



Licence Number	L8336/2009/2
Licence Holder	Suez Recycling & Recovery Pty Ltd
ACN	002 902 650
File Number:	DER2015/001723
Premises	Mindarie Resource Recovery Facility Lot 801 on Plan 57533 Pederick Road NEERABUP WA 6031
Date of Amendment	03/08/2017

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* 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.

Date signed: 3 August 2017

Alan Kietzmann

MANAGER LICENSING – WASTE INDUSTRIES

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
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 <i>Environmental Protection Act 1986</i> Locked Bag 33 Cloisters Square PERTH WA 6850 info-der@dwer.wa.gov.au
CS Act	<i>Contaminated Sites Act 2003 (WA)</i>
Decision Report	refers to this document
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	<i>Environmental Protection Act 1986 (WA)</i>
EP Regulations	<i>Environmental Protection Regulations 1987 (WA)</i>
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999 (Cth)</i>
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
Licensee	Suez Recycling & Recovery Pty Ltd

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 <i>Guidance Statement: Risk Assessment</i>

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 odour controls. No changes to the aspects of the original Licence relating to other emissions or controls have been requested by the Licensee.

The following DWER 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

Suez Recycling & Recovery Pty Ltd (the Licensee) operates the Mindarie Resource Recovery Facility with an approved capacity to accept 110,000 tonnes of putrescible waste per annual period for composting purposes.

The Licensee submitted an amendment application on 29 May 2017 requesting that the current licence conditions in relation to odour limits are reviewed. There are no proposed changes to the odour control infrastructure or operation.

The specific changes that have been requested in the application are as follows:

- Modify Condition 21 to replace the 500 OU limit on a single cell, with a 1100 OU limit averaged across all four cells
- Replace the 350 OU target with 840 OU; and
- Add a requirement that SUEZ formally notify DER when any single Cell odour intensity result exceeds 1100 OU.

The current licence was granted on 10 April 2014 prior to the publication of DER's risk assessment framework and associated guidance statements. The Delegated Officer has determined that DER will undertake a risk assessment of odour emissions using the new framework to determine appropriate controls.

Amendment history

Table 2 provides the amendment history for L8336/2009/2.

Table 2: Licence amendments

Instrument	Issued	Amendment
L8336/2009/2	22/11/2016	Amendment Notice 1 – adjustment of condition numbers
L8336/2009	03/08/2017	Amendment Notice 2 – review and amend odour controls

Ministerial statements

The original construction of the Premises was assessed under Part IV of the EP Act and as a result Ministerial Statement 000662 was issued on 13 October 2004. The Ministerial Statement has two key conditions relating to air and odour emissions being:

- Condition 6 – Prior to commencement of construction of the facility, the proponent shall have an independent expert undertake a peer review of the detailed design of the total odour control system with particular emphasis on the design of the biofilter and process control
- Condition 7 – Prior to commencement of operation, the proponent shall prepare an Odour Management Plan to manage the impact of odour on health and amenity.

These conditions were met during the construction of the Premises, and do not provide any ongoing conflicts with the controls that may be placed on a Part V licence.

Location and receptors

Table 3 below lists the relevant sensitive land uses in the vicinity of the Prescribed Premises which may be receptors relevant to the proposed amendment.

Table 3: Receptors and distance from activity boundary

Residential and sensitive premises	Distance from Prescribed Premises
Motocross raceway	Immediately north of the Premises
Wanneroo Golf Course	Immediately east of the Premises
Industrial Properties	Immediately west of the Premises
Market gardens	200 metres to the north and west of the Premises
Nearest Residence	1 km south of the Premises

Monitoring Reports

The most recent biannual monitoring report (December-May 2017) demonstrated an exceedance of the odour units at three cells. The recorded odour characteristics of these emissions were described by the Licence Holder as 'non-offensive musty and woody nature'. The measurements of relative humidity and temperature were within the required limits of the licence.

Reports for the previous three years indicate similar results with exceedance of odour units at three to four cells, and regular compliance with humidity and temperature limits.

Complaints History

DWER records indicate a number of odour complaints were received in regards to the Premises from 2010 to 2013, however only one odour complaint has been received since (20 June 2017) which has not been substantiated.

Technical Advice

DWER's Air Quality Services undertook a review of the Licence Holder's amendment application and the current licence (including associated Environmental Assessment Report and Amendment Notice 1), and provided the following recommendations:

- Infrastructure currently in place at the Premises is considered sufficient in minimising the risk of odour emission impacts, and no alterations to the infrastructure are considered necessary.
- Current conditions in the licence relating to odour controls should be maintained, with some minor adjustments.
- Conditions specifying limits and targets for odour concentrations should be removed as there is a large uncertainty in measuring these concentrations which therefore restricts their usefulness as a regulatory limit. Additionally, it has been demonstrated over the past two years that operations have been managed to a level that has no longer generated significant odour complaints.
- While the use of the proposed odour concentrations are not supported as a regulatory limit, the Licence Holder should consider updating their internal Biofilter Management Plans with these parameters for use in their management practices.
- Temperature and relative humidity of the air at the inlet of the biofilter are appropriate process parameters that can be used as surrogate data to measure biofilter odour abatement performance.
- Bi-annual and continuous monitoring of critical parameters should remain, however the submission of reports can be reduced to annually.

Meteorological Data

Wind direction and speed at the nearest Bureau of Meteorology station (Gingin Aero, Site number 009178) have been reviewed and are depicted in Figure 1 below. The data indicates strong easterly morning winds, followed by strong south-westerly afternoon winds.

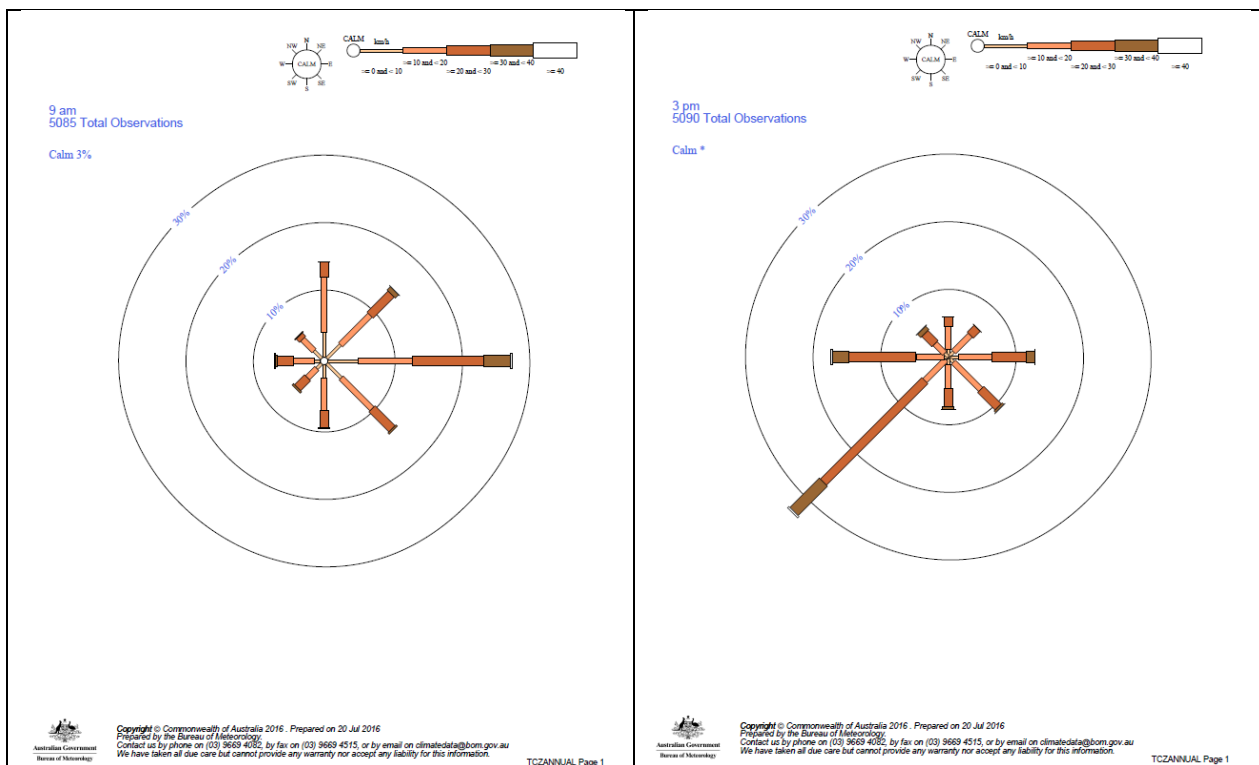


Figure 1: 9am and 3pm wind direction and speeds

Risk assessment

Tables 4 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 4: 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 67A Composting Facility	Receipt and decomposition of waste materials	Odour associated with the receipt and decomposition of waste materials	Residential Receptors 1km south of the Premises. Industrial and Recreational Receptors Immediately adjacent to the Premises.	Air	Amenity impacts	Moderate (mid-level impact to amenity)	Possible (could occur at some time)	Medium	The Delegated Officer has determined risk by considering siting of receptors, pathway (including prevailing winds) and impacts, proponent controls (including infrastructure and operational management), compliance (previous monitoring report trends and complaints history) and existing regulatory controls imposed on the licence.

Decision

The Delegated Officer has determined that potential odour emissions from the Premises pose a medium risk. In line with DER Guidance Statement Risk Assessments (February 2017) medium risk events are acceptable, and are generally subject to regulatory controls. The Guidance Statement further states that a preference for outcome-based conditions where practical and appropriate will be applied.

The controls currently in place have been reviewed along with previously monitoring reports, complaints history and technical advice provided by DER's Air Quality section, and the following determinations have been made.

Infrastructure siting and design controls

The Delegated Officer considers that the current infrastructure controls which generally replicate the applicant's current controls (biofilter) are appropriate and do not require amendment.

Monitoring Requirements

The Delegated Officer has determined that the current monitoring requirements are appropriate and will be maintained on the licence. The requirement to monitor the relative humidity of inlet of each biofilter cell until 13 June 2014 will be removed as this date has passed and is no longer relevant.

Emission targets, emission limits and management actions.

The Delegated Officer has determined that emission targets are not sufficiently enforceable and therefore targets for all parameters be removed from the licence. The Licence Holder may consider applying targets as management triggers within their internal management processes.

The Delegated Officer has determined that odour unit limits are not an appropriate control due to the variability of odour unit measurements and difficulty of applying these units as a regulatory limit. Therefore the Delegated Officer has determined that odour unit limits will be removed. The requirement to monitor and report odour units will be retained to enable data comparison.

Humidity and temperature are considered to be key parameters for effectiveness of the biofilter and will therefore remain as a limit with the subsequent management actions as described by Condition 22.

Reporting

The Delegated Officer considers that annual reporting is appropriate due to the medium risk rating determined for odour emissions, therefore the requirement to submit biannual monitoring and monthly complaints data will be removed. The remaining reporting conditions will be consolidated to remove repetitive requirements and references to the AACR attachment are also removed as the AACR has been updated and is now available on DWER's website.

Administrative amendment

The Delegated Officer has determined that a number of administrative amendments are to be made to change references from the previous Department of Environment Regulation to the new Department of Water and Environmental Regulation.

References to Improvement requirements will be removed as the due date for these improvements has passed.

Licence Holder's comments

The Licence Holder was provided with the draft Amendment Notice on 27 July 2017. The Licence Holder did not have any comments to provide and requested that the amendment be issued as soon as possible.

Amendment

1. Definitions of the Licence is amended by the deletion of the text shown in strikethrough and the insertion of the red text shown in underline below:

~~“Director” means Director, Environmental Regulation Division of the Department of Environment Regulation for and on behalf of the Chief Executive Officer as delegated under Section 20 of the Environmental Protection Act 1986;~~

~~“Director” and “Department of Environment Regulation” for the purpose of correspondence means —~~

~~Regional Leader, Industry Regulation, Swan Region
Department of Environment Regulation
Locked Bag 33
CLOISTERS SQUARE WA 6850~~

~~Telephone: 9333 7510
Facsimile: 9333 7550
Email: swanindustryreg@der.wa.gov.au~~

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-der@dwer.wa.gov.au

2. Condition 10 of the Licence is amended by the deletion of the text shown in strikethrough and the insertion of the red text shown in underline below:

~~10 In the event operations cease due to failure or malfunction of plant equipment, the Licensee shall inform the Director~~ CEO ~~within 24 hours of the cause, duration of closure, time of start-up, and remedies taken to rectify the problem.~~

3. Condition 18 of the Licence is amended by the deletion of the text shown in strikethrough below:

~~18 The Licensee shall monitor biofilter performance continuously using either the SCADA system or manual readings and recordings in accordance with the minimum measurement requirements of Table 2 at the locations specified in Column 1 of Table 2 for the parameters specified in Column 2 of Table 2 and record the results in the unit specified in Column 3 of Table 2.~~

Table 2: Biofilter performance management requirements

Column 1	Column 2	Column 3	Column 4
Location	Parameter and unit	Monitoring frequency	Recording frequency
Maturation building	Air relative humidity (%)	Continuous	Continuous with SCADA system
Fans	Fan rate (%)		
Inlet of the three fans	Air temperature (°C)		
	Air relative humidity (%)		
At the mixing chamber of the biofilter and at the rear of each cell	Pressure (Pa)		Twice weekly
Inlet of each biofilter cell	Relative humidity	Daily Monday to Friday between 12pm and 3pm until 13 June 2014	Daily Monday to Friday

4. Condition 21 of the Licence is amended by the deletion of the text shown in strikethrough below:

21 The Licensee shall operate and manage the humidification system and the biofilter cells 1, 2, 3 and 4 to ensure that the limits ~~and targets~~ for the parameters specified in column 2 of Table 3 at the locations specified in column 1 of Table 3, comply with the ~~targets and limits respectively~~ in column 3 ~~and 4~~ of Table 3.

Table 3: Odour management parameter limits and targets

Column 1	Column 2	Column 3	Column 4 <u>3</u>
Location	Parameters	Target	Limit
Inlet of the three fans	Continuous relative humidity	≥ 90%	≥ 85%
	Continuous temperature	≤ 40°C	< 45°C
Inlet of each biofilter cell	Bi-annual relative humidity	≥ 90%	≥ 85%
	Bi-annual temperature	≤ 40°C	≤ 45°C
Surface area of each of the four biofilter cells	Odour concentration	350 ou	500 ou

5. Condition 23 of the Licence is amended by the deletion of the text shown in strikethrough and insertion of the red text shown in underline below:

23 The Licensee shall investigate any exceedance of the limits referred to in condition 21. The investigation shall include the following:

- (i) submit an exceedance investigation report to the ~~Director~~ CEO within 14 days of becoming aware of the exceedance;
- (ii) the exceedance report shall include:
 - the date, time and reason for the exceedance of the limit;
 - the period over which the exceedance of the limit occurred;
 - the extent of odour impacts over that period and potential or known environmental consequences;

- corrective action planned or taken to mitigate adverse environmental consequences;
- corrective action planned or taken to prevent recurrence of the exceedance; and
- predicted time frame to reduce odour emissions from the biofilter below the limit.

6. The Licence is amended by the deletion of the following Condition 24:

~~24 — The Licensee shall monitor daily Monday to Friday, the relative humidity at the inlet of each cell and record them as indicated in Table 2. The daily measurements will be compared to the continuous monitoring results of relative humidity from the inlets of each three fans.~~

7. The Licence is amended by the deletion of the following Condition 25:

~~25 — The Licensee shall provide to the Director a copy of all odour complaint data collected and analysed at the Premises and surrounding area detailing the information of the condition 2. This data shall be provided to the Director within a week after the completion of each month.~~

8. Condition 26 of the Licence has been renumbered to 24 and is amended by the deletion of the text shown in strikethrough and insertion of the red text shown in underline below:

~~26~~24 The Licensee shall by 1 February in each year, provide to the Director CEO an Annual Audit Compliance Report ~~in the form in Attachment 2 to this licence, signed and certified in the manner required by Section C of the form,~~ indicating the extent to which the licensee has complied with the conditions of this licence, and any previous licence issued under Part V of the Act for the Premises, during the period beginning 1 January the previous year and ending on 31 December.

9. Condition 27 of the Licence has been renumbered to 25 and is amended by the deletion of the text shown in strikethrough and insertion of the red text shown in underline below:

~~27~~25 The Licensee shall by 1 February in each year submit to the CEO an ~~provide that the Annual Environmental Report also contains~~ which shall include but not be limited to:

- (i) any relevant process, production or operational data recorded under condition 3;
- (ii) a comparison of the monitoring results with that of previous years including an assessment of the data against any limits or targets set in this licence or other environmental guidelines or policies and data from previous years' monitoring; identifying any data exceeding any limits, targets, guidelines or policies and provide information on why the exceedance occurred (if known) and action taken by the licensee to prevent recurrence of such exceedances;
- (iii) an assessment of the information contained within the report with respect to the environmental impacts of any discharges into the environment; ~~and~~
- (iv) details of any monitoring methods used to collect and analyse data required by any condition of this licence and information demonstrating that they comply with the methods specified in this licence;

- (v) the monthly total amounts of putrescible waste accepted onto the premises for composting for this reporting period as per the records of condition 6;
- (vi) the total volume of composted material removed offsite for the previous annual period as per the records of condition 8; and
- (vii) a monthly summary of the information contained in the complaint register required by condition 2.

10. The Licence is amended by the deletion of the following Condition 28:

~~28 — The Licensee shall by 15 June and 15 December of each year submit to the Director a Biannual Compliance Report. The report shall include but not be limited to the following for the semester:~~

- ~~(a) the monthly total amounts of putrescible waste accepted onto the premises for composting for this reporting period as per the records of condition 6;~~
- ~~(b) the total amount of composted material removed offsite for the previous semester as per the records of condition 8;~~
- ~~(c) a monthly summary of the information contained in the complaint register required by condition 2;~~
- ~~(d) the monitoring data required by conditions 15 and 16 of this licence; a comparison of the monitoring data against previous semesters data and versus limits and targets in this licence as per condition 19 will be performed; details of the operations during the sampling event as per condition 3; monitoring data required by condition 16 shall be reported with a time series graph for each of the parameters of the column 2 of the Table 2 and for each month; and~~
- ~~(e) the exceedance investigation reports required to be submitted by condition 21.~~

11. The Licence is amended by the deletion of the following Condition 29:

~~29 — The Licensee shall by 20 May 2014 and 20 June 2014 submit to the Director a monthly report. This monthly report shall include in a tabulated format the following:~~

- ~~• the results of the four measurements of the relative humidity at the inlet of each cell;~~
- ~~• the relative humidity results from the continuous monitoring at the inlet of the three fans;~~
- ~~• the atmospheric air temperature and relative humidity at the time of the measurements; and~~
- ~~• comparison of the values between the relative humidity measurements at the inlet of each cell and the relative humidity at the inlet fans shall be discussed.~~

Appendix 1: Key documents

	Document title	Availability
1	Air Quality Technical Advice	DER records [A1484831]
2	L8336 Mindarie RRF – Biannual Report – December 2016 to May 2017	DER records [A1450911]
3	L8336 Mindarie RRF – Biannual Report – June to November 2016	DER records [A1346186]
4	L8336 Mindarie RRF – Biannual Report – June 2016	DER records [A1152405]
5	L8336 Mindarie RRF – Biannual Report – December 2015	DER records [A1016588]
6	L8336 Mindarie RRF – Biannual Report – June 2015	DER records [A993088]
7	L8336 Mindarie RRF – Biannual Report – December 2014	DER records [A993087]