



# Amendment Notice 1

**Licence Number** L6001/1989/15

**Licence Holder** V & V Walsh Pty Ltd  
235 St Georges Terrace  
PERTH WA 6000

**ACN** 100 834 455

**File Number** 2013/003631

**Premises** V & V Walsh Abattoir  
Lot 1 Rawling Road  
DAVENPORT WA 6230

Legal description –  
Lot 1 on Diagram 12060 and Lot 5 on Diagram 50137  
and part of Lot 1050 on Plan 33291

Certificate of Title Volume 1471 Folio 898 and  
Certificate of Title Volume 1468 Folio 29

**Date of Amendment** 7 August 2018

## 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.

Date signed: 7 August 2018

**Caron Goodbourn**

**A/Manager, Licensing (Process 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
ACN	Australian Company Number
Amendment Notice	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 33 Cloisters Square PERTH WA 6850 <a href="mailto:info@dwer.wa.gov.au">info@dwer.wa.gov.au</a>
DAF	dissolved air floatation
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
HDPE	high-density polyethylene
Licence Holder	V & V Walsh 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>

## 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)*; and
- *Guidance Statement: Environmental Siting (November 2016)*.

## Amendment description

V & V Walsh Pty Ltd (the Licence Holder) currently operate an abattoir and rendering facility (the Premises) at Lot 1 Rawling Road, Davenport under Licence L6001/1989/15.

The Licence Holder has applied for the following changes to the Existing Licence:

- increase rendering throughput from 9,000 to 10,000 tonnes (due to an increase in abattoir efficiency);
- allow for a crust or cover over the anaerobic ponds;
- reclassification of pond 2 to anaerobic or facultative;
- splitting and relining of pond 6 into ponds 6 and 7;
- inclusion of Category 83 – fellmongering on the licence to reflect existing fellmongering activities;
- removal of reference to the rotary screen in relation to the dissolved air floatation unit (DAF); and
- other minor administrative type amendments.

This Amendment Notice assesses the risk of the above amendments only, explained in further detail below, and does not review any other conditions of the Existing Licence.

DWER has also been advised of an updated irrigation area. As part of this amendment the irrigation map on the Existing Licence will be updated; however, the discharge of treated wastewater to land via irrigation will not be reviewed as part of this licence amendment.

Table 2 below outlines the proposed changes to the Licence categories. There is no change to Category 55 (livestock saleyard or holding pen).

**Table 2: Proposed throughput capacity changes**

Category	Current capacity throughput	Proposed capacity throughput	Description of proposed amendment
15	47,000 tonnes per annual period	Not more than 47,000 tonnes (hot carcass weight) per annual period	DWER initiated amendment to change the wording to specify that the throughput for the abattoir (Category 15) is based on hot carcass weight (HCW) as the animals are not weighed prior to entering the abattoir.

16	9,000 tonnes per annual period	Not more than 10,000 tonnes of animal material processed per annual period	Due to an increase in efficiency in abattoir operations, the rendering facility will increase the throughput of animal material processed to not more than 10,000 tonnes per annual period.
83	Not identified on Existing Licence.	Not more than 900,000 skins and hides per annual period	The Licence Holder is currently processing skins and hides on the Premises; however, it has previously not been captured in the licence.

### **Increase in rendering operations throughput**

Abattoir operations at the Premises have become more efficient in removing bone and fat from the carcasses, therefore; there is an increase in the amount of animal material available for rendering and the Licence Holder is requesting an amendment to the Licence to increase the approved throughput of category 16 from 9,000 to 10,000 tonnes per annual period. The Licence Holder does not anticipate any increase in emissions or discharges from the rendering operations as the operating hours of the rendering facility are not changing.

Rendering operations are currently conducted within an enclosed building with enclosed equipment (continuous cookers, decanted and Keith press). Roller doors on either side of the building are open during operations due to the continuous nature of the activity with odours generated from the equipment being directed via ducting to a biofilter for treatment.

### **Anaerobic ponds and Pond 2**

The Licence Holder has advised that they would like to maintain a vegetative crust on their anaerobic ponds with the flexibility to install a synthetic cover at a later date. A synthetic cover was installed on pond 0 in 2008; however, the cover was damaged and has not operated efficiently for directing off-gases to a biofilter.

The Licence Holder has investigated the vegetation crust that is currently on ponds 0 and 1 and advises that they are shallow rooted grasses and weeds. Thickness measurements conducted by the Licence Holder in January 2018 revealed that the thickness of the crust on pond 0 was between 300 – 500 mm and pond 1 was between 80 – 200 mm. These crust depths are expected to be within the root zone depth of the grasses and weeds growing on the crusts.

Additionally, due to upgrades to the DAF unit, a vegetative crust that was previously on pond 2 has dissolved and therefore, the Licence Holder believes that pond 2 is now operating as an aerobic pond. However, the Licence Holder intends to desludge pond 0 in the near future and anticipates that when pond 0 is offline, pond 2 may redevelop a crust and return to operating as an anaerobic pond.

Therefore, the Licence Holder is requesting an amendment to Conditions 1.3.1 (containment infrastructure) to allow for a vegetative crust or synthetic cover on the anaerobic ponds, for Pond 2 to be able to be classified as an anaerobic or facultative pond and condition 1.3.3 (management of wastewater treatment ponds) to allow for vegetation on the anaerobic ponds surfaces.

### **Pond 6**

In response to Environmental Field Notice 6859 issued on 6 December 2017, the Licence Holder is in the process of desludging and relining Pond 6 with a 2 mm HDPE liner (previously communicated to DWER in February 2018 with DWER determining that a Works Approval was not required). This will be done in stages and will create two ponds, Pond 6 (on the east) and Pond 7 (on the west). The Licence Holder expects that Pond 7 will be deslugged and relined by June 2018 with Pond 6 being completed by mid-2019. As a result, the Licence Holder is requesting an amendment to condition 1.3.1 (containment infrastructure) to amend the liner from clay lined to HDPE lined and add Pond 7.

### Category 83 – Fellmongering

Up to 900,000 animals are slaughtered annually at the Premises with the skins and hides being trimmed, salted/brined, packed, stored and transported offsite for further processing. Even though the premises description and Licence summary in the Existing Licence states that skins and beef hides are treated onsite for sale or further processing offsite, Category 83 has not previously been included on the Licence. The Licence Holder is requesting Category 83, Fellmongering: premises on which animal skins or hides are dried, cured or stored, to be included on the licence with a throughput of up to 900,000 skins and hides per annual period.

### Rotary screen

The Licence Holder installed a new DAF unit in 2017 and has advised that the existing rotary screen has now become obsolete and cannot be effectively used with the new DAF unit. Therefore, the Licence Holder is requesting an amendment to remove references to the rotary screen within condition 1.3.1 (containment infrastructure).

The Licence Holder is in the process of upgrading the primary screening (save all) which is expected to be completed by the end of 2018. In the interim, the Licence Holder is reintroducing the secondary screen (a 0.75 mm drum screen) which is expected to be operating by mid-2018 and will continue to operate once the primary screen has been upgraded. These screens are expected to reduce the solids load to the new DAF unit.

### Administrative amendments

The Licence Holder has requested numerous administrative amendments to the “Premises description and Licence summary” section of the Existing Licence. These include the following:

- The premises also includes meat trimming, packaging, cold storage and distribution facilities for which both V & V Walsh and are currently leased by Woolworths Pty Ltd have lease arrangements to produce retail packaged meat.
- All abattoir, rendering plant and biofilter wastewater is directed through a ‘save all’ and dissolved air floatation (DAF) unit ~~via a rotary screen.~~
- Water from the DAF unit is further treated through at least two ~~three~~ anaerobic ~~(currently only one pond is active)~~ and three or four facultative ponds with final treatment in an two ~~two~~ oxidation ponds.

The Licence Holder has also requested an administrative amendment to remove “5-day biochemical oxygen demand” from Table 5.2.1 in relation to Table 3.4.2 as it is not a parameter required to be measured as per Table 3.4.2 of the Existing Licence.

## Amendment history

Table 3 provides the amendment history for L6001/1989/15.

**Table 3: Licence amendments**

Instrument	Issued	Amendment
L6001/1989/15	01/10/2015	Licence reissue – includes conversion to REFIRE format and increase the production capacity of category 16 (rendering operations) and category 55 (livestock holding pen).
L6001/1989/15	7/8/2018	Amendment Notice 1 including the addition of category 83 (fellmongering), increase in throughput for category 16 (rendering operations) and amendments relating to the wastewater treatment ponds.

## Location and receptors

The Premises is located on the Swan Coastal Plain approximately 6.2 km southeast of Bunbury’s central business district. The land is zoned special use under the City of Bunbury’s Town Planning Scheme No. 7. Surrounding land uses include industrial, parks and recreation,

rural and general farming.

The Preston River is located along the eastern boundary of the premises and the closest residential area is located 1.5 km northwest of the premises boundary.

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

**Table 4: Receptors and distance from premises**

Residential and sensitive premises	Distance from Prescribed Premises
Residential premises	The closest residential premises is located 950 m north of the premises boundary.
Residential area	The closest residential area is 1.5 km NW of the premises boundary.
Firing Range (Pistol club)	90 m W of premises boundary
Industrial premises – composting and asphalt manufacturing	130 m NW of premises boundary
Halifax Light industrial area	300 m W of premises boundary
Airport	430 m SW of premises boundary
Davenport light industrial area	500 m WNW of premises boundary

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

**Table 5: Environmental receptors and distance from premises**

Environmental receptors	Distance from Prescribed Premises
Geomorphic wetlands	Swan Coastal Plain – Semeniuk, Palusplain, flat, multiple use, wetland management category modified to reflect values – covers the centre of the Premises.  Swan Coastal Plain – Semeniuk, Palusplain, flat, Conservation (Preston River area) – along eastern boundary and NE corner of the Premises.
Threatened Ecological Communities and Priority Ecological Communities	Within buffer area of the Federal Government Threatened Ecological Community <i>Banksia Woodlands of the Swan Coastal Plain</i> (  BanksiaWld14024 (boundary ID 116741), BanksiaWld14029 (boundary ID 116746), BanksiaWld14114 (boundary ID 116831), BanksiaWld13896 (boundary ID 116613), BanksiaWld13898 (boundary ID 116615), BanksiaWld14115 (boundary ID 119833), BanksiaWld14030 (boundary ID 116747), BanksiaWld14021 (boundary ID 116738 and BanksiaWld13895 (boundary ID 116612)) with numerous other Banksia Woodlands areas located within a 1 km radius.
Threatened / Priority Flora	Priority 4 flora located 340 m W and threatened flora located 1.3 km E of the premises boundary.
Surface water – Preston River (major perennial watercourse)	The Preston River follows the eastern boundary of the Premises and terminates in the Leschenault Estuary approximately 4.9 km downstream.  A minor tributary runs through the northeast corner of the Premises and terminates in the Preston River.  The Premises is located within the Preston River Surface Water Management Area (palusplain and riparian areas) managed under the <i>Rights in Water and Irrigation Act 1914</i> (RIWI Act).  The Premises is also within the Leschenault Management Area, gazette under the

	<i>Waterways Conservation Act 1976.</i>
Groundwater	<p>The Premises is located within the Bunbury Groundwater Area proclaimed under the RIWI Act.</p> <p>Groundwater monitoring conducted onsite show that depth to groundwater ranges from approximately 0.7 mbgl in winter to 2.9 mbgl in summer. (from Application)</p> <p>Groundwater salinity is marginal (500 – 1,000 mg/L) and has beneficial use for industrial purposes, domestic / household use and irrigation.</p>

## Risk assessment

Table 6 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.

**Table 6: 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				
Category 16 (Rendering operations)	Increased efficiency in abattoir operations resulting in an increased amount of animal material rendered	Fugitive odour from rendering operations	Industrial premises located 130 m N and industrial areas located 300 m W and 500 m WNW of the premises boundary.	Air / wind dispersion	Potential amenity impacts	Minor	Possible	Medium	<p>With the increase in the amount of animal material rendered at the Premises it is expected that there will be a negligible increase in odour emissions.</p> <p>Existing Licence conditions 1.3.1 and 1.3.2 apply.</p> <p>The prescribed premises category table on page 1 of the Licence will be updated with the new approved premises production or design capacity.</p> <p>No further assessment required.</p>
		Fugitive odour	Industrial premises located 130 m N and industrial areas located 300 m W and 500 m WNW of the premises boundary.	Air / wind dispersion	Potential amenity impacts	Slight	Unlikely	Low	<p>Skins and hides are fellmongered within the skin shed, an enclosed building with concrete flooring.</p> <p>All waste salt is removed for off-site disposal.</p> <p>All wash down water is contained in dedicated sumps and directed to the wastewater treatment system.</p> <p>The Delegated Officer considers that the separation distance between the source and potential receptors is sufficient noting that fugitive odour from fellmongering activities is expected to be insignificant compared to abattoir and rendering operations onsite and the treatment of wastewater in the onsite wastewater treatment system.</p>
Addition of Category 83 (Fellmongering)	Skins and beef hides treated onsite for sale or further processing offsite	Solid waste (salt) and leachate	Preston River located approximately 500 m east of the fellmongering shed.	Direct discharge to land or surface water.	Soil and surface water pollution from salt (sodium).	Slight	Unlikely	Low	<p>Category 83 will be added to the prescribed premises category table on page 1 of the Licence.</p> <p>Existing Licence condition 1.3.1 apply.</p>
			Soil beneath the premises.						



Risk Event					Consequence rating	Likelihood rating	Risk	Reasoning	
Source/Activities	Potential emissions	Potential receptors	Potential pathway	Potential adverse impacts					
<b>Category 15</b> (Abattoir), <b>16</b> (Rendering operations), <b>55</b> (livestock saleyard or holding pen) and <b>83</b> (fellmongering)	Removal of rotary screen	N/A	N/A	N/A	N/A	N/A	N/A	<p>No further assessment required.</p> <p>The rotary screen cannot be effectively used with the upgraded DAF unit and has therefore become obsolete.</p> <p>References to the rotary screen will be removed from condition 1.3.1 (Table 1.3.1).</p>	
	Wastewater treatment ponds	Fugitive odour associated with wastewater in the anaerobic ponds	Industrial premises located 130 m N and industrial areas located 300 m W and 500 m WNW of the premises boundary.	Air / wind dispersion	Potential amenity impacts	Minor	Possible	Medium	See Decision section of this document for reasoning.
		Reclassification of pond 2 from anaerobic to "anaerobic or facultative"	N/A	N/A	N/A	N/A	N/A	N/A	
		Storage of treated wastewater in Pond 6 - upgrading liner and splitting into two ponds (Pond 6 and Pond 7).	N/A	N/A	N/A	N/A	N/A	N/A	<p>DWER has previously communicated to the Licence Holder that these works do not require a Works Approval; however, a licence amendment is required to include pond 6 and pond 7 in the licence.</p> <p>Condition 1.3.1 will be amended to include pond 7 as an oxidation pond and change the infrastructure requirements from "clay lined" to "minimum of 1.5 mm HDPE lined to achieve a permeability of <math>&lt;1 \times 10^{-9}</math> m/s. With completion of pond 6 by May 2019." Condition 2.2.1 will be amended to include pond 7. The definition for HDPE will also be added.</p> <p>The map of storage locations will be amended to include pond 7.</p>

Risk Event						Consequence rating	Likelihood rating	Risk	Reasoning
Source/Activities	Potential emissions	Potential receptors	Potential pathway	Potential adverse impacts					
Administrative amendments	Relating to wording in the "Premises and Licence summary" of the Existing Licence	N/A	N/A	N/A	N/A	N/A	N/A	N/A	The Delegated Officer notes the changes requested by the Licence Holder; however, as the "Premises description and Licence summary" section is not part of the Existing Licence conditions, no changes will be made as part of this Amendment Notice.
	Relating to wording of Table 5.2.1 in relation to Table 3.4.2.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	The Delegated Officer notes the changes requested by the Licence Holder and the administrative error will be removed from Table 5.2.1.
	Update map of irrigation area	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<p>The discharge of treated wastewater to land via irrigation is not assessed under this Amendment Notice.</p> <p>The map of the irrigation area supplied indicates that the actual size (ha) of land being irrigated is far less than that used in calculations to determine nutrient loading rates (kg/ha/year). In addition native vegetation is noted within the designated irrigation area. The killing of native vegetation through the application of wastewater would be considered clearing and constitutes an offence if not cleared in accordance with a Clearing Permit. Irrigation of wastewater will be risk assessed when the licence is reviewed. A review is planned within the next 6 months.</p> <p>The Licence Holder engaged Cape Life to survey the irrigation area for native vegetation. It was found that the six areas assessed by Cape Life were considered degraded to completely degraded except for a wetland area that was considered good under the Keighery Scale.</p>

Risk Event					Consequence rating	Likelihood rating	Risk	Reasoning
Source/Activities	Potential emissions	Potential receptors	Potential pathway	Potential adverse impacts				
								<p>The designated irrigation area is at least 50 m from the Preston River (defined watercourse) as per Existing Licence condition 1.3.2.</p> <p>Existing Licence conditions 1.3.2, 2.2.1 and 2.2.2 apply to the discharge of treated wastewater to land.</p> <p>The map of emission points and monitoring locations in Schedule 1 of the Existing Licence will be updated with the amended irrigation area. Irrigation area L2 has been labelled as three separate areas (L2, L3 and L4) to distinguish between the areas and to allow for loading rates to be calculated for each area. Existing Licence conditions have been updated to reflect these separate irrigation areas.</p>
	Surface water quality monitoring	N/A	N/A	N/A	N/A	N/A	N/A	<p>An upstream surface water quality monitoring point (WQ2) has been added to the Licence to enable comparison to the downstream monitoring point (WQ1). Table 3.4.1 and the map of emission points and monitoring locations of the Existing Licence has been updated to include WQ2.</p>

## Decision

### Fugitive odour associated with anaerobic wastewater treatment ponds

The Delegated Officer has considered the location of the anaerobic wastewater treatment ponds in relation to sensitive human receptors and determined that there will be low level impacts to amenity on a local scale. Therefore the Delegated Officer considers the consequence to be minor.

The Delegated Officer has considered the Licence Holder's proposal to maintain a vegetative crust on the anaerobic ponds or the use of a synthetic cover and has determined that low level impacts to amenity on a local scale could occur at some time if the crust or cover does not cover the entire anaerobic pond, especially if pond 2 (which will not be specifically defined as an anaerobic pond in the Licence) were to become anaerobic during desludging of pond 0.

The overall rating for the risk of fugitive odour emissions during operation causing adverse impacts on local sensitive receptors to be medium and subject to regulatory controls.

#### Regulatory Controls

Existing condition 1.3.1 (containment infrastructure) will be amended to clarify that Pond 0 and Pond 1 are anaerobic ponds and remove the requirement for the anaerobic ponds to be fitted with a cover with off gases directed to a biofilter.

Pond 2 will be removed from being specifically classified as an anaerobic pond and added as a separate row within the containment infrastructure table (Table 1.3.1), clarifying that the source of wastewater is from pond 1 and that it is lined with 1.5mm Huitex Geomembrane lined to achieve a permeability of  $<1 \times 10^{-9}$  m/s. The source of wastewater to the facultative ponds will also be amended to include wastewater from the anaerobic ponds or from Pond 2.

Additional conditions 1.3.4 and 1.3.6 will be added to the Licence to require the Licence Holder to have a complete crust, or to install a complete synthetic cover, within 60 days of a pond becoming anaerobic, except during maintenance. The Licence Holder will also be required to notify DWER within 7 days prior to any maintenance occurring on a wastewater treatment pond, the location of the pond where maintenance will occur and the expected duration of the maintenance. The definition of wastewater treatment pond will also be added.

Additionally, Existing Licence condition 1.3.3 will be amended to allow vegetation and floating debris on anaerobic pond surfaces. Condition 1.3.5 will be added to the Licence to ensure that any crust that is established on an anaerobic pond does not inhibit the efficiency or compromise the integrity of the anaerobic pond in which the crust is established.

The map of storage locations, within Schedule 1 of the Existing Licence, will be updated to specify the location of each pond.

Operation of the anaerobic ponds include fugitive odour where there is potential risk to the amenity of nearby industrial premises if not managed appropriately. The Delegated Officer has amended the above Existing Licence conditions and included additional conditions to minimise the risk of fugitive odour from the anaerobic ponds (and any ponds that may become anaerobic).

#### Licence Holder's comments

The Licence Holder was provided with the draft Amendment Notice on 12 June 2018. Comments received from the Licence Holder have been considered by the Delegated Officer as shown in Appendix 2.

## Amendment

- The Prescribed Premises Category table on page 1 of the Existing Licence is amended by the deletion of the text shown in strikethrough below and the insertion of the red text shown in underline below:

Category number	Category description	Category production or design capacity	Approved Premises production or design capacity
15	Abattoir: premises on which animals are slaughtered	1,000 tonnes or more per year	47,000 tonnes ( <del>hot carcass weight</del> ) per annual period
16	Rendering Operations: premises on which substances from animal material are processed or extracted	100 tonnes or more per year	<del>9,000</del> <u>10,000</u> tonnes <u>of animal material processed</u> per annual period
55	Livestock saleyard or holding pen: premises on which live animals are held pending their sale, shipment or slaughter	10,000 animals or more per year	900,000 animals per annual period
<u>83</u>	<u>Fellmongering: premises on which animal skins or hides are dried, cured or stored</u>	<u>1,000 skins or hides or more per year</u>	<u>900,000 skins or hides per annual period</u>

- Definitions of the Existing Licence is amended by the insertion of the red text shown in underline below:

'HDPE' means high-density polyethylene;

'wastewater treatment pond' means pond 0, pond 1, pond 2, pond 3, pond 4, pond 5, pond 6 and pond 7 as depicted in the Map of storage locations.

- Table 1.3.1 of the Existing Licence is amended by the deletion of the text shown in strikethrough below and the insertion of the red text shown in underline below:

Containment reference	point	Material	Infrastructure requirements
Anaerobic (Pond 0 - <del>Pond 2</del> <u>Pond 1</u> )	Ponds	Wastewater from the DAF plant and livestock wastewater tank <sup>1</sup>	1.5mm Huitex Geomembrane lined to achieve a permeability of <math>1 \times 10^{-9}</math> m/s. <del>When operational, the ponds shall be fitted with a cover with off-gases directed to a biofilter.</del>
<u>Pond 2</u>		<u>Wastewater from Pond 1</u>	<u>1.5 mm Huitex Geomembrane lined to achieve a permeability of &lt;math&gt;1 \times 10^{-9}&lt;/math&gt; m/s</u>
Facultative (Pond 3 - Pond 5)	Ponds	Wastewater from the anaerobic ponds <u>or Pond 2</u>	1.5mm HDPE lined to achieve a permeability of <math>1 \times 10^{-9}</math> m/s.
Oxidation Ponds <u>(Pond 6 and Pond 7)</u>		Wastewater from the facultative ponds	<del>Clay lined.</del> <u>Minimum of 1.5 mm HDPE lined to achieve a permeability of &lt;math&gt;1 \times 10^{-9}&lt;/math&gt; m/s. (Completion of Pond 6 by May 2019.)</u>
Dissolved Air Floatation unit (DAF)		Wastewater from the Save All and <del>rotary screen</del>	Impermeable tank located within a concrete bunded hardstand area capable of retaining leakages and with a drainage system that can return collected wastewater to the WWTS.
Paunch Pad		Paunch waste, screening solids and high strength effluent from the	Stored in tankers parked on a concrete bunded hardstand area capable of preventing surface run-off of leachate and with a drainage system that can return leachate to the WWTS.

	beef lairage	
Abattoir animal waste trailer	Animal wastes from the abattoir screw extractor	Stored in sealed metal bins in the abattoir which are emptied into a sealed (open top) semi-trailer parked on a bitumised area.
Skin shed	Lamb skins and beef hides	Enclosed building with concrete flooring.
Blood containment tanker	Animal blood from the kill floors	Enclosed, impermeable tanker parked on a bitumised area that directs runoff and spillages to the WWTS.
Rendering plant	Offal, fat and bone	Enclosed building with concrete flooring capable of preventing surface runoff of wastewater and with a drainage system that can return wastewater to the WWTS. Exhaust gases from the cookers emitted to air through a biofilter.

Note 1: In the event of the failure or malfunction of the dissolved air flotation unit, wastewater from the Save All ~~and rotary screen~~ can be directed to the anaerobic ponds.

4. The Existing Licence is amended by the insertion of the following Condition 1.3.4:

1.3.4 The Licensee must establish and maintain a complete crust, or install a complete synthetic cover, within 60 days of a pond becoming anaerobic, except during pond maintenance.

5. The Existing Licence is amended by the insertion of the following Condition 1.3.5:

1.3.5 The crust referred to in condition 1.3.4 must not inhibit the efficiency or compromise the integrity of the anaerobic pond in which the crust is established.

6. The Existing Licence is amended by the insertion of the following Condition 1.3.5:

1.3.6 The Licensee must notify the CEO within 7 days prior to any maintenance occurring on a wastewater treatment pond and include the following information:  
(a) location of the pond (pond number); and  
(b) expected duration of the maintenance.

7. Condition 1.3.3 of the Existing Licence is amended by the insertion of the red text shown in underline below:

1.3.3 The Licensee shall manage all wastewater treatment ponds such that:  
(a) overtopping of the ponds does not occur;  
(b) a minimum top of embankment freeboard of 300mm is maintained;  
(c) wastewater shall enter the anaerobic treatment ponds below the water surface;  
(d) the integrity of the containment infrastructure is maintained;  
(e) stock are prevented from walking on the pond embankments;  
(f) all uncontaminated stormwater runoff shall be prevented from entering the ponds or causing erosion of the outer pond embankments;  
(g) with the exception of any anaerobic pond, vegetation and floating debris (emergent or otherwise) does not encroach onto pond surfaces or inner pond embankments; and  
(h) trapped overflows are maintained on the outlets of ponds to prevent carry-over of surface floating matter.

8. Table 2.2.1 of the Existing Licence is amended by the deletion of the text shown in strikethrough below and the insertion of the red text shown in underline below:

Table 2.2.1: Emissions to land			
Emission point reference	Emission point reference on Map of emission points and monitoring locations	Description	Source including abatement
<del>L1</del> <u>Turf Farm</u>	<del>Turf Farm</del> <u>L1</u>	Central pivot irrigation of a 13 ha grassed field	Treated abattoir wastewater from Pond 6 <u>or Pond 7</u> of the WWTS
<del>L2</del> <u>On Site Irrigation Area</u>	<del>On Site Irrigation Area</del> <u>L2</u>	Sprinkler <u>and trickle</u> irrigation of <del>two areas of pasture and trickle irrigation of tree plantations</del> <u>pasture and tree plantations</u> totaling <del>45</del> <u>19.3</u> ha	Treated abattoir wastewater from Pond 6 <u>or Pond 7</u> of the WWTS.  <u>Irrigation of native vegetation with wastewater is not permitted.</u>
	<u>L3</u>	<u>Sprinkler irrigation of 6.5 ha of pasture</u>	
	<u>L4</u>	<u>Sprinkler irrigation of 2 ha of pasture</u>	

9. Table 2.2.2 of the Existing Licence is amended by the insertion of the red text shown in underline below:

Table 2.2.2: Emission limits to land			
Emission point reference	Parameter	Limit (including units)	Averaging period
L1	Total nitrogen	600 kg/ha	Annual
	Total phosphorus	180 kg/ha	
<u>L2, L3 and L4</u>	Total inorganic nitrogen	180 kg/ha	Annual
	Reactive phosphorus	20 kg/ha	

10. Table 3.2.1 of the Existing Licence is amended by the insertion of the red text shown in underline below:

Table 3.2.1: Monitoring of emissions to land				
Emission point reference	Monitoring point reference and location on Map of emission points	Parameter	Units	Frequency
<u>L1, and L2, <del>L3</del> and L4</u>	M1	Volumetric flow rate	m <sup>3</sup> /day	Monthly
	M2	pH	-	Quarterly
		Total dissolved solids	mg/L	
		Total suspended solids		
		5-day biochemical oxygen demand		
		Total nitrogen		
		Total inorganic nitrogen		
		Nitrite and nitrate nitrogen		
		Ammonium-nitrogen		
		Total phosphorus		
Reactive phosphorus				

11. Table 3.4.1 and Table 3.4.2 of the Existing Licence is amended by the insertion of the red text shown in underline and by the deletion of the text shown in strikethrough below:

<b>Table 3.4.1: Monitoring of ambient surface water quality</b>				
<b>Monitoring point reference and location</b>	<b>Parameter</b>	<b>Units</b>	<b>Averaging period</b>	<b>Frequency</b>
WQ1 <u>and</u> WQ2 (Preston River)	pH	-	Spot sample	Quarterly when flowing <sup>1</sup>
	Total dissolved solids	mg/L		
	Total suspended solids			
	5-day biochemical oxygen demand			
	Total nitrogen			
	Total phosphorus			

Note 1: Sample can be collected further upstream if sample location is dry

<b>Table 3.4.2: Monitoring of ambient groundwater quality</b>				
<b>Monitoring point reference and location</b>	<b>Parameter</b>	<b>Units</b>	<b>Averaging period</b>	<b>Frequency</b>
GQ1 – GQ4	Standing water level	m(AHD)	Spot sample	Six-monthly <u>Quarterly</u>
	pH			
	Total dissolved solids, total nitrogen and total phosphorus	mg/L		

12. Table 5.2.1 of the Existing Licence is amended by the deletion of the text shown in strikethrough below and the insertion of the red text shown in underline below.

<b>Table 5.2.1: Annual Environmental Report</b>		
<b>Condition or table (if relevant)</b>	<b>Parameter</b>	<b>Format or form</b>
-	Summary of any failure or malfunction of any pollution control equipment and any environmental incidents that have occurred during the annual period and any action taken.	None specified
Table 2.2.2	Annual emissions to land loadings for the Turf Farm (L1) – Total Nitrogen and Total Phosphorus, and On-Site Irrigation Areas (L2, <u>L3 and L4</u> ) – Total Inorganic Nitrogen and Reactive Phosphorus.	
Table 3.2.1	Volumetric flow rate, pH, total dissolved solids, total suspended solids, 5-day biochemical oxygen demand, total nitrogen, total inorganic nitrogen, nitrite and nitrate nitrogen, ammonium-nitrogen, total phosphorus and reactive phosphorus	
Table 3.3.1	Livestock received at premises, Livestock processed through the abattoir and animal waste material rendered	
Table 3.4.1	pH, total dissolved solids, total suspended solids, 5-day biochemical oxygen demand, total nitrogen and total phosphorus	
Table 3.4.2	Standing water level, pH, total dissolved solids, <del>5-day biochemical oxygen demand</del> , total nitrogen and total phosphorus	
5.1.3	Compliance	
5.1.4	Complaints summary	None specified

13. The Map of storage locations in Schedule 1 of the Existing Licence is replaced with the Map of storage locations in this Amendment Notice.



14. The Map of emission points and monitoring locations in Schedule 1 of the Existing Licence is replaced with the Map of emission points and monitoring locations in this Amendment Notice.

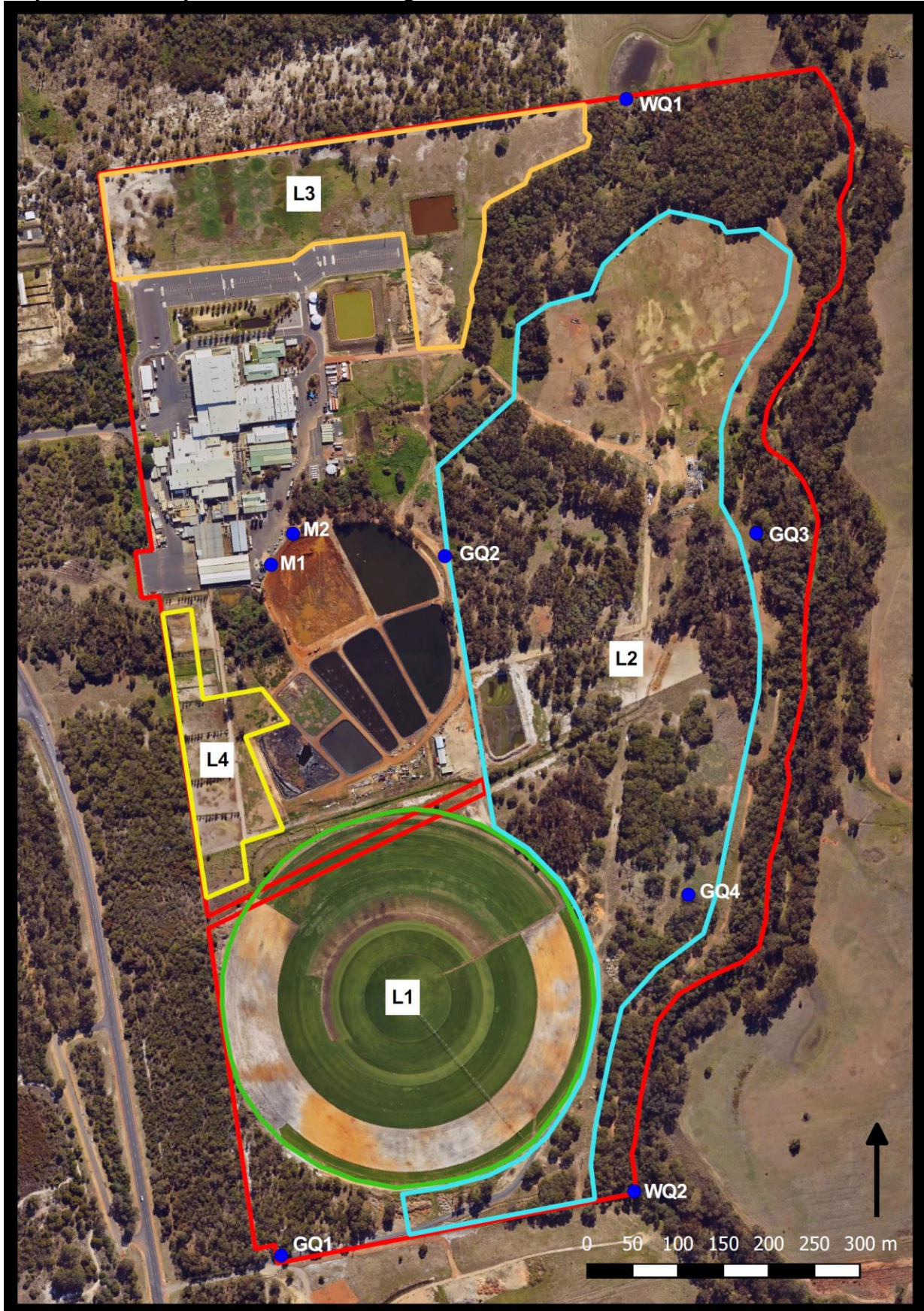
### Map of storage locations

The location of the storage areas defined in Table 1.3.1 are shown below.





Map of emission points and monitoring locations





## Appendix 1: Key documents

	Document title	In text ref	Availability
1.	Licence L6001/1989/15 – V & V Walsh Abattoir	Existing Licence	accessed at <a href="http://www.dwer.wa.gov.au">www.dwer.wa.gov.au</a>
2.	Licence Amendment application and supporting documentation		DWER records (A1643386)
3.	Revised Licence Amendment application and supporting documentation		DWER records (A1658695)
4.	Environmental Field Notice 06859		DWER records (A1577012)
5.	Email from Licence Holder to DWER, <i>RE: Revised Amendment Application – V &amp; V Walsh</i> , including attachment showing location of irrigation infrastructure, dated 3 May 2018		DWER records (A1667030)
6.	Email from Licence Holder to DWER, <i>FW: Rework of irrigation area</i> , including attachment showing location of proposed irrigation areas, dated 14 May 2018		DWER records (A1686558)
7.	Email from Licence Holder to DWER, <i>Re: V&amp;V Walsh</i> , including attachment showing proposed irrigation methodologies, dated 22 May 2018		DWER records (A1686551)
8.	Email from Licence Holder to DWER, <i>Proposed Licence Amendment to Licence L6001/1989/15</i> , including attachments, dated 4 July 2018		DWER records (A1701726)
9.	Email from Licence Holder to DWER, <i>V&amp;V Walsh Licence Amendment No 1</i> , including attachments, dated 3 August 2018		DWER records (DWERDT83739)
10.	DWER, July 2015. <i>Guidance Statement: Regulatory principles</i> . Department of Water and Environmental Regulation, Perth.		accessed at <a href="http://www.dwer.wa.gov.au">www.dwer.wa.gov.au</a>
11.	DWER, October 2015. <i>Guidance Statement: Setting conditions</i> . Department of Water and Environmental Regulation, Perth.		
12.	DWER, February 2017. <i>Guidance Statement: Risk Assessments</i> . Department of Water and Environmental Regulation, Perth.		
13.	DWER, February 2017. <i>Guidance Statement: Decision Making</i> . Department of Water and Environmental Regulation, Perth.		
14.	DWER, November 2016. <i>Guidance Statement: Environmental Siting</i> . Department of Water and Environmental Regulation, Perth.		

## Appendix 2: Summary of Licence Holder comments

The Licence Holder was provided with the draft Amendment Notice on 12 June 2018 for review and comment. The Licence Holder responded on 4 July 2018. The revised draft Amendment Notice was referred to the Licence Holder again on 26 July 2018 with the Licence Holder responding on 3 August 2018. The following comments were received on the draft and revised draft Amendment Notice.

Summary of Licence Holder comment	DWER response
<b>Comments on the draft Amendment Notice received 4 July 2018</b>	
Amendment description – Administrative amendments: Two anaerobic ponds are in operation except when maintenance is being performed. Requesting to add “unless maintenance is being performed on an anaerobic pond” after “Water from the DAF is further treated through at least two anaerobic...”	This section of the amendment refers to the “Premises description and Licence summary” section of the Licence. The Premises description and Licence summary is intended to give an overview of the normal operations of the site and not intended to cover all scenarios when maintenance may be performed. Therefore, no changes will be made to the amendment.
Table 6 – Addition of Category 83 (Fellmongering): All wash down water is contained in dedicated effluent sumps and discharged through the wastewater treatment system.	Table 6 has been updated to include the risk assessment for wastewater (leachate) from the fellmongering shed.
Table 6 – Administrative Amendments – Update map of irrigation area: Supplied a map of the irrigation area and two new areas. Supplied a Vegetation Assessment Report completed by Cape Life.	The map of emission points and monitoring locations has been updated. Existing Licence conditions associated with the irrigation of treated wastewater have also been updated.
Table 3.4.2 of the current licence includes the following parameters for the monitoring of ambient groundwater quality: standing water level, pH, total dissolved solids, total nitrogen and total phosphorus. However, in Table 5.2.1 of the current licence it lists an additional parameter, 5 day biochemical oxygen demand.	Table 5.2.1 of the Existing Licence has been updated to remove the administrative error.
<b>Comments on the revised draft Amendment Notice received 3 August 2018</b>	
Irrigation of native vegetation with wastewater is not permitted – Areas 5 and 6 (southern area of L2) would be most suitable for grazing land of sheep and would need to be cleared subject to application to clear by the Licence Holder and subsequent permit being issued. This would assist in the management and distribution of irrigation waters as well as assisting to house extra stock when additional stock is purchased for economics and planning logistics of the slaughtering. This area has been assessed and commented in Table 6: Risk Assessment for proposed amendments during operation.	As stated in Table 6 of this Amendment Notice, the killing of native vegetation through the application of wastewater would be considered clearing and constitutes an offence if not cleared in accordance with a Clearing Permit. The condition “Irrigation of native vegetation with wastewater is not permitted” is included in Table 2.2.1: Emissions to land. DWER notes that the discharge of treated wastewater to land via irrigation is not assessed under this Amendment Notice, only the map of the irrigation area has been updated.

Summary of Licence Holder comment	DWER response
<b>Comments on the draft Amendment Notice received 4 July 2018</b>	
	No further changes have been made to this Amendment Notice.
Additional surface monitoring WQ2 – please clarify the point of sample and methodology. The Licence holder assumes it is to be taken from the Preston River as close to the area marked on the map.	Table 3.4.1 has been updated to state that WQ2 is in the Preston River.
Table 2.2.2: Emission Limits to Land – Changes to the parameters in regard to the onsite irrigation area from inorganic to total nitrogen and from reactive to total phosphorus. Advice on clarification / reasoning of this change would be appreciated.	Delegated Officer agrees that the emission limits to land will be reverted back to original condition wording. Changes to emission limits will be considered when the licence is next reviewed, giving the Licence Holder an opportunity to submit a revised NIMP.
Table 3.4.2: Monitoring of ambient groundwater now quarterly – noted.	N/A
Map of storage location – DAF unit location is not correct. This is the old DAF plant, the new DAF plant in operation is on the paunch pad and livestock wastewater tank. Accordingly delete from the legend the red/pink box DAF unit and include the DAF in the purple zone.	The map of storage locations has been updated to reflect this change.
The Licence holder noted that “The discharge of treated wastewater to land via irrigation is not assessed under this Amendment Notice. A review is planned within the next 6 months.” The Licence Holder is in the process of actively researching soil amendment together with cropping in particular irrigation areas L2 northern grassed area and L3 which will not only give a higher uptake of nutrients but also heavily impact on our available grazing areas thus the plan to seek a clearing permit (mentioned above). With this being work in progress it is appreciated and relevant that the review be in consultation with the Licence Holder and associated consultants in better management and protection of the environmental concerns with the view that a soil amendment via IMG would be suitable to increase PRI for those areas.	An assessment of the discharge of treated wastewater to land via irrigation will be undertaken in consultation with the Licence Holder. No further changes have been made to this Amendment Notice.