



Amendment Report

Licence Number	L7827/2001/5
Licence Holder	Abbotts Liquid Salvage Pty Ltd
ACN	125 634 004
File Number:	DER2014/001082-1
Premises	Abbotts Liquid Salvage Pty Ltd 35494 Albany Highway DROME WA 6330 Being part of Lot 4638 on Plan 157018 Co-ordinates (MGA Zone 50) -34.9376S, 117.7778E; -34.9375S, 117.7827E; -34.935S, 117.7827E; -34.9351S, 117.7810E; -34.9346S, 117.7770E; -34.9339S, 117.7806E
Date of Report	15 January 2020

1. Definitions and interpretation

Definitions

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

Table 1: Definitions

Term	Definition
ACN	Australian Company Number
Amendment Report	refers to this document
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 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	<i>Environmental Protection Act 1986</i> (WA)
EP Regulations	<i>Environmental Protection Regulations 1987</i> (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	Abbots Liquid Waste Salvage.
Minister	the Minister responsible for the EP Act and associated regulations
Prescribed	has the same meaning given to that term under the EP Act.

Premises	
Premises	refers to the premises to which this Amendment Report applies, as specified at the front of this Amendment Report.
Amended Licence	the amended Licence issued under Part V, Division 3 of the EP Act, with changes that correspond to the assessment outlined in this Amendment Report.

2. Amendment Description

The following guidance statements have informed the assessment and decision outlined in this Amendment Report:

- *Guidance Statement: Regulatory principles (July 2015)*
- *Guidance Statement: Setting conditions (October 2015)*
- *Guidance Statement: Publication of Annual Audit Compliance Reports (May 2016)*
- *Guidance Statement: Licence duration (August 2016)*
- *Guidance Statement: Environmental Standards (September 2016)*
- *Guidance Statement: Environmental Siting (November 2016)*
- *Guidance Statement: Land Use Planning (February 2017)*
- *Guidance Statement: Risk Assessments (February 2017)*
- *Guideline: Decision Making (June 2019)*
- *Guideline: Industry Regulation Guide to Licensing (June 2019)*

2.1. Purpose and scope of assessment

On 5 December 2019 the Licence Holder applied for an amendment to the Licence L7827/2001/1 to extend the licence duration by 12 months.

This amendment also includes a CEO initiated amendment which consolidated separately issued amendment notices (Amendment Notice 1 and Amendment Notice 2) into the licence. No additional assessment has been undertaken as part of this consolidation. Decisions related to the consolidated licence are published in the previous Decision Report and previous Amendment Notices 1, 2 and 3 for L9074/2017/1 (attached). Table 2 below summarises the content of previous amendments to the Licence. In accordance with Section 59(1)(e), (f), (h), (i), or (j) of the EP Act it is noted that consolidation of the amendments made as part of previous decisions may not be appealed against.

3. Amendment history

Table 4 provides the amendment history for L7827/2001/5.

Table 2: Licence amendments

Instrument	Issued	Amendment
W3546/2001/1	18/03/2/002	New Works Approval
L7827/2001/5	20/01/2003	New application
L7827/2001/5	12/1/2004	Licence re-issue
L7827/2001/5	12/1/2005	Licence re-issue
W4390/2007/1	18/03/2/002	Works Approval
L7827/2001/5	14/1/2010	Licence re-issue
L7827/2001/5	19/11/2012	Licence amendment
L7827/2001/5	10/1/2013	Licence re-issue
L7827/2001/5	16/12/2015	Licence amendment to extend duration of the expiry date
L7827/2001/5	26/04/2016	Licence amendment to extend duration of the expiry date

Instrument	Issued	Amendment
W5905/2015/1	11/2/2016	Works Approval to allow construction of composting facility
L7827/2001/5	14/07/2016	Licence amendment to add Category 67A to allow operation of the composting facility
L7827/2001/5	24/11/2016	Amendment Notice 1: DER initiated Amendment Notice to: <ul style="list-style-type: none"> Amend relevant definitions within Condition 1.1.2; Amend Condition 1.2.3 with regards to controls of waste storage, process limitations and administrative errors. Amend Condition 1.2.4 with regards to freeboard levels and administrative errors. Add Condition 1.2.10 with regards to minimum machinery requirements to assist in the control of fugitive emission while compost manufacturing and soil blending activities are being undertaken. Amend condition 3.2.1 with regards to the frequency of monitoring requirements.
L7827/2001/5	06/02/2019	Amendment Notice 2: Licensee initiated amendment to amend Condition 1.2.3 to allow the sale of compost which does not meet physical and chemical requirements set out by AS4454 and meets P1C1 (within the document Western Australian Guidelines for Biosolids Management).
L7827/2001/5	15/01/2020	Amendment to extend licence duration from 19 January 2020 to 19 January 2021 to allow time for a full DWER review of existing licence. DWER has also consolidated/amalgamated separately issued amendment notices in the licence

4. Consultation

Table 9: Summary of consultation

Method	Comments received	DWER response
Applicant referred draft documents (20/12/2019)	No comments received	N/A

5. Conclusion

The Delegated Officer has determined that the extension of the licence expiry date does not alter the risk profile of the premises. DWER is implementing review/reassessment framework for licence renewals which will be in place when the premises licence is due for renewal in 2021. There is to be no change in the potential emissions associated with the facility. The licence has been amended as shown below.

5.1. Summary of amendments

Table 10 provides a summary of the proposed amendments and will act as record of implemented changes. All proposed changes have been incorporated into the Amended Licence as part of the amendment process.

Table 10: Licence amendments

Condition No.	Proposed amendments
Licence Duration	The licence duration has been extended from 19 January 2020 to 19 January 2021

Jane Dalin
A/MANAGER WASTE INDUSTRIES
REGULATORY SERVICES

An officer delegated by the CEO under section 20 of the EP Act

Appendix 1: Key documents

	Document title	In text ref	Availability
1	Licence L7827/2001/5 Abbotts Liquid Salvage	L7827/2001/5	accessed at www.dwer.wa.gov.au
2	DER, July 2015. <i>Guidance Statement: Regulatory principles</i> . Department of Environment Regulation, Perth.	DER 2015a	accessed at www.dwer.wa.gov.au
3	DER, October 2015. <i>Guidance Statement: Setting conditions</i> . Department of Environment Regulation, Perth.	DER 2015b	
4	DER, May 2016. <i>Guidance Statement: Publication of Annual Audit Compliance Reports</i> . Department of Environment Regulation, Perth.	DER 2016a	
5	DER, August 2016. <i>Guidance Statement: Licence duration</i> . Department of Environment Regulation, Perth.	DER 2016b	
6	DER, September 2016. <i>Guidance Statement: Environmental Standards</i> . Department of Environment Regulation, Perth.	DER 2016c	
7	DER, November 2016. <i>Guidance Statement: Environmental Siting</i> . Department of Environment Regulation, Perth.	DER 2016d	
8	DER, February 2017. <i>Guidance Statement: Land Use Planning</i> . Department of Environment Regulation, Perth.	DER 2017a	
9	DER, February 2017. <i>Guidance Statement: Risk Assessments</i> . Department of Environment Regulation, Perth.	DER 2017b	
10	DWER, June 2019. <i>Guideline: Decision Making</i> . Department of Water and Environmental Regulation, Perth.	DWER 2019a	
11	DWER, June 2019. <i>Guideline: Industry Regulation Guide to Licensing</i> . Department of Water and Environmental Regulation, Perth.	DWER 2019b	

Appendix 3: Amendment Notice 1



Government of Western Australia
Department of Environment Regulation

Amendment Notice 1

Licence Number	L7827/2001/5
Licence Holder	Abbotts Liquid Salvage Pty Ltd
Registered business address	8 Princess Royal Drive ALBANY WA 6330
Date of amendment	Thursday, 24 November 2016
Prescribed Premises	Category 61 – Liquid waste facility Category 67A – Compost manufacturing and soil blending
Premises	Abbotts Liquid Salvage 35494 Albany Highway DROME WA 6330 Being Part of Lot 4638 on Plan 157018 within co-ordinates (MGA Zone 50) -34.9376S, 117.7778E; -34.9375S, 117.7827E; -34.935S, 117.7827E; -34.9351S, 117.7810E; -34.9346S, 117.7770E; -34.9339S, 117.7806E.

Amendment

The Delegated Officer has amended the above licence in accordance with section 59 of the *Environmental Protection Act 1986* as set out in this Amendment Notice.

Date signed: 23 November 2016

Caron Goodbourn

ACTING MANAGER LICENCING (WASTE INDUSTRIES)

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

Licence: L7827/2001/5
File No: DER2014/001082
Template: 1.3

Amendment Notice

This Notice is issued under 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.

Amendment Description

The Licence is amended following the identification of administrative errors within the regulatory controls applied to the amended Licence, that was granted on 14/07/2016 for the operation of the Category 67A Compost manufacturing and soil blending prescribed activities, which impact the operation of the prescribed activities. The administrative errors identified were:

- Condition 1.1.2: definitions used within the Licence that require amendment due to the amendments identified below, are not relevant to the content of the Licence (e.g. terms that are not present within the Conditions of the Licence) or were identified as significant omissions for the interpretation of the Conditions.
- Condition 1.2.3: the restriction of the composting windrow lengths to a maximum length of 20 meters and separated by at least 5 metres. The approval granted on 14/07/2016 to undertake Category 67A Compost manufacturing and soil blending prescribed activities did not justify the change with regards to an emission risk. The composting hardstand is required to be contained by a 150 mm bund. The containment of the composting windrows within the composting hardstand is sufficient to address the risk of leachate. The restriction of composting windrow lengths and addition of a minimum separation was not justified.
- Condition 1.2.3: the application of windrows size restrictions to the stockpiled green waste; the green waste was never intended to be stockpiled. The approval granted on 14/07/2016 to undertake Category 67A Compost manufacturing and soil blending prescribed activities did not justify the need for green waste to be stored in windrows.
- Condition 1.2.3: the restriction of waste (sludge and green waste) storage to a maximum of 7 days. The approval granted on 14/07/2016 to undertake Category 67A Compost manufacturing and soil blending prescribed activities did not justify the need to restrict waste stored for no more than seven days.
- Condition 1.2.4: the amendment of the liquid waste facility pond freeboard level from 300 to 500 mm. The approval granted on 14/07/2016 to undertake Category 67A Compost manufacturing and soil blending prescribed activities did not change the risk associated with the storage of liquid waste within the pond and therefore the amendment to freeboard levels was not justified.
- Condition 3.2.1: the amendment of the frequency of monitoring emissions to land by removing the term 'when irrigating'. The approval granted on 14/07/2016 to undertake Category 67A Compost manufacturing and soil blending prescribed activities did not justify the need to monitor the wastewater quality within the liquid waste storage dam in months when irrigation is not occurring.

The amendment to Conditions 1.2.3, 1.2.4 and 3.2.1 are made by the Delegated Officer pursuant to section 59(1)(a) of the EP Act.

Licence: L7827/2001/5
File No: DER2014/001082
Template: 1.3

The Licence Holder has identified that the following equipment is always available at the Premises for the purposes of dust and fire suppression:

- 12 tonne wheel loader with fire suppression system installed.
- 8000 litre fire truck.
- Fire pump.

In addition, the Licence Holder has identified that the following additional equipment can be mobilised at the Premises with short notice for the purposes of dust and fire suppression, if required:

- 18 tonne wheel loader with fire suppression system installed.
- 40 tonne long reach excavator with fire suppression system installed.
- 18 tonne bulldozer with fire suppression system installed.
- 42 tonne bulldozer with fire suppression system installed.
- 25 tonne 6x6 dump truck with fire suppression system installed.
- Trailer mounted 1000 litre fire unit.
- 4000 litre fire unit.

In consideration of the administrative amendments identified above, the Delegated Officer has given some consideration to fugitive emissions regarding the compost and waste materials that may arise in the form of dust, odour and the risk of fire. The administrative amendments are not considered to have materially changed the risks associated with the potential emissions. The identification and specification of machinery capable of addressing the occurrence of these emissions within the new Condition 1.2.10, in conjunction with the existing Conditions of the Licence, is considered appropriate within this context.

The addition of Condition 1.2.10 is made by the Delegated Officer pursuant to section 59(1)(b) of the EP Act.

Decision

The Delegated Officer has determined that amendments be made to Conditions 1.2.3, 1.2.4 and 3.2.1 of the Licence and that new Condition 1.2.10 is added. The Conditions are amended to address the administrative errors identified by the Delegated Officer.

The Delegated Officer does not consider that this approach will impact the risk profile or operation of the prescribed activities at the Premises. There is no additional risk expected through the amendment of the Conditions.

Amendment History

Instrument	Granted	Amendment
L7827/2001/5	16/12/2015	DER initiated Amendment to extend expiry date of Licence L7827/2001/5 to 19 January 2017.

Licence: L7827/2001/5
File No: DER2014/001082
Template: 1.3

L7827/2001/5	29/04/2016	DER initiated Amendment Notice to extend expiry date of Licence L7827/2001/5 to 19 January 2020.
L7827/2001/5	14/07/2016	Licence Holder initiated Amendment to add Category 67A (Compost manufacturing and soil blending) prescribed activities and associated regulatory controls approved through works approval W5905/2015/1.
L7827/2001/5	24/11/2016	DER initiated Amendment Notice to: <ul style="list-style-type: none"> • Amend relevant definitions within Condition 1.1.2; • Amend Condition 1.2.3 with regards to controls of waste storage, process limitations and administrative errors. • Amend Condition 1.2.4 with regards to freeboard levels and administrative errors. • Add Condition 1.2.10 with regards to minimum machinery requirements to assist in the control of fugitive emission while compost manufacturing and soil blending activities are being undertaken. • Amend condition 3.2.1 with regards to the frequency of monitoring requirements.

Amendment

- Condition 1.1.2 of the Licence is amendment by the deletion of the text shown in strikethrough below and the addition of text shown in red below:
 - 1.1.2 For the purposes of this Licence, unless the contrary intention appears:

'AS4454' means the Australian Standard AS 4454-2012 Composts, soil conditioners and mulches;

~~'Licensed landfill' means a landfill licensed under the Act;~~

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

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

'six monthly' means the 2 inclusive periods from 1 January to 30 June to 1 July to 31 December in the ~~same~~ year;

'Windrow' means ~~greenwaste or~~ compost or soil conditioned stockpiles;
- Condition 1.2.3 of the Licence is amendment by the deletion of the text shown in strikethrough below and the addition of text shown in red below:
 - 1.2.3 The Licensee shall ensure that wastes accepted onto the Premises are only subjected to the processes set out in Table 1.2.2 and in accordance with any process limits described in ~~that~~ Table 1.2.2.

Table 1.2.2: Waste processing		
Waste type	Process	Process limits
Liquid waste – all types specified in	Receipt, handling, storage and	Treatment of all liquid waste shall be at or below the treatment capacity of 20,000 tonnes per annual period.

Licence: L7827/2001/5
File No: DER2014/001082
Template: 1.3

Table 1.2.2: Waste processing		
Waste type	Process	Process limits
Table 1.2.1	treatment prior to discharge to irrigation	
Composting material which includes a mixture of sludge/ greenwaste (feedstock)	Receipt, handling and storage prior to composting	<ul style="list-style-type: none"> Waste shall not be stored for longer than 7 days before being added to the composting process. Waste shall not be stored within 20 metres of the Premises boundary.
	Treatment by composting and pasteurisation	<ul style="list-style-type: none"> Windrows shall be turned regularly to ensure aerobic conditions are maintained. The core temperature of the composting pile is maintained between 55 °C and 65 °C for a period of at least 15 days. Moisture level in the composting piles shall be maintained between 40 to 65 per cent. Windrows shall not exceed 3 metres high, and 3 metres wide and 20 metres long. Windrows shall be separated by at least 40 5 metres of clear ground. Composting leachate is collected and returned to the composting process. Ensure that, as a minimum, compost sold commercially for export off-site meets physical and chemical requirements set out by AS4454 and meets P1C1 within the document Western Australia Guidelines for Biosolids Management (Department of Environment and Conservation 2012). Shall produce no more than 67500 tonnes per annual period of compost. Liquid wastes (other than composting leachate) are not permitted to be composted. Only sludges generated from the onsite liquid waste facility at the Premises may be accepted- used for composting
Greenwaste only	Receipt, handling, storage prior to composting	<ul style="list-style-type: none"> Windrows shall not exceed 2 metres high, and 3 metres wide and 20 metres long. Temperatures within windrows are monitored on a weekly basis; Windrows Stockpiles with an internal temperature exceeding 80 degrees Celsius are turned, mixed or otherwise treated, to reduce the temperature until the temperature is reduced below 80 degrees Celsius; and A 10 metre fire break shall be maintained around greenwaste windrows stockpiles. The shredding or grinding of greenwaste shall not be undertaken at the Premises.

3. Condition 1.2.4 of the Licence is amended by the deletion of the text shown in strikethrough below and the addition of text shown in red below:

Licence: L7827/2001/5
File No: DER2014/001082
Template: 1.3

- 1.2.4 The Licensee shall ensure that waste material is only stored and/or treated within vessels or compounds provided with the infrastructure **requirements** detailed in Table 1.2.3.

Table 1.2.3: Containment infrastructure		
Vessel or compound	Material	Requirements
Liquid waste receival tank	Liquid waste specified in Table 1.2.1	<ul style="list-style-type: none"> Impervious concrete tank Concrete hardstand area shall direct wastewater spillages to the receival tank for anaerobic ponds.
Non-Conforming Load Tank	J130 Oil interceptor waste	<ul style="list-style-type: none"> Impervious concrete tank. Concrete hardstand area shall direct wastewater spillages to the receival tank for anaerobic ponds.
	J120 Waste oil and water mixtures or emulsions and hydrocarbon and water mixtures or emulsions	
	J180 Oil Sludge	
	J100 - Waste oils unfit for their intended purpose;	
	J170 Used oil filters.	
Three anaerobic storage ponds	Treated effluent	<ul style="list-style-type: none"> Synthetic liner with a permeability of less than at least 2×10^{-10} m/s. Freeboard of at least 300 mm 800mm.
Two facultative ponds	Treated effluent	<ul style="list-style-type: none"> Synthetic liner with a permeability of less than at least 2×10^{-10} m/s. Freeboard of at least 300 mm 800mm.
Liquid waste storage pond dam	Treated effluent	<ul style="list-style-type: none"> Clay lined with a permeability of less than at least 1×10^{-9} m/s. Freeboard of at least 300 mm 500mm.
Compost Facility Hardstand Pad	Compost	<ul style="list-style-type: none"> have a A minimum 2% drainage gradient to ensure the free drainage of all leachate to leachate collection infrastructure. Bunded hardstand area. KKerbing/ bunding of at least 150mm in height. have a A seal between the hardstand and any bunding/kerbing that is impervious (less than 1×10^{-9} m/s). be cCovered with a protective layer that will protect the liner from damage as a result of day-to-day activities or machinery movements.
Leachate collection infrastructure	Compost leachate	<ul style="list-style-type: none"> Synthetic liner with have a permeability of less than at least 1×10^{-9} m/s.
Composting Facility Leachate Storage Dam	Compost leachate	<ul style="list-style-type: none"> Synthetic liner with have a permeability of less than at least 1×10^{-9} m/s. Freeboard of at least 500mm.

4. Condition 1.2.10 has been added to the Licence by the addition of text shown in red below:

Licence: L7827/2001/5
File No: DER2014/001082
Template: 1.3

1.2.10 The Licensee must ensure that as a minimum the following equipment is available at the Premises when undertaking compost manufacturing and soil blending activities:

- (a) A front end loader;
- (b) A truck with capacity of at least 8000 litres; and
- (c) Mobile fire pump.

5. Condition 3.2.1 of the Licence is amendment by the deletion of the text shown in strikethrough below and the addition of text shown in red below:

3.2.1 The Licensee shall undertake the monitoring in Table 3.2.1 according to the specifications in ~~that~~ Table 3.2.1.

Table 3.2.1: Monitoring of emissions to land					
Emission point reference (identified on the map of emission points in Schedule 1)	Monitoring point and reference location	Parameter	Units	Averaging period	Frequency
L1	Irrigation flow meter	Volumetric flow rate	kL/day	Daily	Daily-Continuous
L2	Liquid waste storage dam	pH	pH units	Spot sample	Monthly, when irrigating
		Total Nitrogen	mg/L		
		Nitrate-nitrogen			
		Total Phosphorus			
		Biochemical Oxygen Demand			
		Total Dissolved Solids			
		Oil and grease			
		Electrical Conductivity			
		Aluminium	mg/L	Spot sample	Annually
		Arsenic			
		Cadmium			
		Chromium			
		Copper			
		Manganese			
		Nickel			
		Lead			
		Zinc			
L3	Stormwater run-off dam	pH	pH units	Spot sample	Quarterly

Appendix 4: Amendment Notice 2



Government of Western Australia
Department of Water and Environmental Regulation

Amendment Notice 2

Licence Number	L7827/2001/5
Licence Holder	Abbotts Liquid Salvage Pty Ltd
ACN	125 634 004
File Number:	DER2014/001082-1
Premises	Abbotts Liquid Salvage 35494 Albany Highway DROME WA 6330 Legal description – Part of Lot 4638 on Plan 157018 within co-ordinates (MGA Zone 50) -34.9376S, 117.7778E; -34.9375S, 117.7827E; -34.935S, 117.7827E; -34.9351S, 117.7810E; -34.9346S, 117.7770E; -34.9339S, 117.7806E.
Date of Amendment	6 February 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.

Tracey
Hassell

Digitally signed by
Tracey Hassell
Date: 2019.02.06
15:46:07 +08'00'

Tracey Hassell

A/MANAGER WASTE INDUSTRIES
REGULATORY SERVICES

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

Licence: L7827/2001/5

IR-T08 Amendment Notice (Major) template v2.0 (July 2017)

1

Definitions and interpretation

Definitions

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

Table 1: Definitions

Term	Definition
ACN	Australian Company Number
Amendment Notice	refers to this document
AS 4454	means the Australian Standard AS 4454 Compost, soil conditioners and mulches.
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@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
EP Act	<i>Environmental Protection Act 1986</i> (WA)
EP Regulations	<i>Environmental Protection Regulations 1987</i> (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	Abbotts Liquid Salvage Pty Ltd
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>

Licence: L7827/2001/5

IR-T08 Amendment Notice (Major) template v2.0 (July 2017)

2

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.

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)*

Amendment description

Abbotts Liquid Salvage Pty Ltd (the Licence Holder) submitted a licence amendment application, which was received by DWER on 6 November 2018.

The Licence Holder has requested that condition 1.2.3 of the Existing Licence is amended to allow the sale of compost which meets pathogen grade P3 to P1 and contaminant grade C2 and C1 (within the *Western Australian Guidelines for Biosolids Management 2012*) as shown in Figure 1.

Condition 1.2.3 of the Existing Licence states for the following:

Ensure that, as a minimum, compost sold commercially for export off-site meets physical and chemical requirements set out by AS4454 and meets P1C1 within the document Western Australian Guidelines for Biosolids Management (Department of Environment and Conservation 2012).

The Licence Holder has advised that they have been unable to meet the C1 contaminant grading (within the *Western Australian Guidelines for Biosolids Management (2012)*) for the compost produced within the Premises since the licence was amended in July 2016 to allow the composting activity. The compost produced has been stockpiled on the Premises.

The Licence Holder has advised that concentrations of arsenic and chromium within green waste feedstock are causing the final composted product to exceed the C1 grading and the unrestricted use upper limits within *Australian Standard AS 4454 Compost, soil conditioners and mulches* (AS 4454).

The C1 and C2 grading both have a concentration thresholds for Chromium (VI) of 1 mg/kg, and do not specify a threshold for arsenic. The AS 4454 unrestricted use upper limits for chromium and arsenic are 100mg/kg and 20mg/kg respectively.

Evidence of testing of the green waste feedstock use at the Premises in November 2017 (provided as supporting documentation) shows that the green waste (barkwaste) contained chromium at a concentration of 39mg/kg and arsenic at a concentration of 20mg/kg. However, the green waste and compost product testing results do not differentiate between different forms of chromium.

The compost product testing results (provided as supporting information) shows that the compost sampled in February 2018 contained chromium at a concentration of 104 mg/kg and arsenic at a concentration of 48.5 mg/kg.

Licence: L7827/2001/5

IR-T08 Amendment Notice (Major) template v2.0 (July 2017)

3

Biosolids end use	Pathogen grade	Contaminant grade*
Unrestricted use ⁷		
Unrestricted use	P1	C1
Restricted use		
Agricultural direct land application (crops that may be consumed raw and in contact with biosolids)	P1	C2
Urban landscaping* (not household use)	P2	C2
Horticulture*	P2	C2
Agricultural direct land application (crops that may be consumed raw but not in contact with biosolids) ⁸	P2	C2
Agricultural direct land application (pasture and crops that are processed before being consumed, but not root crops) ⁹	P3	C2
Forestry direct land application	P3	C2
Rehabilitation (for example, mine sites, contaminated or degraded sites, within the wastewater treatment plant boundary)	P3	C2

Figure 1: Excerpt from Table 6 in the *Western Australian Guidelines for Biosolids Management* (Department of Environment and Conservation 2012).

Other approvals

Correspondence between the Department of Health (DoH) and the Licence Holder in September 2018 has been provided, indicating that DoH will not issue an approval for the retail sale of the compost to the public, as it doesn't achieve the P1C1 grading for unrestricted use.

Amendment history

Table 2 provides the amendment history for L7827/2001/5 since 2015.

Table 2: Licence amendments

Instrument	Issued	Amendment
L7827/2001/5	16/12/2015	DER initiated Amendment to extend expiry date of Licence L7827/2001/5 to 19 January 2017.
L7827/2001/5	29/04/2016	DER initiated Amendment Notice to extend expiry date of Licence L7827/2001/5 to 19 January 2020.
L7827/2001/5	14/07/2018	Licence Holder initiated Amendment to add Category 87A (Compost manufacturing and soil blending) prescribed activities and associated regulatory controls approved through works approval W5905/2015/1.

Licence: L7827/2001/5

IR-T08 Amendment Notice (Major) template v2.0 (July 2017)

4

Instrument	Issued	Amendment
L7827/2001/5 Amendment Notice 1	24/11/2016	DER initiated Amendment Notice to: <ul style="list-style-type: none"> • Amend relevant definitions within Condition 1.1.2; • Amend Condition 1.2.3 with regards to controls of waste storage, process limitations and administrative errors. • Amend Condition 1.2.4 with regards to freeboard levels and administrative errors. • Add Condition 1.2.10 with regards to minimum machinery requirements to assist in the control of fugitive emission while compost manufacturing and soil blending activities are being undertaken. • Amend condition 3.2.1 with regards to the frequency of monitoring requirements.
L7827/2001/5 Amendment Notice 2	6/02/2019	Licensee initiated amendment to amend Condition 1.2.3 to allow the sale of compost which does not meet physical and chemical requirements set out by AS4454 and meets P1C1 (within the document Western Australian Guidelines for Biosolids Management).

Risk assessment

Table 3 below describes the Risk Events associated with the amendment consistent with the *Guidance Statement: Risk Assessments*. The table identifies whether the emissions present a material risk to public health or the environment, requiring regulatory controls.

Licence: L7827/2001/5

IR-T08 Amendment Notice (Major) template v2.0 (July 2017)

5

Table 3: Risk assessment for proposed amendments during operation

Source/Activities		Risk Event				Consequence rating	Likelihood rating	Risk	Reasoning
		Potential emissions	Potential receptors	Potential pathway	Potential adverse impacts				
Cat 67A compost manufacturing and soil blending	Compost product removed from the Premises	Pathogens within product	General public – including end users	Human contact with compost	Health impacts from inhaled or ingested pathogens	Severe	Rare	High	<p>The Delegated Officer has determined that pathogens within the compost product could cause high level adverse health effects (severe consequence).</p> <p>Provided that the product is produced (onsite) and sold for the appropriate end use based on the product's pathogen grade, the Delegated Officer has determined that pathogens in the compost product causing high level adverse health effects for product users may only occur in exceptional circumstances (rare likelihood).</p>
		Contaminants within product	<p>Ecological receptors – including terrestrial and aquatic ecosystems; and</p> <p>General public – including end users</p>	<p>Directly applied to land</p> <p>Human contact with compost</p>	<p>Contamination of ecosystems</p> <p>Health impacts from inhaled or ingested contaminants</p>	Moderate	Unlikely	Medium	<p>Based upon the inputs to the composting process and the degree to which some contaminants remain within the product, and the potential scale of use of the compost product, the Delegated Officer has determined that contaminants within the compost product could cause low level off-site impacts at a local scale, or low level adverse health effects (moderate consequence).</p> <p>Provided that the product is produced (onsite) and sold for the appropriate end use based on the product's contaminant grade, the Delegated Officer has determined that contaminants in the compost product causing low level off-site impacts at a local scale or low level adverse health effects will probably not occur in most circumstances (unlikely).</p>

Licence: L7827/2001/5

IR-T08 Amendment Notice (Major) template v2.0 (July 2017)

6

Decision

The Delegated Officer notes that under the Existing Licence, pasteurisation of the compost produced on the Premises is required by condition 1.2.3 and that compost quality monitoring in accordance with AS 4454 is required under by condition 3.4.1.

The compost product testing results for the compost sampled in February 2018 indicate that the pathogen threshold levels for P1 grading and AS 4454 were met.

The Delegated Officer notes that the contaminant grading within the *Western Australian Guidelines for Biosolids Management* (2012) does not consider a range of contaminants specific to compost (as opposed to biosolids).

Considering that the compost produced within the Premises may be suitable for a range of end uses depending on the product quality and the specific circumstances of the use, the Delegated Officer has determined that the Licence will be amended to:

- Remove the requirement that compost sold commercially for export off-site must meet physical and chemical requirements set out by AS 4454 and P1C1 grading within the document *Western Australian Guidelines for Biosolids Management* (Department of Environment and Conservation 2012);
- Make a minor change to condition 3.4.1 (compost quality monitoring) to clarify the wording regarding compost product testing;
- Include an additional condition which requires the Licence Holder to ensure that testing of all compost product is undertaken in accordance with AS 4454;
- Include an additional condition which requires the Licence Holder to classify the compost products produced on the premises according to the product specification and end use(s) as determined by the physical and chemical quality specifications required by AS 4454 and the document *Western Australia Guidelines for Biosolids Management* (Department of Environment and Conservation 2012) prior to sale or distribution to customers; and
- Include an additional condition which requires the Licence Holder to:
 - implement and maintain a system for recording:
 - the compost quality testing results for all compost products produced; and
 - the resulting product classification determination made for each load or batch of compost product sold or distributed from the Premises; and
 - ensure that these records are made available to the CEO or customers on request.

Considering the Department's 2018 document *Factsheet - assessing whether material is waste*, the Delegated Officer notes that where the application of compost to land occurs and that compost may be considered a waste, a Category 61A: Solid waste facility prescribed activity may occur and the activity may be subject to Sections 52, 53 and 56 of the EP Act.

Licence Holder's comments

The Licence Holder was provided with the draft Amendment Notice on 30 January 2019. The Licence Holder did not provide any comments and waived the remaining comment period on 6 February 2019.

Amendment

1. Condition 1.2.3 of the Licence is amended by the deletion of the red text shown in strikethrough below and insertion of the red text shown in underline below:

1.2.3 *The Licensee shall ensure that wastes accepted onto the Premises are only subjected to the processes set out in Table 1.2.2 and in accordance with any process limits described in Table 1.2.2.*

Table 1.2.2: Waste processing		
Waste type	Process	Process limits
Liquid waste – all types specified in Table 1.2.1	Receipt, handling, storage and treatment prior to discharge to irrigation	Treatment of all liquid waste shall be at or below the treatment capacity of 20,000 tonnes per annual period.
Composting material which includes a mixture of sludge/ greenwaste (feedstock)	Receipt, handling and storage prior to composting	<ul style="list-style-type: none"> Waste shall not be stored for longer than 7 days before being added to the composting process. Waste shall not be stored within 20 metres of the Premises boundary.
	Treatment by composting and pasteurisation	<ul style="list-style-type: none"> Windrows shall be turned regularly to ensure aerobic conditions are maintained. The core temperature of the composting pile is maintained between 55 °C and 65 °C for a period of at least 15 days. Moisture level in the composting piles shall be maintained between 40 to 65 per cent. Windrows shall not exceed 3 metres high, and 3 metres wide. Windrows shall be separated by at least 5 metres of clear ground. Composting leachate is collected and returned to the composting process. Ensure that, as a minimum, compost sold commercially for export of site meets physical and chemical requirements set out by AS4454 and meets P1C1 within the document Western Australia Guidelines for Biosolids Management (Department of Environment and Conservation 2012). Shall produce no more than 7500 tonnes per annual period of compost. Liquid wastes (other than composting leachate) are not permitted to be composted. Only sludges generated from the liquid waste facility at the Premises may be used for composting
Greenwaste only	Receipt, handling, storage prior to composting	<ul style="list-style-type: none"> Temperatures within windrows are monitored on a weekly basis; Stockpiles with an internal temperature exceeding 80 degrees Celsius are turned, mixed or otherwise treated until the temperature is reduced below 80 degrees Celsius; and

Licence: L7827/2001/5

IR-T08 Amendment Notice (Major) template v2.0 (July 2017)

8

Table 1.2.2: Waste processing		
Waste type	Process	Process limits
		<ul style="list-style-type: none"> A 10 metre fire break shall be maintained around greenwaste stockpiles. The shredding or grinding of greenwaste shall not be undertaken at the Premises.

2. Condition 3.4.1 of the Licence is amended by the insertion of the red text shown in underline below:

3.4.1 The Licensee shall undertake the monitoring in Table 3.4.1 according to the specifications in that table.

Table 3.4.1: Process monitoring					
Monitoring point reference	Process description	Parameter	Units	Frequency	Method
Compost windrows	Composting	Temperature	°C	Weekly	None specified
		Moisture content	%	Weekly	None specified
		Compost quality <u>product testing</u>	None specified	<u>As per sampling procedure required in AS 4454</u>	Sampling and testing in accordance with AS 4454

3. The Licence is amended by the insertion of the following Conditions 3.4.2 and 3.4.3:

3.4.2 The Licensee must ensure that the testing of all compost product is undertaken in accordance with AS 4454.

3.4.3 The Licensee must ensure that products are classified according to the product specification and end use(s) as determined by the physical and chemical quality specifications required by AS 4454 and the document Western Australia Guidelines for Biosolids Management (Department of Environment and Conservation 2012) prior to sale or distribution to customers.

4. The Licence is amended by insertion of the following Conditions 4.1.4 (b) and 4.1.4 (c):

4.1.4 The Licensee shall:

(a) implement and maintain a system which ensures that a record is made of:

- the waste type, quantity and date of arrival or each load accepted at the Premises;
- the waste type, quantity, date of removal and destination (recycled material/recycling site/landfill etc.) of each load removed from the site; and
- rejected loads including details of the waste producer, waste carrier, registration number of the vehicle and the date and reason for rejection;

(b) implement and maintain a system which ensures that a record is made of:

- the compost quality product testing results for all compost products required by Condition 3.4.1; and

(ii) the resulting product classification determination made, in accordance with Condition 3.4.3, for each load or batch of compost product sold or distributed from the premises.

(c) ensure that records required by 4.1.4 (b) are made available to the CEO or customers on request.

Appendix 1: Key documents

	Document title	Availability
1	Department of Environment and Conservation, 2012. <i>Western Australian Guidelines for Biosolids Management</i> .	Accessed at https://www.der.wa.gov.au/images/documents/our-services/approvals-and-licences/western-australian-guidelines-for-biosolids-management-dec-2012.pdf
2	Standards Australia, 2012. <i>Australian Standard AS 4454-2012 Compost, soil conditioners and mulches</i> .	Purchased at https://infostore.saiglobal.com/en-au/standards/as-4454-2012-121773_SAIG_AS_AS_267608/
3	DER, July 2015. <i>Guidance Statement: Regulatory principles</i> . Department of Environment Regulation, Perth.	Accessed at www.dwer.wa.gov.au
4	DER, October 2015. <i>Guidance Statement: Setting conditions</i> . Department of Environment Regulation, Perth.	
5	DER, November 2016. <i>Guidance Statement: Risk Assessments</i> . Department of Environment Regulation, Perth.	
6	DER, November 2016. <i>Guidance Statement: Decision Making</i> . Department of Environment Regulation, Perth.	