Government of **Western Australia**
Department of **Environment Regulation**

Licence

Environmental Protection Act 1986, Part V

Licensee: Vancouver Waste Services Pty Ltd

Licence: L7344/1998/10

Registered office: 128 Albany Highway
ALBANY WA 6330

ACN: 135 344 357

Premises address: Mindijup Road Multiple Use Facility
Part of Lot 3 on Diagram 61867 and part of Lot 102 on Plan 22860
Mindijup Road, within co-ordinates (MGA Zone 50)
E597577, N6153749; E599498, N6153643; E597162, N6152577;
E597988, N6153695; E599520, N6152676; E597170, N6153340;
E599067, N6153677; E597558, N6152697; E597244, N6153638;
E599067, N6153648; E597552, N6152085;
PALMDALE WA 6328, as depicted in Schedule 1

Issue date: Thursday, 22 December 2011

Commencement date: Tuesday, 17 January 2012

Expiry date: Monday, 16 January 2017

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
37	Char manufacturing: premises on which wood, carbon material or coal is charred to produce a fuel or material of a carbonaceous nature or of enriched carbon content.	10 tonnes or more per year	4000 tonnes per annual period
62	Solid waste depot: premises on which waste is stored, or sorted, pending final disposal or re-use.	1 000 tonnes or more per year	17 000 tonnes per annual period
63	Class I inert landfill site: premises on which waste (as determined by reference to the waste type set out in the document entitled “Landfill Waste Classification and Waste Definitions 1996” published by the Chief Executive Officer and as amended from time to time) is accepted for burial.	500 tonnes or more per year	5 500 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 soils.	1 000 tonnes or more per year	12 000 tonnes per annual period

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

Date signed: 2 November 2015
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Steve Checker
Manager Licensing (Waste Industries)
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 regulates 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 Vancouver Waste Services Pty Ltd Mindijup Road site (VWSMR) is located within a rural zoning area. The location is within a minor valley comprised primarily of deep pale sand sloping towards the west (Kalgan River). Surrounding land use consists of agricultural paddocks, some remnant native vegetation and the predominant land use being leased blue gum plantation. The Premises is 45 kilometres north east from the centre of the City of Albany.

The VWSMR undertakes the following prescribed activities:

- Inert landfill, primarily for tyres;
- Solid waste storage facility, primarily for inert waste and green waste;
- Composting facility; and
- A trial char production facility.

Potential sensitive receptors are identified as:

- a resident located within 500 metres of the Premises boundary of Lot 3;
- a resident located 1km southwest of the Premises boundary of Lot 3;
- Mindijup Silica Sand Mine (licensed Premises L6798/1993/10) located directly south east of the Premises prescribed activities;
- The Kalgan River located 900 metres to the northwest of the site.
- Surface water flows into the Kalgan River; and
- Local groundwater.

This Licence is the result of an amendment sought by the Licensee to undertake a one off burn of stored green waste no longer suitable for composting and to undertake a trial char production process using an MC Furnace. Administrative amendments are included. Composting and landfill activities have not been assessed as part of this amendment. The licences and works approvals issued for the Premises since 06/01/2011 are:

Instrument log		
Instrument	**Issued**	**Description**
W4797/2010/1	6/01/2011	Works approval (composting)
L7344/1998/9	13/01/2011	Licence reissue
L7344/1998/9	7/07/2011	Licence amendment (composting)
L7344/1998/10	22/12/2011	Licence reissue
W5082/2011/1	12/01/2012	Works approval (inert landfill; asbestos)
L7344/1998/10	15/03/2012	Licence amendment (biosolids trial use)
W5573/2013/1	1/05/2014	Works approval (green waste processing and waste storage)
L7344/1998/10	30/10/2014	Licence amendment (Licence conversion, green waste processing and waste storage)
L7344/1998/10	29/10/2015	Licence amendment (green waste burning and char production)

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 that year;

'ARI' means Average Recurrence Interval;

'AS 4323.1' means Australian Standard AS 4323.1*Stationary source emissions – selection of sampling positions;*

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

'AS/NZS 5667.1' means the Australian Standard AS/NZS 5667.1 *Water Quality – Sampling – Guidance of the Design of sampling programs, sampling techniques and the preservation and handling of samples;*

'AS/NZS 5667.4' means the Australian Standard AS/NZS 5667.4 *Water Quality – Sampling – Guidance on sampling from lakes, natural and man-made;*

'AS/NZS 5667.11' means the Australian Standard AS/NZS 5667.11 *Water Quality – Sampling – Guidance on sampling of groundwaters;*

'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 fibres' has the meaning defined in the document *Guidelines for Assessment, Remediation and Management of Asbestos Contaminated Sites*, Western Australia, published by Department of Health;

'averaging period' means the time over which a limit is measured or a monitoring result is obtained;

'CEO' means Chief Executive Officer of the Department of Environment Regulation;

'CEO' for the purpose of correspondence means;

Chief Executive Officer
Department Administering the *Environmental Protection Act 1986*
Locked Bag 33
CLOISTERS SQUARE WA 6850
Email: info@der.wa.gov.au

'clean fill' has the meaning defined in Landfill Definitions;

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

'composting' means the process whereby organic materials are microbiologically transformed under controlled aerobic conditions;

'composting hardstand area' means the hardstand area approved for composting activities, as defined and labelled "Composting hardstand area" in the Map of composting infrastructure in Schedule 1;

'controlled waste' has the meaning defined in the *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*;

'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;

'freeboard' means the distance between the maximum water surface elevations and the top of retaining banks or structures at their lowest point;

'green waste' means waste that originates from flora and which does not contain or has not been treated or coated with, preserving agents, biocides, fire retardants, paint, adhesives, plastics or binders;

'green waste burning management documents' means the documents "Fire Management Plan: Mindijup Multiple Use Facility", "Vancouver Waste Services Mindijup Facility – greenwaste burn plan" and greenwaste burn area map submitted to DER by the Licensee in July 2015.

'hardstand' means a surface with a permeability of 10^{-9} metres/second or less;

'**inert landfill site**' means area authorised for the burial of waste in accordance with this Licence, as defined and labelled on the Premises Map in Schedule 1;

'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 L7344/1998/10 and issued under the Act;

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

'NATA' means the National Association of Testing Authorities, Australia;

'NATA accredited' means in relation to the analysis of a sample that the laboratory is NATA accredited for the specified analysis at the time of the analysis;

'pasteurisation' means the process whereby organic materials are treated through heat 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;

'retention pond' means the pond receiving runoff from the composting hardstand area, as defined and labelled in the Map of composting infrastructure in Schedule 1;

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

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

'solid' means material that has an angle of repose of greater than 5 degrees, does not contain (or is not comprised of) any free liquids, does not contain (or is not comprised of) any liquids that are capable of being released when the waste is transported, does not become free flowing at or below 60 degrees Celsius or when it is transported, and is generally capable of being moved by a spade at normal temperatures (i.e. is spadeable);

'spot sample' means a discrete sample representative at the time and place at which the sample is taken;

'**straw'** means fresh straw and/or used agricultural bedding straw from feedlots;

'treated timber' means wood which has been treated with a chemical preservative;

'usual working day' means 0800 – 1700 hours, Monday to Friday excluding public holidays in Western Australia;

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 version of that 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.

1.1.5 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 General conditions

1.2.1 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.

1.2.2 The Licensee shall immediately recover, or remove and dispose of spills of environmentally hazardous materials outside an engineered containment system.

1.2.3 The Licensee shall:
(a) implement all practical measures to prevent stormwater run-off becoming contaminated by the activities on the Premises;
(b) treat contaminated or potentially contaminated stormwater as necessary prior to being discharged from the Premises.[1]

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

1.2.4 The Licensee shall maintain permanent markers along the boundary of the Premises so it can be identified on the ground.

1.3 Premises operation

1.3.1 The Licensee shall record and investigate the exceedance of any descriptive or numerical limit specified in any part of section 1.3 of this Licence

1.3.2 The Licensee shall only accept waste on to 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	Waste code	Quantity limit tonnes/ annual period	Specification[1]
Green waste	Not applicable	Total of up to 4,000 tonnes per annual period accepted under category 37	(i) Only green waste is used for char production; (ii) No char production occurs at the Premises after 31 July 2016.
Clean fill	Not applicable	Combined total of up to 5,000 tonnes per annual period for wastes accepted under category 63	(iii) Must meet contaminant thresholds for Class I landfill in accordance with Landfill Definitions. (iv) Waste containing visible asbestos or ACM must not be accepted.
Inert waste type 1	Not applicable		
Inert waste type 2	R100 (used tyres);	500 tonnes per annual period for wastes accepted under category 63	(v) Tyres only. (vi) Tyres that are burnt (or appear burnt) are not to be accepted onto the Premises.
Green waste	Not applicable	Combined total of up to 12 000 tonnes per annual period for wastes accepted under category 67A	(vii) Only received in solid form. (viii) Treated timber must not be accepted.
Straw			

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*.

1.3.3 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 Table 1.3.2.

Table 1.3.2: Processing of materials		
Waste type	**Process**	**Process requirements**[1,2]
Clean fill Inert waste type 1 Inert waste type 2	Receipt, handling, storage and disposal of waste by landfilling	(a) Disposal of waste by landfilling shall only take place within the active landfill area shown on the Landfill Area Map in Schedule 1. (b) All inert waste type 2 awaiting burial is stored within the inert landfill site; (c) No more than 300 tyres are to be left uncovered in the pit awaiting cover;
Green waste Straw	Treatment by composting and pasteurisation	(d) Composting to be undertaken on the composting hardstand area only; (e) Windrows shall be turned regularly to ensure aerobic conditions are maintained; (f) The core temperature of the composting pile is maintained between 55 ºC and 65 ºC for a period of at least three days; (g) Composting leachate is collected in the retention pond and either evaporated or returned to the composting process on the composting hardstand area; (h) Ensure that, as a minimum, compost meets physical and chemical requirements set out by AS4454.
Green waste	Grinding	(i) Moisture levels are maintained to minimise dust emissions during green waste grinding. (j) Grinding of green waste shall only occur within the hours of 7:30am and 5:30pm and shall not occur on Sundays or public holidays.
Green waste	Disposal by open burning	(k) Open burning of green waste must only be undertaken in accordance with the green waste burning management documents. (l) Burning is undertaken in a manner that minimises smoke emissions
Green waste	Char production	(m) In accordance with condition 1.3.9.

Note 1: Requirements for landfilling tyres are set out in Part 6 of the *Environmental Protection Regulations 1987*.
Note 2: Additional requirements for the acceptance and landfilling of controlled waste (including asbestos and tyres) are set out in the *Environmental Protection (Controlled Waste) Regulations 2004*.

1.3.4 The Licensee shall ensure that cover is applied and maintained on landfilled wastes in accordance with Table 1.3.3 and that sufficient stockpiles of cover are maintained on site at all times.

Table 1.3.3: Cover requirements[1]			
Waste Type	**Material**	**Depth**	**Timescales**
Clean fill and Inert waste type 1	No cover required		
Inert waste type 2 (tyres)	Clean fill	1000mm	By the end of the working day in which the waste was deposited.

Note 1: Additional requirements for the covering of tyres are set out in Part 6 of the *Environmental Protection Regulations 1987.*

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**
Composting hardstand area	Composting feedstock (Green waste and straw)	(a) Bunded hardstand area; (b) Lined to achieve a permeability of less than 10^{-9} m/s or equivalent.
Retention pond	Contaminated stormwater and leachate	(c) Lined to achieve a permeability of less than 10^{-9} m/s or equivalent; (d) A minimum top of embankment freeboard of 1000 mm is maintained; (e) Capacity to store a 72 hour duration, 1 in 10 year ARI critical rainfall event without overflow.

1.3.6 The Licensee shall:
- (a) not burn or allow the burning of any waste on the Premises except green waste under condition 1.3.2;
- (b) have ready access to earthmoving equipment and soil cover at all times, which can be used to extinguish fires at the Premises; and
- (c) take immediate measures to extinguish any unauthorised fires at the Premises.

1.3.7 The Licensee shall implement the following security measures at the site:
- (a) maintain suitable fencing to prevent unauthorised access to the site;
- (b) ensure that any entrance gates to the Premises are securely locked when the Premises are unattended; and
- (c) undertake regular inspections of all security measures and repair damage as soon as practicable.

1.3.8 The Licensee shall ensure that that the site supervisor contact number and after hours fire emergency contact numbers are clearly displayed at the main gate at all times.

1.3.9 The Licensee must ensure that all operations are undertaken and managed in accordance with the documents, or parts of documents, specified in Table 1.3.4.

Table 1.3.4: Management Plans		
Management Plan Reference	**Parts**	**Date of Document**
C.M Technology B.V. Manual MC furnace	All	Received 1 April 2015
Vancouver Waste Services Fire Management Plan Mindijup Multiple Use Facility	All	Received 15 July 2015
Vancouver Waste Services T/A WA Biofuels: Environmental Application Mindijup Multiple use Facility – Char Production	All	Received 20 July 2015

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 Point source emissions to air

2.2.1 The Licensee shall ensure that where waste is emitted to air from the emission points in Table 2.2.1 and identified on the map of emission points in Schedule 1 it is done so in accordance with the conditions of this Licence.

Table 2.2.1: Emission points to air		
Emission point reference and location on Map of emission points in Schedule 1	**Emission Point**	**Source, including any abatement**
A1	Incinerator stack	Incinerator chamber
A2	Retort A stack	Retort A heat exchange chamber
A3	Retort B stack	Retort A heat exchange chamber
A4	Retort A vent	Retort A chamber
A5	Retort B vent	Retort B chamber

3 Monitoring

3.1 General monitoring

3.1.1 The licensee shall ensure that:
(a) all compost samples are collected and preserved in accordance with AS 4454;
(b) all laboratory samples are submitted to and tested by a laboratory with current NATA accreditation for the parameters being measured unless indicated otherwise in relevant table.

3.1.2 The Licensee shall ensure that :
(a) monthly monitoring is undertaken at least 15 days apart;
(b) annual monitoring is undertaken at least 9 months apart.

3.2 Monitoring of inputs and outputs

3.2.1 The Licensee shall undertake the monitoring in Table 3.2.1 according to the specifications in that table.

Table 3.2.1: Monitoring of inputs and outputs				
Input/Output	**Parameter**	**Units**	**Averaging period**	**Frequency**
Inputs to the Premises	Each applicable waste type (as detailed in Table 1.3.1) arriving on the Premises	Tonnes	Annual period	Each load arriving at the Premises
Inputs to composting process	Each applicable waste type (as detailed in Table 1.3.1) incorporated into the composting process			Each load incorporated into the composting process
Green waste	Green waste: (a) processed through the grinder; and (b) disposed of by burning.			Each load processed
Inputs to inert landfill	Each applicable waste type as detailed in Table 1.3.1 disposed of in the inert landfill site			Each load buried
Inputs to char production	Green waste used as feed stock for char production	Tonnes	Annual period	Each load processed
Compost Outputs	Final compost product			Each batch produced and Each load leaving the Premises
Outputs from char production	Char product produced			Each load produced

3.3 Process monitoring

3.3.1 The Licensee shall undertake the monitoring in Table 3.3.1 according to the specifications in that table.

Table 3.3.1: Process monitoring

Monitoring point reference	Process description	Parameter	Units	Frequency	Method
Compost quality	Sampled and tested in accordance with AS 4454				
Temperature control board: (a) Incinerator; (b) Retort A; and (c) Retort B.	Temperature when producing char	Temperature	Degrees Celsius	Every 30 minutes when producing char	Visual

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 undertake an environmental monitoring review, and report on its findings. The review shall include (but not be limited to): i) analysis of the effectiveness of all current environmental monitoring in place to detect environmental impacts resulting from activities; ii) a proposed environmental monitoring regime for the site which enables effective monitoring of groundwater and surface water impacts from the activities on the Premises; iii) any proposed surface water monitoring locations and/or groundwater monitoring bore locations for the new regime, based on site specific hydrogeological information for the Premises; and iv) timeframes for implementation of the new monitoring regime.	28 February 2015
IR2	The Licensee shall submit to the CEO a point source emission to air monitoring proposal for any continuation or future development of the onsite char production trial which must: (a) Demonstrate how emissions to air can be monitored in accordance with the relevant USEPA method for the determination of emissions from stationary sources for the following parameters at emission points A1, A2 and A3 (as depicted in schedule 1): (i) Carbon Monoxide; (ii) Oxides of Nitrogen; (iii) Particulate Matter; and (iv) Volatile organic compounds (b) Identify any modifications to the char production unit required to ensure that sampling of point source emission to air monitoring can be undertaken in accordance with AS 4323.1.	30/06/2016

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 implement a complaints management system that as a minimum records the number and details of complaints received concerning the environmental impact of the activities undertaken at the Premises and any action taken in response to the complaint.

5.2 Reporting

5.2.1 The Licensee shall submit to the CEO an Annual Environmental Report within 62 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[1]
-	Summary of char production operations: (a) Details of any char production operations not conforming to the specifications of the document C.M Technology B.V. Manual MC Furnace and how the non-conformances were resolved; (b) Details of any air emission monitoring undertaken by the Licensee.	None specified
Table 3.2.1	Monitoring results for inputs and outputs for the annual period	None specified
Table 3.3.1	Monitoring results for process monitoring for the annual period	None specified
5.1.3	Compliance for the annual period	Annual Audit Compliance Report (AACR)
5.1.4	Complaints summary for the annual period	None specified

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

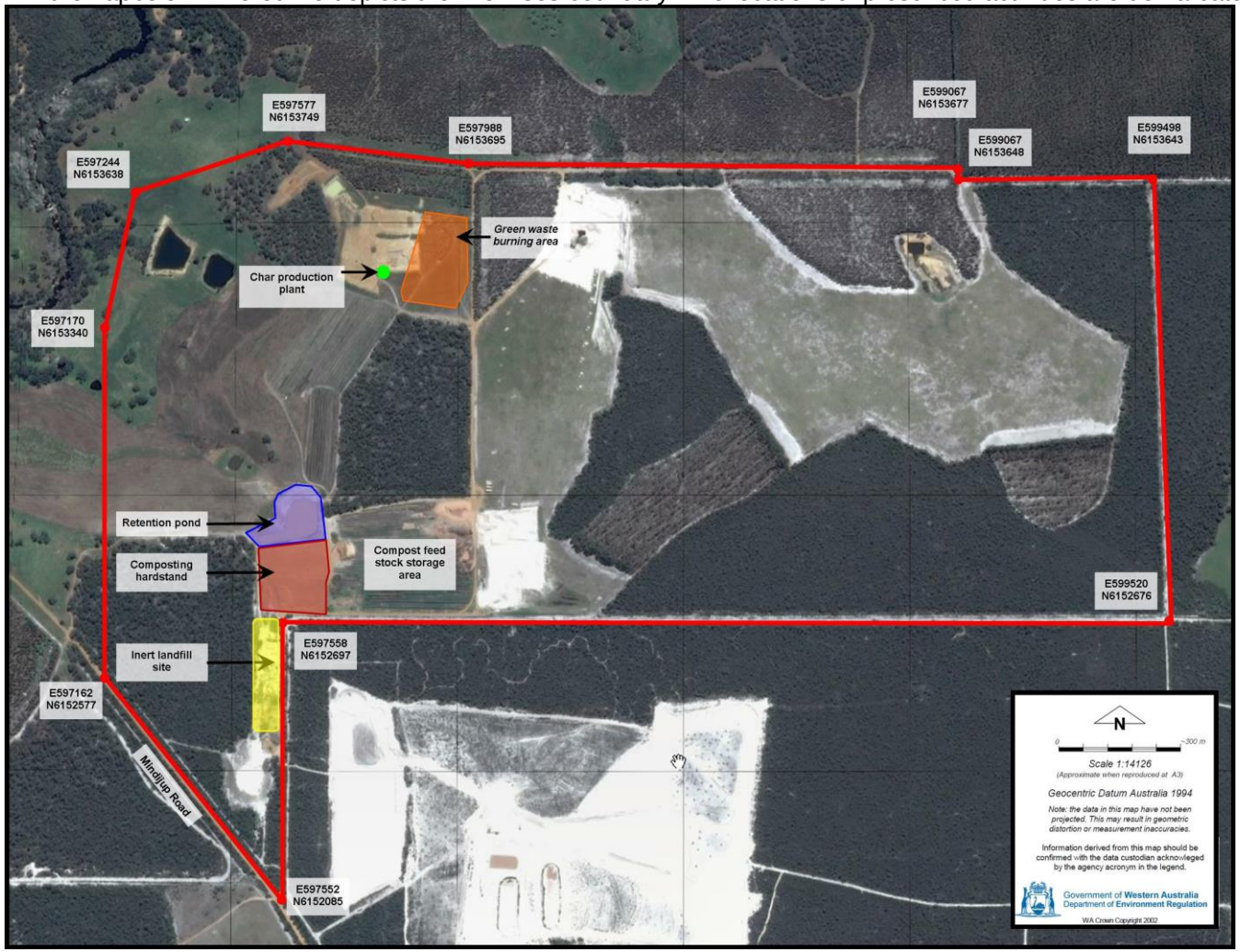
Condition or table (if relevant)	Parameter	Notification requirement[1]	Format or form[2]
-	Fire at the Premises	As soon as practicable	None specified
-	Breach of any limit specified in the Licence	Part A: As soon as practicable as but no later than 5pm of the next usual working day. Part B: As soon as 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

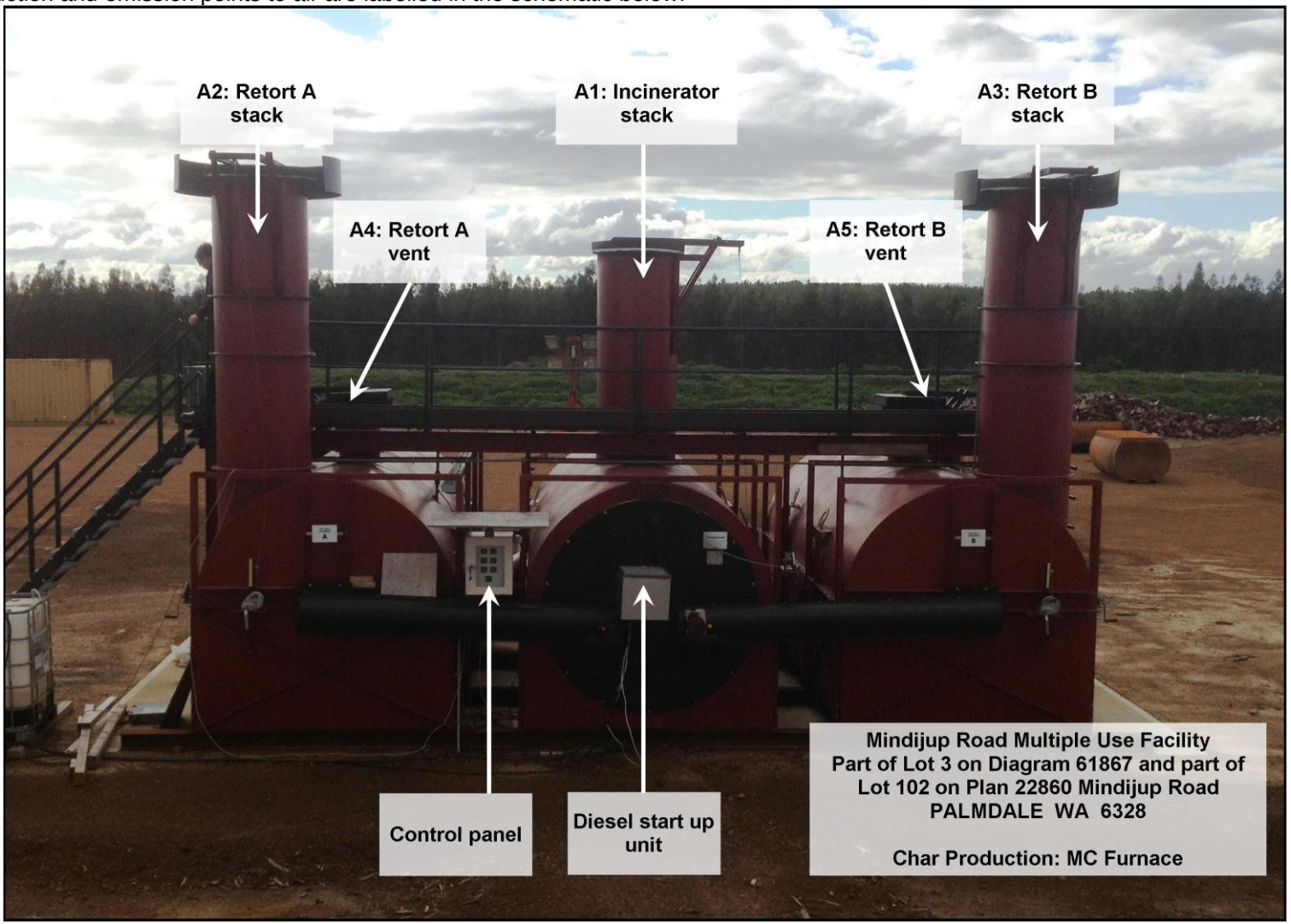
Premises map

The Premises is shown in themapbelow. Theredline depicts the Premises boundary. The locations of prescribed activities are demarcated and labelled.



Char production schematic

The char production and emission points to air are labelled in the schematic below.



Composting infrastructure schematic

The location of the infrastructure associated with composting is shown below.

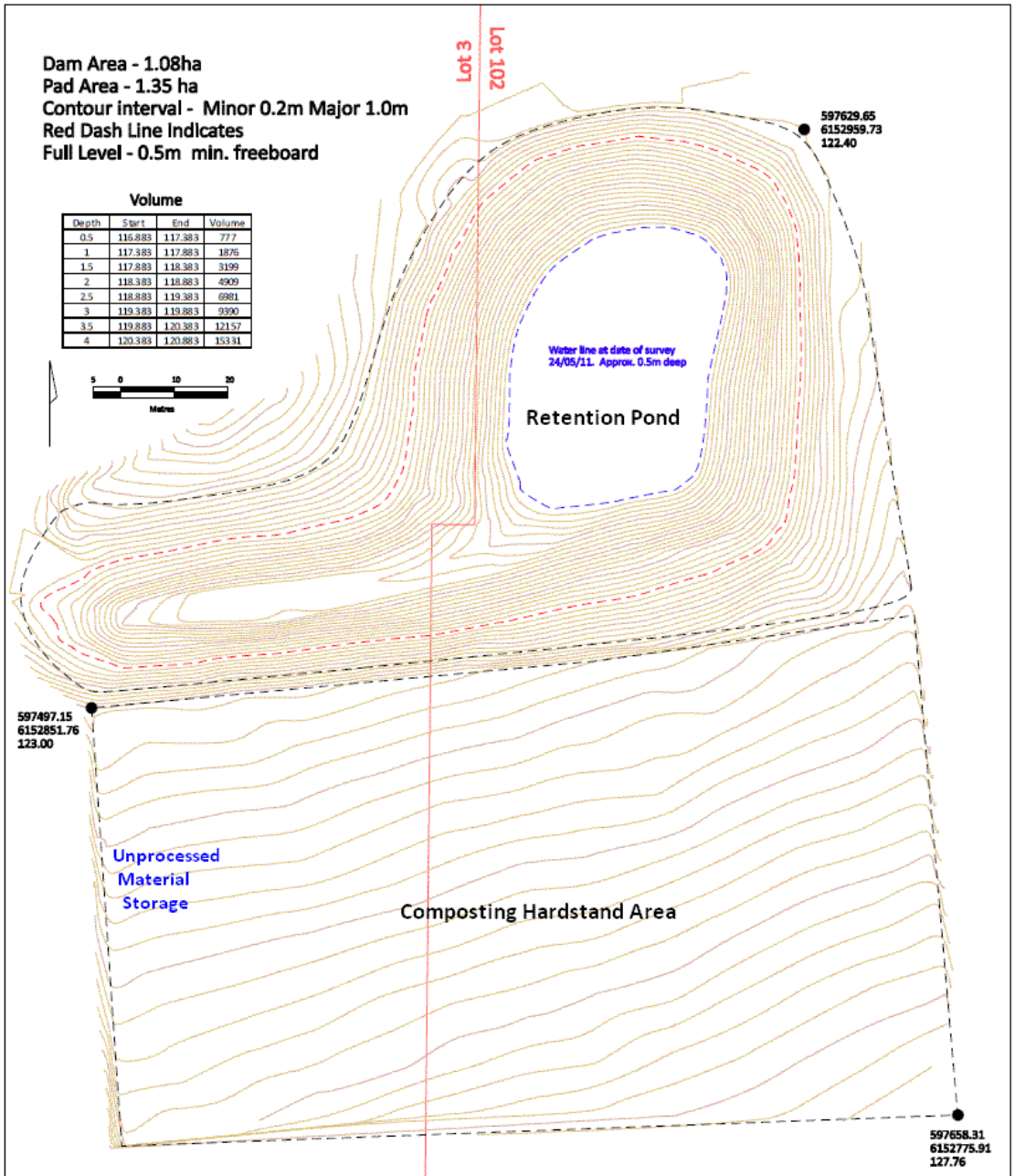


Figure 2. ASCON survey of completed pad and storage dam, Lot 3 and Lot 102 Mindijup Road. (All heights are given as AHD)

Schedule 2: Reporting & notification forms

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

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?:	
☐ Yes ☐ Reported to DER verbally Date _____ ☐ Reported to DER in writing Date _____	☐ 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) may 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	□ □	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	□ □	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	□ □ □ □ □ □	by affixing the common seal of the licensee in accordance with the *Corporations Act 2001*; 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)	□ □	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	□ □	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: _____/_____/_____

SIGNATURE: _____

NAME:
(printed) _____

POSITION: _____

DATE: _____/_____/_____

SEAL (if signing under seal)

Licence:	L7344/1998/10	Licensee:	Vancouver Waste Services Pty Ltd
Form:	N1	Date of breach:	

Notification of detection of the breach of a limit.

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	

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 Vancouver Waste Services Pty Ltd	
Date	

Government of **Western Australia**
Department of **Environment Regulation**

Decision Document

Environmental Protection Act 1986, Part V

Proponent: Vancouver Waste Services Pty Ltd

Licence: L7344/1998/10

Registered office: 128 Albany Highway
ALBANY WA 6330

ACN: 135 344 357

Premises address: Mindijup Road Multiple Use Facility
Part of Lot 3 on Diagram 61867 and part of Lot 102 on Plan 22860 Mindijup Road, within co-ordinates (MGA Zone 50)
E597577, N6153749; E599498, N6153643; E597162, N6152577; E597988, N6153695; E599520, N6152676; E597170, N6153340; E599067, N6153677; E597558, N6152697; E597244, N6153638; E599067, N6153648; E597552, N6152085;
PALMDALE WA 6328, as depicted in Schedule 1

Issue date: Thursday, 22 December 2011

Commencement date: Tuesday, 17 January 2012

Expiry date: Monday, 16 January 2017

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: Peter van Schoubroeck
Licensing Officer

Decision Document authorised by: Caron Goodbourn
Delegated Officer

Contents

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1 Purpose of this Document 2
2 Administrative summary **Error! Bookmark not defined.**
3 Executive summary of proposal and assessment 4
4 Decision table 5
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6 Risk Assessment 12

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.

2 Administrative summary

Administrative details		
Application type	Works Approval ☐ New Licence ☐ Licence amendment ☒ Works Approval amendment ☐	
Activities that cause the premises to become prescribed premises	**Category number(s)**	**Assessed design capacity**
	37	4000 tonnes per annual period
	62	17 000 tonnes per annual period
	63	5 500 tonnes per annual period
	67A	12 000 tonnes per annual period
Application verified Application fee paid	Date: N/A Date: N/A	
Works Approval has been complied with Compliance Certificate received	Yes☐ No☐ N/A☒ Yes☐ No☐ N/A☒	
Commercial-in-confidence claim	Yes☒ No☐	
Commercial-in-confidence claim outcome	Endorsed	
Is the proposal a Major Resource Project?	Yes☐ No☒	
Was the proposal referred to the Environmental Protection Authority (EPA) under Part IV of the *Environmental Protection Act 1986*?	Yes☐ No☒	Referral decision No: Managed under Part V☐ Assessed under Part IV☐
Is the proposal subject to Ministerial Conditions?	Yes☐ No☒	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 *Environmental Protection Act 1986*)?	Yes☐ No☒ Department of Water consulted Yes☐ No☒	
Is the Premises within an Environmental Protection Policy (EPP) Area Yes☒ No☐ *Environmental Protection South West Agriculture Zone Wetlands Policy 1998*		
Is the Premises subject to any EPP requirements? Yes☐ No☒		

3 Executive summary of proposal and assessment

The Vancouver Waste Services Pty Ltd Mindijup Road site (VWSMR) is located within a rural zoning area. The location is within a minor valley of primarily deep pale sand sloping towards the west (Kalgan River). Surrounding land use consists of agricultural paddocks, some remnant native vegetation and the predominant land use being leased blue gum plantation. The Premises is 45 kilometres north east from the centre of the City of Albany.

The VWSMR undertakes the following prescribed activities:

- Inert landfill, primarily for tyres;
- Solid waste storage facility, primarily for inert waste and green waste;
- Composting facility; and
- A trial char production facility.

Potential sensitive receptors are identified as:

- A resident located within 500 metres of the Premises boundary of Lot 3;
- A resident located 1km southwest of the Premises boundary of Lot 3;
- Mindijup Silica Sand Mine (licensed premises L6798/1993/10) located directly south east of the prescribed premises activities;
- The Kalgan River located 900 metres to the northwest of the site.
- Surface water flows into the Kalgan River; and
- Local groundwater.

The Class 1 inert landfill site is primarily for tyre disposal and some inert waste. Receipt of tyres for burial is restricted to less than 500 tonnes per year under the licence and another 5,000 tonnes of inert waste. Tyre burial occurs immediately upon receipt of the tyres to reduce fire risk.

Solid waste storage activities are for the storage and grinding of bulk green waste on the Premises, and the temporary storage of inert waste (other than tyres) on the Premises. VWSMR have the capacity to store up to 12,000 tonnes of green waste and 5,000 tonnes of inert waste.

Composting is undertaken on a 7,500 m^2compacted gravel composting pad, underlined with low permeability compacted clay, which drains into a dam (>30,000m^3) which retains runoff and rainfall providing water for the composting process (constructed under W4797/2010/1).VWSMR have the capacity to produce 12,000 tonnes of compost per year.

A one year char production process is to be trialled using a MC Furnace by C.M Technology B.V. The process comprises of a central furnace and two char production retorts. Following the venting of water vapour from the wood, acetic acid is released. Subsequently pyrolysis gases are released; these gases are redirected to the furnace to maintain the heat cycle. Investigations are proposed into the potential capture of acetic acid.

This Licence amendment is for the following:

- Approval for a one off burn of stored green waste no longer suitable for composting;
- Approval to undertake a trial char production process;
- Removal of the approval to accept biosolids into the composting process as this activity does not occur onsite and Department of Health approval for the facility to accept biosolids has lapsed; and
- Administrative amendments.

Emission risks associated with the burning of green waste and char production are assessed herein. DER has considered the risk profile of emissions and discharges from landfill and composting activities at the Premises. No significant changes are known to have occurred since the previous licence was granted; therefore DER has not amended conditions relating to emissions and discharges from landfill and composting activities.

4 Decision table

All applications are assessed in line with the *Environmental Protection Act1986*, the *Environmental Protection Regulations 1987*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**	**Justification (including risk description & decision methodology where relevant)**	**Reference documents**
General conditions	L1.1.2	**Operation** Condition 1.1.2 has been amended to include standard definitions relevant to the activities undertaken at the Premises. This includes amending the annual period for reporting back to the calendar year, which was changed due to an administrative error in the previous licence amendment.	General provisions of the *Environmental Protection Act 1986*
Premises operation	L1.3.1 – L1.3.9; and L4.1.1	**Operation** Condition 1.3.1 has been included to ensure that any limit (being waste acceptance and char production volumetric limits; and waste acceptance, processing and operational descriptive limits) being exceeded within section 1.3 of the Licence are recorded and investigated. Condition 1.3.2, Table 1.3.1 has been amended to: • Ensure that the Licensee operates the char production trial within the design specifications of the equipment and approved trial parameters. Planning approval by the City of Albany has only been granted until 31/07/2016, subsequently approval under the *Environmental Protection Act 1986* is provided for this period, extension will be considered upon application from the Licensee. • Define the waste code where relevant. • Clarify the waste acceptance quantity limits. • Specify that asbestos cannot be accepted at the Premises. • Remove the approval to accept biosolids for composting based on biosolids not previously being accepted at the Premises and approval from the Department of Health to accept biosolids expiring on 19 January 2015.	Application supporting documents General provisions of the *Environmental Protection Act 1986*

DECISION TABLE			
Works Approval / Licence section	**Condition number** **W = Works Approval** **L= Licence**	**Justification (including risk description & decision methodology where relevant)**	**Reference documents**
		Condition 1.3.3 has been amended to: • Clarify landfill operations, cover material requirements are now contained within condition 1.3.4. • Remove processing requirements for compost containing biosolids. • Amend green waste grinding process requirements to be outcome focused. • Include green waste burning process requirements. • Include char production burning process requirements. Condition 1.3.4 has been included to isolate the cover requirements previously contained within the condition 1.3.3 'processing of materials' table 1.3.2. Condition 1.3.6 has been amended to clarify approved green waste burning and fire response requirements. Condition 1.3.9 has been included in ensure that the Licensee undertakes and manages prescribed activities in accordance with the listed management plans, specifically relating to char production and fire management. **Operation (green waste burning)** <u>Emission Description</u> *Emission:* Smoke emissions from the burning of about 2,500 tonnes of green waste, aged to a minimum of 8 months. Burn is expected to last no more than three days. *Impact:* Reduced local air quality, potentially impacting local flora and fauna, the most proximate residential or public receptors are over 500 metres from the burn site. *Controls:* Green waste is screened for contaminants at the John Street prescribed premises (L8786/2013/1) prior to placement at the Premises. Contaminants are directed to landfill at this stage. The burn plan details fire control resources available and a burn strategy based on managing fire behaviour, potential risks to receptors and smoke emissions.	

DECISION TABLE			
Works Approval / Licence section	**Condition number** **W = Works Approval** **L= Licence**	**Justification (including risk description & decision methodology where relevant)**	**Reference documents**
		Risk Assessment *Consequence:* Insignificant *Likelihood*: Almost certain *Risk Rating:* Moderate Regulatory Controls Conditions 1.3.3(n), 1.3.3(o), 1.3.6 and 1.3.9 ensure only green waste is burnt within the requirements detailed within the green waste burning management documents. The *Environmental Protection (Unauthorised Discharge) Regulations 2004* are applicable to the burning of non-green waste materials. Residual Risk *Consequence:* Insignificant *Likelihood*: Almost certain *Risk Rating:* Moderate	
Point source emissions to air	L2.2.1	**Operation (char production)** Emission Description *Emission:* Temporary release of water vapour and acetic acid from the retort vents A4 and A5. Carbon dioxide may be released at times from all vents and stacks (A1 – A5). Trace amounts of products of incomplete combustion (CO, CH_4, NO_x, SO_2, C_xH_x and more complex organic compounds) may be released from all vents and stacks (A1 – A5) under abnormal operating conditions however these should be directed to the incinerator under normal operating conditions. *Impact:* Reduced local air quality, potentially impacting local flora and fauna, the most proximate residential or public receptors are over 500 metres from the emission points. *Controls:* Manual control of stack and vent opening during the char production processes ensures that pyrolysis gases that would otherwise be released are directed to the incinerator to aid the heat generation process. Capture of acetic acid is	Application supporting documents C.M Technology B.V. Manual MC furnace General provisions of the *Environmental Protection Act 1986*

DECISION TABLE			
Works Approval / Licence section	**Condition number W = Works Approval L= Licence**	**Justification (including risk description & decision methodology where relevant)**	**Reference documents**
		proposed to be investigated during the trial period. The production unit can be largely managed as a closed system. Investigations into the most efficient operations of char production based on control of stack and vent emissions will be undertaken during the trial period. <u>Risk Assessment</u> *Consequence:* Insignificant *Likelihood*: Possible *Risk Rating:* Low <u>Regulatory Controls</u> Condition 1.3.2 requires the Licensee to operate the char production trial within the design specifications of the equipment and approved trial parameters. Condition 1.3.9 requires the MC Furnace to be managed in accordance with the design manual specifications. Condition 2.2.1lists the authorised point source emission to air emission points for the char production process. Condition 4.1.1 improvement reference IR2 has been included to require the ability for point source emissions to air from char production activities to be monitored. Monitoring in accordance with the relevant USEPA method for determination of emissions from stationary sources cannot be undertaken on the existing char production unit. <u>Residual Risk</u> *Consequence:* Insignificant *Likelihood*: Unlikely *Risk Rating:* Low	

DECISION TABLE			
Works Approval / Licence section	**Condition number** **W = Works Approval** **L= Licence**	**Justification (including risk description & decision methodology where relevant)**	**Reference documents**
Fugitive emissions	N/A	It is considered that the provisions of Section 49 of the *Environmental Protection Act 1986* are sufficient to regulate potential fugitive (dust) emissions from the char production process and any other fugitive (dust) emissions arising from activities at the Premises. Condition 2.6.1 from the previous licence has subsequently been removed from the Licence.	General provisions of the *Environmental Protection Act 1986*
Odour	N/A	It is considered that the provisions of Section 49 of the *Environmental Protection Act 1986* are sufficient to regulate potential odour emissions from the char production process and any other fugitive (dust) emissions arising from activities at the Premises. Condition 2.7.1 from the previous licence has subsequently been removed from the Licence.	General provisions of the *Environmental Protection Act 1986*
Noise	N/A	**Operation** Noise emissions generated at the Premises have not resulted in complaints or been identified as an issue. Noise emissions arising from the operation of the char production activities are not expected to exceed ambient noise levels at the premises. Therefore no licence conditions are required in this section. Should noise emissions arise from the Premises operation they can be managed under the requirements of the *Environmental Protection (Noise) Regulations 1997*.	General provisions of the *Environmental Protection Act 1986*
Monitoring of inputs and outputs	L3.2.1	**Operation** Condition 3.2.1 has been amended to ensure that char production input and output parameters are monitored which will allow production limits set under condition 1.3.2 to be verified.	General provisions of the *Environmental Protection Act 1986*
Process monitoring	L3.3.1	**Operation** Condition 3.3.1 has been amended to ensure that criteria essential to ensure that normal operating conditions are maintained in the char production process, which in turn ensures that emissions to air are maintained within acceptable levels.	General provisions of the *Environmental Protection Act 1986*

DECISION TABLE			
Works Approval / Licence section	**Condition number** **W = Works Approval** **L= Licence**	**Justification (including risk description & decision methodology where relevant)**	**Reference documents**
Improvements	L4.1.1	**Operation** Condition 4.1.1 improvement reference IR1 has been amended to specify the submission date of 28 February 2015, which is consistent with the submission date in the previous licence, being four months after the issue of the previous licence. A submission has not been received by DER. Condition 4.1.1 improvement reference IR2 has been included to require the ability for point source emissions to air from char production activities to be monitored. Monitoring in accordance with the relevant USEPA method for determination of emissions from stationary sources cannot be undertaken on the existing char production unit. Condition 4.1.2 has been removed; all improvement conditions have defined dates of completion.	General provisions of the *Environmental Protection Act 1986*
Information	L5.2.1 and L5.3.1	**Operation** Condition 5.2.1has been amended to require a summary of char production operations to be included in the Annual Environmental Report. Condition 5.3.1 has been amended to remove notification requirements under which provisions of Section 72 of the *Environmental Protection Act 1986* are sufficient to regulate.	General provisions of the *Environmental Protection Act 1986*
Licence Duration	N/A	The expiry date (16 January 2017) of the licence has not been amended. None of the amendments undertaken require the expiry date of the licence to be reconsidered.	N/A

5 Advertisement and consultation table

Date	Event	Comments received/Notes	How comments were taken into consideration
30/09/2015	Proponent sent a copy of draft instrument	None applicable	None applicable
02/11/2015	Instrument issue advertised in the West Australian		

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