



Application for a licence amendment

Division 3, Part V *Environmental Protection Act 1986*

Licence Number	L5177/1989/13
Licence Holder	Cutting Cart Pty Ltd
ACN	661 123 404
File number	DER2014/001843-1~5
Premises	Dardanup Butchering Company Abattoir 100 Wimbridge Road PICTON WA 6229
	Legal description - Lot 100 on Plan 61127
Date of report	24 May 2024
Decision	Granted

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 was initiated by the licence holder and is limited to the consideration of matters included in the application, primarily relating to changes to the existing wastewater treatment facility and movement of wastewater across the site.

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

Cutting Cart Pty Ltd (Cutting Cart/licence holder) is seeking retrospective approval for the installation of an AMIAD membrane filtration system, MD screw press and bin, discharge tank, filter permeate tank and filter feed tank to upgrade the existing wastewater treatment plant. The department has initiated changes to the licence as a result of the licence holders' recent connection to Water Corporation sewer to discharge both domestic and abattoir wastewater and install two flow meters at pond 2 to monitor the irrigation of wastewater to land.

A licence amendment application was received by the department 27 November 2023.

This Department has taken the opportunity to convert the existing licence conditions into a new format by the insertion of an approved equipment and infrastructure table and other changes that are needed as a result of the requested amendments and changes to wastewater flows, pumps and meters.

Background

Cutting Cart holds licence L5177/1989/13 for the operation of DBC Abattoir, a multi-species abattoir with an assessed design capacity of <30,000 tonnes per annual period (liveweight).

The abattoir is surrounded by seasonally waterlogged land and multiple use wetlands (e.g. Preston River within 1 km from the premises southern boundary). The licence holder has had ongoing historic issues relating to wastewater management, which has been limited by the lack of available land suitable for treated wastewater irrigation and the efficiency of the existing wastewater treatment facility. On the 6 August 2020, the premises was classified as 'Possibly contaminated – investigation required' in accordance with the *Contaminated Sites Act 2003* (CS Act) due to nutrients present in the groundwater beneath the site exceeding regional background levels (DWER notice dated 11 August 2020).

The existing wastewater treatment facility uses geo bags to store dewatering sludge from the anaerobic reactor and irrigation pond (pond 2). The biproduct from the phosphorus removal system is ferric phosphate sludge which is produced to remove phosphorus by adding ferric chloride during wastewater treatment. The sludge removal process was expected to reduce the total nitrogen (TN) concentration of the irrigation water because as sludge decays, ammonia nitrogen is released. However, overtime, pond 2's sludge had accumulated to a point where it was becoming anaerobic and irrigating wastewater with a greater nutrient loading rate (specifically in ammonia nitrogen). Ammonia levels in pond 2 were 2.4 times higher (on average) throughout the past three years. The licence holder has since determined that improvements can be made to the existing wastewater treatment process to reduce high levels of nutrients in wastewater prior to irrigation and has therefore applied for improvement works subject to this amendment application.

Proposed amendments

Connection to Water Corporation sewerage system

The licence holder's approval for a connection to Water Corporation on 1 October 2023 required two flow meters to be installed, a Tradewaste flow meter (N1 ND285003) located near the fire tanks and a Domestic waste flow meter (N1 ND285009) located near the front gates. The licence holder is currently permitted to discharge a combined tradewaste and domestic wastewater volume of up to 00 kL throughout a 24-hour period.

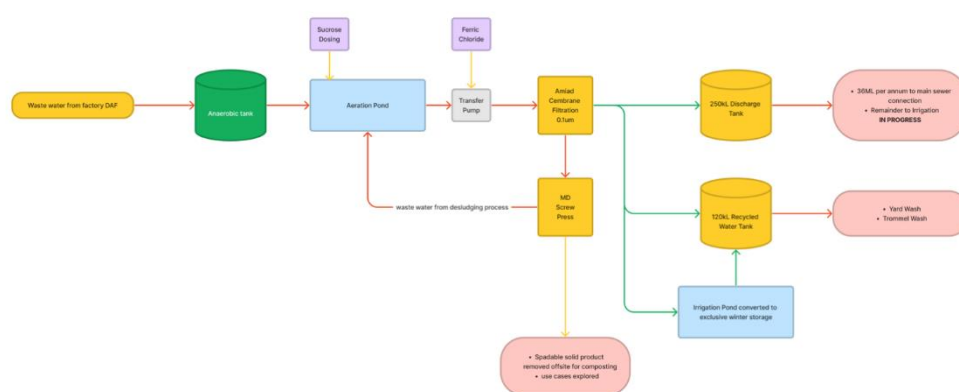
Upgraded wastewater treatment infrastructure.

The AMIAD membrane filtration system is efficient at filtering nutrients (nitrogen and phosphorus) and will function to reduce nutrient loading rates of wastewater, prior to irrigation. The MD screw press's advanced technology will dewater sludge and produce a nutrient rich biproduct which can be directly diverted into a skip bin for eventually off-site disposal to a facility licensed to accept this material. The MD screw press will reduce and eventually stop the treatment facility's need for geo bags and seasonal desludging of pond 2 (irrigation/winter storage holding pond).

The wastewater from ANRUP pond 1 will now be directed from the transfer pump to the AMIAD membrane filtration system instead of pond 2. Additional wastewater from pond 1 desludging will be directed to the MD screw press. The MD screw press will process wastewater received from the AMIAD filtration system and produce a dewatered product which will be directly diverted into the MD screw press' truck/bin. Wastewater from the AMIAD filtration system will be directed to a 250kL discharge tank, 120kL recycled water tank and Pond 2.

Wastewater from the recycled water tank will be used for yard and trommel wash and then be redirected back into the wastewater treatment system.

Flow chart 1: Proposed WWT operational diagram with Cembrane filtering



Source: AMPC, DBC Abattoir - Application documents- Attachment 8A- Ceramic Membrane Technology , Figure 6- Proposed changes to WWT system , page 9, 8 June 2023.

The installation of the AMIAD filtration system and MD screw press requires the installation of additional infrastructure, including a filter feed tank, filter permeate tank, filter sludge tank and an additional truck/bin (for the MD screw press- as mentioned above).

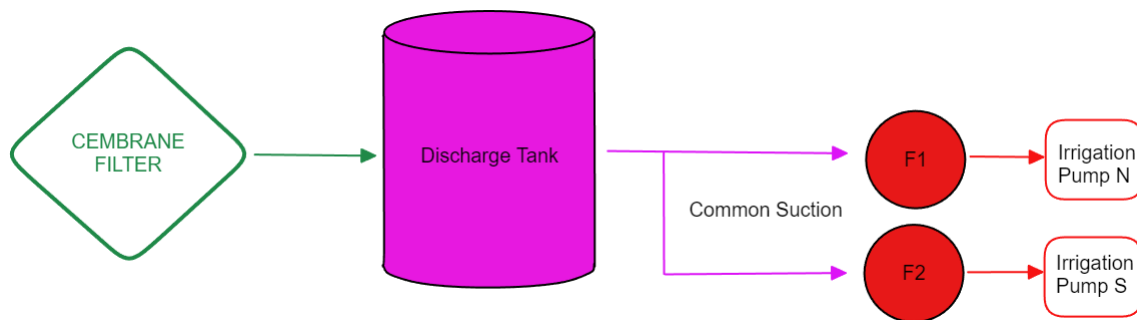
Changes to the wastewater pathway prior irrigation

The licence holder proposes to irrigate from the new 250 kL discharge tank under normal

operations but wishes to retain the option to irrigate directly from Pond 2 in unforeseen emergency circumstances.

A request for information response was received by the department 16 April 2024 (JBS&G, RFI Response- E-mail) which outlined changes to the wastewater pathway prior to irrigation. The RFI response outlined that there are two suction pipes at the bottom of the discharge tank. One suction goes to the sewer and the other has a pipeline which directs wastewater to the existing irrigation pumps (located at Pond 2) and flows through the existing flow meters (F1 and F2). The discharge tank pipeline for irrigation, bypasses pond 2 and discharges directly through the existing flow meters (F1 and F2) to the irrigation paddocks (connected to irrigation pumps north and south).

Flow chart 2: The above flow chart shows the wastewater pathway for irrigation from the discharge tank and does not include the pathway of wastewater to the sewer.



Source: JBS&G 16 April 2024, L5177/1989/13 - RFI Response – Direction of wastewater prior to irrigation, E-mail

Other approvals

The City of Bunbury has advised, that in accordance with the Planning and Development (Local Planning Schemes) Regulations 2015, the subject lot is zoned 'Light industry' under Local Planning Scheme No.8 9LPS8 and the works require a Development Approval to be submitted to the City of Bunbury. The City of Bunbury has advised the department that it has not yet received a Development Approval application for the new wastewater treatment plant and if works have already been completed, retrospective approvals will be required.

The licence holder is advised to apply for the necessary retrospective Development Approval

Consultation

Table 1 provides a summary of the consultation undertaken by the department.

Table 1: Consultation

Parties consulted	Summary of comments received
The department referred the application to City of Bunbury on 23 January 2024.	The City of Bunbury provided information regarding the current approval status of this proposal, which has been included above under 'Other approvals.'
The department provided the licence holder with a draft amended	The licence holder responded on 22 March 2024 and 20 May 2024.

licence and decision report on 20 February 2024 and 30 April 2024	A summary of the licence holder's comments are outlined in Appendix 1.
---	--

Decision

Connection to Water Corporation sewerage system

The applicant's connection to Water Corporation's sewer to discharge abattoir wastewater, was approved 1 October 2023. Water Corporation has given Cutting Cart approval to discharge a combined 100 kL of tradewaste and domestic wastewater throughout a 24-hour period. This connection will allow the licence holder to reduce the amount of treated wastewater irrigated to land from up to 56ML/year to 20 ML/year (Flowchart 1 above and Attachment 8A, Application and Supporting Documents, 2023, page 9).

The Water Corporation sewerage connection and Tradewaste flow meter have been added into condition 1, Table 1- Infrastructure and equipment requirements, and condition 9, Table 5 – Monitoring of inputs and outputs of the licence.

Upgraded wastewater treatment infrastructure.

The Delegated Officer has determined that the proposal to install an AMIAD membrane filtration system, MD screw press and bin, discharge tank, filter permeate tank and filter feed tank to upgrade the existing wastewater treatment plant, is likely to improve the efficiency of wastewater management and nutrient removal prior to irrigation. This determination is based on the AMIAD membrane filtration system functioning to efficiently remove nitrogen (ammonia N) and phosphorus prior to irrigation. Also, based on the MD screw press enhancing the sludge dewatering process to efficiently remove nutrient rich sludge from the wastewater treatment process.

The new wastewater treatment infrastructure has been added into condition 1, Table 1- Infrastructure and equipment requirements and their locations have been added into Schedule 1, Figure 3 – Site layout map, of the licence.

Changes to the wastewater pathway prior to irrigation

The Delegated Officer has determined that the amendment to wastewater pathway prior to irrigation is acceptable given that the wastewater passes through flow meters F1 and F2 prior to irrigation. The Delegated Officer accepts that the irrigation pipelines from pond 2 will remain in case of an emergency event, given that wastewater from Pond passes through flow meters F1 & F2 prior to irrigation.

Department initiated amendment.

The applicant outlined in correspondence dated 22 March 2024, that an updated Nutrient and Irrigation Management Plan (NIMP) is currently being prepared to include the input of nutrients derived from the holding of sheep in the wastewater irrigation areas as part of the nutrient balance.

The department considers that the submitted NIMP must also seek to determine applicable nutrient loading rates based on an overall nutrient balance (nutrients in and nutrients out), noting that the holding of sheep will contribute more nutrient in the form of manure than they remove through grazing.

As sheep are currently being intermittently held within the wastewater irrigation areas without authorisation through the licence, the department has determined to add the requirement for the submission of a Nutrient Management Plan (conditions 16 and 17 in the amended licence) to support a future licence amendment application to seek approval to hold

sheep outside of the approved lairage yards and account for the additional nutrient loads and possible impacts to vegetation cover.

Additional changes to the licence

In amending the licence, the delegated officer has also:

- included the requirement to use a department derived nutrient loading rate spreadsheet calculator as Appendix 1. The spreadsheet will be used by the licence holder to provide present wastewater nutrient loading rate calculations.
- included the requirement to supply photographic evidence of monthly flow meter readings of wastewater discharged to the irrigation areas in the Annual Environmental Report;
- revised condition numbers and removed any redundant conditions; and
- corrected clerical mistakes and unintentional errors.

Conclusion

Based on this assessment, it has been determined that an amendment will be granted, subject to conditions which commensurate the determined controls and are 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 1	'Table 1: Infrastructure and equipment requirements' added, to include new and existing infrastructure that reflects the premises operations.
Conditions 4, 5, 6 & 7	Conditions moved to be included into condition 2, Table 1.
Condition 8, Table 4	Flow metres and discharge tank added as a monitoring point reference
Condition 9, Table 5	Tradewaste Flow meter added for discharge to Water Corporation Sewer
Conditions 15 & 16	Nutrient Management Plan submission and requirements
Condition 17, Table 7	Table updated to include monitoring of irrigation areas using the nutrient loading spreadsheet and monitoring of irrigation wastewater emissions to land through flow meters (F1 & F2)
Schedule 1: Maps	Premises map revised and updated, paddock locations for treated wastewater irrigation added and site layout map added
Appendix 1	Nutrient loading spreadsheet added

References

1. Department of Environment Regulation (DER) 2017, *Guidance Statement: Risk Assessments*, Perth, Western Australia.
2. Department of Water and Environmental Regulation (DWER) 2019, *Guideline: Decision Making*, Perth, Western Australia.

3. Department of Water and Environmental Regulation (DWER) 2019, *Industry Regulation Guide to Licensing*, Perth, Western Australia.
4. Department of Water and Environmental Regulation (DWER) 5 March 2024, *Correspondence to Water Corporation- Sewer connection*, Perth, Western Australia, E-mail
5. Department of Water and Environmental Regulation (DWER) 2023, *Licence L5177/1989/13*, Perth, Western Australia.
6. Department of Water and Environmental Regulation (DWER) 19 February 2024, *Request for Information from Cutting Cart RE: L5177/1989/13*, Perth, Western Australia, E-mail.
7. Department of Water and Environmental Regulation (DWER) 20 April 2024, *DRAFTS and Request for Information RE: L5177/1989/13*, Perth, Western Australia, E-mail.
8. Cutting Cart Pty Ltd 2023, *Application and supporting documents (Attachments: 3B, 8A, 8B, 8C and Cembrane Location)*, Perth, Western Australia.
9. *JBS&G 16 April 2024, L5177/1989/13 - RFI Response – Direction of wastewater prior to irrigation, E-mail*
10. JBS&G 2024, *Cutting Cart Pty Ltd - Dardanup Butchering Co - Annual Environmental Report*, Perth, Western Australia.
11. JBS&G 22 March 2024, *L5177/1989/13 - Applicant comments on DRAFT 21 Day*, Perth, Western Australia.
12. JBS&G 20 May 2024, *L5177/1989/13 – RFI Response*, Perth, Western Australia
13. Water Corporation 6 March 2024, *Correspondence to DWER – Sewer connection*, Perth, Western Australia, E-mail
14. City of Bunbury 11 March 2024, *Comments on DRAFT 21 Day*, Perth, Western Australia.

Appendix 1: Summary of licence holder's comments on assessment and draft conditions

Condition	Summary of licence holder's comments received 22/03/24	Department's response
1 (Table 1) Row 1 (Wastewater Treatment System [WTS])	All abattoir wastewater generated on-site is directed either to the Water Corporation sewer or the abattoir wastewater treatment plant (WTP) and requests the condition to be updated.	Accepts changes
	All solids generated from the WTP are directed to a solid waste collection bin for disposal offsite, however solid waste from the ponds is removed by geobags and taken by trucks to a composting facility.	Accepts changes
	HART tank does not operate using a freeboard	Accepts changes
	Some stormwater may enter WTS vessels, e.g. pits surrounding the DAF tank.	Condition amended
	Retain the ability for pond 2 to irrigate as contingency irrigation in case not all irrigation can occur from the discharge tank.	Condition (c) added to ensure all wastewater from pond 2 passes through flowmeters F1 & F2 prior to irrigation
1 (Table 1) Row 5 (Wastewater disposal area)	The irrigation paddocks (#1-11) cover a total of 10.23 ha	Accepts changes
1 (Table 1) Row 6 (lairage areas)	Request to delete proposed condition that states " <i>Animals awaiting slaughter must only be held in the lairage or holding yards specified in column 2 of Table 1</i> " as sheep are occasionally temporarily stored in paddocks (maximum holding time of 5 days). Licence holder stated they are revising their Nutrient and Irrigation Management Plan (NIMP) to include inputs of nutrients from the holding of sheep in these paddocks and a revised NIMP will be provided to DWER in support of their upcoming application that DBC intends to submit for new abattoir processing infrastructure.	<p>The department does not accept the requested changes to condition 1. The applicant does not have approval to use irrigation areas as overflow animal holding yards. If this activity continues to occur without the necessary authorisations, it will be at the licence holder's own risk.</p> <p>If the licence holder wants approval to use the irrigation areas as animal holding yards then this activity needs to be assessed and approved through a licence amendment application which must be supported by a waste management plan/NIMP</p>
1 (Table 1) Row 7 (Hide and skin shed)	Wastewater from the shed is collected in a sealed concrete sump that runs the length of the building immediately below the salting drums. The wastewater is reused in the process. Any excess wastewater is pumped from the sump into 1000 L bulk containers (IBCs), which are removed off-site for disposal.	Accepts changes

OFFICIAL

10 (Table 4) Monitoring of emissions to land	Monitoring point for quarterly wastewater sampling is referenced as either Discharge Tank or Pond 2, which will retain the ability to irrigate as a contingency (refer to response above).	Monitoring points have been amended to include Pond 2
11 (Table 5) Monitoring of inputs and outputs	Premises does not have a weighbridge to meet requirement to monitor quantity of solid animal waste or rendering material discharge off-site is	Accepts changes, however notes that all waste that is disposed of off-site must be disposed of at a facility that is licensed to accept that type of waste.
Condition	Summary of licence holder's comments received 20/05/24	Department's response
Condition 1 (Table 1) Row 6, Wastewater collection, treatment and disposal	Delete the operational requirement (a) limiting the volume of wastewater that can be discharged to sewer due to duplication of regulation with the licence holder's trade waste permit.	Agrees to in part. The department regulates all changes to emissions and discharges from a prescribed premises in accordance with the <i>Industry Regulation Guide to Licensing (2019)</i> . Whilst it will not limit the volumes of wastewater that will go to Water Corporation it requires these volumes to be reported.
Condition 1 (Table 1) Row 7, Lairage/holding yards	Delete operational requirement (a) requiring dry manure to be swept up for storage in a trailer parked on bitumen sealed yard area, for off-site disposal. The licence holder has confirmed that no 'dry' manure is collected. All manure generated in the lairage yards is considered 'wet' and swept/hosed into the wastewater treatment system (WTS) via the bunds and drains in the yards.	Condition amended to read 'All drains and bunds within the yards must direct all manure to the WTS'
Condition 9 (Table 4) Monitoring of emissions to land	The serial numbers for the flow meters are: • F1 (North): 142541D350. • F2 (South): 143541D350.	Licence conditions updated to include flow meter serial numbers
Condition 10 (Table 5) Monitoring of inputs and outputs	Amend frequency of monitoring for 'Livestock received at premises' from 'Each batch arriving at premises' to 'All animals slaughtered on the premises.'	No changes, this condition is an existing licence condition, and the proposed changes are not part of this amendment application.
Condition 16 and 17, Submission of a Nutrient	Delete requirement to provide the Nutrient Management Plan (NIMP) as a condition of the amended licence.	No changes. The licence holder has made a commitment to provide a NIMP to support a future application to holding sheep within the wastewater disposal areas. As sheep are currently

Management Plan		being held in the irrigation areas, which has not been assessed or approved by the licence, this presents a potential risk to the environment. For these reasons the department considers that the submission of a NIMP that accounts for the sheep in the disposal areas must be added as a regulatory requirement.
Condition 18 (Table 7) Annual environmental report	Amend requirement (e) to reduce the frequency of photographic evidence of the flowmeters from monthly to annual. Monthly photos present unnecessary administrative burden.	No changes. The licence holder is required to obtain and provide monthly readings from the flow meters and the addition of a photo is little additional administrative burden.
Schedule 1: Maps	An updated premises map is attached as the GW monitoring bores were incorrectly labelled in the version previously provided.	Premises map updated in Schedule 1 of the licence.
Decision – Department initiated amendment	Request that the last paragraph is deleted – refer to comments provided above against Conditions 16 and 17. If retained, the licence holder seeks clarification on the biosecurity risks posed by the activity that the decision report states may occur. The licence holder takes its biosecurity obligations seriously and implements all necessary procedures and controls required by the relevant legislation and guidance administered by the Department of Primary Industries and Regional Development.	Agrees to changes. References to biosecurity are removed.