# **Amendment Report**

# **Department initiated Amendment**

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

**Licence Number** L4297/1983/17

**Licence Holder** Derby Industries Pty Ltd

**ACN** 009 033 612

File Number DER2017/00961

Talloman Rendering Facility

Premises

Lakes Rd, Hazelmere, WA, 6055

Legal description

Lot 5000 on Plan 67434, Certificate of Title Folio 2785 Volume 277; Part of Lot 20 on Plan 73040, Certificate of Title Folio 2814 Volume 696; Part of Lot 116 on Plan 4553, Certificate of Title Folio 1243 Volume 89; Part of Lot 117 on Plan 4553, Certificate of Title Folio 1244 Volume 987; & Part of Lot 50 on

Plan 7475, Certificate of Title Folio 1810 Volume 68.

As defined by the premises map attached to the issued

licence

Date of Report 12 June 2023

Proposed Decision Revised licence granted

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# 1. Decision summary

The Delegated Officer has determined to make amendments to Licence L4297/1983/17. The amendments are administrative in nature therefore they do not alter the risk profile of the Premises, providing that activities, emissions and receptors as stated in existing approvals remain unchanged.

This Amendment Report documents the amendments made pursuant to section 59 and 59(B) of the *Environmental Protection Act 1986* (EP Act).

The decision report for the Existing licence will remain on the department's website for future reference and will act as a record of the department's decision making.

# 2. Scope of assessment

## 2.1 Regulatory framework

In amending the licence, the department has considered and given due regard to its Regulatory Framework and relevant policy documents which are available at <a href="https://dwer.wa.gov.au/regulatory-documents">https://dwer.wa.gov.au/regulatory-documents</a>.

## 2.2 Amendment summary

Licence L4297/1983/17 is held by Derby Industries Pty Ltd trading as Talloman for the Talloman Rendering Facility (the Premises), located at 115 Lakes Road in Hazelmere WA..

The Premises relates to the category 16: rendering operations and the assessed production capacity of 160,000 tonnes per annum under Schedule 1 of the *Environmental Protection Regulations* 1987 (EP Regulations) which are defined in existing Licence L4297/1983/17.

On 3 February 2023, the department initiated an amendment to Licence L4297/1983/17. The amendment was initiated to amalgamate Amendment Notice 1, issued 30 November 2017; and Amendment Notice 2, issued 27 September 2018 into the Licence. Changes to premises boundary made under Amendment Notice 1 are reflected in the updated Licence.

In addition to the Amalgamation, condition 4.1.1 has been deleted after consultation with the Licence Holder. The Licence has been altered to remove Improvement Conditions IR 1 and IR2 (which form part of Condition 4.1.1) which required the Licence Holder to submit an Odour Management Plan and a Biofilter Management Plan. These documents were submitted in 2016.

A summary of the additional changes is provided in Section 4.1.

#### 3. Consultation

The Licence Holder was provided with the draft Amendment Report on 3 February 2023 and 17 May 2023. Comments were received from the Licence Holder on 8 February; 8 June 2023 and on 21 February 2023 during an on-site meeting between representations from the Department of Water and Environmental Regulation and Derby Industries Pty Ltd.

The Licence Holder advised that the construction of two groundwater monitoring bores as specified in Condition 1.3.6 have been constructed however they are yet to submit the construction completion reports required by 1.3.6. This condition is retained within the amalgamated Licence.

Non annual reporting requirements Table 4.2.2 has been amended to require the Licence

Holder to submit geo-coordinates for existing groundwater monitoring wells 4/91, TMB2, TMB3, TMB4, NMB5 and NMB6.

Improvement conditions IR 1 and IR2 have been completed and are removed.

The Licence Holder advised during consultation that they intend to undertake irrigation of wastewater in the future and will make further application to DWER in this regard.

The Licence Holder provided an updated premises map which is included within the Licence.

The changes made to the Licence Conditions under this amendment have been summarised in Section 4.2.

#### **Covered Anaerobic Lagoon 2**

During the onsite consultation meeting conducted on 21 February 2023, the occupier advised DWER officers that they had increased the embankment height and wastewater containment capacity of Covered Anaerobic Lagoon 2. The pond capacity was increased via these works from ~4,200m³ to 6,100m³ and a height of 920mm along the lowest embankments (NE and NW corners). These works were undertaken without obtaining approval via a Licence Amendment or Works Approval for the alteration to the effluent containment infrastructure. DWER is investigating this non-compliance in accordance with Incident and Complaints Management System reference number 68899.

The primary mechanism to prevent, control and mitigate impacts to the environment from embankment failure is the structural integrity of the Covered Anaerobic Lagoon (CAL) which is controlled at the construction stage by the specification and quality assurance control of construction methods and materials. Post construction, other factors such as seepage through the base and walls of the dam, overtopping, surface water runoff and flood events that inundate the base of the CAL have the ability to compromise the embankments. In the event of an embankment failure or "dam break' incident, impacts are likely to be significant with effects spread over several other land holdings within the geographical area.

In response to the unknown construction methods of the CAL 2 embankment raise, DWER requested that the company seek a third-party geotechnical assessment into the stability of the unauthorised works. On the 30 April DWER received a copy of an independent geotechnical engineer's report (DWER reference document DWERDT772658). The third-party report indicates that the raised embankments where visibly cracking and subject to visible erosion at the time of inspection, constructed of undefined though variable materials and methods, and are of undefined stability.

#### **Risk Assessment and Decision**

On the basis that the construction specifications, materials and methods of the CAL 2 embankment raise is unknown and unable to be defined by the third-party geotechnical engineers the current time, the Delegated Officer considers the likelihood of a dam break event occurring as **possible**, as the risk event could occur at some time. The consequence of untreated wastewater flowing in an uncontrolled manner onto the nearby geographical area impacting on the nearby freehold rural and light industrial landholdings, roadways and wetlands (Hazelmere Lakes) could cause high level and catastrophic impacts including loss of human life to persons using Lakes Road, Hazelmere, soil and groundwater pollution and have prolonged impacts on the aquatic ecosystem of Hazelmere Lakes. The consequence of dam break event is therefore considered **high/severe**. On this basis the acceptability of the continued use of CAL 2 at the newly constructed embankment height will not be tolerated until the occupier is able to prove the stability of this part of the dam meets the required safety standards, such that it will not breach containment through normal operational use.

Use of CAL 2 will be restricted to the original pond effluent capacity and pond height and the occupier will need to make application to the department for use of the increase of capacity of CAL 2. Talloman should consider engaging a third-party geotechnical engineer to undertake a further assessment of the lagoon, including:

- An audit of the construction materials and methods used during the recent embankment raise to ensure the entire dam is suitable for use as a long-term organic liquid waste stabilisation pond;
- an assessment of the geotechnical stability of the CAL 2, including the newly raised portion, and a dam break factor of safety assessment for the dam;
- should the assessment identify issues with CAL 2, any changes to the existing structure to ensure it is able to meets recommended dam break factor of safety requirements, stability and permeability specifications and is therefore suitable for use as intended over the long term, should be included within any application made for works to CAL 2 to the department; and
- Any other information considered relevant to the ongoing safe operation of CAL
   2.

### 4. Conclusion

Based on the assessment in this Amendment Report, the Delegated Officer has determined that an amended licence will be granted, subject to conditions commensurate with the determined controls and necessary for administration and reporting requirements.

## 4.1 Summary of amendments

Table 1 below provides a summary of the proposed amendments and will act as a record of implemented changes. All changes included with amendment have been incorporated into the Revised licence as part of the amendment process.

**Table 1: Summary of licence amendments** 

Condition no.	Proposed amendments
1.3.2	Requires the Licence Holder to restrict use of CAL 2 from use by 31 August 2023 to the originally approved capacity and height.
4.1.1	Improvement program conditions IR1 and IR2 are removed.
5.1.1	Now condition 4.1.1
5.1.2	Now condition 4.1.2
5.1.3	Now condition 4.1.3
5.1.4	Now condition 4.1.4
5.2.1	Now condition 4.2.1
5.2.2	Now condition 4.2.2
	Table 4.2.2 Non annual monitoring requirements updated to require the submission of geo-coordinates for existing groundwater monitoring wells 4/91, TMB2, TMB3, TMB4, NMB5 and NMB6

Condition no.	Proposed amendments
5.2.3	Now condition 4.2.3
5.2.4	Now condition 4.2.4
5.3.1	Now condition 4.3.1