

Licence

Environmental Protection Act 1986, Part V

Licensee:	Shire of Merredin		
Licence:	L8513/2010/2		
Registered office:	Shire of Merredin Administration Centre Lot 1444 King Street MERREDIN WA 6415		
Premises address:	Merredin Chandler Road Landfill MERREDIN WA 6415 being Lot 500 on Plan 66111 Chandler Road as depicted in Schedule 1.		
Issue date:	Thursday, 05 February 2015		
Commencement date:	Sunday, 08 February 2015		
Expiry date:	Wednesday, 07 February 2035		
Prescribed premises o	estedory		

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
61	Liquid waste facility: premises on which liquid waste produced on other premises (other than sewerage waste) is stored, reprocessed, treated or irrigated.	100 tonnes or more per year	200 tonnes per annual period
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
64	Class II putrescible 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.	20 tonnes or more per year	5 000 tonnes per annual period

Conditions

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

Date signed: 4 February 2016

Alan Kietzmann 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: <u>http://www.slp.wa.gov.au/legislation/statutes.nsf/default.html</u>

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 Merredin Chandler Road Landfill is located on Lot 500 on Plan 66111, Chandler Road in the Shire of Merredin ('The Shire'). The premises is approximately 260 kilometres east of Perth, and 6km north of the Merredin town site. The average yearly rainfall is 314mm and average monthly evaporation is 180mm.

The site is located on the Yilgarn Craton, which is characterised predominately by granite rock overlain by weathered clay soils. Testing on site has shown high clay pindan soils to a depth of approximately 18m, with hypersaline groundwater located at approximately 14 to 20m (most recent electrical conductivity results of 2160mS/m). The Shire has estimated that groundwater flows from the north to the south west.

There are no permanent water bodies within 1km of the site. There are a number of creeks which flow intermittently, the closest of which are located 750m to the south east of the premises. The Shire advised there are no domestic or industrial uses of groundwater within 2km of the premises, and the groundwater is proven to be highly saline in nature.

The site receives waste from residents and commercial contractors from within the boundaries of the Shire of Merredin. The site also receives, on occasion, C&D waste, ACM and other general waste from outside the bounds of the Shire of Merredin. Some waste types are stockpiled onsite, such as recyclable paper, cardboard, plastics, batteries and green waste. These wastes are stored and then taken off-site by Avon Waste, once a sizable load is accumulated (approximately every few months). Green waste is stockpiled to be chipped and is then taken away by members of the public.

Liquid wastes are directed to an evaporation pond lined with in-situ clays. All other wastes are buried in the landfill. The landfill uses a trench and fill method where a hole is dug and backfilled with waste using the excavated material as cover. Special Waste Type 1 and 2 are disposed in designated areas with restricted access.

The main potential emission from the premises is leachate from the stored and landfilled wastes. The potential for leachate to impact groundwater or surface water is limited due to the distance to groundwater and the thickness and permeability of clay as indicated in sample bores constructed at the premises.

There is also potential for fugitive dust and odour to be emitted from the premises, however the emissions and potential impacts are likely to be low due to the proximity to sensitive receptors, sealed roads and site management practices including the use of vegetative buffer zones.

This licence is the result of an amendment sought by the Licensee to install and operate a new animal burial pit. This amendment does not result in a change of activities, throughput, emissions or discharges. A number of DER initiated amendments have also been made to ensure consistency with licence templates.

Instrument log		
Instrument	Issued	Description
W4751/2010/1	21/10/2010	Works Approval to extend landfilling operations under previous registration R1399
L8513/2010/1	06/02/2011	New Licence
L8513/2010/2	08/02/2015	Licence re-issue

The licences and works approvals issued for the Premises since 21/12/2010 are:



L8513/2010/2	12/11/2015	Licence amendment to increase capacity, remove groundwater		
		monitoring and conversion to new format		
L8513/2010/2	04/02/2015	Licence amendment to install and operate new animal burial pit		

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:

'Act' means the Environmental Protection Act 1986;

'AHD' means the Australian height datum;

'Acceptance Criteria' has the meaning defined in Landfill Definitions;

'annual period' means the inclusive period from 2 March to 1 March in the following year;

'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 5667.11' 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;

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

'Clean Fill' has the meaning defined in Landfill Definitions;

'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: <u>info@der.wa.gov.au</u>;

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

'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;

'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 or binders;

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

'Inert Waste Type 2' has the meaning defined in Landfill Definitions;



Government of Western Australia Department of Environment Regulation

'Landfill Definitions' means the document titled "Landfill Waste Classification and Waste Definitions 1996" published by the Chief Executive Officer of the Department of Environment as amended from time to time;

'Licence' means this Licence numbered L8513/2010/2 and issued under the Act;

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

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

'quarantined storage area or container' means a hardstand storage area or sealed-bottom container that is separate and isolated from authorised waste disposal areas and is capable of containing all non-conforming waste and its constituents, these areas must be clearly marked and their access restricted to authorised personnel;

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

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

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

'Special Waste Type 2' has the meaning defined in Landfill Definitions;

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

'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 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 Premises operation

- 1.2.1 The Licensee shall only accept waste on to the Premises if:
 - (a) it is of a type listed in Table 1.2.1; and
 - (b) the quantity accepted is below any quantity limit listed in Table 1.2.1; and
 - (c) it meets any specification listed in Table 1.2.1.

Table 1.2.1: Waste acceptance					
Waste type	Quant	ity limit / annual	period	Specification ¹	
	Category 64 activities	Category 62 activities	Category 61 activities		
Clean Fill	N/A	N/A	N/A	None	
Hazardous waste	N/A	Combined total of 2 000	N/A	Limited to waste oil and batteries only.	
Green waste				None	
Putrescible waste	Combined total of 5 000 tonnes	tonnes		None	



Table 1.2.1: Waste accept	1			O	
Waste type	Quantity limit / annual pCategory 64Category 62activitiesactivities		Category 61 activities	Specification ¹	
Inert Waste Type 1				None	
Inert Waste Type 2				Plastics only	
Special Waste Type 1 (Asbestos waste)	-		-	None	
Special Waste Type 2 (Biomedical waste)				Biomedical/clinical waste which is radioactive must not be accepted ²	
Contaminated solid waste				Must meet the acceptance criteria for Class I or II landfills	
Septage wastes (waste code K210)		N/A			
Waste from grease traps resulting from food preparation (waste code K110) Fire debris and washwater (waste code N140) Stormwater, pond water and low strength wastewater	- N/A		Combined total of 200 tonnes	None	

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

Note 2: Information relating to the classification of radioactive waste can be found in the Western Australian Radiation Safety Act 1975.

- 1.2.2 The Licensee shall ensure that where waste does not meet the waste acceptance criteria set out in condition 1.2.1 it is removed from the Premises by the delivery vehicle or, where that is not possible, stored in a quarantined storage area or container and removed to an appropriately authorised facility as soon as practicable.
- 1.2.3 The Licensee shall ensure that wastes accepted onto the Premises are only subjected to the processes set out in Table 1.2.2 and in accordance with any process limits described in that Table.

Table 1.2.2: Waste processing				
Waste type	Process(es)	Process limits ^{1, 2}		
All solid waste (excluding hazardous waste)	Disposal of waste by landfilling	 No Wastes shall be disposed of in a defined trench and within an area enclosed by earthen bunds No waste shall be temporarily stored or landfilled within 15 metres from the boundary of the premises. The separation distance between the base of the landfill and the highest groundwater level shall not be less than 3m. The separation distance between any existing or new tipping areas and any naturally occurring surface water body shall not be less than 100 metres. 		
Green waste	Receipt, handling,	 No more than 1000m³ stored at any one time Stored in piles of up to 4m in height with a 6m fire 		



Table 1.2.2: Waste	Table 1.2.2: Waste processing					
Waste type	Process(es)	Process limits ^{1, 2}				
Hazardous Wastes	associated storage prior to removal offsite.	 break between piles All mulched green waste shall be stored in windrows Windrows with an internal temperature exceeding 80 degrees Celsius shall be turned/mixed, or otherwise treated to reduce the temperature. Windrows are to be maintained as parallel rows no more than 3 meters high or 4 metres wide and separated by at least 5 metres of clear ground from any other row. Directed to a quarantined storage area or container The licensee shall immediately recover or remove and dispose of spills of hazardous wastes outside of a quarantined storage area or container. 				
Special Waste Type 1 (Asbestos waste)	Receipt, handling, associated storage and disposal of waste by landfilling	 Only to be disposed of into a designated asbestos disposal area within the landfill; and Not to be deposited within 2m of the final tipping surface of the landfill. No works shall be carried out on the landfill that could lead to a disturbance of Special Waste Type 1. 				
Special Waste Type 2 (Biomedical waste)	Receipt, handling, associated storage and disposal of waste by landfilling	 Buried in a designated Special Waste Type 2 area where access is restricted to authorised personnel only. No works shall be carried out on the landfill that could lead to a disturbance of Special Waste Type 2. 				
Septage wastes (waste code K210) Waste from grease traps (waste code K110) Fire debris and washwater (waste code N140) Stormwater, pond water and low strength wastewater	Receipt and storage / evaporation	Liquid wastes shall be directed to an evaporation pond.				

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.*

1.2.4 The Licensee shall ensure that waste material is only stored and/or treated within vessels or compounds provided with the infrastructure detailed in Table 1.3.3.

Table 1.2.3: Containment infrastructure				
Vessel or compound Material Requirements				
Evaporation pond	Liquid waste	In situ clays.		



1.2.5 The Licensee shall ensure that cover is applied and maintained on landfilled wastes in accordance with Table 1.2.4 and that sufficient stockpiles of cover are maintained on site at all times.

Table 1.2.4: Cover requirements ¹					
Waste Type	Material	Depth	Timescales		
Special Waste		300mm	As soon as practicable after deposit and prior to compaction.		
Type 1		1000mm	By the end of the working day in which the asbestos waste was deposited.		
Special Waste Type 2	Type 1 Inert waste or soil	1000 mm	Immediately.		
Putrescible waste,		230mm	By the end of the working day in which municipal waste was deposited.		
Inert waste type 2		1000 mm	Within 3 months of achieving final waste contours.		

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

- 1.2.6 The Licensee shall implement the following security measures at the site:
 - (a) erect and maintain suitable fencing to prevent unauthorised access to the site; and
 - (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.
- 1.2.7 The Licensee shall take all reasonable and practical measures to ensure that no wind-blown waste escapes from the Premises and that wind-blown waste is collected on at least a weekly basis and returned to the tipping area.
- 1.2.8 The Licensee shall ensure that no waste is burnt on the Premises.
- 1.2.9 The Licensee shall ensure that there are appropriate procedures in place at the Premises so that any unauthorised fire is promptly extinguished.
- 1.2.10 The licensee shall install and maintain a sign at the entrance to the premises which clearly displays (a) Hours of operation
 - (b) Contact telephone number for information and complaints or notification of fires
 - (c) A list of materials accepted for recycling and the location of where they can be deposited on the premises
 - (d) Types of wastes not accepted by the premises and a contact number for alternative disposal options; and
 - (e) A warning indicating penalties for people lighting fires.
- 1.2.11 The Licensee shall manage the evaporation pond such that:
 - (a) overtopping of the pond does not occur;
 - (b) stormwater runoff is prevented from entering the pond;
 - (c) there is no discernible seepage loss from the pond; and
 - (d) vegetation and floating debris (emergent or otherwise) is prevented from growing or accumulating in the pond.
- 1.2.12 The Licensee shall comply with the document titled 'Asbestos Management Plan Merredin-Chandler Road Landfill, Merredin Shire Council' dated October 2015.
- 1.2.13 The Licensee shall construct the new animal pit in accordance with the document titled 'Application form: works approval/licence' dated 8 January 2016



2 Monitoring

2.1 Monitoring of inputs and outputs

2.1.1 The Licensee shall undertake the monitoring in Table 2.1.1 according to the specifications in that table.

Table 2.1.1: Monitoring of inputs and outputs					
Input/Output	Parameter	Units	Averaging period	Frequency	
Waste Inputs	Putrescible waste, Green waste, Hazardous waste, Inert waste type 1 and 2, Clean Fill, special waste type 1 and 2, liquid wastes.	m³	N/A	Each load arriving at the Premises	
Waste Outputs	Waste type as defined in the Landfill Definitions			Each load leaving or rejected from the Premises	

2.2 Process monitoring

2.2.1 The Licensee shall undertake the monitoring in Table 2.2.1 according to the specifications in that table.

Table 2.2.1: Process monitoring					
Monitoring point reference	Process description	Parameter	Units	Frequency	Method
-	Mulched green waste	Temperature	°C	Weekly	None specified



3 Information

3.1 Records

- 3.1.1 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 3.1.1(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.
- 3.1.2 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.
- 3.1.3 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.
- 3.1.4 The Licensee shall maintain a register of Special Waste Type 1 and Type 2 disposed of at the Premises which shall include a plan showing the position of Special Waste Type 1 and Type 2 disposed of at the Premises.

3.2 Reporting

3.2.1 The Licensee shall submit to the CEO an Annual Environmental Report within 61 calendar days after the end of the annual period. The report shall contain the information listed in Table 3.2.1 in the format or form specified in that table.

Table 3.2.1: Annual Condition or table (if relevant)	Parameter	Format or form ¹
-	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	
1.3.3 3.1.4	Details of the landfill cells used for active filling Copy of the plan showing asbestos and clinical waste burial	None specified
1.2.8	Summary of unauthorised fires Measures taken to control pests and vermin	
Table 2.1.1	Summary of inputs and outputs	Annual Audit Compliance Report (AACR)
3.1.3	Compliance	Annual Audit Compliance Report (AACR)
3.1.4	Complaints summary	None specified

Note 1: Forms are in Schedule 2

3.2.2 The Licensee shall ensure that the Annual Environmental Report also contains an assessment of the information contained within the report against previous monitoring results and Licence limits.



- 3.2.3 The Licensee shall submit a compliance document to the CEO, following the construction of works described in condition 1.2.13 and 4 weeks prior to commissioning of the same.
- 3.2.4 The compliance document shall:
 - (a) certify that the works were constructed in accordance with the conditions of the licence
 - (b) be signed by a person authorised to represent the Licensee and contain the printed name and position of that person within the company.

3.3 Notification

3.3.1 The Licensee shall ensure that the parameters listed in Table 3.3.1 are notified to the CEO and in accordance with the notification requirements of the table.

Table 3.3.1: Notification requirements			
Condition or table (if relevant)	Parameter	Notification requirement ¹	Format or form ²
1.2.8	Unauthorised fire	Within 14 days of unauthorised fire	None specified
2.1.1	Breach of any limit specified in the Licence	Part A: As soon as practicable but no later than 5pm of the next usual working day. Part B: As soon as practicable	N1

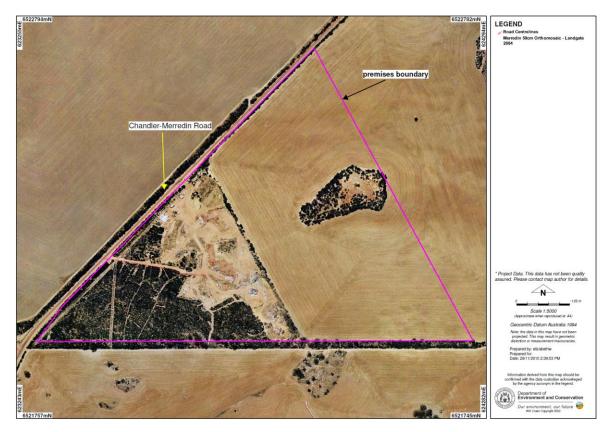
Note 1: Notification requirement in the Licence shall not negate the requirement to comply with s72 of the Act. Note 2: Forms are in Schedule 2



Schedule 1: Maps

Premises map

The Premises is shown in the map below. The pink 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.

ANNUAL AUDIT COMPLIANCE REPORT PROFORMA

SECTION A LICENCE DETAILS

Licence Number:		Licence File Number:
Company Name:		ABN:
Trading as:		
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 D Please proceed to Section C

No D 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 cor	npliance?:	
e) Summary of particulars of the non compliance, and what was th	e 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:



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:
	by the individual licence holder, or
An individual	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	by the principal executive officer of the licensee; or
unincorporated company	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.
	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
A corporation	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 outbority	by the principal executive officer of the licensee; or
A public authority (other than a local government)	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
a local government	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:	SIGNATURE:
NAME: (printed)	NAME: (printed)
POSITION:	POSITION:
DATE:///	DATE:///
SEAL (if signing under seal)	



Government of Western Australia Department of Environment Regulation

Licence: Form: L8513/2010/2 N1 Licensee: Shire of Merredin 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		



T UIT D		
Any more accurate information on notification under Part A.	the matters for	
Measures taken, or intended to be prevent a recurrence of the incider		
Measures taken, or intended to be limit or prevent any pollution of the which has been or may be caused	environment	
The dates of any previous N1 notif Premises in the preceding 24 mon		

Name	
Post	
Signature on behalf of	
Shire of Merredin	
Date	



Decision Document

Environmental Protection Act 1986, Part V

Proponent:	Shire of Merredin
Licence:	L8513/2010/2
Registered office:	Shire of Merredin Administration Centre corner of King & Barrack Streets MERREDIN WA 6415
Premises address:	Merredin Chandler Road Landfill MERREDIN WA 6415 being Lot 500 on Plan 66111 Chandler Road
Issue date:	Thursday, 05 February 2015
Commencement date:	Sunday, 08 February 2015
Expiry date:	Wednesday, 07 February 2035

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.

Decision Document prepared by:

Melissa Chamberlain Licensing Officer

Decision Document authorised by:

Alan Kietzmann Manager Licensing



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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.



2 Administrative summary

Administrative details						
Application type	Works Approval New Licence Licence amendmer Works Approval an		ent			
	Category number	(s)	Assessed design capacity			
Activities that cause the premises to become prescribed premises	61		200 tonnes per annual period			
	62		2 000 tonnes per annual period			
	64		5 000 tonnes per annual period			
Application verified	Date: N/A					
Application fee paid	Date: N/A					
Works Approval has been complied with	Yes No	N/A	\mathbb{N}			
Compliance Certificate received	Yes No	N/A	\mathbb{N}			
Commercial-in-confidence claim	Yes No					
Commercial-in-confidence claim outcome						
Is the proposal a Major Resource Project?	Yes No	I				
Was the proposal referred to the Environmental	Yes No		rral decision No:			
Protection Authority (EPA) under Part IV of the Environmental Protection Act 1986?			aged under Part V			
Is the proposal subject to Ministerial Conditions?	Yes No	winis	terial statement No:			
		EPA	Report No:			
Does the proposal involve a discharge of waste	Yes No	1				
into a designated area (as defined in section 57 of the <i>Environmental Protection Act 1986</i>)?						
Is the Premises within an Environmental Protection Policy (EPP) Area Yes No						
If Yes include details of which EPP(s) here.						
Is the Premises subject to any EPP requirements?	Yes No					
If Yes, include details here, eg Site is subject to SO ₂ requirements of Kwinana EPP.						



3 Executive summary of proposal and assessment

The Merredin Chandler Road Landfill is located on Lot 500 on Plan 66111, Chandler Road in the Shire of Merredin ('The Shire'). The premises is approximately 260 kilometres (km) east of Perth, and 6 km north of the Merredin town site. The average yearly rainfall is 314 millimeters (mm) and average monthly evaporation is 180 mm.

The site is located on the Yilgarn Craton, which is characterised predominately by granite rock overlain by weathered clay soils. Testing on site has shown high clay pindan soils to a depth of approximately 18 metres (m), with hypersaline groundwater located at approximately 14 to 20 m (most recent electrical conductivity results of 2160 mS/m). The Shire has estimated that groundwater flows from the north to the south west.

There are no permanent water bodies within 1 km of the site. There are a number of creeks which flow intermittently, the closest of which are located 750 m to the south east of the premises. The Shire advised there are no domestic or industrial uses of groundwater within 2 km of the premises, and the groundwater is proven to be highly saline in nature.

The site receives waste from residents and commercial contractors from within the boundaries of the Shire of Merredin. The site also receives, on occasion, C&D waste, ACM and other general waste from outside the bounds of the Shire of Merredin. Some waste types are stockpiled onsite, such as recyclable paper, cardboard, plastics, batteries and green waste. These wastes are stored and then taken off-site by Avon Waste, once a sizable load is accumulated (approximately every few months). Green waste is stockpiled to be chipped and is then taken away by members of the public.

Liquid wastes are directed to an evaporation pond lined with in-situ clays. All other wastes are buried in the landfill. The landfill uses a trench and fill method where a hole is dug and backfilled with waste using the excavated material as cover. Special Waste Type 1 and 2 are disposed in designated areas with restricted access.

The main potential emission from the premises is leachate from the stored and landfilled wastes. The potential for leachate to impact groundwater or surface water is limited due to the distance to groundwater and the thickness and permeability of clay as indicated in sample bores constructed at the premises.

There is also potential for fugitive dust and odour to be emitted from the premises; however the emissions and potential impacts are likely to be low due to the proximity to sensitive receptors, sealed roads and site management practices including the use of vegetative buffer zones.

This licence is the result of an amendment sought by the Licensee to construct and operate a new animal burial pit. The pit will be approximately 7 m wide, 7 m long and 4 m deep and inclusive of a small vehicle access ramp. The pit will be surreounded by 1.8 m high fencing with a lockable gate. This amendment does not result in a change of activities, throughput, emissions or discharges. A number of DER initiated amendments have also been made to ensure consistency with licence templates.



4 Decision table

All applications are assessed in line with the *Environmental Protection Act 1986*, 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 TABL			
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
Interpretation/ General Conditions	N/A	 Previous condition 1.1.5 is removed as it is an explanatory statement and not a valid or enforceable condition. Previous conditions 1.2.1 and 1.2.2 are removed as they are not enforceable as they are not sufficiently clear or certain. The requirements of previous condition 1.2.2 have been replicated in Table 1.2.2 to specifically refer to spills of hazardous waste types. Previous condition 1.2.5 is removed as it is unclear what stormwater infrastructure is required, or what specific management actions are required. As there are no longer conditions under the heading '1.2 General Conditions' this has been removed. 	L8513/2010/2
Premises operation	L1.2.13	Condition 1.2.13 requires that the new animal pit is constructed in accordance with the document titled 'Application form: works approval/licence' dated 8 January 2016 so that works undertaken are consistent with those assessed for this amendment.	'Application form: works approval/licence' dated 8 January 2016
Emissions to Groundwater	N/A	Emission Description Emission: Leachates from the decomposition of animal bodies. Impact: Leachates may enter groundwater in the area. Controls: The animal pit will be lined with in-situ clays. The Shire expects that the permeability of these soil is low, in the vicinity of <1.0x10 ⁻⁹ m/s. The pit is to a depth of 4 m which maintains a minimum distance of 7 m to groundwater which	L8513/2010/2

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		is found at 14-20 m.	
		Risk Assessment Consequence: Minor Likelihood: Unlikely Risk Rating: Low	
		Regulatory Controls Due to the low risk of leachates migrating to groundwater no specific conditions relating to emissions to groundwater are required.	
		Current condition 1.2.3 requires that Special Waste Type 2 is buried in a designated Special Waste Type 2 disposal area, and no works shall be carried out on the landfill that oculd lead to a disturbance of Special Waste Type 2.	
		Residual Risk Consequence: Minor Likelihood: Unlikely Risk Rating: Low	
Fugitive emissions	N/A	Construction and operation of the animal pit is not expected to cause significant dust emissions.	N/A
Odour	N/A	Emission Description Emission: Odour from receipt and disposal of animal bodies. Impact: Odour can negatively impact on the welfare and amenity of those on nearby properties. There are no sensitive receptors within 2 km of the premises. Controls: Special Waste Type 2 is immediately covered with 1000 mm of Type 1 inert waste or soil.	Supporting documentation General provisions of the <i>Environmental</i> <i>Protection Act</i>
		Risk Assessment Consequence: Minor Likelihood: Possible Risk Rating: Low	1986.
		Regulatory Controls Condition 1.2.5 and Table 1.2.4 require the licensee to immediately cover	

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		Special Waste Type 2 with 1000 mm of Type 1 inert waste or soil.	
		This assessment has determined the risk of odour being low and any associated emssions can be suitably regulated under section 49 of the <i>Environmental Protection Act 1986</i> .	
		Risk Assessment Consequence: Minor Likelihood: Possible	
		Risk Rating: Low	
Noise	N/A	Construction and operation are not expected to cause significant noise emissions.	N/A
Information	N/A	Previous condition 3.1.2 is removed as it is not enforceable as the requirements for compliance are not clear.	N/A
	L3.2.3-3.2.4	Condition 3.2.3 requires the licensee to submit a compliance document following construction of the works to certify that works are constructed as specified. The condition requires the documents to be submitted 4 weeks before commissioning to provide DER with enough notification to review the documentation before the pit is in use.	
		Condition 3.2.4 specifies the requirements of the compliance document.	
Licence duration	N/A	The licence duration has been extended to 20 years from the original issue date as a full assessment of the premises was recently undertaken and there are no factors which otherwise limit the licence duration.	Department of Environment Regulation, Guidance Statement, Licence Duraiton, November 2014 (revised May
			(revised Ma 2015).



5 Advertisement and consultation table

Date	Event	Comments received/Notes	How comments were taken into
			consideration
28/01/2016	Proponent sent a copy of draft	No comments received, waiver form signed	Licence amendment progressed to issue as
20/01/2010	instrument	and returned on 1/2/2016	soon as possible.

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6 Risk Assessment

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

Table 1	:	Emissions	Risk	Matrix
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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