



Licence

Environmental Protection Act 1986, Part V

Licensee: Cell 6 Pty Ltd

Licence: L6832/1997/12

Registered office: Suite 1, 42 Dellamarta Road,
WANGARA, WA 6065

ACN: 130 417 542

Premises address: Non Organic Disposals
50 Driver Road
DARCH WA 6065
Being Lot 1 on Plan 69382 as depicted in Schedule 1.

Issue date: Friday, 15 June 2012

Commencement date: Thursday, 21 June 2012

Expiry date: Tuesday, 20 June 2017

Prescribed premises category

Schedule 1 of the *Environmental Protection Regulations 1987*

Category number	Category description	Category production or design capacity	Approved Premises production or design capacity
13	Crushing of building material: premises on which waste building or demolition material (for example, bricks, stones or concrete) is crushed or cleaned.	1,000 tonnes or more per year	325,000 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	325,000 tonnes per annual period

Conditions

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

Date signed: 4 December 2015

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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:

<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 premises principally operates as an inert solid waste depot (category 62) and a construction and demolition recycling facility (category 13). Historically the licence has also authorised the landfilling of clean fill and type 1 inert waste (category 63) as defined in the *Landfill Waste Classification and Waste Definitions 1996* (as amended December 2009). No landfilling has occurred at the premises since May 2009 when Cell 6 Pty Ltd took operational control of the premises.

The premises covers an area of approximately 12 hectares. Originally the premises included the adjacent lot (Lot 2) to the east and south of the premises. Both Lot 1 and Lot 2 are classified under the *Contaminated Sites Act 2003* as "contaminated – restricted use" due to the previous occupier undertaking unauthorised landfilling activities whereby putrescible materials were buried at the premises. Landfill gas and groundwater impacts were noted as part of the classification.

Due to urban encroachment over the years, the site is now immediately adjacent to residential dwellings to the west (approx.15m away) and south (approx. 200m away) and commercial properties to the north (approx.15m away).

The Department of Water (DoW) Perth Groundwater Atlas indicates that groundwater beneath the premises ranges from a depth of between 0.5 and 16m below ground level (mBGL). Site-specific data (groundwater monitoring data from 2014) indicates the depth of groundwater ranges across the site from 39.55mAHD in the north-east of the premises to 37.2mAHD in the south-west of the premises; as a result groundwater flow across the site has been inferred in south-westerly direction across the premises.

The main potential emissions from the site are fugitive emissions in the form of dust and noise, The risk of noise and dust emissions and potential impacts are likely to be moderate due to the proximity to sensitive receptors however, site management practices including internal buffers, use of vegetative buffer zones and siting of crushing and screening equipment in a central area of the site, which is surrounded by earthen bunds or processed stockpiled material, assists in controlling the risk. Landfill gas and leachate emissions resulting from previous unauthorised activities are also issues of concern. Landfill gas and groundwater monitoring conditions are included on the licence to ensure potential risks are monitored and quantified.

Waste materials are checked prior to being accepted at the premises, and any loads not meeting the classification types for clean fill and type 1 inert waste (including asbestos and tyres) are redirected off-site and are not accepted at the premises. A DER endorsed Asbestos Management Plan is also in place to manage pre-acceptance and validation monitoring for different product lines (road base, fill materials and aggregate).

This Licence is the result of an amendment sought by the Licensee to remove Category 63 *Inert landfill* from the licence. The amendment also takes into consideration a previous amendment request received by DER in July 2014 in relation to the handling of non-conforming residual wastes (timber, plastics and scrap metal) from category 13 and 63 activities and to afford the



licensee flexibility on the frequency of groundwater and landfill gas monitoring from specified months to a defined biannual period. The July 2014 licence amendment application and associated amended licence was progressed to the 21 day comment period on the 8 January 2015. However, the amended licence was not issued due to non-compliances with the storage of non-conforming residual wastes (timber, plastics and scrap metal) on the premises; this issue is currently being managed by DER's Environmental Compliance functional area.

DER has converted the licence to DER's current licence format as part of the amendment process. During the conversion process, DER has considered whether the risk profile of emissions and discharges from the premises has significantly changed since the previous licence was granted. No significant changes have occurred however, DER has undertaken a technical review of historical landfill gas monitoring records for the premises which has led to an improvement condition being placed on the licence to require the installation of additional monitoring wells across the western perimeter and southern portion of the site. Dissolved methane has also been added to the groundwater analytical suite to better understand the potential for LFG migration off-site.

The licences and works approvals issued for the Premises since 31/05/2000 are:

Instrument log		
Instrument	Issued	Description
L6832/1997/4	31/05/2000	Licence re-issue
L1234/1999/5	09/06/2001	Licence re-issue
L1234/1999/6	15/05/2002	Licence re-issue
L1234/1999/7	12/05/2003	Licence re-issue
L1234/1999/8	31/05/2004	Licence re-issue
L1234/1999/9	30/05/2005	Licence re-issue
L1234/1999/10	24/05/2006	Licence re-issue
L1234/1999/11	01/05/2007	Licence re-issue
L1234/1999/12	14/06/2012	Licence re-issue
L1234/1999/12	4/12/2015	Licence amendment to remove Category 63 and provide flexibility to monitoring periods.

Severance

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

END OF INTRODUCTION



Licence conditions

1 General

1.1 Interpretation

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

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

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

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

'Act' means the *Environmental Protection Act 1986*;

'AHD' means the Australian height datum;

'annual period' means the inclusive period from 1 January until 31 December in the same year;

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

'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;

'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);

'Assessment and management of contaminated sites guidelines' means the document titled "Assessment and management of contaminated sites Contaminated sites guidelines" published by the Chief Executive Officer of the Department of Environment Regulation as amended from time to time;

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

'BGL' means below ground level;

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



'CEO' for the purpose of correspondence means;

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

'CIRIA C665' means the Construction Industry Research and Information Association document "Assessing risks posed by hazardous ground gases to buildings (C665)", CIRIA, 2007;

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

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

'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;

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

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

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

"Landfill Gas" means gas generated from the decomposition of waste containing a mixture of methane, carbon dioxide and other gases;

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

'Licence' means this Licence numbered L6832/1997/12 and issued under the Act;

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

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

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

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

'Processed materials' means material that has been crushed and screened on the Premises;

'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;

'quarterly' means the 4 inclusive periods from 1 January to 31 March, 1 April to 30 June, 1 July to 30 September and, 1 October to 31 December, in the same year;

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

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



'six monthly' means the 2 inclusive periods from 1 January to 31 March and 1 July to 30 September in the same year;

'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 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 immediately recover, or remove and dispose of spills of environmentally hazardous materials outside an engineered containment system.

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; and
- (b) the quantity accepted is below any quantity limit listed in Table 1.3.1; and
- (c) it meets any specification listed in Table 1.3.1.

Table 1.3.1: Waste acceptance

Waste type	Quantity limit tonnes/ annual period	Specification
Clean Fill	325,000 tonnes	None Specified
Inert Waste Type 1		Waste containing visible asbestos or ACM shall not be accepted.

1.3.2 The Licensee shall visually inspect all waste on arrival at the Premises and again before it enters any stockpile or treatment process to ensure that it complies with the waste acceptance criteria in Table 1.3.1.

1.3.3 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 prior to the close of business every Friday.

1.3.4 The Licensee shall ensure that any waste that does not conform to the waste acceptance criteria in Table 1.3.1 due to asbestos content, is bagged and kept within a clearly



identified, labelled, segregated and secure container prior to being removed off site to an appropriate authorised facility.

- 1.3.5 The Licensee shall ensure that wastes accepted onto the Premises are only subjected to the processes set out in Table 1.3.2 and in accordance with any process limits described in that Table.

Table 1.3.2: Waste processing		
Waste type	Processes	Process limits
Clean Fill	Receipt and handling prior to treatment or storage.	None Specified.
Inert Waste Type 1	Receipt, handling, storage and sorting (hand and mechanical sorting) prior to treatment. Mechanical treatment consisting only of screening, crushing and cleaning. Storage of treated materials.	No waste shall be landfilled (buried) at the premises. No waste shall be temporarily stored within 25 metres from the boundary of the premises. The licensee shall ensure that the tipping area is supervised at all times when waste is received for processing. Processed and unprocessed materials shall be segregated and stored within designated storage areas. Timber, plastics and scrap metal wastes recovered from the sorting process shall be managed in accordance with Condition 1.3.3.

- 1.3.6 The Licensee shall ensure that the asbestos content of any recycled output originating from construction and demolition waste does not exceed the contamination limits specified in Table 1.3.3.

Table 1.3.3: Recycled output contamination limits		
Output	Parameter	Limit
Recycled drainage rock	Asbestos (in any form)	0.001%w/w
Recycled sand		
Recycled road base		

- 1.3.7 The Licensee shall ensure that recycled outputs originating from construction and demolition waste are sampled and tested in accordance with Table 1.3.4.

Table 1.3.4: Recycled output sampling and testing			
Output	Parameter	Limit	Method
Recycled drainage rock	Asbestos (in any form)	0.001%w/w	In accordance with the DER Asbestos Guidelines.
Recycled sand			
Recycled road base			

- 1.3.8 The Licensee shall undertake activities on the Premises and manage asbestos and ACM in accordance with the Asbestos Management Plan *Non-Organic Disposals Environmental Improvement Plan incorporating the site Asbestos Management Plan, Compliance Assessment Report* (Peter Margetic and Luwam Araya, 11 April 2013).



- 1.3.9 The Licensee shall implement the following security measures at the site:
- (a) erect and maintain suitable fencing to prevent unauthorised access to the site; 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.
- 1.3.10 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) warning indicating penalties for people lighting fires; and
 - (d) list of materials accepted for recycling and the location of where they can be deposited on the premises.
- 1.3.11 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 a daily basis and returned to the tipping area or appropriately contained.
- 1.3.12 The Licensee shall ensure that no waste is burnt on the premises.
- 1.3.13 The licensee shall ensure a water supply and a means of distribution must be readily available to enable the extinguishment of a fire at any part of the premises.
- 1.3.14 The licensee shall ensure that immediate action is taken to extinguish any fire on the premises.
- 1.3.15 The licensee shall maintain diversion drains and/or swales which direct stormwater away from unprocessed waste storage and sorting areas to sandy well drained areas of the site, where no historical landfilling has occurred¹.
- Note 1: refer to the Map of on-site stormwater flow direction in Schedule 1 for on-site flow direction.

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) quarterly monitoring is undertaken at least 45 days apart; and
 - (b) six monthly monitoring is undertaken at least 5 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.
- 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	Clean Fill, Inert 1	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 ³ (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 and record and investigate results that do not meet any limit specified.

Table 2.3.1: Monitoring of ambient groundwater quality				
Monitoring point reference and location	Parameter	Units	Averaging period	Frequency
NODGW01 NODGW02 NODGW03 NODGW04 NODGW05 NODGW06 DDW13 DDW28 DDW29 As depicted in Schedule 1	Standing water level	m (AHD) m (BGL)	Spot sample	Six monthly
	pH ¹	-		
	Electrical conductivity ¹	µS/cm		
	Arsenic, Cadmium, Chromium, Copper, Manganese, Nickel, Lead, Mercury, Zinc, Iron	mg/L		
	Total ammonia			
	Total nitrogen			
	Total Phosphorus			
	Total dissolved solids			
	COD (chemical oxygen demand)			
	Potassium			
	Chloride			
	Sulphate			
	Sulphite			
	Hardness (CaCO3)			
	Benzene			
	Ethyl benzene			
	Toluene			
	Xylenes			
	Total recoverable hydrocarbons			
	Organochlorines			
	Organophosphates			
	Phenols			
	Polycyclic aromatic hydrocarbons (PAHs)			
	Polychlorinated biphenyls			



Table 2.3.1: Monitoring of ambient groundwater quality

	(PCBs)			
	Dissolved methane			

Note 1: In-field non-NATA accredited analysis permitted.

2.4 Monitoring of landfill gas

2.4.1 The Licensee shall undertake the monitoring in Table 2.4.1 according to the specifications in that table.

Table 2.4.1: Monitoring of landfill gas

Monitoring point reference	Parameter	Units	Frequency	Method
G30	Volumetric flow rate	L/hr	Quarterly	Assessment and management of contaminated sites guidelines
G31		m ³ /day		
G32	Methane	%v/v		
G33	Carbon dioxide	%v/v		
NODG01	Oxygen	%v/v		
NODG02				
As depicted in Schedule 1				

3 Improvements

3.1 Improvement program

3.1.1 The Licensee shall complete the improvements in Table 3.1.1 by the date of completion in Table 3.1.1.

3.1.2 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 install ¹ three dedicated landfill gas monitoring wells at the following locations (one at each location): a) along the western boundary between monitoring locations G31 and NODG01 (as specified in Schedule 1); b) along the western boundary between monitoring locations DDW29 and DDW13 (as specified in Schedule 1); and c) within the central southern portion of the site between NODGW04 and NODGW03 (as specified in Schedule 1).	29/02/2016
IR2	The licensee shall prepare and submit to DER a report outlining the installation of the three dedicated landfill gas monitoring wells installed in accordance with IR1. The report shall include, but not limited to, well constructions logs and results of any baseline monitoring undertaken.	29/02/2016
IR3	Post installation the licensee shall monitor the three dedicated	



Table 3.1.1: Improvement program

	landfill gas monitoring wells installed in accordance with IR1 according to the specifications in Table 2.4.1. The results of this monitoring shall also be reported in accordance with Condition 4.2.1.	
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Note 1: Guidance on Landfill gas assessment, including reference to general installation requirements is provided in the Assessment and management of contaminated sites guidelines.

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 4.1.1(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:

- (a) implement a complaints management system that shall record the following information (if known or provided) about complaints received at the Premises concerning any environmental impact of the activities undertaken at the Premises:
 - (i) name and address of the complainants (if consented);
 - (ii) date and time of complaint;
 - (iii) date and time of alleged incident;
 - (iv) alleged source of the incident;
 - (v) general description of the alleged incident, including any environmental or health impacts reported by the complainant;
 - (vi) wind direction, wind speed and temperature at time of alleged incident;
 - (vii) likely source of the alleged incident; and
 - (viii) actions taken by the Licensee to address the complaint, including the outcome of any investigation(s) and action(s) to verify any impacts.
- (b) complete an annual analysis and review of complaints recorded under 4.1.4(a) to identify any common factors and root cause of complaints and proposals to address these.



4.2 Reporting

- 4.2.1 The Licensee shall submit to the CEO an Annual Environmental Report within 31 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 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	None specified
-	Map of the active tipping area(s)	None specified
Table 2.2.1	Summary of inputs and outputs	None specified
Table 2.3.1	Monitoring of ambient groundwater quality. A summary of the results should be presented in tabulated form within the body of the report as well as onto site drawings, where appropriate. Assessment of ambient groundwater quality monitoring results against previous monitoring results and relevant assessment levels for water as published in the Assessment and management of contaminated sites guidelines.	None specified
Table 2.4.1	Monitoring of landfill gas	None specified
4.1.3	Compliance	Annual Audit Compliance Report (AACR)
4.1.4	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:
- an assessment of the information contained within the report against previous monitoring results and Licence limits.

4.3 Notification

- 4.3.1 The Licensee shall ensure that the parameters listed in Table 4.3.1 are notified to the CEO in accordance with the notification requirements of the table.

Table 4.3.1: Notification requirements			
Condition or table (if relevant)	Parameter	Notification requirement ¹	Format or form
2.1.4	Calibration report	As soon as practicable.	None specified
Table 3.8.1 and 3.8.2	If any bores are decommissioned or rendered unusable	Within 7 days.	None specified
-	Notification to DER of any fire at the premises	Within 1 hour of notifying emergency services.	None specified

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



Schedule 1: Maps

Premises map

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





Monitoring Locations Map

The locations for groundwater and landfill gas monitoring locations are marked in the map below.





Map of on-site stormwater flow direction

The flow direction of stormwater encountered on-site is depicted on the map below.



Storm water flow direction



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 C

No ☐ Please proceed to Section B

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

Initial:



SECTION B

DETAILS OF NON-COMPLIANCE WITH LICENCE CONDITION.

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

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

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

Initial:



SECTION C

SIGNATURE AND CERTIFICATION

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

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

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

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

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

SIGNATURE: _____

SIGNATURE: _____

NAME:
(printed) _____

NAME:
(printed) _____

POSITION: _____

POSITION: _____

DATE: ____/____/____

DATE: ____/____/____

SEAL (if signing under seal)



Decision Document

Environmental Protection Act 1986, Part V

Proponent: Cell 6 Pty Ltd

Licence: L6832/1997/12

Registered office: Suite 1, 42 Dellamarta Road,
WANGARA, WA 6065

ACN: 130 417 542

Premises address: Non Organic Disposals
50 Driver Road
DARCH WA 6065
Being Lot 1 on Plan 69382 as depicted in Schedule 1.

Issue date: Friday, 15 June 2012

Commencement date: Thursday, 21 June 2012

Expiry date: Tuesday, 20 June 2017

Decision

Based on the assessment detailed in this document the Department of Environment Regulation (DER), has decided to issue an amended licence. DER considers that in reaching this decision, it has taken into account all relevant considerations.

Decision Document prepared by: Jarrod Abrahams
Licensing Officer

Decision Document authorised by: Alan Kietzmann
Delegated Officer



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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 <input type="checkbox"/> New Licence <input type="checkbox"/> Licence amendment <input checked="" type="checkbox"/> Works Approval amendment <input type="checkbox"/>	
Activities that cause the premises to become prescribed premises	Category number(s)	Assessed design capacity
	62	325,000 tonnes per annual period
	13	325,000 tonnes per annual period
Application verified	Date: N/A	
Application fee paid	Date: N/A	
Works Approval has been complied with	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>	
Compliance Certificate received	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>	
Commercial-in-confidence claim	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Commercial-in-confidence claim outcome		
Is the proposal a Major Resource Project?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Was the proposal referred to the Environmental Protection Authority (EPA) under Part IV of the <i>Environmental Protection Act 1986</i> ?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Referral decision No: Managed under Part V <input type="checkbox"/> Assessed under Part IV <input type="checkbox"/>
Is the proposal subject to Ministerial Conditions?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Ministerial statement No: EPA Report No:
Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the <i>Environmental Protection Act 1986</i>)?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Department of Water consulted Yes <input type="checkbox"/> No <input type="checkbox"/>	
Is the Premises within an Environmental Protection Policy (EPP) Area Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> If Yes include details of which EPP(s) here. Environmental Protection (Swan Coastal Plain Lakes) Policy 1992		
Is the Premises subject to any EPP requirements? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> If Yes, include details here, eg Site is subject to SO ₂ requirements of Kwinana EPP.		



3 Executive summary of proposal and assessment

The premises principally operates as an inert solid waste depot (category 62) and a construction and demolition recycling facility (category 13). Historically the licence has also authorised the landfilling of clean fill and type 1 inert waste (category 63) as defined in the *Landfill Waste Classification and Waste Definitions 1996* (as amended December 2009). No landfilling has occurred at the premises since May 2009 when Cell 6 Pty Ltd took operational control of the premises.

Proposed amendment:

This Licence is the result of an amendment sought by the Licensee to remove Category 63 *Inert landfill* from the licence. The amendment also takes into consideration a previous amendment request received by DER in July 2014 in relation to the handling of non-conforming residual wastes (timber, plastics and scrap metal) from category 13 and 63 activities and to afford the licensee flexibility on the frequency of groundwater and landfill gas monitoring from specified months to a defined 6 monthly and quarterly period, respectively. The July 2014 licence amendment application and associated amended licence was progressed to the 21 day comment period on the 8 January 2015 however, the amended licence was not issued due to non-compliances with the storage of non-conforming residual wastes (timber, plastics and scrap metal) on the premises; this issue is currently being managed by DER's Environmental Compliance functional area.

DER has converted the licence to DER's current licence format as part of the amendment process. During the conversion process, DER has considered whether the risk profile of emissions and discharges from the premises has significantly changed since the previous licence was granted. No significant changes have occurred, however, DER has undertaken a technical review of historical landfill gas monitoring records for the premises which has led to an improvement condition being placed on the licence to require the installation of additional monitoring wells across the western perimeter and southern portion of the site. Dissolved methane has also been added to the groundwater analytical suite to better understand the potential for LFG migration off-site. DER has not amended conditions relating to other emissions and discharges or re-visited any related existing emission control levels, unless otherwise specified in the Decision Table.

Summary of emissions and discharges:

The main potential emissions from the site are fugitive emissions in the form of dust and noise. The risk of noise and dust emissions and potential impacts are likely to be moderate due to the proximity to sensitive receptors however, site management practices including internal buffers, use of vegetative buffer zones and siting of crushing and screening equipment in a central area of the site, which is surrounded by earthen bunds or processed stockpiled material, assists in controlling the risk.

Landfill gas and leachate emissions resulting from previous unauthorised activities are also issues of concern. Landfill gas and groundwater monitoring conditions are included on the licence to ensure potential risks are monitored and quantified. Further information relating to landfill gas risks is presented in Appendix A.



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 TABLE			
Works Approval / Licence section	Condition number W = Works Approval L = Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
General conditions	L1.2.1	L1.2.1, which requires the immediate recovery, or removal and disposal of spills of environmentally hazardous materials outside an engineered containment system, replaces condition 11(b) of the previous licence. The provision has been imposed in line with DER's current licensing process.	<i>Environmental Protection (Unauthorised Discharge) Regulations 2004.</i>
Premises operation	L1.3.1	L1.3.1, which specifies waste acceptance criteria, replaces condition 1 of the previous licence line with DER's current licensing process. L1.3.1 also includes a quantity limit which is consistent with the specifications listed for 'capacity' on the previous licence and as documented in the Environmental Assessment Report which is attached to the previous licence.	
	L1.3.2 L1.3.4 L1.3.6 L1.3.7	L1.3.2, L1.3.4, L1.3.6, L1.3.7 have been included on the licence to manage the risk of asbestos being accepted on the premises and processed. A risk assessment is provided below. Asbestos <u>Emission Description</u> Emission: Release of asbestos fibres during handling, sorting and treatment activities (crushing and screening). Impact: Health effects from breathing in fibres, such as mesothelioma, asbestosis and lung cancer. Controls: Implementation of standard operating procedures as per the Asbestos	Non-Organic Disposals Environmental Improvement Plan incorporating the Asbestos Management Plan, Compliance Assessment Report, Peter Margetic and Luwam Araya, 11



DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
		<p>Management Plan for the site, including pre-acceptance procedures, acceptance procedures, load inspection after acceptance, waste processing controls, monitoring and testing and general site management. The Asbestos Management Plan for the site was previously deemed compliant with the DER Asbestos Guidelines on 18 June 2014.</p> <p><u>Risk Assessment</u> <i>Consequence:</i> Major <i>Likelihood:</i> Unlikely <i>Risk Rating:</i> Moderate</p> <p><u>Regulatory Controls</u> In line with DER's licensing process for Category 13 premises, conditions L1.3.2 and 1.3.4 have been included on the amended licence to ensure the inspection of waste loads upon arrival at the premises and again before it enters any stockpile or treatment process and to ensure that if any waste is suspected to contain asbestos it is secured before being removed off-site to an appropriate authorised facility.</p> <p>In line with DER's licensing process for Category 13 premises conditions L1.3.6 – 1.3.7 have also been included on the amended licence to ensure recycled outputs from C & D waste are sampled and tested in accordance with the DER Asbestos Guidelines. Recycled output contamination limits, consistent with those specified in the DER Asbestos Guidelines, are also stipulated in the respective conditions.</p> <p><u>Residual Risk</u> <i>Consequence:</i> Major <i>Likelihood:</i> Unlikely <i>Risk Rating:</i> Moderate</p>	<p>April 2013</p> <p>Guidelines for managing asbestos at construction and demolition waste recycling facilities (DEC, December 2012) (DER Asbestos Guidelines)</p>
	L1.3.3	L1.3.3, requiring the removal of waste from the site that does not meet the waste acceptance criteria, replaces condition 2 of the previous licence.	



DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
		During a compliance inspection undertaken by DER on 13 August 2015, DER officers observed large volumes of non-conforming waste (timber, plastics and scrap metal) separated and stored on the premises. The subsequent compliance inspection report (DER ref: A984706) dated 7 October 2015 concluded that non-conforming waste is not being disposed of to an appropriately licensed landfill on weekly basis i.e. close of business every Friday as required by this condition 2. The compliance inspection report requires that the actions relating to demonstrating compliance with condition 2 of the previous licence are complied with; the associated action requires the licensee remove all non-conforming waste stockpiles by the 1 December 2015. DER noted in the report that this issue had been ongoing since the DER prescribed premises licence inspection in 2014. DER is aware that that works are currently underway to remove stockpiles of non-conforming waste from the premises.	
	L1.3.5	<p>L1.3.5 and associated Table 1.3.2, specifies waste processing controls for the different wastes which the licensee is authorised to receive. This condition has been included in line with DER's current licensing process.</p> <ul style="list-style-type: none">• The process limit which specifies that <i>no waste shall be landfilled (buried) at the premises</i>, has been included as the licensee is no longer authorised under the amended licence to landfill inert waste at the premises.• The process limit relating to segregation of processed and unprocessed materials has been included to control the potential cross contamination of materials.• The process limit which specifies that <i>no waste shall be temporarily stored within 25 metres from the boundary of the premises</i>, replaces condition 7 of the previous licence.• The process limit which specifies that the <i>tipping area is supervised at all times when waste is received for processing</i>, replaces condition 5. However, this limit only refers to material being received for processing as opposed to material being received for landfilling, as was the intention of condition 5 of the	



DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
		<p>previous licence.</p> <ul style="list-style-type: none"> The process limit which specifies that <i>timber, plastics and scrap metal wastes recovered from the sorting process shall be managed in accordance with condition 1.3.3</i>, has been included to ensure the licensee is explicitly aware of the requirements of condition 1.3.3. 	
	L1.3.8	L1.3.8, requiring adherence to an Asbestos Management Plan, replaces condition 12 of the previous licence. The Asbestos Management Plan for the site was previously deemed compliant with the DER Asbestos Guidelines on 18 June 2014.	<p><i>Non-Organic Disposals Environmental Improvement Plan incorporating the site Asbestos Management Plan, Compliance Assessment Report</i> (Peter Margetic and Luwam Araya, 11 April 2013).</p> <p>Guidelines for managing asbestos at construction and demolition waste recycling facilities (DEC, December 2012) (DER Asbestos Guidelines)</p>
	L1.3.9	L1.3.9, requiring security measures, replaces condition 8 of the previous licence.	



DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
	L1.3.10	L1.3.10, requiring signage, replaces condition 9 of the previous licence.	
	L1.3.11	L1.3.11, requiring management of windblown waste, replaces conditions 3 and 4 of the previous licence.	<i>Litter Act 1979</i>
	L1.3.12 L1.3.13 L1.3.14	L1.3.12, requiring no waste is to be burnt on the premises, replaces condition 15(a) of the previous licence. L1.3.13, requiring water supply and means of distribution for fire suppression, replaces condition 15(b) of the previous licence. L1.3.14, requiring immediate action to extinguish any fire, replaced condition 15(c) of the previous licence.	<i>Environmental Protection (Unauthorised Discharge) Regulations 2004.</i>
	L1.3.15	Operation – Stormwater Management <u>Emission Description</u> <i>Emission:</i> Stormwater contaminated with leachate derived from unprocessed waste storage and sorting operations. <i>Impact:</i> Contamination of surrounding land, underlying groundwater and surface water drainage lines. As the licensee is only authorised to accept inert solid waste or clean fill materials associated impacts is reduced. <i>Controls:</i> The licensee controls stormwater on the premises through diversion drains which direct any surface water away from the unprocessed waste storage and sorting areas to sandy well drained areas that are free from landfill. <u>Risk Assessment</u> <i>Consequence:</i> Minor	



DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L = Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
		<p><i>Likelihood: Possible</i> <i>Risk Rating: Moderate</i></p> <p><u>Regulatory Controls</u> <i>Environmental Protection (Unauthorised Discharge) Regulations 2004</i> provides provisions whereby it is an offence to discharge certain materials into the environment.</p> <p>Condition 1.3.15 has been added to the licence to ensure the proponents proposed control for managing stormwater is adhered to.</p> <p><u>Residual Risk</u> <i>Consequence: Minor</i> <i>Likelihood: Unlikely</i> <i>Risk Rating: Moderate</i></p>	
Rehabilitation and post closure management	-	<p>The licence amendment application primarily relates to the removal of Category 63, <i>Inert Landfill</i>, from the licence. As part of the amendment application the licensee has not provided any details on the rehabilitation and management of the landfill post-closure.</p> <p>As the site is to remain an active Part V licensed premises for Category 13 and 62 DER proposes to defer the imposition of licence conditions that require the licensee to provide further detail on the progressive rehabilitation and closure of the site.</p> <p>Lot 1 is currently classified under the <i>Contaminated Sites Act 2003</i> (CS Act) as “contaminated – restricted use” due to the previous occupier undertaking unauthorised landfilling activities whereby waste materials with an appreciable biodegradable component (e.g. putrescibles) were buried at the premises. Landfill gas and groundwater impacts are noted as part of the classification. DER notes that changes to</p>	



DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
		<p>the site will need to be carefully regulated to ensure that the LFG regime at the site does not change such that horizontal migration of gases occurs. DER considers that this can be appropriately managed through the provisions of the CS Act; specifically, as the site is classified contaminated – restricted use, pursuant to section 58(6) (b) of the CS Act, any proposed ‘development’ of the site cannot be approved by a responsible authority (e.g. the City of Wanneroo) without first seeking and taking into account the advice of the CEO of DER.</p> <p>Any proposed development at the site which DER considers may alter the LFG migration regime is likely to result in DER recommending that appropriate planning conditions be placed requiring LFG assessment, modelling and/or mitigation strategies to ensure that the risk to on-site and off-site receptors remains low and acceptable.</p>	



Fugitive emissions - Dust	N/A	<p>Operation – Dust Emissions</p> <p><u>Emission Description</u> <i>Emission:</i> Dust from truck and vehicle movements, waste tipping area, crushing and screening activities and dust lift-off from stockpiles.</p> <p><i>Impact:</i> Nuisance quantities of dust and potential human health issues associated with reparable dust fractions.</p> <p><i>Controls:</i> Dust emissions are currently managed on site through the following control measures as documented in the <i>Non-Organic Disposals Environmental Improvement Plan incorporating the site Asbestos Management Plan, Compliance Assessment Report</i> (Peter Margetic and Luwam Araya, 11 April 2013), as amended from time to time. The EIP includes the following management strategies:</p> <ul style="list-style-type: none">• A site board is maintained and updated each morning with daily weather conditions with associated risk category assigned (low, medium and high) depending on wind direction and strength.• Water sprays and automatic reticulation cover each stage of the process capable of generating dust.• High pressure hoses are used to wet-down loads as they are tipped in the waste tipping area.• In the event that dust generation cannot be controlled the plant will be shut-down and all unnecessary site movement will be stopped. <p><u>Risk Assessment</u> <i>Consequence:</i> Moderate <i>Likelihood:</i> Unlikely <i>Risk Rating:</i> Moderate</p> <p><u>Regulatory Controls</u> In line with DER's current licensing process fugitive dust emissions can be sufficiently regulated under the general provisions of the <i>Environmental Protection Act 1986</i>. As a result condition 13 of the previous licence, which requires the licensee to suppress dust within the premises boundary, has been removed as part of this amendment.</p> <p>DER will monitor site operations and complaints associated with dust emissions and</p>	<i>Environmental Protection Act 1986</i>
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		<p>where warranted the licence may be amended to include prescriptive conditions relating to the management of dust emissions.</p> <p><u>Risk Assessment</u> <i>Consequence:</i> Moderate <i>Likelihood:</i> Unlikely <i>Risk Rating:</i> Moderate</p>	
Fugitive emissions – Landfill Gas	-	DER's assessment and decision making are detailed in Appendix B.	
Odour	N/A	Odour emissions – as the licensee is only authorised to accept inert waste and clean fill odour emissions from the premises are considered to present a low risk. Odour emissions can be sufficiently regulated under the general provisions of the <i>Environmental Protection Act 1986</i> . As a result condition 14 of the previous licence, relating to odour emissions, has been removed as part of this amendment.	<i>Environmental Protection Act 1986</i>
Noise	N/A	<p>The current siting of the crushing and screening plant has also been strategically located in a depressed area of northern central portion of the site with earthen bunds to the east and west of the plant which act as a noise barrier.</p> <p>Noise has not been reassessed as part of this amendment. As the previous licence did not impose controls on noise, no specified conditions have been included in this section. Noise emissions can be sufficiently regulated under the general provisions of the <i>Environmental Protection (Noise) Regulations 1997</i>.</p>	
Monitoring general	L2.1.1 L2.1.2 L2.1.3 L2.1.4	<p>General monitoring requirements were not otherwise assessed as part of this amendment.</p> <p>L2.1.1 (a) and (b), relating to sampling requirements in accordance with AS/NZS 5667.1, replaces condition 20(b) of the previous licence.</p> <p>L2.1.1(c), relating to laboratory samples being submitted to a NATA accredited laboratory, replaces condition 20(c) of the previous</p> <p>L2.1.2 provides specifications for the frequencies of monitoring required by L2.3.1 and</p>	



		<p>L2.4.1.</p> <p>L2.1.3 and L2.1.4 set out requirements for general monitoring such as maintaining and calibrating monitoring equipment to manufacturer's specifications, and notifying the CEO when discrepancies or issues arise with calibration of monitoring equipment. These conditions are relevant to the monitoring of groundwater and landfill gas as specified in L2.3.1 and L2.4.1 and assist in increasing the reliability and accuracy of monitoring results.</p>	
Monitoring of inputs and outputs	L2.2.1	L2.2.1 and corresponding Table 2.2.1, relating to the monitoring of waste inputs and outputs, replaces condition 19(a) of the previous licence. DER notes that the previous licence did not require waste outputs to be monitored however, in line with DER's current licensing process this requirement is being imposed as part of the amendment.	
Ambient quality monitoring	L2.3.1	<p>L2.3.1 and corresponding Table 2.3.1, relating to the monitoring of ambient groundwater quality, replaces condition 20(a) of the previous licence. Specifications in Table 2.3.1, provides flexibility on the frequency of groundwater monitoring from specified months to a defined six monthly period across respective three month windows:</p> <p>1st monitoring period: 1 January to 31 March; and 2nd monitoring period: 1 July to 30 September.</p> <p>Whilst the changes provide greater flexibility on the monitoring frequency the intention to monitor seasonal variations in groundwater quality and static water levels remains.</p> <p>Migration of landfill gases from a source (i.e. buried waste mass) to a potential receptor may occur either in the gas phase, or dissolved in groundwater. Given the on-site presence of landfill gas in certain locations DER has included dissolved methane as part of the groundwater analytical suite to better understand the potential for LFG migration off-site.</p>	
Landfill gas monitoring	L2.4.1	L2.41 and corresponding Table 2.4.1, relating to the monitoring of landfill gas, replaces condition 21(a) and (b) of the previous licence. Specifications in Table 2.4.1, provides flexibility on the frequency of landfill gas monitoring from specified months to a defined quarterly period across respective three month windows:	



		<p>1st monitoring period: 1 January to 31 March; 2nd monitoring period: 1 April to 30 June; 3rd monitoring period: 1 July to 30 September; and 4th monitoring period: 1 October to 31 December.</p> <p>Whilst the changes provide greater flexibility on the monitoring frequency the intention to monitor seasonal variations for landfill gas remains.</p> <p>L2.4.1 also replaces the reference from the previous condition, relating to complying with all methodology and monitoring requirements as stated in CIRIA C665 guidance (2007), with reference to the DER guideline titled "Assessment and management of contaminated sites Contaminated sites guidelines" published by the Chief Executive Officer of the Department of Environment Regulation as amended from time to time. This guideline outlines the minimum standard for the collection and analysis of environmental samples and data interpretation. The current monitoring methodologies are broadly consistent with the requirements outlined in the above guideline.</p>	
Improvements	N/A	<p>Condition 23 in the previous licence, which required the licensee to operate in accordance with an Environmental Improvement Plan (EIP), has not been included on this licence. The suite of conditions included as part of this amendment has been deemed sufficient to manage and control emissions and discharges from the premises.</p> <p>Condition 24 from the previous licence has not been included as the Assessment Report has been submitted. The premises was inspected on 21 August 2013 to assess compliance against the DER Asbestos Guidelines. On 18 June 2014 DER confirmed that the premises met compliance with the DER Asbestos Guidelines. L1.3.8 is also included in the amended licence and requires that operations on-site adhere to an Asbestos Management Plan.</p> <p>L3.1.1 and L3.1.2 have been included on the licence to require the installation and monitoring of additional landfill gas monitoring wells. DER's assessment and decision making are detailed in Appendix B.</p>	
Information	L4.1.1 L4.1.2 L4.1.3 L4.1.4	<p>In line with DER's current licensing process L4.1.1 and 4.1.2 have been included on the amended licence as general requirements for records management and to ensure that any person left in charge of the Premises or any person who performs tasks on the Premises is aware of the conditions of the Licence.</p>	



		<p>L4.1.3, requiring the completion of the AACR, replaces a component of condition 26 of the previous licence.</p> <p>L4.1.4, requiring a complaints management system to be maintained, replaces condition 22 of the previous licence.</p>	
	L4.2.1 L4.2.2	<p>L4.2.1 and L4.2.2, requiring the submission of an Annual Environmental Report (AER), replaces conditions 20(d), 21(c) and 25 of the previous licence and components of condition 19(a), 22, and 26 of the previous licence.</p> <p>L4.2.2 requires that the AER also includes an assessment of the information contained in the report against previous monitoring results. Trend graphs and an interpretive summary will assist in demonstrating compliance with this condition.</p>	
	L4.3.1	<p>L4.3.1, which specifies notification requirements, replaces conditions 18 and 21(d) of the previous licence.</p>	
Licence Duration	-	<p>The licence duration has not been reassessed as part of this amendment.</p> <p>DER received a query from the licensee on 6 May 2015 in relation to the licence duration of L6832/1997/12. DER understood that the licensee was seeking advice as to whether it was possible, under DERs <i>Guidance Statement – Licence Duration Part V Environmental Protection Act 1986</i> (November 2014), to request a licence duration extension of 15 years. The licensee was informed that based on the framework specified in the Guidance Statement that DER considered that it did not currently hold sufficient information to support an extension to the licence duration and that further information would be required as part any formal licence amendment application to extend the licence duration. Further details are provided in the DER's letter to Mr Peter Margetic dated 13 July (DER ref: A933677).</p>	<p>DERs <i>Guidance Statement – Licence Duration Part V Environmental Protection Act 1986</i> (November 2014),</p>



5 Advertisement and consultation table

Date	Event	Comments received/Notes	How comments were taken into consideration
12/11/2015	Proponent sent a copy of draft instrument	<p>Comments were received on 18 November 2015 with regards to following proposed conditions:</p> <ul style="list-style-type: none">• L1.2.1 <i>Maintain all pollution control and monitoring equipment;</i>• L1.2.3 <i>Stormwater management ;</i>• L2.4.1 <i>Monitoring of landfill gas;</i>• L4.1.1(c) <i>Records management;</i> and• L4.1.4(b) <i>Complaints management system</i>	<p>Additional clarity was provided to the licensee with additional changes proposed. In summary:</p> <ul style="list-style-type: none">• L1.2.1 was removed as other licence conditions relating to pollution control and monitoring adequately control related risks.• L1.2.3 was removed and was replaced by L1.3.15 which ensures that the proponents proposed control for managing stormwater is adhered to.• L2.4.1 – administrative error was rectified;• L4.1.1(c) – administrative error was rectified; and• L4.1.4(b) – administrative error was rectified



6 Risk Assessment

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

Table 1: Emissions Risk Matrix

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



Appendix A – Fugitive emissions - Landfill Gas

Landfill gas (LFG) and leachate emissions resulting from previous unauthorised landfilling activities are issues of concern for the premises. Based on the information available, DER considers that there is evidence to demonstrate that the premises' presents a low-moderate risk of off-site LFG migration. To ensure this continues to be the case DER requires the ongoing monitoring of LFG utilising an appropriate network of perimeter and on-site monitoring wells to ensure that the risk profile does not increase.

Whilst the evidence suggests a low risk, there are several concerns and uncertainties in the dataset which should be noted when considering monitoring results for Lot 1 (collected since January 2011). The following concerns and uncertainties have been highlighted:

- The available records indicate that a detailed site investigation of the waste mass has not been completed to date. The nature and extent of fill with an appreciable biodegradable component across Lot 1 is unknown. Investigations completed on the neighbouring lot (Lot 2 which was formerly part of the licensed premises) indicate significant quantities of LFG were recorded in wells installed in the waste mass.
- Given the methane content reported in G30, and the extent of methane generation across Lot 2, it is likely that there is high potential for LFG generation across Lot 1.
- The western boundary of the premises is bounded by residential areas to the west, located approximately 20 metres across Driver Road. Given the close proximity to these residential areas, the current LFG monitoring network could be improved to provide greater accuracy on the characterisation and assessment of the potential for lateral LFG migration off-site and associated risks to adjoining residential land users.
- It is unclear whether LFG migration pathways (i.e. drainage lines, sub-surface infrastructure) exist beneath the site and immediately off-site and if these have been considered as potential preferential pathways available for LFG migration.

DER considers that so long as Lot 1 remains a licensed industrial premises, the key consideration is the potential for off-site migration of LFG. To address some of the above uncertainties DER considers that additional dedicated LFG monitoring wells be installed and monitored along the western perimeter boundary and within the central southern portion of the premises. The additional data collected from LFG monitoring at these new locations will provide further evidence on whether the risk to on-site and off-site receptors remains low and acceptable. The data will also provide further supporting information and inform any subsequent rehabilitation or remediation of the site where a change in land use is proposed.

Emission Description

Emission – LFG is generated by the biodegradation of waste and consists of a mix of bulk gases such as methane, carbon dioxide, nitrogen, oxygen and hydrogen and many trace gases such as hydrogen sulphide, carbon monoxide, halogenated organics and aromatic hydrocarbons. The rate of LFG emissions is dependent on the conditions present within the waste mass, for example moisture and bacteria content. LFG monitoring records for the premises, reported to DER in accordance with licence conditions, indicate that the presence of LFG is mainly isolated to the area around G30/G30R.

Impact – LFG can be passively vented to the atmosphere through the surface of the landfill where a low permeability cap or cover material has not been applied, which is the case for the Non Organics Disposal landfill. It can also migrate through the subsurface and through features such as pipelines and service ducts in the gas and leachate collection systems. Potential impacts associated with releases of LFG include toxicity from inhalation, ecotoxicity, fire and explosion if gas collects in high enough concentrations, asphyxiation and odour.



Controls – Other than allowing LFG to passively vent to the atmosphere and undertaking periodic monitoring for LFG at dedicated monitoring wells no other control mechanisms are being implemented or are proposed for the premises.

Risk Assessment

Consequence: Major

Likelihood: Unlikely

Risk Rating: Moderate

Regulatory Controls

DER considers that so long as Lot 1 remains a licensed industrial premises, the key consideration is the potential for off-site migration of LFG. To address some of the above uncertainties DER considers that additional dedicated LFG monitoring wells be installed and monitored along the western perimeter boundary and within the central southern portion of the premises. The additional data collected from the three new LFG monitoring wells will provide further evidence on whether the risk to on-site and off-site receptors remains low and acceptable. The data will also provide further supporting information and inform any subsequent rehabilitation or remediation of the site where a change in land use is proposed.

L3.1.1 and L3.1.2 have been included on the licence to require the installation and monitoring of additional LFG monitoring wells.

Risk Assessment

Consequence: Major

Likelihood: Unlikely

Risk Rating: Moderate