



## Application for Licence

### Part V Division 3 of the *Environmental Protection Act 1986*

---

|                          |   |
|--------------------------|---|
| <b>Licence Number</b>    | L7799/2001/8  |
| <b>Applicant</b>         | Southern Metropolitan Regional Council  |
| <b>File Number</b>       | DER2015/001639  |
| <b>Premises</b>          | Regional Resource Recovery Centre<br><br>Regional Resource Recovery Centre<br>Part Lot 77 and part Lot 78 on Plan 2903, 350 Bannister Road<br>CANNING VALE , WA 6031<br><br>As defined in Schedule 1 of the Licence |
| <b>Date of Report</b>    | 27 November 2020  |
| <b>Proposed Decision</b> | Licence granted   |

#### **A/MANAGER, WASTE INDUSTRIES REGULATORY SERVICES**

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

## Table of Contents

|   |           |
|---|-----------|
| <b>1. Decision summary</b>                                      | <b>3</b>  |
| <b>2. Scope of assessment</b>                                   | <b>3</b>  |
| 2.1 Regulatory framework  | 3         |
| 2.2 Application summary and overview of Premises                | 3         |
| 2.3 Legislative context and other approvals                     | 4         |
| <b>3. Risk assessment</b>                                       | <b>5</b>  |
| 3.1 Risk assessment   | 7         |
| 3.2 Decision  | 8         |
| 3.3 Summary of all changes made to the Licence                  | 8         |
| <b>4. Consultation</b>  | <b>10</b> |
| <b>5. Conclusion</b>  | <b>11</b> |
| <b>Appendix 2: Key documents</b>                                | <b>12</b> |
| Table 1: Relevant approvals                                     | 4         |
| Table 2: Works approval and licence history                     | 4         |
| Table 3: Risk assessment of proposed amendment during operation | 6         |
| Table 4: Summary of proposed amendments                         | 8         |
| Table 5: Consultation   | 10        |

## 1. Decision summary

Licence L7799/2001/8 is held by Southern Metropolitan Regional Council (Licence Holder) for the Regional Resource Recovery Centre (the Premises), located at Part Lot 77 and Part Lot 78 on Plan 2903, 350 Bannister Road, Canning Vale, WA 6031.

This Amendment Report documents the assessment of potential risks to the environment and public health from proposed changes to the emissions and discharges during the operation of the Premises. As a result of this assessment, Revised Licence L7799/2001/8 has been granted.

The Revised Licence issued as a result of this amendment consolidates and supersedes the existing Licence previously granted in relation to the Premises. The Revised Licence has been granted in a new format with existing conditions being transferred, but not reassessed, to the new format.

## 2. Scope of assessment

### 2.1 Regulatory framework

In completing the assessment documented in this Decision Report, the department has considered and given due regard to its Regulatory Framework and relevant policy documents which are available at <https://dwer.wa.gov.au/regulatory-documents>.

### 2.2 Application summary and overview of Premises

On 3 June 2020 Southern Metropolitan Regional Council (SMRC) applied to amend the operating Licence for the Resource Recovery Centre (RRRC) in accordance with section 59 and 59B of the *Environmental Protection Act 1986* (EP Act). The application was made following the identification of non-compliances during a compliance inspection undertaken on 12 November 2019 by Department of Water and Environmental Regulation (DWER) Officers. The Licence Holder sought the following amendments:

- amendment to the requirement to undertake quarterly monitoring of biofilter performance during periods of shut down or maintenance (existing Condition 39(a), renumbered as Condition 37(a) as part of this amendment); and
- amendment to the requirement to ensure biofilter inlet fan speeds operate at 95% or greater of the design capacity (existing Condition 39(b)ii, renumbered to Condition 37(b)(ii) as part of this amendment).

During the compliance inspection, it was identified that SMRC was unable to meet the above requirements as specified by existing Licence condition 39 on the Licence (condition number as indicated in Licence issued on 27 March 2015). SMRC advised that the biofilter inlet fans operational speed is limited to 65 - 80% of the design capacity, and not able to achieve the 95% requirement as specified in the Licence. SMRC also advise that quarterly monitoring of the biofilters was not being undertaken while that the biofilters are shut down for maintenance or are off line.

As part of the amendment process, a number of administrative changes have also been made to the Licence. These have included:

- Updating the format and appearance of the Licence;
- Updating Licence Holder terminology;
- Updating the Licence to reflect the current activities and infrastructure on site;
- Revised Licence condition's numbers, and removed any redundant conditions and realigned condition numbers for numerical consistency; and

- Corrected clerical mistakes and unintentional errors.

A summary and explanation for the changes to the Licence are provided in Section 3.3.

## 2.3 Legislative context and other approvals

Relevant approvals are shown in Table 1.

**Table 1: Relevant approvals**

| Legislation       | Number | Approval   |
|-------------------|--------|--|
| EP Act Part IV    | MS 517 | <p>Report of the EPA – Bulletin 938</p> <p>Provides for the construction and operation of a Regional Resource Recovery Centre for the separation and processing of waste, with the three main components:</p> <ul style="list-style-type: none"> <li>- An in-vessel composting facility operated under negative pressure and services by biofilters;</li> <li>- A materials recycling facility; and</li> <li>- A green waste processing facility. The in-vessel composting facility is to be operated under negative pressure and services by biofilters.</li> </ul> <p>The proposed amendments do not relate to the scope of the Ministerial Statement regulated under Part IV.</p> |
| Planning approval | -      | No change requiring planning approval.   |

The recent licence history is shown in Table 2.

**Table 2: Works approval and licence history**

| Instrument   | Issued     | Amendment  |
|--------------|------------|--|
| L7799/2001/8 | 27/03/2014 | Licence re-issued  |
| L7799/2001/8 | 29/08/2014 | Amendment to correct administrative errors and update biofilter monitoring and compliance reporting    |
| L7799/2001/8 | 29/04/2016 | Amendment to expiry date of licence as per DER's Notice of Amendment to Licence Expiry Dates           |
| L7799/2001/8 | 27/03/2015 | Amendment to increase tonnage per year and remove the monthly limit of waste collected at the facility |
| L7799/2001/8 | 20/12/2017 | Amendment Notice 1 – Administrative changes only   |
| L7799/2001/8 | 09/07/2018 | Amendment Notice 2 – Inclusion of new sorting platform to the WCF for FOGO processing.                 |
| L7799/2001/8 | 27/11/2020 | Amendment to alter biofilter monitoring condition and amalgamate Licence                               |

### 3. Risk assessment

Table 4 below describe the Risk Event associated with the amendment consistent with the *Guidance Statement: Risk Assessments* (DER, 2017) and identifies the potential source, pathway and impact to receptors from the proposed amendment.

To establish a Risk Event there must be an emission, a receptor which may be exposed to that emission through an identified actual or likely pathway, and a potential adverse effect to the receptor from exposure to that emission.

Although there is no alteration to emissions and discharges to the environment from the proposed changes to the Licence, the Licence Holder has requested a change to the regulatory control applied to the potential emissions of odour which may present a risk to public health or the environment.

**Table 1: Risk assessment of proposed amendment during operation**

| Risk Event   |  |   |   |                      | Risk rating <sup>1</sup><br>C = consequence<br>L = likelihood | Proposed applicant controls sufficient? | Conditions of licence | Justification for amended regulatory controls |
|--|--|---|---|----------------------|---|---|-----------------------|---|
| Source/Activities  | Potential emission   | Potential pathways and impact                               | Receptors   | Applicant controls   |   |   |                       |   |
| <b>Operation: Cat 67A</b>  |  |   |   |                      |   |   |                       |   |
| <b>Compost manufacturing and soil blending</b>   |  |   |   |                      |   |   |                       |   |
| Alteration to biofilter monitoring frequencies during shutdown<br>-Condition 39(a)<br>(37(a) - renumbered as part of this amendment) | Odour: associated with the sorting of food and garden organics waste | Air/windborne pathway causing impacts to health and amenity | Sensitive residential premises within Leeming, approx. 400m north of the premises | Refer to Section 3.1 | C: Slight<br>L= Rare<br><b>Low Risk</b>                       | Y                                       | Condition 37 (a)      | Refer to Section 3.1 and 3.2                  |
| Alteration to biofilter inlet fan operating speed<br>-Condition 39(b)ii)<br>(37(b)ii) - renumbered as part of this amendment)        |  |   |   | Refer to Section 3.1 | C = Minor<br>L = Rare<br><b>Low Risk</b>                      | Y                                       | Condition 37(b) (ii)  | Refer to Section 3.1 and 3.2                  |

Note 1: Consequence ratings, likelihood ratings and risk descriptions are detailed in the *Guidance Statement: Risk Assessments* (DER 2017).

## 3.1 Risk assessment

### Condition 37 (a) - Change to biofilter monitoring frequency during shut down

The Licence Holder has requested that the monitoring conditions of the Licence be amended to remove the requirement for biofilter monitoring (both monthly and quarterly) when the processing plant and biofilters are not operating or shut down for extended periods of time (when the biofilters are not required for odour treatment). The Licence Holder has advised that the premises has not been utilising the digesters or the full capacity of the tipping or aeration building since they commenced processing FOGO wastes. The biofilters have also been sequentially taken off line for extended periods since the end of 2019 period for maintenance and refurbishment works.

The Delegated Officer considers that the Likelihood of an odour emission occurring during these periods is **rare**, and may only occur in exceptional circumstances. The consequence of not undertaking biofilter monitoring while they are shut down mode is **slight** and health criteria will not be affected. The Delegated Officer therefore considers the overall risk from not undertaking monthly and quarterly monitoring biofilter (while they are in shut down mode, and where the period of shut down extends for the whole monthly or quarterly monitoring period) to be **low**.

### Condition 37 (b) (ii) - Alteration to biofilter fan inlet speed

The Licence Holder has provided third party technical advice within the application that indicates that the biofilter operates less effectively and reliably when inlet fan speeds are operated at 95% of the manufacturers maximum design capacity, as opposed to when they operated at the specified normal operating range of between 65%-80% of the manufacturers specified maximum design capacity. The evidence provided suggests that the air delivery infrastructure causes static pressure to build up within the existing system when the fan speed is above the optimal range of 65-80% capacity. In higher air velocity rates, various parts of the system become limiting or slow points to over-all air flow conveyance such as the inline air humidifier, as well as pipework ducts, bends and elbows. The biofilter media itself is also identified to act as an air pressure point, affecting the rate at which the input air can be removed from the system.

Further to the above, the Licence Holder has also presented evidence that suggests the system may only reliably operate at 95% of manufacturers maximum design capacity when the system is newly refurbished and the biofilter media is new, and that operational reliability can only be maintained reliably for very short of period of several weeks. It is suggested that after this time, sludge and bacteria builds up within the humidifier and within the biofilter substrate media itself, and this build up retards air movement through the system. This buildup of bacteria is however, considered to improve the effectiveness of the system to treat air and therefore compensates for the reduction in the air movement/fan speed.

The Licence Holder has also indicated that the negative pressure of the buildings is able to be maintained, ensuring that potentially odorous air is maintained within the processing building (regardless of the lower inlet fan speed).

Based on the information provided within the application and review conducted by DWER, the Delegated Officer considers that the proposed changes to the inlet fan speed specification within the licence will not result in a significant change to odour emissions, nor prevent the ongoing monitoring of biofilter performance. The Delegated Officer considers the likelihood of reduced biofilter fan inflow rate on odour emissions from the premises to be **rare** and may occur in exception circumstances only. The consequence of the change is assessed as **minor** and any impacts to the environment or public health will be limited to low-level on-site impacts, with offsite impacts being non detectable. The overall risk of this change to off site amenity impacts from odour is therefore considered to be **low**.

## 3.2 Decision

### Condition 37(a)- Change to biofilter monitoring frequency during shut down

The Delegated Officer considers that proposed changes to Condition 37(a) are reasonable and has amended the requirements of the condition to remove monthly and quarterly biofilter monitoring during periods when the processing plant is not operational.

### Condition 37(b)(ii)- Alteration to biofilter fan inlet speed

The Delegated Officer considers that the proposed amendment to the inlet fan speed is acceptable, noting that representative biofilter performance monitoring can be achieved with a reduced inlet fan speed. Condition 37(b)(ii) updated to require biofilter monitoring during normal operating conditions for the inlet fan. Condition 4(p) also updated to require reporting of the normal operating conditions during biofilter monitoring to allow DWER to assess processing plant operating conditions and biofilter performance during monitoring events.

## 3.3 Summary of all changes made to the Licence

In addition to the amendments requested by the Licence Holder, and the administrative amendments identified in section 2.2, the Delegated Officer has consolidated the Licence with Amendment Notice 1 and Amendment Notice 2. Other changes include updates to the waste acceptance condition to the standard condition format used in new Licences, clarification of the premises boundary for fencing and security purposes, removal of completed construction conditions and amending condition 8 regarding the requirement to load all putrescible materials received on site into the digestors within 72 hours of receipt. Typographical errors, where present have also been corrected.

The Delegated Officer has also updated the waste acceptance table and definitions within the Licence to specifically include a definition for Food Organics and Garden Organics (FOGO) waste. The risk assessment for the construction and operation of the FOGO waste sorting platform and associated infrastructure at the premises (which was completed April 2020) was conducted with Amendment Notice 2 (dated 9 July 2018). The Delegated Officer notes that operations, and the risk assessment for FOGO waste acceptance and processing remains consistent with the assessment conducted for Amendment Notice 2, and the revision of the waste acceptance table has been completed to clarify waste acceptance at the Premises.

A detailed summary against each condition is provided below.

**Table 4: Summary of proposed amendments**

| Condition Number of Revised Licence | Proposed amendment   |
|-------------------------------------|--|
| All                                 | Changes in terminology from Licensee to Licence Holder.  |
| 2                                   | This condition which defines the terms of waste acceptance at the premises has been updated to the new format and includes both types of waste currently accepted at the premises. |
| 4                                   | Condition 4(p) was included that requires the Licence Holder to record the biofilter inlet fan speeds during monitoring undertaken in accordance with Condition 37(b)(ii)          |



| Condition Number of Revised Licence | Proposed amendment  |
|-------------------------------------|---|
| 6                                   | Inclusion of all existing putrescible waste storage infrastructure into condition 6 which reflects actual putrescible materials storage areas including: Aeration building, Product Storage Area, Area A and Shredder Building for green wastes in addition to the Tipping Shed.  |
| 8                                   | Condition 8, which required all putrescible waste received at the premises to be loaded into the Digestors within 72 hours of receipt on site has been updated to reflect current processing operations (that does not incorporate use of the Digestors).   |
| 9, 11, 12, 13 and 30                | Reference to Combined Premises boundary included as both the SMRC RRRC and the adjacent Materials Recovery Facility are located within one secured operational area.<br><br>Following consultation with the Licence Holder Condition 9(b) was deleted as it duplicated the intent of Condition 10.  |
| 15                                  | Corrections to condition numbering 15(a); 15(c)(iii) and 15(c)(iv)  |
| 17                                  | Corrections of condition numbering within 17(b)<br><br>Following consultation with the Licence Holder Condition an administrative change was made to conditions 17(a) and 17(c) to correct the date of the current Field Odour Assessment Plan date from 2012 to 2020.  |
| 34                                  | Administrative change to reference Attachment 1   |
| 36                                  | Corrections to condition numbering within 36(b) and 36(c).  |
| 37                                  | <ul style="list-style-type: none"> <li>- 37(a) Amendment to Table 3 to remove monitoring requirements during shut down or maintenance periods.</li> <li>- 37(a) and 37(b)(i) Corrections to condition numbering</li> <li>- 37(b)(ii) Amendment to the biofilter inlet fan speed requirements.</li> <li>- Following consultation with the Licence Holder Condition an administrative change was made to condition 37(a) Table 4 with regards to the citation of Condition 16 (previously the incorrect Condition number 18 was referenced).</li> </ul> |
| 39-43                               | Administrative change in condition numbers due to deletion of construction conditions 38, 39 and 40 as compliance has been demonstrated with these.   |
| -                                   | <p>Construction conditions removed as construction completed.</p> <p>The works have been constructed and documentation certifying the completion of works to the standards prescribed within Amendment Notice 2 to the CEO's requirements was received by DWER on 3 April 2020 (DWER Document reference A1882173).</p>  |

## 4. Consultation

Table 5 provides a summary of the consultation undertaken by the department.

**Table 5: Consultation**

| Consultation method  | Comments received   | Department response  |
|--|---|--|
| <p>The Licence Holder was provided the draft Licence and Amendment Report on 20 October 2020 for a 21-day comment period</p> | <p>The Licence Holder provided comments on 13 November 2020.</p> <p><u>Condition 2:</u> The Licence Holder questioned the restriction of FOGO accepted on the premises to 40,000 tonnes, a putrescible waste which contradicted the throughput capacity for composting.</p> <p><u>Condition 9(b) and Condition 10:</u> Licence Holder noted that these conditions were effectively the same</p> <p><u>17(a), 17(b) and Condition 37(a)</u> administrative amendments to condition numbers were requested.</p> <p><u>Figure 1 and Figure 3</u></p> <p>The Licence Holder highlighted that these site maps did not include reference to the bin storage shed.</p> | <p><u>Condition 2:</u> The Delegated Officer has agreed to remove the restriction of 40,000 tonnes in relation to the acceptance of FOGO waste at the site as detailed in Condition 2 of the Licence.</p> <p>The Delegated Officer notes that the infrastructure at the site has been assessed for the composting of up to 109,200 tonnes of municipal solid waste. Prior to commencement of composting activities at the site, the Licence Holder should consider all existing and proposed activities to be undertaken on the premises and ensure those activities are consistent with the current Licence.</p> <p>Condition 9(a) and (9b): Condition 9(b) was deleted and Condition 9(a) is now Condition 9.</p> <p><u>17(a), 17(b) and Condition 37(a)</u> administrative changes made as detailed in Table 4.</p> <p><u>Figure 1 and Figure 3:</u> Changes to the maps were not made as the bin storage shed is not referenced in the Licence. An updated map can be included within future licence amendments as necessary (following the decommissioning and removal of the digestors).</p> |

## 5. Conclusion

This assessment of the risk in change to reporting requirements for monitoring activities on the premises has been undertaken with due consideration of a number of factors, including the documents and policies specified in this decision report (summarised in Appendix 2).

Based on this assessment, it has been determined that an amended Licence will be granted subject to conditions commensurate with the determined controls and necessary for administration and reporting requirements.

DWER notes that it may review the appropriateness and adequacy of controls at any time and that, following a review, DWER may initiate amendment to the approval under the EP Act.

## Appendix 2: Key documents

|     | Document title   | In text ref      | Availability   |
|-----|--|------------------|--|
| 1.  | Licence amendment application form – Regional Resource Recovery Centre – Materials Recycling Facility                | NA               | DWER record: A1899972  |
| 2.  | Licence L7799/2001/8<br>Amendment Notice 1<br>Amendment Notice 2   | L7799/2001/8     | accessed at <a href="http://www.dwer.wa.gov.au">www.dwer.wa.gov.au</a> |
| 3.  | Ministerial Statement 517  | MS 517           | accessed at <a href="http://www.epa.wa.gov.au/">www.epa.wa.gov.au/</a> |
| 4.  | SMRC FOGO platform compliance documentation  | A188273          | DWER record: A188273   |
| 5.  | DWER Compliance Inspection letter and report   | DWER<br>A1888783 | DWER record: A1888783  |
| 6.  | SMRC Comments on draft 21 day Licence  | NA               | DWER record: A1953483  |
| 7.  | DWER, June 2019. Guideline: Industry Regulation Guide to Licensing. Department of Water and Environmental Regulation | -                | accessed at <a href="http://www.dwer.wa.gov.au">www.dwer.wa.gov.au</a> |
| 8.  | DER, July 2015. <i>Guidance Statement: Regulatory principles.</i> Department of Environment Regulation, Perth.       | -                |  |
| 9.  | DER, October 2015. <i>Guidance Statement: Setting conditions.</i> Department of Environment Regulation, Perth.       | -                |  |
| 10. | DER, August 2016. <i>Guidance Statement: Licence duration.</i> Department of Environment Regulation, Perth.          | -                |  |
| 11. | DER, November 2016. <i>Guidance Statement: Risk Assessments.</i> Department of Environment Regulation, Perth.        | -                |  |
| 12. | DER, November 2016. <i>Guidance Statement: Decision Making.</i> Department of Environment Regulation, Perth.         | -                |  |