

# **Amendment Notice 1**

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Licence Number L7023/1997/11

Licence Holder Shire of Wiluna

**File Number:** 2012/006675-1

Premises Wiluna Refuse Disposal Site

Reserve 8384, Rubbish Tip Road

WILUNA WA 6646

Date of Amendment 22 May 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.

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  |  |  |
|-------------------------------|---|--|--|
| Amendment Notice              | refers to this document   |  |  |
| Category/<br>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 A 1986 Locked Bag 10 JOONDALUP DC WA 6919 info@dwer.wa.gov.au |  |  |
| Delegated Officer             | an officer under section 20 of the EP Act   |  |  |
| Department                    | means the department established under section 35 of the <i>Public Sector Management Act 1994</i> 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 Wiluna   |  |  |
| Minister                      | the Minister responsible for the EP Act and associated regulations  |  |  |
| Prescribed<br>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  |

### **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 Category 61. No changes to the aspects of the original Licence relating to Category 64 have been requested by the Licence Holder.

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: Decision Making (February 2017)
- Guidance Statement: Risk Assessment (February 2017)
- Guidance Statement: Environmental Siting (November 2016)

## **Amendment description**

The Wiluna Refuse Disposal Site, operating under Licence L7023/1997/11, is located in the Northern Goldfields Region of Western Australia, approximately 957km north-east of Perth. The town site of Wiluna is approximately 1.5km north-east of the premises. The premises accepts waste including domestic and septic waste from the town site and surrounding mine camps. The facility operates as a category 64 Putrescible Landfill, and a Category 61 Liquid Waste Facility. An application was submitted to DWER on 14 March 2019 by the Licence Holder requesting an increase in the Category 61 approved Premises production or design capacity from 200 tonnes per annual period to 400 tonnes per annual period. The request to increase the accepted annual tonnage comes in response to the increased demand from mining operations in the area. The Premises has received more than their approved 200tpa and subsequently closed the site pending approval of this amendment.

The liquid waste is managed on site through a series of unlined shallow trenches (Septage trenches), where the high evaporation rate results in quick drying of the waste allowing the removal of the dry sludge to the landfill putrescible cell. The premises is unlined with an underlying geology comprised of clay, silt, sand, and a depth to groundwater between 16m-18m. A 2016 environmental study confirmed that the properties of the material underlying the Septage trenches is the equivalent to a liner with the properties as outlined in the *Water Quality Protection Note 27 Liners for containing pollutants, using engineered soils guideline.* 

Table 2 below outlines the proposed changes to the Licence

Table 2: Proposed design capacity changes

| Category | Current design capacity      | Proposed design capacity     | Description of proposed amendment   |
|----------|------------------------------|------------------------------|---|
| 61       | 200 tonnes per annual period | 400 tonnes per annual period | Increase the design capacity from 200 tonnes per annual period to 400 tonnes per annual period. |

## **Amendment history**

Table 3 provides the amendment history for L7023/1997/11.

Table 3: Licence amendments

| Instrument    | Issued     | Amendment   |  |  |
|---------------|------------|---|--|--|
| L7023/1997/8  | 14/03/2005 | Licence re-issue – short term licence   |  |  |
| L7023/1997/9  | 26/02/2006 | Licence re-issue  |  |  |
| L7023/1997/10 | 26/02/2011 | Licence re-issue  |  |  |
| L7023/1997/11 | 18/02/2016 | Licence re-issue and converted into the latest DER format                           |  |  |
| L7023/1997/11 | 29/04/2016 | Licence amendment – extension of expiry date  |  |  |
| L7023/1997/11 | 08/06/2016 | Licence amendment – include category 61 to the Licence                              |  |  |
| L7023/1997/11 | 21/05/2019 | Amendment Notice 1 – Increase in Category 61 design capacity from 200tpa to 400tpa. |  |  |

## **Location and receptors**

Table 4 below lists the relevant sensitive land uses in the vicinity of the Prescribed Premises which may be receptors relevant to the proposed amendment.

Table 4: Receptors and distance from activity boundary

| Residential and sensitive premises | Distance from Prescribed Premises |  |  |
|------------------------------------|-----------------------------------|--|--|
| Residence                          | 1.2km                             |  |  |
| Residence                          | 1.5km                             |  |  |

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

Table 5: Environmental receptors and distance from activity boundary

| Environmental receptors                         | Distance from Prescribed Premises |
|---|-----------------------------------|
| Minor watercourse                               | 1.8km E                           |
| Lake Violet Calcrete TEC Priority 1 Buffer Zone | 4km SE                            |

### Risk assessment

Table 6 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 6: Risk assessment for proposed amendments during operation

|                                       | Risk Event   |  |   |   | 1 31-121-1-1   |       |                      |        |   |
|---------------------------------------|--|--|---|---|--|-------|----------------------|--------|---|
| Source/                               | Activities   | Potential emissions  | Potential receptors   | Potential pathway                         | Potential adverse impacts  |       | Likelihood<br>rating | Risk   | Reasoning   |
| Cat 61<br>Liquid                      | Increase acceptance                                | Dust:<br>associated with<br>increased<br>vehicle<br>movement                       | Residence 1.2km<br>and 1.5km from<br>Premises   | Air                                       | Health and amenity impacts   | N/A   | N/A                  | N/A    | Given the separation<br>distance, the Delegated<br>Officer considers the risk<br>of dust associated with the<br>increase in vehicle<br>movements as negligible  |
| waste<br>facility                     | from 200tpa<br>to 400tpa                           | Odour:<br>associated with<br>increased<br>quantity of<br>liquid waste              | Residence 1.2km<br>and 1.5km from<br>Premises   | Air                                       | Amenity causing nuisance   | N/A   | N/A                  | N/A    | The Delegated Officer considers the separation distance between source and receptor significant enough to lower the risk of odour to negligible.  |
| Cat 61<br>Liquid<br>waste<br>facility | Increase<br>acceptance<br>from 200tpa<br>to 400tpa | Liquid Waste:<br>From potential<br>overtopping of<br>containment<br>infrastructure | Residence 1.2km and 1.5km from Premises  Minor watercourse 1.8km East of site  Lake Violet Calcrete TEC Priority 1 Buffer Zone 4km SE | Overland<br>flow /<br>Direct<br>discharge | Contamination of surface water  Adverse impacts to the health and survival of TEC and flora and fauna dependent upon surface water | Minor | Possible             | Medium | Condition 1.3.4 has been amended to place responsibility on the Licence Holder to ensure overtopping of the Septage trenches does not occur.  The region is known to have high evaporation rates resulting in prompt removal of dry sludge from the trenches.  The Delegated Officer considers the high local evaporation rate in the area in conjunction with the amended condition 1.3.4 as sufficient in mitigating the risk of overtopping. |
| Cat 61<br>Liquid<br>waste<br>facility | Increase<br>acceptance<br>from 200tpa<br>to 400tpa | Leachate:  | Groundwater and groundwater dependent vegetation and  | Seepage                                   | Adverse impacts to the health and survival of  | Minor | Unlikely             | Low    | Groundwater in the area is between 16m – 18mBGL  An environmental study   |

| Risk Event        |                     |                     |                   | Components                                     | اد د داناه دادا    |                   |      |   |
|-------------------|---------------------|---------------------|-------------------|--|--------------------|-------------------|------|---|
| Source/Activities | Potential emissions | Potential receptors | Potential pathway | Potential adverse impacts                      | Consequence rating | Likelihood rating | Risk | Reasoning   |
|                   |                     | ecosystem           |                   | vegetation<br>dependent<br>upon<br>groundwater |                    |                   |      | carried out by Galt Geotechnics in February 2016 confirmed that it is unlikely that the existing disposal technique presents a risk to the groundwater.                     |
|                   |                     |                     |                   |  |                    |                   |      | The Delegated Officer considers the subsurface conditions of the soil, underlying bedrock, and the distance to groundwater is adequate in lowering the risk to groundwater. |

#### **Decision**

The Delegated Officer has determined the risk associated with increasing the operational capacity from 200 to 400 tonnes per annual period is able to be appropriately managed under existing conditions with a minor amendment to condition 1.3.4 to ensure that overtopping of the Septic trenches does not occur.

The Delegated Officer considers the risk from odour and dust expected to result from the increased vehicle movements and increased liquid waste acceptance as negligible due to the nearest sensitive receptor being 1.3-1.5km away.

As the risks are able to be adequately managed with minor amendments to conditions 1.3.2 and 1.3.4, the Delegated Officer has decided to grant Amendment Notice 1.

### **Licence Holder's comments**

The Licence Holder was provided with the draft Amendment Notice on 20 May 2019. Comments received from the Licence Holder have been considered by the Delegated Officer as shown in Appendix 2.

### **Amendment**

- 1. Condition 1.3.2 of the Existing Licence is amended by the deletion of the text shown in strikethrough and the insertion of the red text shown in underline below:
  - 1.3.2 The Licensee shall only accept waste on to the Premises if:
    - a) it is of a type listed in Table 1.3.1;
    - b) the quantity accepted is below any quantity limit listed in Table 1.3.1; and
    - c) it meets any specification listed in Table 1.3.1.
    - d) in the case of contaminated solid waste is supported by documentation that demonstrates compliance with the acceptance criteria for Class II landfills.

| Table 1.3.1: Waste acceptance             |   |  |  |  |  |
|---|---|--|--|--|--|
| Waste                                     | Quantity limit tonnes/<br>year                      | Specification <sup>1</sup>   |  |  |  |
| Clean fill                                |   | None specified   |  |  |  |
| Inert Waste Type 1                        |   | None specified   |  |  |  |
| Inert Waste Type 2                        |   | None specified   |  |  |  |
| Putrescible Waste (including green waste) |   | None specified   |  |  |  |
| Special Waste Type 1 (asbestos waste)     | Combined total of 5,000 tonnes per annual period    | None specified   |  |  |  |
| Special Waste Type 2 (biomedical waste)   |   | None specified   |  |  |  |
| Scrap metal                               |   | None specified   |  |  |  |
| Other Recyclables                         |   | None specified   |  |  |  |
| Used Tyres                                | Less than 1000 car tyre equivalents at any one time | None specified   |  |  |  |
| Liquid Waste                              | 200 400 tonnes per annual period                    | Septage (K210) <sup>2</sup> and grease trap waste (K110) <sup>2</sup> . Delivered in liquid waste truck. |  |  |  |

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

Note 2: Controlled Waste category group and waste code

- 2. Condition 1.3.4 of the Existing Licence is amended by the insertion of the red text shown in underline below:
  - 1.3.4 The Licensee shall ensure that wastes accepted onto the premises are only subjected to the process(es) 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                                | Process  | Process limits   |
| All                                       | Receipt, handling and associated storage prior to the disposal of waste by landfilling | <ul> <li>No waste shall be temporarily stored or landfilled within 35 meters from the boundary of the premises;</li> <li>The tipping area shall not exceed a maximum linear length of 30 meters;</li> <li>The separation distance between the base of the landfill and the highest groundwater level shall not be less than 3 meters;</li> <li>A minimum distance of at least 100 meters between the waste disposal site and any superficial water body shall be maintained; and</li> <li>Cover completed cells with a final soil cover of at least one (1) meter</li> </ul>   |
| Clean fill                                | Receipt, handling and  | None specified   |
| Inert Waste Type 1                        | associated storage prior to the disposal of waste                                      | None specified   |
| Inert Waste Type 2                        | by landfilling   | None specified   |
| Putrescible waste (including green waste) | Receipt, handling and associated storage prior to the disposal of waste by landfilling | Place waste within a defined trench or within and area enclosed by earthen or other bunds  |
|   | Disposal by Burning  | <ul> <li>Burning of Green Waste Only</li> <li>To be dried and seasoned for at least 2 months before burning;</li> <li>To take place in a designated burning area at least 25m from the boundary of any active disposal areas;</li> <li>To take place in trenches or windrows;</li> <li>To take place only when an adequate supply of water is available to effectively manage the burning process;</li> <li>To be burnt in a manner to minimize smoke generation;</li> <li>Ensure burning does not commence before 0800 hours and the Fire Control Officer for the premises declares the area safe by 1700 hours on the same day; and</li> <li>Restrict the volume of green waste burnt such that it is completely burnt during daylight hours.</li> </ul> |
| Special Waste                             | Receipt, handling and  | Only to be disposed of into a designated   |

| Type 1 (asbestos waste)                          | associated storage prior<br>to the disposal of waste<br>by landfilling  | <ul> <li>asbestos disposal area within the landfill;</li> <li>Not to be deposited within 2m of the final tipping surface of the landfill; and</li> <li>No works shall be carried out on the landfill that could lead to a release of asbestos fibres.</li> </ul>   |
|--|---|--|
| Special Waste<br>Type 2<br>(biomedical<br>waste) |   | <ul> <li>Only to be disposed of into a designated clinical waste disposal area within the landfill;</li> <li>Not to be disposed within 2m of the final tipping surface of the landfill; and</li> <li>No works shall be carried out on the landfill that could lead to biomedical wastes being excavated or uncovered.</li> </ul> |
| Scrap metal                                      |   | Stored in an area delineated by heaped   |
| Other recyclables Used tyres                     | Receipt, handling, storage prior to reuse or  | gravel windrows  When tyres only are being disposed of to landfill, they are to be covered at regular  |
|  | disposal by landfilling   | intervals such that no more than 100 tyres are left exposed at any time  |
| Liquid Waste                                     | Disposal of waste in the designated trench under the supervision of the Licensee, or person nominated by the Licensee | <ul> <li>Only to be disposed of into the designated Septage trenches, as shown in the map in Schedule 1.</li> <li>Ensure that overtopping of the Septage trenches does not occur.</li> </ul>   |

# **Appendix 1: Key documents**

|   | Document title                       | In text ref   | Availability                   |
|---|--------------------------------------|---------------|--------------------------------|
| 1 | Licence L7023/1997/11 – Wiluna       | L7023/1997/11 | accessed at www.dwer.wa.gov.au |
|   | Refuse Disposal Site                 |               |                                |
| 2 | DER, July 2015. Guidance Statement:  |               | accessed at www.dwer.wa.gov.au |
|   | Regulatory principles. Department of | DER 2015a     |                                |
|   | Environment Regulation, Perth.       |               |                                |
| 3 | DER, October 2015. Guidance          |               |                                |
|   | Statement: Setting conditions.       | DER 2015b     |                                |
|   | Department of Environment            |               |                                |
| 4 | Regulation, Perth.                   |               |                                |
| 4 | DER, November 2016. Guidance         |               |                                |
|   | Statement: Risk Assessments.         | DER 2016b     |                                |
|   | Department of Environment            | 221120100     |                                |
|   | Regulation, Perth.                   |               |                                |
| 5 | DER, November 2016. Guidance         |               |                                |
|   | Statement: Decision Making.          | DER 2016c     |                                |
|   | Department of Environment            | DEIX 20100    |                                |
|   | Regulation, Perth.                   |               |                                |

## **Appendix 2: Summary of Licence Holder comments**

The Licence Holder was provided with the draft Amendment Notice on 20 May 2019 for review and comment. The Licence Holder responded on 21 May 2019 waiving the remaining comment period (until 10 June). No comments were submitted on the draft Amendment Notice.