises are unattended; and
  - (c) undertake regular inspections of all security measures and repair damage as soon as practicable.
- 1.3.10 The Licensee shall ensure that no waste is burnt on the premises.



## 2 Emissions

### 2.1 General

- 2.1.1 The Licensee shall record and investigate the exceedance of any descriptive or numerical limit or target specified in any part of section 2 of this Licence.

#### 2.2-2.4 Point source emissions to air, surface water and groundwater

There are no specified conditions relating to point source emissions to air, surface water or groundwater in this section.

### 2.5 Emissions to land

There are no specified conditions relating to emissions to land in this section.

### 2.6 Fugitive emissions

- 2.6.1 The Licensee shall use all reasonable and practical measures to prevent and where that is not practicable to minimise dust emissions from the Premises.
- 2.6.2 The Licensee shall ensure that no visible dust generated by the activities on the Premises crosses the boundary of the Premises.

### 2.7 Odour

- 2.7.1 The Licensee shall ensure that odour emitted from the Premises does not unreasonably interfere with the health, welfare, convenience, comfort or amenity of any person who is not on the Premises.

### 2.8 Noise

There are no specified conditions relating to noise in this section.

## 3 Monitoring

### 3.1 General monitoring

There are no specified conditions relating to monitoring in this section.

#### 3.2-3.4 Monitoring of point source emissions to air, surface water and groundwater

There are no specified conditions relating to monitoring of point source emissions to air, surface water and groundwater in this section.

### 3.5 Monitoring of emissions to land

There are no specified conditions relating to monitoring of emissions to land in this section.



### 3.6 Monitoring of inputs and outputs

3.6.1 The Licensee shall undertake the monitoring in Table 3.6.1 according to the specifications in that table.

Table 3.6.1: Monitoring of inputs and outputs				
Input/Output	Parameter	Units	Averaging period	Frequency
Waste Inputs	Waste type as detailed in Table 1.3.1	m <sup>3</sup> or tyre units	One year	Each load arriving at the Premises
Waste Outputs	Waste type as detailed in Table 1.3.1	m <sup>3</sup> or tyre units	One year	Each load leaving the Premises

### 3.7 Process monitoring

3.7.1 The Licensee shall undertake the monitoring in Table 3.7.1 according to the specifications in that table.

Table 3.7.1: Process monitoring					
Monitoring point reference	Process description	Parameter	Units	Frequency	Method
Compost windrows	Composting	Temperature	°C	Twice daily	None specified
		Moisture content	%	Twice daily	None specified
Compost quality	Sampled and tested in accordance with AS 4454				

### 3.8 Ambient environmental quality monitoring

There are no specified conditions relating to ambient environmental quality monitoring in this section.

### 3.9 Meteorological monitoring

There are no specified conditions relating to meteorological monitoring in this section.



## 4 Improvements

### 4.1 Improvement program

4.1.1 The Licensee shall complete the improvements in Table 4.1.1 by the date of completion in Table 4.1.1

Table 4.1.1: Improvement program		
Improvement reference	Improvement	Date of completion
IR1	The Licensee shall submit to the CEO a Compost Management Plan (CMP). The CMP shall be consistent with the requirements of <i>Australian Standard AS 4454 Composts, soil conditioners and mulches</i>	01/07/2016
IR2	The Licensee shall submit an Odour Management Plan (OMP) for the Premises. The plan shall include, but not be limited to: (a) identification of odour sources; (b) predicted odour contours; (c) abatement measures and equipment; (d) contingency plans in the event of exceedances; and (e) odour surveys every X years.	01/07/2016





## 5 Information

### 5.1 Records

#### 5.1.1 All information and records required by the Licence shall:

- (a) be legible;
- (b) if amended, be amended in such a way that the original and subsequent amendments remain legible or are capable of retrieval;
- (c) except for records listed in 5.1.1(d) be retained for at least 6 years from the date the records were made or until the expiry of the Licence or any subsequent licence; and
- (d) for those following records, be retained until the expiry of the Licence and any subsequent licence:
  - (i) off-site environmental effects; or
  - (ii) matters which affect the condition of the land or waters.

#### 5.1.2 The Licensee shall ensure that:

- (a) any person left in charge of the Premises is aware of the conditions of the Licence and has access at all times to the Licence or copies thereof; and
- (b) any person who performs tasks on the Premises is informed of all of the conditions of the Licence that relate to the tasks which that person is performing.

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

#### 5.1.4 The Licensee shall:

- (a) implement a complaints management system that shall record the following information (if known or provided) about complaints received at the Premises concerning any environmental impact of the activities undertaken at the Premises:
  - (i) name and address of the complainants (if consented);
  - (ii) date and time of complaint;
  - (iii) date and time of alleged incident;
  - (iv) alleged source of the incident;
  - (v) general description of the alleged incident, including any environmental or health impacts reported by the complainant;
  - (vi) wind direction, wind speed and temperature at time of alleged incident;
  - (vii) likely source of the alleged incident; and
  - (viii) actions taken by licensee to address complaint, including the outcome of any investigation(s) and action(s) to verify any impacts.
- (b) complete an annual analysis and review of complaints recorded under 5.1.4(a) to identify any common factors and root cause of complaints and proposals to address these.

#### 5.1.5 The Licensee shall:

- (a) implement and maintain a system which ensures that a record is made of:
  - (i) the waste type, quantity and date of arrival of each load accepted at the Premises;
  - (ii) the waste type, quantity, date of removal and destination (recycled material/recycling site/landfill etc) of each load removed from the site; and
  - (iii) rejected loads including details of the waste producer, waste carrier, registration number of the vehicle and the date and reason for rejection.



## 5.1 Reporting

5.2.1 The Licensee shall submit to the CEO an Annual Environmental Report within 60 calendar days after the end of the annual period. The report shall contain the information listed in Table 5.2.1 in the format or form specified in that table.

Table 5.2.1: Annual Environmental Report		
Condition or table (if relevant)	Parameter	Format or form <sup>1</sup>
-	Summary of any failure or malfunction of any pollution control equipment and any environmental incidents that have occurred during the annual period and any action taken	None specified
Table 3.6.1	Inputs and outputs	None specified
Table 3.7.1	Temperature, moisture content and compost quality	None specified
5.1.3	Compliance	Annual Audit Compliance Report (AACR)
5.1.4	Complaints summary	None specified
5.1.5	Summary of waste types and quantities accepted and removed from the Premises in the reporting year	None specified
	Summary of rejected loads	

Note 1: Forms are in Schedule 2

## 5.3 Notification

5.3.1 The Licensee shall ensure that the parameters listed in Table 5.3.1 are notified to the CEO in accordance with the notification requirements of the table.

Table 5.3.1: Notification requirements			
Condition or table (if relevant)	Parameter	Notification requirement <sup>1</sup>	Format or form <sup>2</sup>
1.3.10	Fire at the premises	As soon as practicable	None specified
-	Any failure or malfunction of any pollution control equipment or any incident, which has caused, is causing or may cause pollution	Part A: As soon as practicable but no later than 5pm of the next usual working day.  Part B: As soon as practicable	N1

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

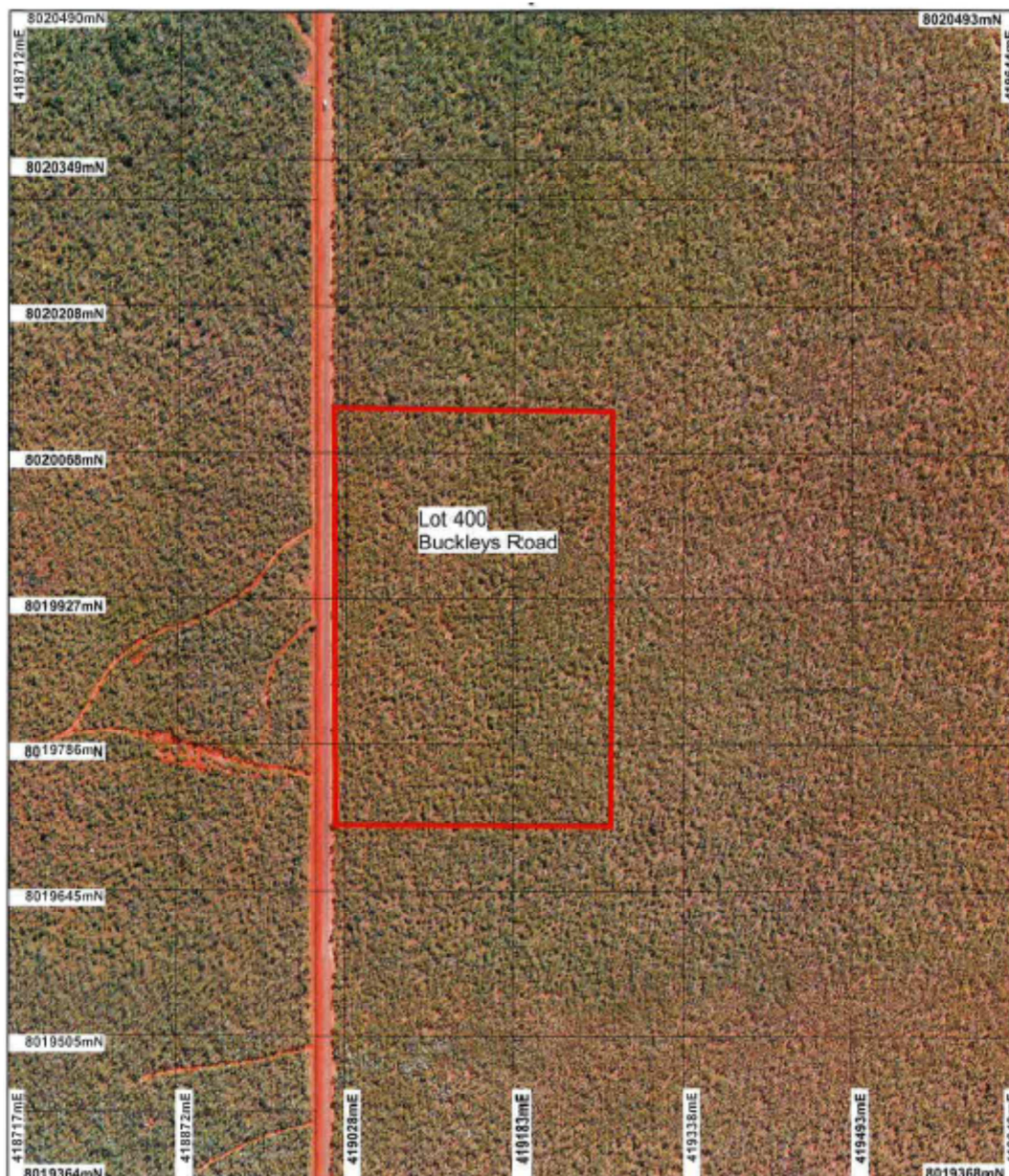
Note 2: Forms are in Schedule 2



## Schedule 1: Maps

### Premises map

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





## Schedule 2: Reporting & notification forms

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

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### ANNUAL AUDIT COMPLIANCE REPORT PROFORMA

#### SECTION A LICENCE DETAILS

Licence Number:	Licence File Number:
Company Name: Trading as:	ABN:
Reporting period: _____ to _____	

#### STATEMENT OF COMPLIANCE WITH LICENCE CONDITIONS

1. Were all conditions of the Licence complied with within the reporting period? (please tick the appropriate box)

Yes ☐ Please proceed to Section C

No ☐ Please proceed to Section B

Each page must be initialled by the person(s) who signs Section C of this Annual Audit Compliance Report (AACR).

Initial:





## SECTION B

### DETAILS OF NON-COMPLIANCE WITH LICENCE CONDITION.

Please use a separate page for each licence condition that was not complied with.

a) Licence condition not complied with:	
b) Date(s) when the non compliance occurred, if applicable:	
c) Was this non compliance reported to DER?:	
<input type="checkbox"/> Yes <input type="checkbox"/> Reported to DER verbally Date _____ <input type="checkbox"/> Reported to DER in writing Date _____	<input type="checkbox"/> No
d) Has DER taken, or finalised any action in relation to the non compliance?:	
e) Summary of particulars of the non compliance, and what was the environmental impact:	
f) If relevant, the precise location where the non compliance occurred (attach map or diagram):	
g) Cause of non compliance:	
h) Action taken, or that will be taken to mitigate any adverse effects of the non compliance:	
i) Action taken or that will be taken to prevent recurrence of the non compliance:	

Each page must be initialled by the person(s) who signs Section C of this AACR

Initial:





## SECTION C

### SIGNATURE AND CERTIFICATION

This Annual Audit Compliance Report (AACR) must only be signed by a person(s) with legal authority to sign it. The ways in which the AACR must be signed and certified, and the people who may sign the statement, are set out below.

Please tick the box next to the category that describes how this AACR is being signed. If you are uncertain about who is entitled to sign or which category to tick, please contact the licensing officer for your premises.

If the licence holder is		The Annual Audit Compliance Report must be signed and certified:
An individual	<input type="checkbox"/> <input type="checkbox"/>	by the individual licence holder, or by a person approved in writing by the Chief Executive Officer of the Department of Environment Regulation to sign on the licensee's behalf.
A firm or other unincorporated company	<input type="checkbox"/> <input type="checkbox"/>	by the principal executive officer of the licensee; or by a person with authority to sign on the licensee's behalf who is approved in writing by the Chief Executive Officer of the Department of Environment Regulation.
A corporation	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	by affixing the common seal of the licensee in accordance with the <i>Corporations Act 2001</i> ; or by two directors of the licensee; or by a director and a company secretary of the licensee, or if the licensee is a proprietary company that has a sole director who is also the sole company secretary – by that director, or by the principal executive officer of the licensee; or by a person with authority to sign on the licensee's behalf who is approved in writing by the Chief Executive Officer of the Department of Environment Regulation.
A public authority (other than a local government)	<input type="checkbox"/> <input type="checkbox"/>	by the principal executive officer of the licensee; or by a person with authority to sign on the licensee's behalf who is approved in writing by the Chief Executive Officer of the Department of Environment Regulation.
a local government	<input type="checkbox"/> <input type="checkbox"/>	by the chief executive officer of the licensee; or by affixing the seal of the local government.

It is an offence under section 112 of the *Environmental Protection Act 1986* for a person to give information on this form that to their knowledge is false or misleading in a material particular. There is a maximum penalty of \$50,000 for an individual or body corporate.

I/We declare that the information in this annual audit compliance report is correct and not false or misleading in a material particular.

SIGNATURE: \_\_\_\_\_

NAME:  
(printed) \_\_\_\_\_

POSITION: \_\_\_\_\_

DATE: \_\_\_\_/\_\_\_\_/\_\_\_\_

SEAL (if signing under seal)

SIGNATURE: \_\_\_\_\_

NAME:  
(printed) \_\_\_\_\_

POSITION: \_\_\_\_\_

DATE: \_\_\_\_/\_\_\_\_/\_\_\_\_



Licence: L8852/2014/1  
Form: N1

Licensee: Shire of Broome  
Date of breach:

**Notification of detection of the breach of a limit or any failure or malfunction of any pollution control equipment or any incident which has caused, is causing or may cause pollution.**

These pages outline the information that the operator must provide.

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

**Part A**

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

**Notification requirements for the breach of a limit**

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

**Notification requirements for any failure or malfunction of any pollution control equipment or any incident which has caused, is causing or may cause pollution**

Date and time of event	
Reference or description of the location of the event	
Description of where any release into the environment took place	
Substances potentially released	
Best estimate of the quantity or rate of release of substances	
Measures taken , or intended to be taken, to stop any emission	
Description of the failure or accident	



## Part B

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

Name	
Post	
Signature on behalf of Shire of Broome	
Date	



# Decision Document

## *Environmental Protection Act 1986, Part V*

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**Proponent:** Shire of Broome

**Licence:** L8852/2014/1

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**Registered office:** 27 Weld Street  
BROOME WA 6725

**Premises address:** Reserve 51151 Lot 400 Buckley's Road  
BROOME WA 6725  
Being Lot 400 on Plan 72930 Reserve 51151

**Issue date:** Thursday, 15 January 2015

**Commencement date:** Monday, 19 January 2015

**Expiry date:** Saturday, 18 January 2020

### Decision

Based on the assessment detailed in this document the Department of Environment Regulation (DER), has decided to issue an amended licence. DER considers that in reaching this decision, it has taken into account all relevant considerations and legal requirements and that the Licence and its conditions will ensure that an appropriate level of environmental protection is provided.

Decision Document prepared by: Damian Thomas  
Licensing Officer

Decision Document authorised by: Alana Kidd  
Manager Licensing



## Contents

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## 1 Purpose of this Document

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

### Works approval and licence conditions

DER has three types of conditions that may be imposed on works approvals and licences. They are as follows;

#### Standard conditions (SC)

DER has standard conditions that are imposed on all works approvals and licences regardless of the activities undertaken on the Premises and the information provided in the application. These are included as the following conditions on works approvals and licences:

Works approval conditions: 1.1.1-1.1.4, 1.2.1, 1.2.2, 5.1.1 and 5.1.2.

Licence conditions: 1.1.1-1.1.4, 1.2.1-1.2.4, 5.1.1-5.1.4 and 5.2.1.

For such conditions, justification within the Decision Document is not provided.

#### Optional standard conditions (OSC)

In the interests of regulatory consistency DER has a set of optional standard conditions that can be imposed on works approvals and licences. DER will include optional standard conditions as necessary, and are likely to constitute the majority of conditions in any licence. The inclusion of any optional standard conditions is justified in Section 4 of this document.

#### Non standard conditions (NSC)

Where the proposed activities require conditions outside the standard conditions suite DER will impose one or more non-standard conditions. These include both premises and sector specific conditions, and are likely to occur within few licences. Where used, justification for the application of these conditions will be included in Section 4.





## 2 Administrative summary

Administrative details		
Application type	Works Approval <input type="checkbox"/> New Licence <input type="checkbox"/> Licence amendment <input checked="" type="checkbox"/> Works Approval amendment <input type="checkbox"/>	
Activities that cause the premises to become prescribed premises	<b>Category number(s)</b>	<b>Assessed design capacity</b>
	13	6000 tonnes per annual period
	57	5000 tyres at any one time
	62	2000 tonnes per annual period
	67A	5000 tonnes per annual period
Application verified	Date: N/A	
Application fee paid	Date: N/A	
Works Approval has been complied with	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>	
Compliance Certificate received	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>	
Commercial-in-confidence claim	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Commercial-in-confidence claim outcome		
Is the proposal a Major Resource Project?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Was the proposal referred to the Environmental Protection Authority (EPA) under Part IV of the <i>Environmental Protection Act 1986</i> ?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Referral decision No: Managed under Part V <input type="checkbox"/> Assessed under Part IV <input type="checkbox"/>
Is the proposal subject to Ministerial Conditions?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Ministerial statement No: EPA Report No:
Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the <i>Environmental Protection Act 1986</i> )?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Department of Water consulted Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Is the Premises within an Environmental Protection Policy (EPP) Area Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> If Yes include details of which EPP(s) here.		
Is the Premises subject to any EPP requirements? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> If Yes, include details here, eg Site is subject to SO <sub>2</sub> requirements of Kwinana EPP.		



### 3 Executive summary of proposal and assessment

The Shire of Broome currently operates the Broome Refuse Site (BRS) at Lot 228 Buckleys Road Broome under licence L6912/1997/11. Due to a lack of space and suitable area to undertake some waste management practices, such as re-cycling greenwaste and inert waste, the Shire has constructed (and will operate) a new waste management facility to alleviate pressures at the current BRS premises. The new premises is located at Lot 400 Buckleys Road (the Lot 400 premises), which is approximately 560m south of the existing landfill. It is envisaged that the new Lot 400 premises will operate at this location until the new dedicated Class III lined putrescible landfill is constructed in a few years to replace the existing BRS.

The Lot 400 premises is zoned as "Development" under the Shire of Broome Town Planning Scheme No.4 and the record of Certificate of Crown Land for the site states that the site (Reserve 51151) is designated for the purpose of greenwaste.

The Lot 400 premises will incorporate the following activities:

- Receipt of unprocessed greenwaste (17 000m<sup>3</sup> per annum);
- Mulching, composting (including the use of manure) and soil conditioning of received greenwaste (10 000m<sup>3</sup> per annum);
- Sale of varying grades of mulch to the general public;
- Stockpiling and processing of inert waste;
- Stockpiling of scrap metal car bodies;
- Car impounding lot;
- Stockpiling of tyres;
- Stockpiling of daily cover material (Pindan Sand) for the BRS (2000m<sup>3</sup> at any one time; daily use at the BRS is approximately 70-100m<sup>3</sup>); and
- Stockpiling of final capping material for the BRS progressive rehabilitation.

The initial proposal is to mulch greenwaste and sell it to the public. Within a few years the Shire plans to then further process the mulch into a range of products including compost and soil improvers for sale to the public. Accordingly, the proposal and application will include the assessment of Category 67A so that no further assessment (and amendments) is warranted if the Shire elects to compost the greenwaste in the future.

The following is noted on potential receptors in the vicinity of the Site:

- There are no permanent or ephemeral surface watercourses located on the Lot 400 premises or within 5km of the Lot 400 premises.
- The closest wetland is approximately 950m north west and comprised of saltwater marshes.
- The Lot 400 premises are located 2.5km south west of a Priority 1 drinking water protection area.
- The depth to groundwater is approximately 12m below ground level.
- The Lot 400 premises are located approximately 5km north of the Broome town centre and 2.6km east of the coast.
- The closest residences are approximately 635m to the north east, being residential property at Locke Street, 900m west for dwellings located on Lullfitz Drive and over 1200m east for dwellings located along Broome Road. The Buffer distances recommended by the Environmental Protection, Authority Guidance for the Assessment of Environmental Factors, Separation Distances between Industrial and Sensitive Land Uses No.3 June 2005 documents for category 13, 57, 62 and 67A are 1000m, 100-200m, 200 and 1000m (noting manure is proposed to be used) respectively. The proposal concurs with these buffer distances.
- The Lot 400 premises are also located within the Broome North Development Plan area which identifies the future land use as Neighbourhood Living (residential) and Public Purposes (Water Supply).

The main emissions from the premises are general emission including stormwater, fugitive emissions (leachate from mulching /compositing) and odour.



The Shire of Broome has constructed the new premises under works approval W5587/2014/1 and accordingly has applied for a licence to operate the Lot 400 premises. This assessment is for the Lot 400 licence application. Appendix A provides further details on the Lot 400 premises and operations.

DER issued the Lot 400 licence to Shire of Broome on 15 January 2015. DER sent the licence to SoB for comments prior to issue. The original greenwaste size was to not exceed 3 metres high, 5 metres wide and 20 metres long but Shire of Broome requested the length be 40 metres. DER agreed with this length but unfortunately the change from 20 metres to 40 metres was not saved on the issue documents. The administrative amendment is to only change the greenwaste stockpile length to 40 metres as negotiated.



## 4 Decision table

All applications are assessed in line with the *Environmental Protection Act 1986*, the *Environmental Protection Regulations 1987*, DER's Policy Statement No 7 – Operational Risk Management, and DER's Operational Procedure on Assessing Emissions and Discharges from Prescribed Premises. Where other references have been used in making the decision they are detailed in the decision document.

DECISION TABLE				
Works Approval / Licence section	Condition number W = Works Approval L = Licence	OSC or NSC	Justification (including risk description & decision methodology where relevant)	Reference documents
General conditions	L1.2.4 L1.3.1 – 1.3.10	OSC	<p><b>Operation</b> Greenwaste, compost and conditioned soil may produce leachate and contaminated stormwater during the vegetation decomposition process. It is possible that asbestos will be mixed with C&amp;D waste and thus needs to be managed accordingly to reduce the environmental and health risk. Conditions L1.2.4 and L1.3.1-1.3.10 (referring to leachate, stormwater and asbestos emissions) are discussed further in Appendix B.</p> <p>There will be no storage of hydrocarbons at the Lot 400 premises. All refuelling facilities and activities will occur at the BRS.</p>	<p>General provisions of the <i>Environmental Protection Act 1986</i>.</p> <p>Application supporting documentation</p>
Emissions general	L2.1.1	N/A	<p><b>Operation</b> Condition 2.1.1 is required on the licence and relates to Conditions 2.6.1 and 2.6.2 (fugitive emissions).</p>	<p>General provisions of the <i>Environmental Protection Act 1986</i>.</p> <p>Application supporting documentation.</p>
Point source emissions to air including monitoring	L2.2	N/A	<p><b>Operation</b> There are not expected to be point source emissions to air including monitoring for operation of the Lot 400 premises. No specified conditions relating to point source emissions to air or the monitoring of these emissions are required to be added to the licence.</p>	<p>General provisions of the <i>Environmental Protection Act 1986</i>.</p> <p><i>Environmental Protection</i></p>



DECISION TABLE				
Works Approval / Licence section	Condition number W = Works Approval L= Licence	OSC or NSC	Justification (including risk description & decision methodology where relevant)	Reference documents
				(Unauthorised Discharges) Regulations 2004.  Application supporting documentation.
Point source emissions to surface water including monitoring	L2.3	N/A	<b>Operation</b> There are not expected to be any point source emissions to surface water during operation of the Lot 400 premises. No specified conditions relating to point source emissions to surface water including monitoring of these emissions are required to be added to the licence.	General provisions of the <i>Environmental Protection Act 1986</i> .  Application supporting documentation.
Point source emissions to groundwater including monitoring	L2.4	N/A	<b>Operation</b> There are not expected to be point source emissions to groundwater including monitoring during the operation of the Lot 400 premises. No specified conditions relating to point source emissions to groundwater including monitoring are required to be added to the licence in relation to the premises.	General provisions of the <i>Environmental Protection Act 1986</i> .  Application supporting documentation.
Emissions to land including monitoring	L2.5	N/A	<b>Operation</b> There are not expected to be Emissions to land including monitoring for operation of the Lot 400 premises. No specific conditions regarding Emissions to land including monitoring have been added to the licence at the Lot 400 premises.	General provisions of the <i>Environmental Protection Act 1986</i> .  Application supporting documentation.
Fugitive emissions	L2.6.1 & 2.6.2	OSC	<b>Operation</b> <u>Emission Description</u> <i>Emission:</i> Fugitive dust particulate emissions (PM <sub>10</sub> ) from vehicle movements, crushing and other activities at the premises	General provisions of the <i>Environmental Protection Act 1986</i> .





DECISION TABLE				
Works Approval / Licence section	Condition number W = Works Approval L = Licence	OSC or NSC	Justification (including risk description & decision methodology where relevant)	Reference documents
			<p><i>Impact:</i> Contamination of surrounding land and potential impacts on ecology and human health.</p> <p><i>Controls:</i> Dust suppression management occurs on site. Water carts are employed at the premises to suppress dust emissions. Visual monitoring occurs during all operations.</p> <p><u>Risk Assessment</u> <i>Consequence:</i> Minor <i>Likelihood:</i> Possible <i>Risk Rating:</i> Moderate</p> <p><u>Regulatory Controls</u> Licence conditions 2.6.1 and 2.6.2 will be added to the licence to regulate fugitive dust emissions for operations at the premises. Crushing will only occur once a year so these two conditions are considered adequate for the yearly crushing program.</p> <p><u>Residual Risk</u> <i>Consequence:</i> Insignificant <i>Likelihood:</i> Unlikely <i>Risk Rating:</i> Low</p> <p><u>Emission Description</u> Emissions of leachate from greenwaste/composting activities may occur and cause contamination of groundwater and any surface water bodies to which groundwater discharges.</p> <p>The Lot 400 premises has been sited in an area that presents little risk to groundwater contamination. All waste is sited on a dedicated hardstand area within the premises. The dedicated treatment areas have bunding and a sump to contain runoff. Depth to groundwater is 12m bgl.</p>	Application supporting documentation.



DECISION TABLE				
Works Approval / Licence section	Condition number W = Works Approval L= Licence	OSC or NSC	Justification (including risk description & decision methodology where relevant)	Reference documents
			<p>Due to volumes it is not expected that leachate will be generated from the Lot 400 premises in any significant volume. No licence conditions are required to be drafted on the licence for the Lot 400 premises</p> <p><u>Residual Risk</u> <i>Consequence</i>: Moderate <i>Likelihood</i>: Unlikely <i>Risk Rating</i>: Moderate</p>	
Odour	L2.7.1 & L2.7.1	OSC	<p><b>Operation</b> <u>Emission Description</u> <i>Emission</i>: Odour emissions from operations at the premises due to decomposition of vegetation and use of manure and lime. <i>Impact</i>: Discomfort to amenity of human health. <i>Controls</i>: Implementation of an Odour Management Plan. The Buffer distances recommended by the Environmental Protection, Authority Guidance for the Assessment of Environmental Factors, Separation Distances between Industrial and Sensitive Land Uses No.3 June 2005 document for category 67A are 1000m for manures, mixed food/putrescible and vegetative food wastes, 500m for biosolids and 150m for greenwaste. The closest residence are approximately 635m northeast for dwellings at Locke Street, 900m west for dwellings located on Lullfitz Drive and over 1200m east for dwellings located along Broome Road. The predominant dry season winds tend easterly which will push any odour west towards Lullfitz Drive (buffer of 900m) while the wet season winds tend westerly so will push any odour east (buffer of 1200m) however winds conditions do vary. If composting and soil conditioning occurs then manure will be used in the process.</p> <p><u>Risk Assessment</u> <i>Consequence</i>: Minor <i>Likelihood</i>: Possible <i>Risk Rating</i>: Moderate</p>	Environmental Protection, Authority Guidance for the Assessment of Environmental Factors, Separation Distances between Industrial and Sensitive Land Uses No.3 June 2005



DECISION TABLE				
Works Approval / Licence section	Condition number W = Works Approval L= Licence	OSC or NSC	Justification (including risk description & decision methodology where relevant)	Reference documents
			<p><u>Regulatory Controls</u> Optional standard condition 2.7.1 has been included on the licence to ensure odour emitted from the Premises does not unreasonably interfere with the health, welfare, convenience, comfort or amenity of any person who is not on the Premises.</p> <p>Prior to composting (and soil conditioning) operations occurring at Lot 400 the licensee will implement an Odour Management Plan (OMP) prior to operations to ensure there are no offsite impacts. IR3 and 4 have been drafted onto the licence for the submission of OMP. Once submitted the licence may be amended to include an implementation condition.</p> <p><u>Residual Risk</u> <i>Consequence:</i> Insignificant <i>Likelihood:</i> Unlikely <i>Risk Rating:</i> Low</p>	
Noise	L2.8	N/A	<p><b>Operation</b> The Shire has a statutory responsibility to comply with the <i>Environmental Protection (Noise) Regulations 1997</i>. No specified conditions relating to noise emissions are required to be added to the licence in relation to the Lot 400 premises.</p>	<p>General provisions of the <i>Environmental Protection Act 1986</i>.</p> <p>Application supporting documentation.</p>
Monitoring general	L3.1	N/A	<p><b>Operation</b> There will be no general monitoring conditions required during operation of the Lot 400 premises. No specified conditions relating to Monitoring general are required to be added to the licence in relation to the Lot 400 premises.</p>	<p>General provisions of the <i>Environmental Protection Act 1986</i>.</p> <p>Application supporting documentation.</p>



DECISION TABLE				
Works Approval / Licence section	Condition number W = Works Approval L = Licence	OSC or NSC	Justification (including risk description & decision methodology where relevant)	Reference documents
Monitoring of inputs and outputs	L3.6.1	OSC	<b>Operation</b> There will be monitoring of inputs and outputs required during the operation of the Lot 400 premises. Licence condition L3.6.1 has been added to the licence to regulate monitoring of inputs and outputs of waste at the Lot 400 premises.	General provisions of the <i>Environmental Protection Act 1986</i> .  Application supporting documentation.
Process monitoring	L3.7.1	N/A	<b>Operation</b> There will be Process Monitoring required during operation of the Lot 400 premises for composting. Condition L3.7.1 relating to Process monitoring has been added to the licence in relation to the Lot 400 premises.	General provisions of the <i>Environmental Protection Act 1986</i> .  Application supporting documentation.
Ambient quality monitoring	L3.8	N/A	<b>Operation</b> There is no ambient quality monitoring required during operation of the Lot 400 premises. No specified conditions relating to Ambient quality monitoring are required to be added to the licence in relation to the Lot 400 premises.	General provisions of the <i>Environmental Protection Act 1986</i> .  Application supporting documentation
Meteorological monitoring	L3.9	N/A	<b>Operation</b> There is no meteorological monitoring required during operation of the Lot 400 premises. No specified conditions relating to Meteorological monitoring are required to be added to the licence in relation to the Lot 400 premises.	General provisions of the <i>Environmental Protection Act 1986</i> .  Application supporting documentation.
Improvements	L4.1.1 & L4.1.2 IR1 IR2	OSC	<b>Operation</b> IR1 requires the licensee to submit to the CEO a Composting Management Plan (CMP) consistent with the requirements of Australian Standard AS 4454:	General provisions of the <i>Environmental Protection Act 1986</i> .



DECISION TABLE				
Works Approval / Licence section	Condition number W = Works Approval L= Licence	OSC or NSC	Justification (including risk description & decision methodology where relevant)	Reference documents
			<i>Composts, soil conditioners and mulches</i> to ensure composting activities are managed with minimal impacts to the environment. IR2 requires submission and implementation of the OMP.	Application supporting documentation.
Information	L5.1.4 L5.1.5	OSC	<b>Operation</b> Optional standard condition 5.1.4 will be added to the licence for a complaints management system for the Lot 400 premises due to potential odour issues.  Optional standard condition 5.1.5 has been added to the licence for a records system. Standard conditions for notification of unauthorised fires and any failure or malfunction of any pollution control equipment will also be applicable.	General provisions of the <i>Environmental Protection Act 1986</i> .  Application supporting documentation.
Licence Duration	N/A	N/A	Licence to be issued for 5 years as the premises will be a low priority premises. It is not envisaged that the Lot 400 premises will operate for longer than this length of time as the site is an interim site while the new Class III landfill is being constructed in the next few years.	



## 5 Advertisement and consultation table

Date	Event	Comments received/Notes	How comments were taken into consideration
27/10/2014	Application advertised in West Australian (or other relevant newspaper).	No comments received.	N/A
11/12/2014	Proponent sent a copy of draft instrument.	Proponent provided comments 11 and 12 December 2014.	Minor changes to documents
09/03/2015	Proponent sent a copy of draft instrument for administrative amendment.	Proponent requested amendment to be issued with no changes.	N/A





## 6 Risk Assessment

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

**Table 1: Emissions Risk Matrix**

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



## Appendix A – Description of premises

The Shire of Broome currently operates the Broome Refuse Site (BRS) at Lot 228 Buckleys Road Broome under licence L6912/1997/11. Due to a lack of space and suitable area to undertake some waste management practices, such as re-cycling greenwaste and inert waste, the Shire has constructed (and will operate) a new waste management facility to alleviate pressures at the current BRS premises.

The Lot 400 premises is zoned as “Development” under the Shire of Broome Town Planning Scheme No.4 and the record of Certificate of Crown Land for the site states that the site (Reserve 51151) is designated for the purpose of greenwaste.

The Lot 400 premises will incorporate the following activities:

- Receipt of unprocessed greenwaste (17 000m<sup>3</sup> per annum);
- Mulching, composting and soil conditioning of received greenwaste (10 000m<sup>3</sup> per annum);
- Sale of varying grades of mulch to the general public;
- Stockpiling and processing of inert waste;
- Stockpiling of scrap metal car bodies;
- Car impounding lot;
- Stockpiling of tyres;
- Stockpiling of daily cover material (Pindan Sand) for the BRS (2000m<sup>3</sup> at any one time; daily use at the BRS is approximately 70-100m<sup>3</sup>); and
- Stockpiling of final capping material for the BRS progressive rehabilitation.

The location of the Lot 400 premises site layout is shown in Figure 1. Access roads will be from Buckleys Road and access to the site will be controlled through a 1.2m cyclone fence with a lockable double gate. The car impound lot has an internal lockable 1.8m cyclone fence. No power or sewer connection are required. The public will not have access to the site.

There is no groundwater licence for the facility and if water is required on site it will be sourced from the existing bore at the BRS and transported to site.

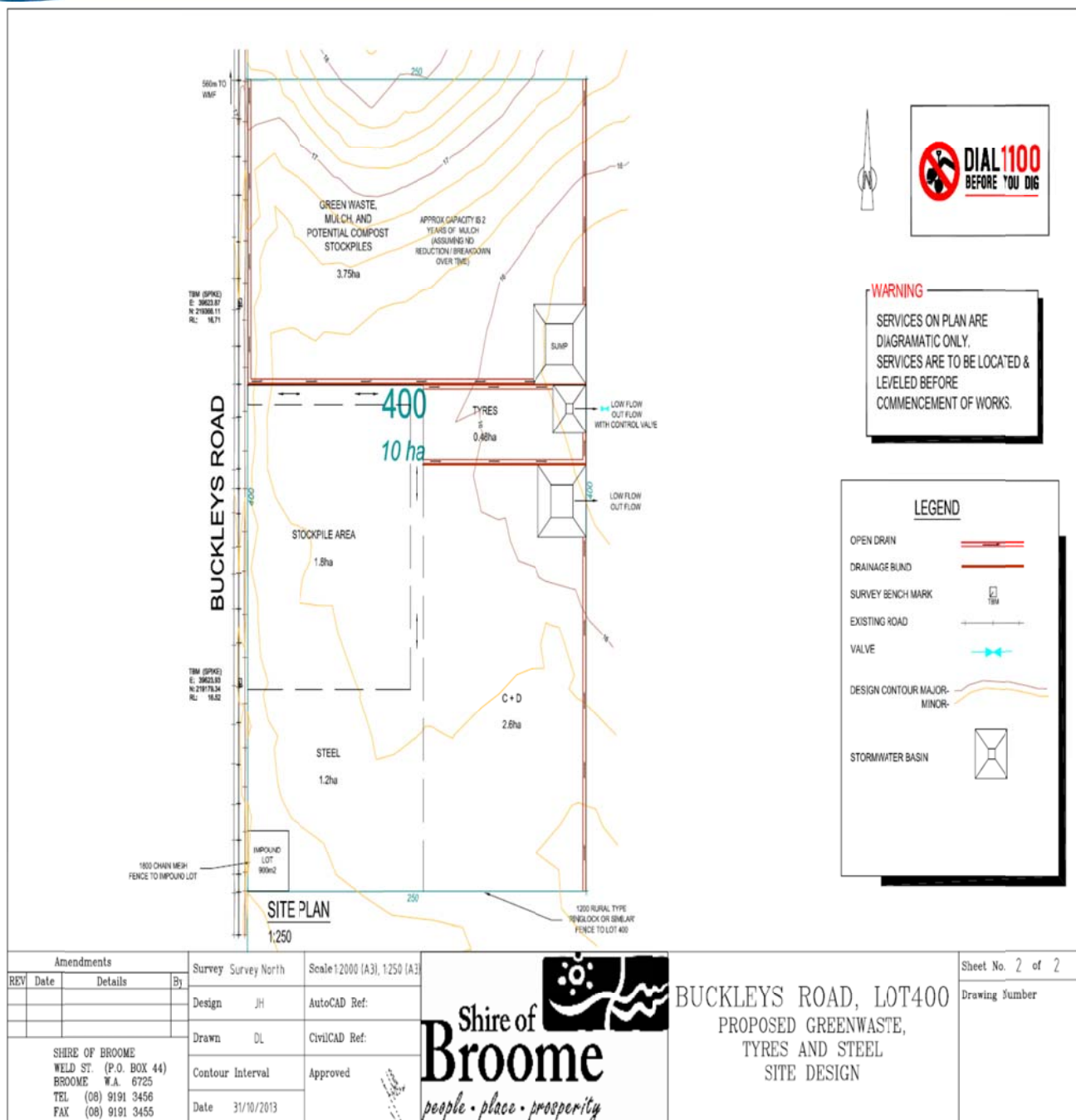


Figure 1. Site overview

The initial proposal is to mulch greenwaste and sell it to the public. Within a few years the Shire plans to then further process the mulch into a range of products including compost and soil improvers for sale to the public.



Greenwaste will be delivered to the existing BRS and then transferred to the new premises at regular intervals. This will limit the need to duplicate administration and allow the greenwaste to be thoroughly inspected prior to being stored and processed at the Lot 400 premises. The BRS has a Greenwaste Management Plan which will be employed at the Lot 400 premises.

If and when composting occurs, it is proposed that it will occur consistent with a Compost Management Plan which will be drafted to meet the requirements of Australian Standard AS 4454 *Composts, soil conditioners and mulches*. Future production of soil at the site (if it occurs) would require the input of manure and lime sands. Should composting occur at the site, water would be applied to the windrows of mulch via a water cart. The windrows would then be turned/aerated and water applied. The process is estimated to take eight weeks before the compost will be ready for sale or transformation into soil conditioner.

Inert waste will be stored at the Lot 400 premises, and this will predominately be Construction and Demolition Waste (C&D). C&D waste will initially report to the BRS and then it will be transported to the new premises where the C&D waste will be crushed on site. Mobile crushers will be employed when sufficient volumes warrant crushing. The proponent will be required operate in accordance with an Asbestos Management Plan.

The Lot 400 premises will also accept scrap metal and car bodies and serve as a location for impounded vehicle storage. As with the other waste streams, waste will initially report to the BRS and then be transferred to the new premises for storage / processing.

The Shire will be contracting an external service provider to recycle used tyres so this will avoid the need for tyre disposal at BRS so the Shire requires a site to store tyres prior to recycling. The Lot 400 premises is thus proposed to act as a temporary tyre storage facility. The Shire recycles tyres once a year and the Shire receives approximately 3500 tyres per annum. All tyres are tracked under the DER Controlled Waste Tracking System. The above ground tyre storage area will be a designated area separate from all other waste areas and this area will drain to a basin that will be used to collect stormwater. Uncontaminated stormwater collected in the basin will be discharged from the site in a controlled manner using a low flow discharge point. Tyres will be stored in windrows 5m wide by 3m high and up to 40m in length and they will be separated from other tyre windrows by a separation gap of 6m and the premises boundary with a 10m buffer. The tyre storage area will be free of vegetation at all times to reduce fire risk. There will be no tyre burial at the Lot 400 premises.



## Appendix B

### General conditions

Leachate and stormwater contaminated with leachate may be produced from the decomposition of greenwaste and composting / soil conditional stockpiles. The leachate generation potential from the mulching process is much less than could be the case from production of compost or soil improver, as the process only involves mulching the greenwaste itself whereas the application for composting /soil conditioning requires feedstock material (manure etc) which is likely to result in more leachate. In order to minimise the potential impacts from the mulch processing and storage, mulch stockpiles will be turned regularly to aerate the centre of the stockpiles which will assist to keep stockpiles internal temperatures cooler and assist to dry the mulch, thus minimising leachate generation.

The premises topography is gently sloping to the east with elevations ranging from 15.8 to 18m AHD. Regional geology mapping indicates that the soil type present on site is Silty Sands which is described as red, fine grained, sub-rounded quartz, variable silt content, homogeneous. Geotechnical investigations undertaken as part of the Broome North Project describe the soils within the area as:

- Soil is typical Pindan Sand and is classified as Silty Clayey Sand, fine to medium coarse, dense, and red to brown and weakly cemented. The materials were consistent to the maximum excavation depth of 2.5m.
- Soil contains 16% to 26% of fines likely silt or clay material less than 27 microns and the fines are generally of low plasticity.
- Samples of the Pindan Sand were collected at four locations in the north west portion of Lot 400. Permeability tests were completed on all four samples, with results of 5.27m/day, 4.15m/day, 0.71m/day and 0.61m/day (average 2.69m/day).

The premises hardstand pad has been compacted Pindan Sand with compaction rates as above.

There are no ephemeral watercourses within 5km of the area. There are no surface water features on the Lot 400 premises either. The closest wetland is approximately 950m North West and comprises saltwater marshes. The site is located 2.5km south west of the Priority 1 drinking water protection area. Depth to groundwater is approximately 12m.

There is no Threatened or Priority flora recorded within the premises. Vegetation on site does not comprise the two Priority 1 Ecological Communities which may occur in the Broome area.

It is possible that asbestos will be mixed with C&D waste and thus needs to be managed accordingly to reduce the environmental and health risk.

### ***Emission Risk Assessment – Operations***

#### Emission Description

*Emission:* Greenwaste and compost may produce leachate during the decomposition process.

*Impact:* Contamination of surrounding land and surface water drainage systems. Potential impacts on ecology of surface water from the addition of nutrients and heavy metals.

*Controls:* The licensee has committed to conducting ensuring composting operations (if it occurs) will:

- occur on a dedicated hardstand pad and in areas separated and contained by bunding from other waste process areas at the premises;
- will be undertaken consistent with a Composting Management Plan. The premises is only expected to operate for a few years until a dedicated Class III landfill is constructed (currently in planning stages).

#### Risk Assessment

*Consequence:* Minor



*Likelihood:* Unlikely

*Risk Rating:* Moderate

#### Regulatory Controls

Licence condition L1.2.4 to regulate uncontaminated / contaminated stormwater at the Lot 400 premises.

Licence condition 4.1.1 IR1 and IR2 will be added to the licence requiring the licensee to submit to the CEO a Composting Management Plan (CMP) and comply with the CMP. Condition L1.3.4 will be added to the licence to regulate storage of greenwaste stockpiles on the Lot 400 premises into suitably sized units/windrows. Licence condition L1.3.10 will be added to the licence to regulate fires on the Lot 400 premises. Fires are not authorised on site.

#### Residual Risk

*Consequence:* Insignificant

*Likelihood:* Unlikely

*Risk Rating:* Low

#### Emission Description

*Emission:* Unacceptable discharges to land from operations at the new premises may occur from stormwater that becomes contaminated with sediment and leachate from greenwaste / compost decomposition.

*Impact:* Contamination of surrounding land and surface water drainage systems. Potential impacts on ecology of surface water from the addition of nutrients and heavy metals.

*Controls:* Stormwater and drainage systems proposed for the new premises at Lot 400 include the following:

- All stormwater coming into contact with greenwaste will be directed to a separate sump to prevent flow of surface drainage offsite.
- All stormwater within the tyre disposal area will be directed to a separate sump. The sump has been provided to capture stormwater (and firewater runoff). Uncontaminated stormwater contained in the sump will be discharge via a low flow discharge point in a controlled manner.
- All other storage and processing areas will drain either across the area or through drainage channels to a sump before flowing off site through a low flow discharge point. The flow will be equal to pre-development flow.
- All sumps have been designed to retain both the 5 minute 10 year average recurrence interval (ARI) and 5 minute 100 year ARI storm events.

#### Risk Assessment

*Consequence:* Minor

*Likelihood:* Possible

*Risk Rating:* Moderate

#### Regulatory Controls

Licence condition L1.2.4 to regulate uncontaminated / contaminated stormwater at the new premises. Licence condition L1.3.1 to regulate waste types accepted at the new premises. Licence condition L1.3.2 and L1.3.3 to regulate waste that do not meet licence acceptance criteria and for alternate disposal.

Licence condition L1.3.4 to regulate wastes accepted onto the new premises are subjected to certain processes to ensure emissions are minimised. Licence condition L1.3.5 to regulate storage of waste on dedicated bunded hardstand areas. Licence condition L1.3.9 to regulate security measures for the new premises to restrict access to the site. Licence condition 1.3.10 ensures that no waste will be burnt at the premises.



Residual Risk

*Consequence:* Insignificant

*Likelihood:* Unlikely

*Risk Rating:* Low

Emission Description

*Emission:* Unacceptable discharges to the environment of material containing asbestos during crushing of C&D material.

*Impact:* Contamination of surrounding land and surface water drainage systems. Potential impacts on human health as asbestos causes severe medical conditions.

*Controls:* Assessing all loads of C&D waste for asbestos prior to acceptance at the new premises. ACM material will not be accepted at the new Lot 400 premises. Implementation of an AMP.

Risk Assessment

*Consequence:* Minor

*Likelihood:* Unlikely

*Risk Rating:* Moderate

Regulatory Controls

Licence condition L1.3.6 to regulate asbestos content of any recycled output. Licence condition 1.3.7 shall ensure that recycled outputs from C&D waste is sampled and tested. Licence condition 1.3.8 ensures all activities on the premises is undertaken in accordance with the AMP.

Residual Risk

*Consequence:* Insignificant

*Likelihood:* Unlikely

*Risk Rating:* Low

By applying regulatory controls DER is satisfied that that the risk has been reduced to an acceptable level.