Government of Western Australia
Department of Water and Environmental Regulation

Amendment Notice 1

Licence Number	L6878/1997/13
Licence Holder	Shire of Northampton
ACN	NA
File Number:	DER2014/001051-1
Premises	Northampton Waste Management Facility Crown Reserve 25328 Lot 10603 on Plan 168471 and Lot 300 on Plan 50239 Horrocks Road, NORTHAMPTON WA 6535
Date of Amendment	8 March 2019

Amendment

The Chief Executive Officer (CEO) of the Department of Water and Environmental Regulation (DWER) has amended the above Licence in accordance with section 59 of the *Environmental Protection Act 1986* (EP Act) as set out in this Amendment Notice. This Amendment Notice constitutes written notice of the amendment in accordance with section 59B(9) of the EP Act.

Stephen Checker
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Date: 2019.03.08 15:09:05 +08'00'

STEVE CHECKER
MANAGER WASTE INDUSTRIES
REGULATORY SERVICES

an officer delegated under section 20 of the *Environmental Protection Act 1986* (WA)

Definitions and interpretation

Definitions

In this Amendment Notice, the terms in Table 1 have the meanings defined.

Table 1: Definitions

Term	Definition
AACR	Annual Audit Compliance Report
ACN	Australian Company Number
AER	Annual Environment Report
Amendment Notice	refers to this document
AS 4156.6 – 2000	Australian Standard AS 4156.6 – 2000: Determination of Dust/moisture Relationship for Coal.
Category/ Categories/ Cat.	categories of Prescribed Premises as set out in Schedule 1 of the EP Regulations
CEO	means Chief Executive Officer. CEO for the purposes of notification means: Director General Department Administering the *Environmental Protection Act 1986* Locked Bag 33 Cloisters Square PERTH WA 6850 info@dwer.wa.gov.au
CS Act	*Contaminated Sites Act 2003* (WA)
Delegated Officer	an officer under section 20 of the EP Act
Department	means the department established under section 35 of the *Public Sector Management Act 1994* and designated as responsible for the administration of Part V, Division 3 of the EP Act.
DWER	Department of Water and Environmental Regulation
EPA	Environmental Protection Authority
EP Act	*Environmental Protection Act 1986* (WA)
EP Regulations	*Environmental Protection Regulations 1987* (WA)

Existing Licence	The Licence issued under Part V, Division 3 of the EP Act and in force prior to the commencement of and during this Review
Licence Holder	Shire of Northampton
m^3	cubic metres
Minister	the Minister responsible for the EP Act and associated regulations
NEPM	National Environmental Protection Measure
Noise Regulations	*Environmental Protection (Noise) Regulations 1997* (WA)
Occupier	has the same meaning given to that term under the EP Act.
Prescribed Premises	has the same meaning given to that term under the EP Act.
Premises	refers to the premises to which this Decision Report applies, as specified at the front of this Decision Report.
Risk Event	as described in *Guidance Statement: Risk Assessment*
UDR	*Environmental Protection (Unauthorised Discharges) Regulations 2004* (WA)

Amendment Notice

This amendment is made pursuant to section 59 of the *Environmental Protection Act 1986* (EP Act) to amend the Licence issued under the EP Act for a prescribed premises as set out below. This notice of amendment is given under section 59B (9) of the EP Act.

This notice is limited only to an amendment for:

- addition of Category 61A to the exisiting licence;

The following guidance statements have informed the decision made on this amendment*:*

- *Guidance Statement: Regulatory Principles (July 2015)*
- *Guidance Statement: Setting Conditions (October 2015)*
- *Guidance Statement: Land Use Planning (February 2017)*
- *Guidance Statement: Licence Duration (August 2016)*
- *Guidance Statement: Decision Making (February 2017)*
- *Guidance Statement: Risk Assessment (February 2017)*
- *Guidance Statement: Environmental Siting (November 2016)*

Amendment description

The Northampton waste management facility is operated by Shire of Northampton (The Shire). The premises is located approximately 475 kilometres (km) north of Perth. The premises receives animal carcasses and animal wastes, green waste and inert wastes type 1 and 2. All putrescible waste received is collected within skips and transferred out of the premises to Meru landfill on a weekly basis. Separation of some waste streams is carried out within smaller skip bins for aluminium tins and cardboard at the premises, for removal by contractors. Tyres are currently being stored at the premises for later disposal off site.

In 2015 following the Northampton Fire where a rural stockist commercial premises was destroyed, the Shire of Northampton applied to the Department of Environmental Regulation for (and was granted) approval under Sect 75 of the Act for an emergency containment area (bioremediation pad) which was constructed at the Northampton Waste Management Facility. Contaminated soil with a small amount of other material was collected by the Shire and placed on the bioremediation pad where the pesticide and herbicide chemicals, fuel/oil, and fire suppressing foam chemicals in the soils will be able to gradually reduce in concentration. Once the contamination levels in the soils are low enough, the Shire intends to use the remediated waste soil as cover material within the Facility. It is estimated that 500 cubic metres (cm^3) of contaminated soils/material were placed on the bioremediation pad. The bioremediation pad was designed to hold and manage 2,000 cubic metres of material (refer to figure 1 below).

The application details that:

- The constructed bioremediation pad surface is 70.0m long x 33.0m wide x 200mm deep;
- was designed to store and manage 2,000m^3 of material;
- the average annual capacity of the bioremediation pad was calculated using climate data from the Geraldton Town weather station number 008050;
- natural soil was dug out and slopes formed in accordance with the design plans;
- a layer of 100mm thick sand was laid over the natural soil and compacted;
- a 1.5mm high density polyethylene (HDPE) liner was laid over the sand layer and hot

welded on-site;

- a final layer of compacted sand 150mm thick was laid over the liner to protect it from vehicle movements and sharp material placed on top of the pad;
- the bioremediation process involves spreading the soil over the pad and turning it monthly to aerate the soil and help in the breakdown of contaminants;
- no chemical additives are proposed for the bioremediation process;
- an evaporation pond was constructed on the southern end of the pad to capture contaminated water from rain falling on the contaminated material and for the collection of leachate from the pad;
- the evaporation pond is 37.2m long x 17.2m wide x 1.4m deep;
- the evaporation pond has been designed to provide a freeboard of 400mm during the month of July when evaporation is at its lowest;
- freeboard has been calculated to provide containment for the 10 year, 24 hour (ARI) design storm;
- at freeboard the evaporation pond is 39.2m long x 19.2m wide x 0.4m deep;

Figure 1: General arrangement of the bioremediation pad and evaporation pond

Table 2 below outlines the proposed changes to the Licence

Table 2: Additional categories

Category Number	Description	Nominated production throughput
61A	Solid waste facility: premises (other than premises with category 67A) on which solid waste produced on other premises is stored, reprocessed, treated or discharged onto land.	4,700 tpa

Other approvals

The Licence Holder has provided the following information relating to other approvals as outlined in Table 3.

Table 3: Relevant approvals

Legislation	Number	Approval
Planning and Development Act 2005- Shire of Northampton	*NA*	*No approval required*

Amendment history

Table 4 provides the amendment history for L6878/1997/13.

Table 4: Licence amendments

Instrument	Issued	Amendment
L6878/1997/13	*05/02/2019*	*Licence amendment to change Premises boundary.*
L6878/1997/13	*29/04/2016*	*Licence amendment to extend expiry date to 2033.*
L6878/1997/13	*7/03/2019*	*Amendment Notice 1: add category 61A to existing licence.*

Location and receptors

Table 5 below lists the relevant sensitive land uses in the vicinity of the Prescribed Premises which may be receptors relevant to the proposed amendment.

Table 5: Receptors and distance from activity boundary

Residential and sensitive premises	Distance from Prescribed Premises
Closest residential premises	approximately 400 m from the premises boundary

Table 6 below lists the relevant environmental receptors in the vicinity of the Prescribed Premises which may be receptors relevant to the proposed amendment.

Table 6: Environmental receptors and distance from activity boundary

Environmental receptors	Distance from Prescribed Premises
Nokanena Brook (tributary of Bowes River)- a perennial stream that was previously contaminated from the “Uga” lead mine activities	approximately 115m south west of the premises.
Groundwater	35.96 metres below ground level approximately 304m south west of the premises.

Risk assessment

Tables 7 below describe the Risk Events associated with the amendment consistent with the *Guidance Statement: Risk Assessments*. Both tables identify whether the emissions present a material risk to public health or the environment, requiring regulatory controls.

Table 7: Risk assessment for proposed amendments during operation

Risk Event						Consequence rating	Likelihood rating	Risk	Reasoning
Source/Activities		**Potential emissions**	**Potential receptors**	**Potential pathway**	**Potential adverse impacts**				
Cat 61A *Solid waste facility*	*Bioremediation Facility*	***Odour:*** *associated with solid waste storage and treatment*	*approximately 400m from the premises boundary*	*Air / wind dispersion*	*Amenity and health impacts*	*Slight*	*Possible*	*Low*	*The operations will possibly generate odour. However current licence condition 2.7.1 ensures that odour emitted from the Premises does not unreasonably interfere with the health, welfare, convenience, comfort or amenity of any person who is not on the premises.* *The Delegated Officer considers that the provisions of the existing licence and Section 49 of the Environmental Protection Act 1986 are sufficient to regulate odour emissions during operation and does not require any further regulatory controls.*
		Dust: *associated with solid waste storage and treatment*	*approximately 400m from the premises boundary*	*Air / wind dispersion*	*Amenity and health impacts*	*Slight*	*Possible*	*Low*	*The Delegated Officer has considered that current licence condition 2.6.1 which requires the licensee to use all reasonable and practical measures to prevent or minimise dust emissions from the premises and licence condition 2.6.2 ensures no visible dust to cross the premises boundary. The provisions of Section 49 of the*

									Environmental Protection Act 1986 are also sufficient to regulate odour emissions during operation and does not require any further regulatory controls.
		Noise- *associated to truck movements*	*approximately 400 m from the boundary*	*Air / wind dispersion*	*Amenity and health impacts*	*Slight*	*Possible*	*Low*	*The primary noise emissions will be generated from the movement of trucks The Delegated Officer considers noise emissions are adequately addressed under the provisions of the Environmental Protection (Noise) Regulations 2002.*
		Seepage/Leachate	*Surrounding land, Groundwater – depth approximately 35.96m and surface water drainage system*	*Seepage or overland flow of leachate*	*Amenity and health impacts*	*Minor*	*Possible*	*Medium*	*The Delegated Officer has reviewed the information regarding the risk of leachate migrating and considers that licence conditions will be added to the amended licence to ensure:* • *that the storage of the contaminated waste is within the bioremediation cell/pad only;* • *that the contaminated solid waste is stored and treated within the containment structure that are lined to achieve a permeability of 1 x 10^{-9}, contain leachate and storm water produced as a result of a 1 in*

									100-year storm event, • *the evaporation pond has been designed to provide a freeboard of 400mm during the month of July when evaporation is at its lowest;*
		Disposal/reuse	*Contamination of disposal area*	*Contaminant present in soil*	*Health impacts*	*Minor*	*Possible*	*Medium*	• *adequate tilling and wetting of the contaminated soil to facilitate the bioremediation process;* • *that the bioremediated soils are sampled prior to disposal or reuse*

Decision

Dust controls

The Delegated Officer considers that there is a low risk of impacts from dust emissions from the proposed amendments.

The complaints history of the Premises indicates that there have been no dust complaints received by DWER in regards to the Premises.

The Licence Holder will also be subject to the general provisions of the EP Act.

Leachate controls

The Delegated Officer considers that there is a medium risk of impacts from leachate emissions from the proposed amendment. However this risk is considered acceptable subject to some regulatory controls and given the bioremediation pad and the evaporation pond are lined to achieve a permeability of no greater than 1 $x10^{-9}$ m/s.

Noise controls

The Delegated Officer has determined that there is a low risk of impacts from noise emissions during the operation of the liquid waste ponds. The Licence Holder will also be subject to the general provisions of the *Environmental Protection (Noise) Regulations 1997*.

Odour

The Delegated Officer considers that storing, treatment and the tilling activities will possibly generate odour however there is a low risk of impacts from odour emissions from the proposed amendments since the Licence Holder will also be subject to the general provisions of the EP Act.

Disposal/Reuse

The delegated officer considers that remediated soils are to be assessed to determine suitability for reuse or disposal to landfill in accordance with the requirements of the National Environmental Protection (Assessment of Site Contamination) Measure 1999. The NEPM provides guidance on the required sampling densities for soil stockpiles, as well as appropriate assessment for different land uses.

Using the above information, the Delegated Officer has determined that an amendment be made to the licence with the inclusion of additional licence conditions to allow for the operation of the bioremediation pad.

The Delegated Officer considers the proposed conditions will not increase any risk relating to emissions at the premises.

The Delegated Officer has considered DWER's *Guidance Statement: Regulatory Principles, Guidance Statement: Setting Conditions* and *Guidance Statement: Risk Assessment* in granting this amendment, and does not consider that this amendment will impact the risk profile of the premises, which is currently considered as low.

Licence Holder's comments

The Licence Holder was provided with the draft Amendment Notice on 12 February 2019. Comments received from the Licence Holder have been considered by the Delegated Officer as shown in Appendix 2.

Amendment

1. The front page of the Licence is amended by the insertion of the red text shown in underline below.

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
57	Used tyre storage (general): premises (other than premises within category 56) on which used tyres are stored.	100 tyres or more	2,000 tyres
62	Solid waste depot – premises on which waste is stored or sorted pending final disposal or re-use.	500 tonnes or more per year	1,600 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	2,000 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.	1,000 tonnes or more per year	4,700 tonnes per annual period

2. Condition 1.3.1 (Table 1.3.1) of the licence is amended by the insertion of the red text shown in underline below:

Table 1.3.1: Waste acceptance		
Waste type	**Quantity limit tonnes/ annual period**	**Specification**[1]
Putrescible Waste	1,600	None specified.
Inert Waste Type 1	2,000	Waste containing visible asbestos or ACM shall not be accepted.
Inert Waste Type 2		Tyres and plastic only. Maximum storage capacity of 2,000 tyres only at any one time.
Special Waste Type 1		Cement bonded asbestos. No fibrous asbestos shall be accepted.
Clean Fill		None specified.
Contaminated soil	4,700 tonnes per annual period	None specified

3. Condition 1.3.3 (Table 1.3.2) of the licence is amended by the insertion of the red text shown in underline below:

Table 1.3.2: Waste processing		
Waste type	**Process(es)**	**Process limits[1, 2, 3]**
		<u>All waste types</u> Disposal of waste by landfilling shall only take place within the landfill area shown on the Landfill Area Map in Schedule 1. No waste shall be temporarily stored or landfilled within 35 metres from the boundary of the premises. The separation distance between the base of the landfill and the highest groundwater level shall not be less than 3 m.
Putrescible waste	Receipt, handling, associated storage and disposal of waste	<u>Putrescible waste</u> • Only to be accepted for transfer not burial/ disposal except for animal carcasses; • To be removed from premises within 7 days of receipt, except for carcasses. <u>Green waste</u> Ensure the following measures relating to the storage of green waste on the premises are implemented: • a total of no greater than 2,000 m^3 of mulch and green waste shall be stored at any one time; • all mulch and green waste shall be stored in windrows; and a 5 m fire break shall be maintained around the green waste storage area; • stored to a maximum height of 2 m; and • only green waste may be burned on site.
Inert Waste Type 1		• Waste containing visible asbestos or ACM shall not be accepted. • Scrap metal can be accepted on site.
Inert Waste Type 2		• Tyres and plastics only. • Tyres to be stored in piles of up to 100 units with a 6 m separation distance between piles.
Special Waste Type 1		• Only to be disposed of into a designated asbestos disposal area within the landfill; • Cement bonded asbestos shall be bagged and stored in a clearly labelled and secure container; • Not to be deposited within 2 m of the final tipping surface of the landfill; and • No works shall be carried out on the landfill that could lead to a release of asbestos fibres.

Clean Fill		None specified.
Contaminated soil	Receipt, handling and treatment	• Contaminated soils only to be stored within the bioremediation cell (as shown in schedule 1 map- waste disposal and burial area); • Contaminated soil is to be tilled as required to facilitate the bioremediation process;and • Wetting of contaminated soil to occur as required to facilitate the bioremediation process.

4. The Licence is amended by the insertion of Conditions 1.3.11 and 1.3.12 shown below:

1.3.11 The Licensee shall ensure that material is only stored within the areas with the relevant infrastructure requirements and at the locations specified in Table 1.3.4.

Table 1.3.4: Containment infrastructure		
Containment point reference	***Material***	***Infrastructure requirements***
Bioremediation cell	*Contaminated soil*	• *The constructed bioremediation pad surface is 70.0m long x 33.0m wide x 200mm deep;* • *Designed to store and manage 2,000m^3 of material;* • *A layer of 100mm thick sand was laid over the natural soil and compacted;* • *Lined with a 1.5mm high density polyethylene (HDPE) liner with a permeability of 10^{-9} m/s; and* • *a final layer of compacted sand 150mm thick is laid over the liner to protect it from vehicle movements and sharp material placed on top of the pad;*

1.3.12 The Licensee shall ensure that:
(a) Bioremediated soils are sampled and tested to determine their suitability for reuse or disposal to landfill; and
(b) The suitability of bioremediated soils for reuse as a resource is assessed in accordance with the requirements of the National Environmental Protection (Assessment of Site Contamination) Measure 1999.

5. Condition 3.3.1 (Table 3.6.1) of the licence is amended by the insertion of the red text shown in underline below:

Table 3.6.1: Monitoring of inputs and outputs				
Input/ Output	**Parameter**	**Units**	**Averaging period**	**Frequency**
Waste Inputs	Putrescible waste, Inert 1, Inert 2, Special Waste 1, Clean Fill, Contaminated soil	tonnes (where a weighbridge is present on the site) m^3 (where no weighbridge is present)	N/A	Average monthly volume received.
Waste Outputs	Waste type as defined in the Landfill Definitions			Average monthly volume leaving or rejected from the Premises

6. Condition 3.4 of the licence is amended by the deletion of the text shown in strike through below and the insertion of Condition 3.4.1 shown in red text in underline below:

3.4 Process monitoring

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

3.4.1 The Licensee shall undertake process monitoring according to the specifications in Table 3.6.2.

Table 3.6.2: Monitoring of inputs and outputs				
Monitoring point reference	**Parameter**	**Units**	**Frequency**	**Method**
Contaminated soil stockpiles contained within the bioremediation cell	BTEX and TRH C6-C9 petroleum hydrocarbons C16-C35 petroleum hydrocarbons (aromatics) C10->C35 petroleum hydrocarbons (aliphatics) PAHs (total) Benzo (a)pyrene Toulene Xylenes (total) Chlorpyrifos Pronamide Lead Chlorpyrifos (total) Pronamide (total) Glyphosate (total) 2,4-D (total) PFOS PFHxS PFOA	mg/Kg	Prior to disposal or reuse	AS 4482.2

Appendix 1: Key documents

	Document title	In text ref	Availability
1	Licence L6878/1997/13 – Northampton Waste Management Facility	L6878/1997/13	accessed at www.dwer.wa.gov.au
2	Amendment application document	A1727898	DWER records

Appendix 2: Summary of Licence Holder comments

The Licence Holder was provided with the draft Amendment Notice on 12 February 2019 for review and comment. Comments received from the Licence Holder have been considered by the Delegated Officer as shown below.

Condition	Summary of Licence Holder comment	DWER response
Prescribed premises category table	Minor typographical changes	Typographical changes adopted
Table 1.3.1- waste acceptance	Minor typographical changes	Typographical changes adopted