



Application for a licence amendment

Division 3, Part V *Environmental Protection Act 1986*

Licence number L6001/1989/15

Works approval holder V & V Walsh Pty Ltd

ACN 100 834 455

DWER file number 2013/003631-1~7

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

Legal description – Lot 1 on Diagram 12060, Lot 5 on Diagram 50137 and part Lot 1050 on plan 33291

Date of report 06/08/2024

Status of report Final

Amendment description

This amendment is made pursuant to section 59 of the *Environmental Protection Act 1986* (EP Act) to amend the existing licence issued under the EP Act for a prescribed premises as set out below. This notice of amendment is hereby given under section 59B(9) of the EP Act.

This amendment is limited to the construction of a bunded concrete pad to place and operate a pond dewatering and desludging unit.

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

Purpose and scope of assessment

V & V Walsh Pty Ltd (licence holder) is seeking approval to construct and operate a pond dewatering unit. The application was received on 12 June 2024.

Background

The licence holder operates a dual-species abattoir in Davenport, on the outskirts of Bunbury.

The premises is located on the Swan Coastal Plain and immediately adjacent to the Preston River. Over the years light industry has been allowed to encroach within 300 m of the site, and residential development to within 1 km.

A major constraint to operations has been the management of wastewater produced from abattoir operations, due to deficient wastewater treatment and storage infrastructure and a lack of suitable available land for the discharge (irrigation) of treated wastewater.

Following consistent issues with high nutrient and salt content in the treated wastewater, the department on 2 April 2023 sent a letter reviewing the licence holders annual environmental report. The review noted that the licence holder was looking to purchase additional treatment and additives to reduce sludge and nutrient content in the treated wastewater. This licence amendment is in response to those claims made by the licence holder to improve the quality of the treated wastewater.

Wastewater is currently treated by an onsite wastewater treatment system (WTTS). The WWTS is comprised of 8 ponds located on the premises. The treated wastewater is then theoretically irrigated to 38.23 ha of land comprising of a turf farm, grass fields and native vegetation.

Proposed amendment

The proposed infrastructure consists of the following:

- Bunded concrete pad (13.3m x 6m).
- Self-bunded containerised dewatering unit.
- Sludge balancing tank (12 m³).
- Dewatered cake catchment bin (9 m³).
- Floating sludge pump, capable of pumping up to 60 kL per hour.
- Piping infrastructure from the floating sludge pump to the dewatering unit consisting of a HDPE pipe within a concrete channel from the bunded concrete pad.

The licence holder considers the proposed infrastructure will operate for 12 hours a day to process up to 1680 kilograms/day of pond sludge solids. The infrastructure is expected to have a lifetime of 2 years, after which it will be decommissioned.

Wastewater will be pumped from pond 4 to the sludge balancing tank intermittently via the floating sludge pump prior to being pumped to the dewatering unit. Once the wastewater has been treated by the dewatering unit the solids removed will be stored in a solids bin to be sent offsite to a licensed composting facility. The dewatered wastewater will then flow back into pond 4.

Emissions and controls

The emissions and controls proposed by the licence holder are summarized below in Table 1.

Table 1: Emissions and proposed applicant controls

Emission	Sources	Potential pathways	Proposed applicant controls
Nutrient rich wastewater	Leaks and spills from piping infrastructure and dewatering unit. Overtopping or leaks from balancing tank.	Infiltration into soil leading to contamination of soil and groundwater.	<ul style="list-style-type: none"> Balancing tank and dewatering unit are constructed on top of a bunded concrete pad. Dewatering unit is in a self-bunded container with a drainage line back into the pond if any spills or leaks occur. Piping infrastructure will mostly be located in the pond to prevent any spillage and leaks outside of the pond. All dewatered wastewater will be directed back to Pond 4 via a drainage line.
Odour	Storage of sludge material and treatment of wastewater.	Air / wind dispersal	<ul style="list-style-type: none"> Storage of dewatered solids to be a maximum of 1 week and not exceed 9m³ of solids at any time.

Risk assessment.

The table below describes the risk events associated with the amendments consistent with the *Guidance Statement: Risk Assessments* (DER 2017). The table identifies whether the risk events are acceptable and tolerated, or unacceptable and not tolerated, and the appropriate treatment and degree of regulatory control, where required.

Risk Event				Consequence rating ¹	Likelihood rating ¹	Risk ¹	Reasoning	Regulatory controls
Source/ Activities	Potential emissions	Potential receptors, pathway and impact	Licence holder controls					
Operation								
Operation of a dewatering unit and storage of sludge	<ul style="list-style-type: none"> Leaks and spills from piping infrastructure and dewatering unit. Overtopping or leaks from balancing tank. Storage of sludge material in catchment bin. 	<p>Overland runoff to Preston River and on-site wetland, causing contamination of surface water systems.</p> <p>Pooling of nutrient rich wastewater and subsequent infiltration to soil and shallow groundwater, causing contamination.</p>	Applicant controls listed in Table 1.	<p>Mid-level on-site impacts</p> <p>Low-level off-site impacts</p> <p>Moderate</p>	Risk event could occur at some time Possible	Medium <i>Acceptable, subject to multiple regulatory controls</i>	<p>The proposal to operate a dewatering unit to remove sludge from the wastewater ponds is expected to remove 1680kg of solids per day. Although this may not reduce nutrient loading for nitrogen and phosphorous it's expected to reduce the salts in the treated wastewater.</p> <p>Due to the dewatering unit being located in a self-bunded container on top of a concrete bunded pad and the additional controls provided by the licence holder are deemed to be sufficient in reducing the likelihood of risk events.</p>	<i>Condition 13: operational requirements.</i>
	<ul style="list-style-type: none"> Odour 	<p>Air / wind dispersal of odours to nearby industrial receptors.</p>		<p>Minimal-level on-site impacts</p> <p>Slight</p>				

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

Decision

The delegate officer has determined the proposal to construct and operate a dewatering unit will likely improve the quality of the treated wastewater.

Based on this assessment, it has been determined to amend the existing licence, subject to conditions commensurate with the determined controls and necessary for administration and reporting requirements.

Summary of amendments

The below table provides a summary of the proposed amendments and will act as a record of implemented changes. All proposed changes have been incorporated into the revised works approval as part of the amendment process.

Condition no.	Proposed amendments
Condition 6, Table 2.	Added a new column to Table 2 detailing infrastructure location as shown in Schedule 1.
Condition 10, Table 4.	Added a new condition of construction/installation requirements for amendment infrastructure including infrastructure location in Schedule 1.
Condition 11 and 12	The requirements to send an infrastructure report to the CEO on the compliance and certification of the infrastructure listed in Condition 6, Table 4.
Condition 13, Table 5	Condition for the infrastructure operational requirements and location of the dewatering unit.
Condition 14, Table 6	Included the word wastewater to the condition for clarity.

References

1. Department of Environment Regulation (DER) 2017, *Guidance Statement: Risk Assessments*, Perth, Western Australia.
2. Department of Environment Regulation (DER) 2016, *Guidance Statement: Licence duration*, Perth, Western Australia.
3. Department of Water and Environmental Regulation (DWER) 2019, *Guideline: Decision Making*, Perth, Western Australia.
4. V&V Walsh Pty Ltd 2024, *Application form: Works Approval / Licence / Renewal / Amendment / Registration*, Perth, Western Australia.

Summary of licence holder's comments on risk assessment and draft conditions

Document	Reference	Licence holder comment	DWER response
Licence	Condition 13, Table 5: Infrastructure and equipment requirements	<ul style="list-style-type: none"> <li>i. Requested that the floating sludge pump and piping infrastructure may be placed in either treatment ponds 3, 4 or 5 if dewatering of Pond 4 occurs before anticipated. <li>ii. That the equipment may be operated for three years instead of two years. 	Both changes were made to the amended licence.