

# Licence

# Environmental Protection Act 1986, Part V

### Licensee: Waste Stream Management Pty Ltd

### Licence: L6772/1997/13

Registered office: 22 Railway Parade Subiaco WA 6008

**ACN:** 069 513 346

Premises address:	Waste Stream Management Ratcliffe Road Kwinana Beach WA 6167 Being Lot 304 on Diagram 72808 and Lot 434 on Plan 220492 as depicted in Schedule 1.
Issue date:	Thursday 23 July 2015
Commencement date:	Saturday 25 July 2015

Expiry date: Sunday, 24 July 2016

#### Prescribed premises category

Schedule 1 of the Environmental Protection Regulations 1987

Category number	Category description	Category production or design capacity	Approved Premises production or design capacity
13	Crushing of building material: premises on which waste building or demolition material (for example, bricks, stones or concrete) is crushed or cleaned	1000 tonnes or more per year	90,000 tonnes per annual period
61A	Solid waste facility: premises (other than premises within category 67A) on which solid waste produced on other premises is stored, reprocessed, treated, or discharged onto land	1000 tonnes or more per year	100,000 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	90,000 tonnes per annual period
63	Class I inert landfill site: premises on which waste (as determined by reference to the waste types set out in the document entitled "Landfill Waste Classification and Waste Definitions 1996" published by the CEO and as amended from time to time) is accepted for burial.	500 tonnes or more per year	500,000 tonnes per annual period



70	Screening etc, of material: premises on which material extracted from the ground is screened, washed, crushed, ground, milled, sized or separated.	More than 5000 but less than 50 000 tonnes per year	50,000 tonnes per annual period
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### Conditions

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

Ruth Dowd

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 company has operated at the Waste Stream Management (WSM) premises in Kwinana since 1997, and leases the premises from the Town of Kwinana. The premise is approximately 29ha in size and located ~ 1.9km from the town site of Kwinana. Landfilling activities ceased on Lot 304 in 2008 and it is currently being rehabilitated with native vegetation, although it still comprises of licensed activities related to the solid waste depot and crushing of building material. Class I Landfill activities are now restricted to Lot 434.

The premise is bordered to the north by rural and recreational land, to the east by parks and recreation bushland areas, to the south by Thomas Road, and to the west by Rockingham Road. The Kwinana Industrial Area is located ~ 500m to the west of the premises on the other side of Rockingham Road. An urban residential area (Medina) is located south east of the premises, with the closest residence being approximately 1.9 km south of the WSM site.

Lots 304 and 434 are located within the Swan Coastal Plain within the Spearwood Dune System on associated sands and limestone. The closest Environmentally Sensitive Area (ESA) to the WSM premises is Bush Forever Site 349, known as 'Leda and Adjacent Bushland, Leda located south of the premises on the opposite side of Thomas Rd. The nearest mapped wetland is the Mounsey Road Resource Enhancement Wetland (REW), located ~ 820m south of the premises. The prescribed activities are not considered likely to impact on nearby ESA due to the activities on site; distance to nearby ESA and groundwater flow is in a south-westerly direction.

The main activities on site include screening of limestone, crushing of building material, shredding of green waste and disposal of asbestos and inert waste landfilling. The main potential emissions from the site are fugitive emissions in the form of dust. The site implements a number of dust management measures such as the use of a purpose built water cart and fixed sprinklers on roadways and batters.

This Licence is the successor to licence L6772/1997/12 and includes changes which reflects revised licence template and DER Director General's instructions.

Instrument log		
Instrument	Issued	Description
L6772/1997/4	16/07/2000	Licence re-issue
L6772/1997/5	27/07/2001	Licence re-issue
L6772/1997/6	31/07/2002	Licence re-issue
L6772/1997/7	21/07/2003	Licence re-issue
L6772/1997/8	17/08/2004	Licence re-issue
L6772/1997/9	22/7/2006	Licence re-issue
L6772/1997/10	19/07/2007	Licence re-issue
L6772/1997/11	16/07/2009	Licence re-issue
L6772/1997/12	21/05/2015	Licence amendment to authorise the construction of an ASS
		treatment facility.
L6772/1997/13	23/07/2015	Licence reissue

The licences issued for the Premises are:



#### 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;

"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);

"AHD" means the Australian height datum;

"Acceptance Criteria" has the meaning defined in Landfill Waste Classification and Waste Definitions 1996 published by DEC and as amended from time to time;

"annual period" means the inclusive period from 1 July until 30 June 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 as defined in the Environmental Protection (Controlled Waste) Regulations 2004;

"asbestos" means the asbestiform variety of mineral silicates belonging to the serpentine or amphibole groups of rock-forming minerals and includes actinolite, amosite, anthophyllite, chrysolite, crocidolite, tremolite and any mixture containing 2 or more of those;

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

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

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

"AS 1940" means the current version of Australian Standard AS 1940 The storage and handling of flammable and combustible liquids.

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

"Clean Fill" has the meaning defined in Landfill Waste Classification and Waste Definitions 1996 published by DEC and as amended from time to time;

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



"CEO" for the purpose of correspondence means;

Manager Licensing (Waste Industries) Department of Environment Regulation Locked Bag 33 CLOISTERS SQUARE WA 6850 Telephone: (08) 9333 7510 Facsimile: (08) 9333 7550 Email: industry.regulation@der.wa.gov.au;

"**DEC Asbestos Guidelines**" means the current version of the *Guidelines for managing asbestos at construction and demolition waste recycling facilities*;

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

"disposal site" means a premises licenced under Part V of the *Environmental Protection Act 1986* to accept that waste;

"garden waste or green waste" means biodegradable waste comprising plants and their component parts such as flower cuttings, hedge trimmings, branches, grass, leaves, plants, seeds, shrub and tree loppings, tree trunks, tree stumps and similar materials and includes any mixture of those materials;

"green waste storage area" means any area where garden waste or green waste is stored pending processing, and/or any area where there is a mulched garden waste or green waste windrow;

"hydrocarbons" means the subset of organic compounds that consist entirely of carbon and hydrogen such as methane ( $CH_4$  – the main component of natural gas) and petroleum products including petrol, diesel, lubricating oils and fuel oils; it should be noted that hydrocarbons may contain other (minor) impurities within their bulk such as oxygen, sulfur, chlorine or nitrogen containing compounds and various metals, either intentionally added (as with molybdenum sulfide – a lubricant) or as residue from refining or operational use;

"Inert Waste Type 1" has the meaning defined in Landfill Waste Classification and Waste Definitions 1996 published by the CEO and as amended from time to time;

"Inert Waste Type 2" has the meaning defined in Landfill Waste Classification and Waste Definitions 1996 published by DEC and as amended from time to time;

"Licence" means this licence numbered L6772/1997/12 and issued under the *Environmental Protection Act 1986*;

"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;

"placard quantity" has the meaning defined in the Dangerous Goods Safety (Storage and Handling of Non-explosives) Regulations 2007;

"practicable" is as defined in the Environmental Protection Act 1986.

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



**"Special Waste Type 1"** has the meaning defined in Landfill Waste Classification and Waste Definitions 1996 published by DEC and as amended from time to time;

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

"SWL" means the standing water level prior to sampling and expressed in metres AHD;

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

"waste" has the meaning defined in the Environmental Protection Act 1986.

"windrows" mean parallel rows of mulched green waste where each row is no more than 3 metres high and no more than 4 metres wide and separated by at least 2.5 metres of clear ground from any other row; and

- 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; and
  - (b) treat contaminated or potentially contaminated stormwater as necessary prior to being discharged from the Premises.<sup>1</sup>

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

1.2.4 The Licensee shall ensure that the pH of the water from the leachate sump in the acid sulphate soil treatment area is between 6.5 and 8.5 prior to discharge to the drainage system on the site.

### 1.3 Premises operation

- 1.3.1 The Licensee shall only accept waste on to the Premises if:
  - (a) it is of a type listed in Table 1.3.1;
  - (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
  - (d) in the case of contaminated solid waste is supported by documentation that demonstrates compliance with the acceptance criteria for an inert Class 1 landfill



values in Tables 3, 4 and 5 of the document titled *Landfill Waste Classification and Waste Definitions 1996 (As amended December 2009)* for an inert class 1 landfill;

Table 1.3.1: Waste acceptance		
Waste type	Quantity limit tonnes/ year	Specification <sup>1</sup>
Inert Waste Type 1		None specified
Inert Waste Type 2	]	Tyres and plastic only
Clean Fill	500,000	None specified
Special Waste Type 1 (asbestos)		Cement bonded asbestos. No fibrous asbestos shall be accepted.
Green Waste	90,000	None specified
Acid Sulphate Soils	100,000	None Specified

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.

- 1.3.2 The Licensee shall ensure that where waste does not meet the waste acceptance criteria set out in condition 1.3.1 it is removed from the Premises by the delivery vehicle or, where that is not possible, stored in a quarantined storage area or container and removed to an appropriately authorised facility as soon as practicable.
- 1.3.3 The Licensee shall ensure that wastes accepted onto the Premises are only subjected to the process (es) set out in Table 1.3.3 and in accordance with any process limits described in that Table.

Table 1.3.3: Waste	Table 1.3.3: Waste processing					
Waste type	Process(es)	Process limits <sup>1, 2</sup>				
	Receipt, handling and storage of waste prior to crushing.	Construction and demolition waste containing visible asbestos or ACM shall not be processed for crushing purposes.				
Inert Waste Type 1	Mechanical treatment consisting only of crushing and cleaning.	None specified.				
	Storage of crushed materials	Treated materials shall only be stored within designated storage bays provided with dust control measures.				
		<ul> <li><u>All waste types</u></li> <li>(i) Disposal of waste by landfilling shall only take place within the landfill area depicted by the pink line in the Landfill Area Map Schedule 1.</li> </ul>				
Inert Waste Type 1 & Inert Waste Type	Receipt, handling and disposal of waste by landfilling	(ii) The separation distance between the base of the landfill and the highest groundwater level shall not be less than 1.2 metres				
2		<ul> <li>Special Waste Type 1</li> <li>accept only Asbestos Waste and Material containing asbestos which is sealed in double-lined or double-bagged, heavy duty plastic sheeting of at least 0.2 millimetres thickness;</li> </ul>				



Table 1.3.3: Waste processing				
Waste type	Process(es)	Process limits <sup>1, 2</sup>		
		<ul> <li>(ii) accept only wrapped or otherwise contained Asbestos Waste or Material containing asbestos, which is labeled or marked with the words "CAUTION – ASBESTOS" in letters not less than fifty (50) millimetres high;</li> <li>(iii) as soon as practicable and before compaction, cover the asbestos or material containing asbestos with a layer of soil at least 300 millimetres thick or with a layer of dense, inert and incombustible material at least 1 metre thick;</li> <li>(iv) record as grid references on a premises plan all locations used for the disposal of Asbestos Waste or Material containing asbestos and keep this plan as a permanent record;</li> <li>(v) keep a permanent register of each load of Asbestos Waste or Material containing asbestos or Material containing asbestos deposited at the premises, including the date, the name of person that deposited the Asbestos or Material containing asbestos Waste or Material containing asbestos and sign the register referred to in (v) within two (2) hours of the covering taking place;</li> <li>(vii) operate the landfill such that any existing Asbestos Waste or Material containing asbestos deposited on the premises remains undisturbed; and</li> <li>(ix) make all records available for viewing by an Inspector</li> </ul>		
Green Waste	Receipt, handling and storage prior to disposal or re- use	<ul> <li>upon request.</li> <li>(i) no greater than 250 m<sup>3</sup> of garden waste or green waste shall be stored at the premises at any one time;</li> <li>(ii) no greater than 1,250 m<sup>3</sup> of mulched garden waste or green waste shall be stored at the premises at any one time;</li> <li>(iii) all mulched garden waste or green waste shall be stored in windrows;</li> <li>(iv) temperatures within mulched garden waste or green waste windrows are monitored and managed to prevent self combustion;</li> <li>(v) all mulched and non-mulched garden waste and green waste storage areas are on a base of compacted limestone; and</li> <li>(vi) a five metre fire break shall be maintained around mulched and non-mulched garden waste and green waste storage areas.</li> </ul>		
Acid Sulphate Soils	Receipt, handling and storage prior to disposal or re- use	The licensee shall receive, handle and store acid sulphate soils in the designated acid sulphate soil treatment area as detailed in Waste Stream Management Pty Ltd Acid Sulphate Soil Treatment and Environmental Management Document, August 2014.		

Note 1: Requirements for landfilling tyres are set out in Part 6 of the Environmental Protection Regulations1987. 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 manage the landfilling activities to ensure:
  - (a) waste is levelled and compacted as soon as practicable after it is discharged; and
  - (b) waste is placed and compacted to ensure all faces are stable and capable of retaining rehabilitation material; and
  - (c) rehabilitation of a cell or phase takes place within 6 months after disposal in that cell or phase has been completed.
- 1.3.5 The Licensee shall ensure that cover is applied and maintained on landfilled wastes in accordance with Table 1.3.5 and that sufficient stockpiles of cover are maintained on site at all times.

Table 1.3.5: Cover requirements <sup>1</sup>					
Waste Type	Material	Depth	Timescales		
Special Waste	Type 1 Inert	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		
	waste or soil		By the end of the working day in which the waste was deposited.		
Inert Waste Type 2		100mm	Plastic waste with the potential to become windblown shall be covered as soon as practicable after deposit.		
Inort Wasto Type 1	No covor rogu	uirod			

Inert Waste Type 1 No cover required

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

1.3.6 The Licensee shall :

- (a) implement security measures at the site to prevent as far as is practical unauthorised access to the site;
- (b) undertake regular inspections of all security measures and repair damage as soon as practicable; and
- (c) ensure the entrance gates are closed and locked when the site is closed.
- 1.3.7 The Licensee shall ensure that wind-blown waste is contained within the boundary of the Premises and that wind-blown waste is returned to the tipping area on at least a weekly basis.
- 1.3.8 The licensee shall not burn or allow the burning of waste at the premises.
- 1.3.9 The licensee shall store liquid hydrocarbons within a facility with a floor and bunds of a permeability of less than 1x10<sup>-9</sup> metres per second, designed to contain 110% of the volume of the stored hydrocarbons and sufficient additional capacity to ensure hydrocarbons are not discharged beyond the bunds during rainfall events.
- 1.3.10 The licensee shall undertake activities on the Premises and manage asbestos and ACM in accordance with the Asbestos Management Plan Waste Stream Management Pty Ltd C&D Asbestos Management at WSM and ACH facility, Ratcliffe Rd, Medina, WA June 2013.
- 1.3.11 The licensee shall establish and maintain internal buffer distances of:
  - (i) 10 metres at the northern and southern premises boundaries;
  - (ii) 25 metres at the eastern premises boundary; and
  - (iii) a minimum 5 metres at the western premises boundary.
- 1.3.12 The Licensee shall install and maintain a sign at the entrance to the Premises which clearly displays the following information:
  - (a) hours of operation;
  - (b) contact telephone number;
  - (c) a warning indicating penalties for people lighting fires;



- (d) list of materials accepted for recycling and the location of where they can be deposited on the premises.
- 1.3.13 The Licensee shall ensure that the treatment of acid sulfate soils is conducted according to the provisions of the Waste Stream Management Acid Sulfate Soil Treatment and Environmental Management Document August 2014.

### 2 Monitoring

### 2.1 General Monitoring

- 2.1.1 The licensee shall ensure that:
  - (a) all water samples are collected and preserved in accordance with AS/NZS 5667.1;
  - (b) all groundwater sampling is conducted in accordance with AS/NZS 5667.11; and
  - (c) all laboratory samples are submitted to and tested by a laboratory with current NATA accreditation for the parameters being measured [unless indicated otherwise in the relevant table].
- 2.1.2 The Licensee shall ensure that:
  - (a) six monthly monitoring is undertaken at least 5 months apart; and
  - (b) annual monitoring is undertaken at least 9 months apart.
- 2.1.3 The Licensee shall ensure that all monitoring equipment used on the Premises to comply with the conditions of this Licence is calibrated in accordance with the manufacturer's specifications and the requirements of the Licence.
- 2.1.4 The Licensee shall, where the requirements for calibration cannot be practicably met, or a discrepancy exists in the interpretation of the requirements, bring these issues to the attention of the CEO accompanied with a report comprising details of any modifications to the methods.

### 2.2 Monitoring of inputs and outputs

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: Monitoring of inputs and outputs					
Input/Output	Parameter	Units	Averaging period	Frequency	
Waste Inputs	Inert 1, Inert 2, Special Waste 1, Clean Fill, and Green Waste, Acid Sulphate Soil	tonnes (where a weighbridge is present on the site)	N/A	Each load arriving at the Premises	
Waste Outputs	Waste type as defined in the Landfill Definitions	m <sup>3</sup> (where no weighbridge is present)		Each load leaving or rejected from the Premises	



### 2.3 Ambient environmental quality monitoring

2.3.1 The Licensee shall undertake the monitoring in Table 2.3.1 according to the specifications in that table.

Table 2.3.1 M	onitoring of ambient groundwater quality			
Monitoring	Parameter	Units	Averaging	Frequency
point			period	1 -
reference &				
location				
	Ammonia-Nitrogen (NH <sub>3</sub> -N)	mg/L	Spot sample	
	COD (Chemical Oxygen demand)	mg/L	Spot sample	
	Nitrate Nitrogen NO <sub>3</sub> -N	mg/L	Spot sample	
	Nitrite Nitrogen NO <sub>2</sub> -N	mg/L	Spot sample	
	Phosphorus (total)	mg/L	Spot sample	-
	Nitrogen (total)	mg/L	Spot sample	
TMP1A –	TDS (Total Dissolved Solids)	mg/L	Spot sample	_
shallow,	TOC (Total Organic Carbon)	mg/L	Spot sample	
intermediate	Calcium	mg/L	Spot sample	_
deep	Magnesium	mg/L	Spot sample	
TMP2 –	Potassium	mg/L	Spot sample	_
shallow,	Sodium	mg/L	Spot sample	
intermediate	Chloride	mg/L	Spot sample	
deep	Bicarbonate	mg/L	Spot sample	
deep	Sulphate	mg/L	Spot sample	
TMP3 –	Aluminium	mg/L	Spot sample	Six Monthly
shallow,	Arsenic	mg/L	Spot sample	Six Monthly
intermediate	Cadmium	mg/L	Spot sample	
deep	Chromium	mg/L	Spot sample	
	Copper	mg/L	Spot sample	
TMP4 –	Iron (total)	mg/L	Spot sample	
shallow,	Lead	mg/L	Spot sample	
intermediate	Manganese	mg/L	Spot sample	
deep	Mercury	mg/L	Spot sample	
	Nickel	mg/L	Spot sample	
TMP5 –	Selenium	mg/L	Spot sample	
shallow,	Zinc	mg/L	Spot sample	
intermediate	pH*	pH units		
deep	Electrical Conductivity*	µS/cm	Spot sample	
THE	Standing Water Level (SWL)*	m(AHD)	Spot sample	
TMP6 –	Eh (redox potential)*	mV	Spot sample	
shallow,	Dissolved Oxygen	mg/L	Spot sample	
intermediate	Benzene	mg/L	Spot sample	
deep	Ethyl benzene	mg/L	Spot sample	
	Toluene	mg/L	Spot sample	
	Xylenes	mg/L	Spot sample	
	Total Petroleum Hydrocarbons	mg/L	Spot sample	
	Organochlorines	mg/L	Spot sample	Annually
	Organophosphates	mg/L	Spot sample	
	Phenols	mg/L	Spot sample	
	Polycyclic Aromatic Hydrocarbons (PAHs)	mg/L	Spot sample	
	Polychlorinated Biphenyls (PCB's)	mg/L	Spot sample	
	Total Petroleum Hydrocarbon (TPH)	mg/L	Spot sample	

\* Denotes infield measurements

# SWL shall be determined prior to collection of all other water samples.

Note 1: Six monthly sampling shall take place between February - April and August - October of each year.



### 3 Improvements

### 3.1 Improvement program

3.1.1 The Licensee, for improvements not specifically requiring a written submission, shall write to the CEO stating whether and how the Licensee is compliant with the improvement within one week of the completion date specified in Table 3.1.1.

Table 3.1.1: Improvement program				
Improvement reference	Improvement	Date of completion		
IR1	The Licensee shall construct the acid sulphate soil (ASS) treatment facility in accordance with the <i>Waste Stream</i> Management Acid Sulfate Soil Treatment and Environmental Management Document August 2014.	30/04/2016		
IR2	The Licensee shall submit a compliance document to the CEO, following the construction of the ASS treatment facility and prior to commissioning of the same.	-		

### 4 Information

### 4.1 Records

- 4.1.1 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.
- 4.1.2 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.
- 4.1.3 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.
- 4.1.4 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.

### 4.2 Reporting

4.2.1 The Licensee shall submit to the CEO an Annual Environmental Report within 28 calendar days after the end of the annual period. The report shall contain the information listed in Table 4.2.1 in the format or form specified in that table.



Table 4.2.1: Annual	Environmental Report	
Condition or table (if relevant)	Parameter	Format or form <sup>1</sup>
-	Summary of any failure or malfunction of any pollution control equipment and any environmental incidents that have occurred during the annual period and any action taken	None specified
Table 2.2.1	The volume of waste received at the premises during the reporting period	None specified
Table 2.2.1	The volume of waste rejected at the premises during the reporting period	None specified
Table 2.3.1	<ul> <li>Parameters as specified in Table 2.3.1. Ambient Groundwater Monitoring including;</li> <li>(i) a graph of the groundwater monitoring results obtained from the analysis showing a comparison of these results with historical data collected for this licence;</li> <li>(ii) interpretation of the monitoring results obtained from the analysis and</li> <li>(iii) comparison of the monitoring results obtained from the analysis and if any limits or targets are exceeded, include reasons for the exceedance(s) and actions taken by the licensee to prevent recurrence of such exceedances.</li> </ul>	None specified
3.1.3	Compliance	AACR
3.1.4	Complaints summary	None specified

Note 1: Forms are in Schedule 2

4.2.2 The Licensee shall ensure that the Annual Environmental Report also contains:

- (a) any relevant process, production or operational data recorded under Condition 2.1.3; and
  - (b) an assessment of the information contained within the report against previous monitoring results and Licence limits.
- 4.2.3 The Licensee shall submit the information in Table 4.2.3 to the CEO according to the specifications in that table.

Table 4.2.3: Non-annual reporting requirements				
Condition or table (if relevant)	Parameter	Reporting period	Reporting date (after end of the reporting period)	Format or form <sup>1</sup>
-	Copies of original monitoring reports submitted to the Licensee by third parties	Not Applicable	Within 14 days of the CEOs request	As received by the Licensee from third parties

Note 1: Forms are in Schedule 2



# Schedule 1: Maps

### Premises map

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



Plan showing boundaries of Lot 434 and lot 304, showing activities on each area. Monitoring bores are shown as TMP 1 to TMP 6  $\bigcirc$ 



# 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 🗌	Please proceed to Section (	С

No  $\Box$  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:	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:
	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)	



Licence:L6772/1997/12Licensee:Waste Stream Management Pty LtdForm:N1Date 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	
Signature on behalf of Xxxx Xxxx	
Date	



# **Decision Document**

# Environmental Protection Act 1986, Part V

Licensee:	Waste Stream Management Pty Ltd	
Licence:	L6772/1997/13	
Registered office:	22 Railway Parade Subiaco WA 6008	
ACN:	069 513 346	
Premises address:	Waste Stream Management Ratcliffe Road Kwinana Beach WA 6167 Being Part Lot 304 on Diagram 72808 and Lot 434 on Plan 220492 as depicted in Schedule 1.	
Issue date:	Thursday, 23 July 2015	
Commencement date:	Friday, 25 Saturday 2015	
Expiry date:	Sunday, 24 July 2016	

### 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:

Dr Bhabesh Das Senior Licensing Officer

Decision Document authorised by:

Caron Goodbourn A/Manager Licensing



# Contents

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# **1** Purpose of this Document

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



# Administrative summary

Administrative details			
Application type	Works ApprovalImage: Constraint of the second s		
	Category number(s)	Assessed design capacity	
	13	90,000 tonnes per annual period	
Activities that cause the premises to become	62	90,000 tonnes per annual period	
prescribed premises	63	500,000 tonnes per annual period	
	61A	100,000 tonnes per annual period	
	70	50 000 tonnes per annual period	
Application verified	Date: 19/05/2015		
Application fee paid	Date: 27/05/2015		
Works Approval has been complied with	Yes No	N/A	
Compliance Certificate received Yes No		N/A	
Commercial-in-confidence claim	Yes No		
Commercial-in-confidence claim outcome	N/A		
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	
Is the proposal subject to Ministerial Conditions?	Yes□ No⊠	Ministerial statement No: EPA Report No:	
Does the proposal involve a discharge of waste       Yes No         Into a designated area (as defined in section 57       Department of Water consulted Yes No         If the Environmental Protection Act 1986)?       Department of Water consulted Yes		consulted Yes 🗌 No 🛛	
Is the Premises within an Environmental Protection Policy (EPP) Area Yes No			
Is the Premises subject to any EPP requirements? Yes No			





### Executive summary of proposal and assessment

The Waste Stream Management facility (WSM), located at Part Lot 304 on Diagram 72808 and Lot 434 on Plan 220492 is approximately 29 ha in size and is located approximately 1.9 km from the Town site of Kwinana.

WSM is located within the Swan Coastal Plain and within the Spearwood Dune System on associated sands and limestone. The closest Environmentally Sensitive Area (ESA) to the WSM facility is Bush Forever Site 349, known as Leda and Adjacent Bushland, located south of the premises on the opposite side of Thomas Road. The nearest mapped wetland is the Mounsey Road Resource Enhancement Wetland (REW) located approximately 820m south of the premises. The depth to groundwater ranges from approximately 17.5m to 29m across the site and groundwater flow appears to be in a south-westerly direction across the site.

The main activities on site include Class I landfilling, crushing of building material, shredding of green waste, disposal by burial of asbestos, the treatment of acid sulphate soils (ASS) and screening of limestone.

The current licence allows the licensee to treat ASS according to the provisions of the Waste Stream Management Acid Sulphate Soil Treatment and Environmental Management document, August 2014. The document specifies the construction of an ASS treatment pad and leachate collection pond. The pad will be approximately 100 m long by 50 m wide and constructed with 300mm thick compacted limestone with perimeter bund. The pad will have a permeability of  $1 \times 10^{-9}$  m/s. The pad will be graded so that it drains to a HDPE lined leachate pond. The pond has a capacity of 20,000 Litres.

The Waste Stream Management Licence L6772/1997/12 is due to expire on 24 July 2015. As part of this reissue, DER has not re-assessed the acceptability or impacts of emissions and discharges from the Premises or re-visited any existing emission control levels. The changes to the licence include standard administrative changes and changes to reflect DER's revised licence template with Director General's instructions. A partial decision document has been completed for the reissue of this licence.

The current activities are described in Appendix A



### 4 Decision table

All applications are assessed in line with the *Environmental Protection Act 1986*, the *Environmental Protection Regulations 1987*, DEC's Policy Statement - Limits and targets for prescribed premises (2006), 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.

Licence section	Condition number	Justification (including risk description & decision methodology where relevant)	Reference documents
Template changes	-	<ul> <li>The licence has been updated from the previous licence to reflect changes to DER's licence template. Specifically the following changes have been made: <ul> <li>All references to REFIRE have been removed. This project has been incorporated into DER's Strategy and Reform group and it is no longer appropriate to reference in licences.</li> <li>Text referring to 'there are no specified conditions in this section' have been removed;</li> <li>Sections where there are no conditions have not been retained for numbering purposes. Condition numbers may therefore have changed from the previous version of the licence;</li> <li>Conditions that duplicate requirements of s72 have been removed.</li> <li>Generic fugitive emission conditions have been removed. These aspects are controlled directly by the Environmental Protection act 1986.</li> </ul> </li> </ul>	
Improvement	L3.1.1	Condition L3.1.1 has been added to the licence which requires the Licensee to submit a compliance document following the construction of the acid sulphate treatment facility and commissioning of the same.	
Information	L4.2.3 Condition L4.2.3 has been added to the licence. The condition relates to the submission of original monitoring reports at the request of CEO. There is requirement of ambient groundwater monitoring in the licence under condition L2.3.1 for groundwater quality assessment. Therefore, the addition of this condition is justified.		N/A
Licence duration	N/A	The licence is issued for a period of one. year	N/A



### 5 Advertisement and consultation table

Date	Event	Comments received/Notes	How comments were taken into consideration
8/06/2015	Advertised in West Australian	No submissions received	N/A
22/07/2015	Proponent sent draft instrument		DER was unable to provide the proponent with a draft licence to comment on prior to issue and the current licence expiring.
			The proponent has a right to appeal any condition imposed under this licence.



### 6 Risk Assessment

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

Table 1: Emissions R	isk 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



Appendix A

#### **Current activities on Site**

#### Class I Inert Landfill

The inert landfilling on site occurs in the void created by a limestone excavation on Lot 434. Construction and demolition waste arrives at the WSM site where it is checked, accepted and weighed over a weighbridge. Trucks are then directed to an unloading area where the material is unloaded and then spread and compacted by dozers. Any non-conforming waste identified at this time is separated out for removal off-site. Water is also added as required to assist with compaction and dust suppression. When clean fill is accepted it is set aside to be used as cover on the tip face and batters. Waste is buried at regular intervals and as soon as practicable during operating hours.

Asbestos from building sites and fencing contractors is accepted, provided it is wrapped in high-density polyethylene (HDPE) sheeting as per the *Environment Protection (Controlled Waste) Regulations 2004* (the CW Regulations) and buried as soon as practical. Material that is not wrapped according to the CW Regulations is wrapped correctly before disposal. An extract "Disposal of Material Containing Asbestos" from the *Environment Protection (Controlled Waste) Regulations 2004* is also handed to the truck driver and the load is diverted to a watering down area and sprayed with water before wrapping.

Dust suppression is achieved through the use of a purpose built water cart and fixed sprinklers on roadways and batters.

#### Screening of material

WSM screens limestone at the premises sourced from the onsite quarry. The screening plant is mobile and moved to various areas of the lot depending on where extraction is being undertaken. The screener is manned by one operator when in use. Dust and noise will be managed in accordance with the "" Waste Stream Management, Environmental and Operational Management Plan, Redcliffe Road, Medina WA, May 2010".

#### Crushing of building material

A hired crusher located on Lot 434 separates brick from concrete when volumes reach levels to run the crusher. Crushed building material is sold for off-site use as road base or drainage aggregate. Dust and noise will be managed in accordance with the "" Waste Stream Management, Environmental and Operational Management Plan, Redcliffe Road, Medina WA, May 2010".

#### Solid waste depot

The premises has a solid waste depot for shredding green waste. It is intended that shredded green waste materials can produce products suitable for sale off-site to compost manufacturers. Dust and noise will be managed in accordance with the "" Waste Stream Management, Environmental and Operational Management Plan, Redcliffe Road, Medina WA, May 2010".

#### Treatment of Acid Sulphate Soils (ASS)

Acid sulphate soil will be treated on the premises in accordance with the *Waste Stream Management Pty Ltd Acid Sulphate Soil Treatment and Environmental Management Document,* August 2014. The management plan has been approved by the Contaminated Sites Branch of DER.



### Government of Western Australia Department of Environment Regulation

Acid sulphate soil will be treated within a designated area as detailed in the *Waste Stream Management Pty Ltd Acid Sulphate Soil Treatment and Environmental Management Document, August 2014* as depicted in Schedule map. The designated area has been constructed with a minimum 300 mm thickness of compacted crushed limestone and bunded with a minimum 150mm high perimeter of compacted crushed limestone to contain potential leachate runoff within the treatment area and prevent surface water runoff from entering the treatment area. The treatment area is graded with a rainfall of 1:100 to ensure any leachate generated during wet season is collected in a geotextile lined sediment pond.

Leachate in the sediment pond is monitored prior to its discharge by irrigating landfill cover and dust suppression. . Leachate water will not be discharged from the sediment pond unless water quality is between pH 6.5 and 8.5.

The following information is to be collected prior to acceptance of ASS material for neutralisation on site:

- total quantity of material;
- source from which material originated;
- acidity status of material (field and/or laboratory results as appropriate);
- neutralisation status of any material received in a neutralised state; and
- quantity of neutralising agent applied for neutralised material.

Potential off site impacts from this premises are:

- noise from machinery on site;
- dust from vehicle movements, stockpiles, crushing and screening;
- groundwater contamination from materials on site; and
- contaminated stormwater runoff.