Government of Western Australia
Department of Water and Environmental Regulation

Decision Report

Application for Licence

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

Licence Number	L2979/2015/1
Applicant	MORRIS HOSPITALITY PTY LTD
ACN	132 266 061
File number	APP-0029366
Premises	Colonial Brewing Company (CBCo Brewing) 561 Osmington Road, BRAMLEY, WA, 6285 Legal description – Lot 11 on Deposited Plan 92579 Certificate of Title Volume 2115 Folio 619 As defined by the Premises maps attached to the Licence
Date of report	18/09/2025
Decision	Licence granted

Table of Contents

1. Purpose and scope of assessment

This decision report sets out the Delegated Officer's assessment and decision on the licence application (the Application) for CBCo Brewing (the Premises) submitted by Morris Hospitality Pty Ltd under Part V of the Environmental Protection Act (EP Act) on 4 June 2025.

The Application is for the operation of an existing brewery that was not initially constructed and approved through a works approval.

The scope of this assessment includes:

- the design of the proposed and existing infrastructure;
- a risk-based assessment of the emissions and discharges associated with the construction and operation of the brewery; and
- a risk-based assessment on the irrigation of brewery wastewater to four Land Application Areas (LAAs) located on the Premises.

In completing the assessment documented in this decision report, the Department of Water and Environmental Regulation (the department; DWER) 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.

2. Application summary and overview of premises

CBCo Brewing, operated by Morris Hospitality Pty Ltd, is located at 561 Osmington Road, Bramley, Western Australia. Established in 2004, it was the first brewery in the south-west wine region of WA. The brewery has historically operated below the regulatory threshold of 350,000 litres/year, with current production around 250,000 litres/year.

On 4 June 2025, CBCo Brewing submitted an application under Section 54 of the Environmental Protection Act 1986 (EP Act) for a Category 25: Alcoholic Beverage Manufacturing licence, which applies to premises where alcoholic beverages are produced and liquid waste is discharged onto land or into waters.

The application seeks approval for:

- A production capacity of 500,000 litres/year;
- Construction of a Wastewater Treatment and Storage Compound (WTSC);
- Irrigation of treated wastewater to four Land Application Areas (LAAs) covering 1.9 hectares.

The CBCo Brewing premises are located approximately 2 km west of Bramley, with the nearest sensitive receptor situated 350 metres north-west of the beer manufacturing building. The proposed Land Application Areas (LAAs) for wastewater irrigation are not located within a designated Public Drinking Water Supply Area (PDWSA), however, the north-eastern corner of the lot falls within the Margaret River Drinking Water Source Catchment Area Boundary, with the boundary located approximately 200 metres north of LAA 3.

CBCo Brewing has integrated brewing with agricultural activities, using nutrients from wastewater for pasture irrigation and spent grain/yeast as cattle feed. A surface water licence permits extraction of 37.2 million litres/year, including 15 million litres for pasture irrigation and 2.5 million litres for brewery use, though rainwater is preferred.

To support the application, CBCo Brewing engaged an environmental consultant to conduct a site and soil investigation and prepare a wastewater management plan, submitted to inform the department's risk assessment.

The department has assessed the infrastructure and equipment associated with the premises in accordance with the Guideline: Risk Assessments (DWER 2020), and the approved infrastructure and

operational details are documented in Licence L2979/2025/1

2.1 Existing Operations

CBCo Brewing currently operates with an annual production volume of approximately 250,000 litres of beer. Core activities at the premises include beer manufacturing, wastewater collection and storage, and the reuse of solid by-products such as spent grain and excess yeast for cattle feed. Cider is not currently produced at the site, however, the Applicant has indicated a potential future intention to diversify operations to include cider manufacturing.

Wastewater generated from brewing and cleaning processes is collected and stored on-site, with current practices focused on maintaining pasture health to support integrated meat production. Irrigation of treated wastewater is not currently undertaken and is proposed as part of the licence application.

Fermentation vessels are routinely cleaned using caustic chemicals including sodium hydroxide, potassium hydroxide, and phosphoric acid. These chemicals are reused until they lose efficacy and are then discharged into the bulk liquid waste stream.

Water for brewing is primarily sourced from rainwater or tanker deliveries, with supplementary supply available under a surface water licence. The licence permits an annual extraction of 37.2 million litres, including 15 million litres for pasture irrigation and 2.5 million litres for commercial brewery use.

Infrastructure and equipment associated with the premises are detailed in Licence L2979/2025/1.

2.2 Proposed works

To support increased production and enhance wastewater management, CBCo Brewing proposes the construction of a WTSC designed to treat and store up to 2,500,000 litres of wastewater annually, based on a 5:1 wastewater-to-beer production ratio. The system will include:

- 1 x 23,000 L flow balance tank (relocated from the existing setup);
- 1 x 75,000 L wet-weather storage tank; and
- A recirculating pump with automatic pH dosing.

Wastewater from brewing and packaging areas will be strained and pumped to the balance tank for pH adjustment using liquid lime, with high pH managed through recirculation. Overflow during wet conditions will be directed to the wet-weather tank.

Treated wastewater will be irrigated across four Land Application Areas (LAAs) totalling 1.9 hectares, with seasonal management practices including stock exclusion (August–October), pasture harvesting (late October/early November), kikuyu and ryegrass rotation (LAAs 1 & 2), and regenerative agriculture with mixed species (LAAs 3 & 4). All associated pipework will be constructed from polyethylene in accordance with AS 2698.2:2000 and installed by a licensed plumber in compliance with AS/NZS 3500.1:2021.

Figure 1 provides a visual overview of the beer production process, including key inputs, operational steps, outputs, and associated waste management practices described above.

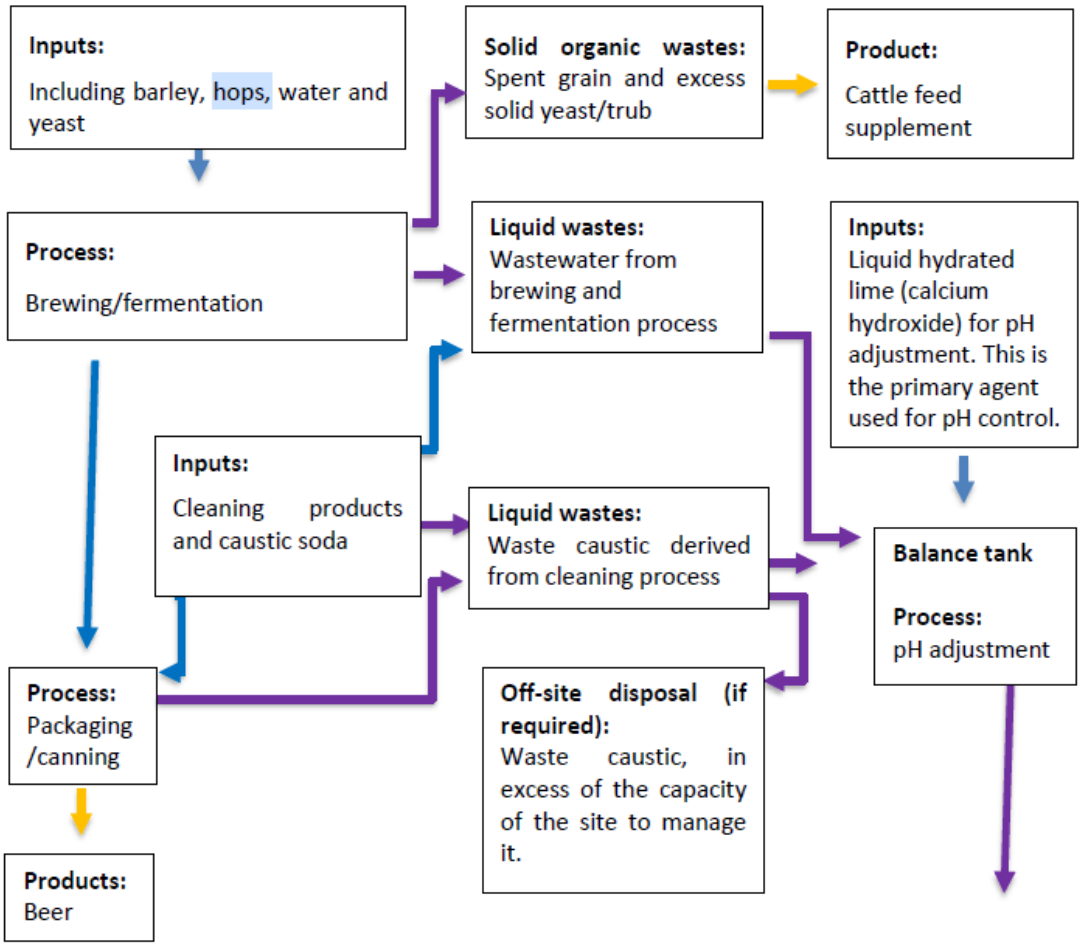

Figure 1: Process inputs, products and waste overview

2.3 Environmental Monitoring Program

The site and soil evaluation, along with the wastewater management plan, includes an environmental monitoring program covering wastewater quality, groundwater depth, and soil condition. To protect environmental values, irrigation will not be permitted when groundwater is detected within 1 metre below ground level at the LAAs observation wells or when more than 3 mm of rainfall is recorded onsite within a 24-hour period.

If groundwater levels exceed the threshold following irrigation, targeted groundwater monitoring will be initiated at monitoring bores MB1 and MB2.

Sodium application rates will be carefully managed to prevent degradation of soil structure. The monitoring program is designed to ensure that soil quality is maintained, nutrient and wastewater loading limits specified in Licence L2979/2025/1 are not exceeded, and potential impacts to groundwater are effectively mitigated.

3. Other approvals

3.1.1 Rights In Water and Irrigation (RIWI) Act

The Applicant holds surface water licence 067022, which grants an annual entitlement of 37,200,000 litres. This allocation includes 15 million litres for pasture irrigation and 2.5 million litres for commercial use within the brewery.

3.1.2 Department of Health (DoH)

Approval from the Department of Health is required for the wastewater treatment and disposal system, and the proposed irrigation of wastewater to the designated new Land Application Areas (LAAs).

3.1.3 Planning approvals

Development approvals will be necessary from the Shire of Augusta-Margaret River for both the proposed WTSC and proposed wastewater irrigation activities associated with the LAAs.

4. Decision Rationale

The Delegated Officer considers the Applicant's proposed infrastructure and environmental management controls to be appropriate and proportionate for managing emissions and discharges from the premises. The proposed construction of a WTSC, supported by a detailed wastewater management plan and environmental monitoring program, demonstrates a proactive and risk-based approach to protecting soil, groundwater, and local amenity.

CBCo Brewing has operated at the site since 2004 without any recorded environmental incidents, which supports confidence in the Applicant's operational capability. While the irrigation of treated wastewater is a new activity proposed under this application, the supporting site and soil evaluation, seasonal land management practices, and nutrient control measures provide a sound basis for sustainable land application.

The proximity of Land Application Area 3 (LAA 3) to the Margaret River Drinking Water Source Catchment Area boundary presents a potential risk to groundwater. However, the hydraulic gradient flows westward—away from the catchment—and the Applicant has proposed robust wastewater controls and monitoring measures. These are considered sufficient to manage the risk of contamination and safeguard drinking water sources.

Regulatory controls have been implemented regarding the use of travelling irrigators, due to the potential risk of over-irrigation if their operation is not adequately supervised.

Overall, the Applicant has presented a well-structured and justified environmental management strategy. The integration of infrastructure, operational procedures, and contingency planning reflects recognised best practice and is expected to effectively prevent adverse impacts on sensitive receptors, public health, and the surrounding environment.

5. Risk assessment

The department assesses the risks of emissions from prescribed premises and identifies the potential source, pathway and impact to receptors in accordance with the *Guideline: Risk Assessments* (DWER 2020).

To establish a risk event there must be an emission, a receptor which may be exposed to that emission through an identified actual or likely pathway, and a potential adverse effect to the receptor from exposure to that emission.

6. Receptors

In accordance with the Guideline: Risk Assessment (DWER 2020), the Delegated Officer has excluded the applicant's employees, visitors, and contractors from its assessment. Protection of these parties often involves different exposure risks and prevention strategies and is provided for under other state legislation.

The most sensitive human receptors include a residential property located approximately 250 metres west of Land Application Area (LAA) 2, and commercial premises within 400 metres of the same area.

These receptors have the potential to be impacted by odour emissions, particularly following the wet season when stored wastewater can undergo anaerobic decomposition, producing odorous compounds that may disperse via windborne pathways.

In addition, around 28.5 hectares of native vegetation lie within 20 metres of LAA 1 along the eastern boundary of the premises. While the overall risk to this ecological receptor is considered low, it may increase if irrigation occurs during or shortly after rainfall events exceeding 3 mm, potentially leading to surface runoff or waterlogging.

Groundwater was identified as an environmental receptor based on monitoring data from the 2023 and 2024 wet seasons. During these periods, groundwater levels rose to within one meter below ground level for extended durations—up to 94 days in some areas. This sustained proximity, particularly in LAA2 and LAA3 where soils remained saturated for weeks, indicates a high potential for interaction between applied wastewater and the underlying groundwater system.

7. Risk ratings

Risk ratings have been assessed in accordance with the *Guideline: Risk Assessments* (DWER 2020) for each identified emission source and takes into account potential source-pathway and receptor linkages as identified in Table 1. Where linkages are in-complete they have not been considered further in the risk assessment.

Where the applicant has proposed mitigation measures/controls (as detailed in Table 1), these have been considered when determining the final risk rating. Where the delegated officer considers the applicant's proposed controls to be critical to maintaining an acceptable level of risk, these will be incorporated into the licence as regulatory controls.

Additional regulatory controls may be imposed where the applicant's controls are not deemed sufficient. Where this is the case the need for additional controls will be documented and justified in Table 1.

Licence L2979/2025/1 that accompanies this decision report authorises emissions associated with the operation of the premises.

The conditions in the issued licence have been determined in accordance with *Guidance Statement: Setting Conditions* (DER 2015).

Table 1: Risk assessment of potential emissions and discharges from the premises during construction and operation

Risk Event					Consequence rating[1]	Likelihood rating[1]	Risk[1]	Reasoning	Regulatory controls
Source/ Activities		**Potential emissions**	**Potential receptors, pathway and impact**	**Applicant controls**					
Category 25: Alcoholic Beverage Manufacturing									
Construction/Installation									
	Vehicle movement on access roads	Dust	Construction activities are not intensive, and the impact on receptors is seasonal, as these receptors are only used during certain times of the year. The risk event has been screened out.						
		Noise							
	Construction of wastewater treatment and storage infrastructure and equipment	Dust							
		Noise							
	Installation of monitoring equipment including	Dust							
		Noise							
Operations									
Beverage Manufacturing Facility (Process building)	Beer manufacturing and packaging	Noise	Noise from brewing processes travelling via air/windborne pathways impacting health and amenity. **Receptors**: 3 Residential premises and 2 commercial premises within 500 m of process building	All beer manufacturing occurs within an enclosed beer process building containing noise emissions.	**Slight** Minimal impacts to amenity	**Rare** The risk event may only occur in exceptional circumstances	**Low**	All beer production occurs in an enclosed process building and beer production does not occur 24 hours a day minimising the risk of unreasonable noise production.	Low risk, no additional controls required
		Odour	Odour emissions from the brewing process escaping the process building and travelling via air/windborne	All beer manufacturing occurs within an enclosed beer process building with adequate ventilation.	**Slight** Local scale: minimal impacts to amenity	**Unlikely** The risk event will probably not occur in most circumstances	**Low**	All beer production occurs in an enclosed process building minimising the risk of odour impacting amenity.	Low risk, no additional controls required

Risk Event					Consequence rating[1]	Likelihood rating[1]	Risk[1]	Reasoning	Regulatory controls
Source/ Activities		**Potential emissions**	**Potential receptors, pathway and impact**	**Applicant controls**					
			pathways impacting health and amenity. **Receptors**: 3 Residential premises and 2 commercial premises within 500 m of process building						
		Spills and leaks of beer from processing and packing	Beer potentially leaking from drainage infrastructure, running off over land or infiltrating into ground, potentially impacting groundwater and groundwater dependent ecosystems. **Receptors**: Margaret River Catchment at north-east corner of premises and 28.5 hectares of native vegetation along the entirety of the eastern boundary of the premises.	All wastewater produced in the beer process building and packaging shed is collected by a drainage system via floor drains and gathered in a collection sump.	**Slight** Onsite impact: minimal	**Rare** The risk event may only occur in exceptional circumstances	**Low**	Existing drainage infrastructure removes the risk of any discharge to the environment during manufacturing.	Low risk, no additional controls required
	Solid and liquid wastes from the brewing process	Odour	Odour emissions from stored spent grain, solid yeast and wastewater travelling via air/windborne pathways impacting health and amenity. **Receptors**: 3 Residential premises and 2 commercial premises within 500 m of process building.	Spend grain and solid yeast waste is repurposed as supplemental feed for stock. Solid wastes are transported directly to the paddock after allowing time to cool in the loading bay, with a maximum cooling time of 24 hours. Wastewater is lime treated and not expected to generate odour if irrigated within a few days of its generation. The wastewater storage tank's proposed location is at the eastern side of the premises to maximise the distance to sensitive receptors.	**Slight** Local scale: minimal impacts to amenity	**Unlikely** The risk event will probably not occur in most circumstances	**Low**	Solid waste is removed from the premises within 24 hours minimising potential for odour emissions. Wastewater's pH is lime treated minimising the generation of odorous compounds. Wastewater is irrigated shortly after generation, minimising the production of odourous compounds that may occur during storage. Based on these controls, odour from solid waste does not pose a high risk of impacting amenity.	Low risk, no additional controls required

Risk Event					Consequence rating[1]	Likelihood rating[1]	Risk[1]	Reasoning	Regulatory controls
Source/ Activities		**Potential emissions**	**Potential receptors, pathway and impact**	**Applicant controls**					
		Leachate from solid wastes (spent grain and yeast waste)	Leachate from solid wastes (spent grain and yeast waste) breaching containment, entering the environment and potentially impacting groundwater or surface water. **Receptors**: Surface water dam located on the premises directly south of the WTSC. Drainage line directing water from the dam north-west to a second dam on a hydraulically down-gradient on a neighbouring property. Margaret River Catchment at north-east corner of premises and 28.5 hectares of native vegetation along the entirety of the eastern boundary of the Premises.	Spent grain and waste yeast is stored in IBCs with dedicated plastic bunds to capture any leachate that may collect during storage. IBCs are stored on the Premises for a maximum of 24 hours before collection for use as supplementary feed at paddocks. After collection the plastic bunds are emptied on the floor of the Process building for collection by the drainage system and directed to the WTSC.	Slight Onsite impacts: minimal	Unlikely The risk event will probably not occur in most circumstances	**Low**	Solid wastes produced in the brewery are either contained in the process building where the drainage system can capture any leachate. The loading bay where spent grain is left for cooling is on concrete hardstand. The ICB's with plastic bunding to capture leachate before transport offsite. Based on these controls the likelihood of leachate from solid wastes produced from the brewery entering the environment is minimal.	Low risk, no additional controls required
		Spills or leaks of wastewater	Wastewater potentially breaching containment infrastructure, running off over land impacting surface water, or infiltrating into ground, impacting groundwater. **Receptors**: Surface water dam located on the premises directly south of the WTSC. Drainage line directing water from the dam north-west	All wastewater from the brewing and packaging shed is collected by existing floor drains and directed via a strainer to an existing 1,800 L concrete pump well fitted with a high-level alarm. The wastewater will then be pumped to a proposed 23k L PVC balance tank located in the proposed wastewater treatment and storage compound (WTSC). Strainer is monitored and emptied once a week.	**Moderate** Offsite impacts local scale: low level	**Rare** The risk event may only occur in exceptional circumstances	**Medium**	Drainage infrastructure is adequate to ensure wastewater is directed to storage tanks. High level alarm automates the prevention of overflows of the concrete pump well. Due to the volume of wastewater expected to be produced the consequence of discharge to the environment is moderate. The actual likelihood of the drainage systems or proposed pipe work from the brewery to the WTSC failing is rare considering they are	The applicant's controls are sufficient.

Risk Event					Consequence rating[1]	Likelihood rating[1]	Risk[1]	Reasoning	Regulatory controls
Source/ Activities		**Potential emissions**	**Potential receptors, pathway and impact**	**Applicant controls**					
			to a second dam on a hydraulically down-gradient on a neighbouring property. Margaret River Catchment at north-east corner of premises and 28.5 hectares of native vegetation along the entirety of the eastern boundary of the premises.	All drainage works to the wastewater treatment compound must be undertaken by a licenced plumber and comply with Department of Health requirements. All pipework must comply with Department of Health requirements. The minimum standard for pipework must be polyethylene complying with AS 2698.2:2000. Installation of pipe work must comply with AS/NZS 3500.1:2021 and be suitable for use with wastewater.				required to be constructed and installed as per the minimum standards mentioned in the applicant control column.	
	Cleaning of brewing equipment	Spills or leaks of wastewater containing cleaning products and caustic (Sodium hydroxide, potassium hydroxide and phosphoric acid)	Wastewater potentially breaching containment infrastructure, running off over land and infiltrating into ground, impacting groundwater. **Receptors**: Margaret River Catchment at north-east corner of premises and 28.5 hectares of native vegetation along the entirety of the eastern boundary of the premises.	All wastewater from the brewing and packaging shed is collected by existing floor drains and directed via a strainer to an existing 1,800 L concrete pump well fitted with a high-level alarm. The wastewater will then be pumped to a proposed 23k L PVC balance tank located in the proposed wastewater treatment and storage compound (WTSC). Wastewater containing caustic chemicals in excess unable to be managed by the site will be collected for off-site disposal by a controlled waste contractor if required.	**Moderate** Offsite impacts local scale: low level	**Rare** The risk event may only occur in exceptional circumstances	**Medium**		The applicant's controls are sufficient
Waste Treatment and Storage Compound (WTSC)	Collection and storage of wastewater from brewing process	Spills or leaks of wastewater	Wastewater potentially breaching containment or drainage infrastructure, running off over land and infiltrating into ground, impacting	The wastewater holding tank must include secondary containment controls including an audible and visual high-level alarm, a surface water diversion bund around the tank in the event of high	**Moderate** Onsite impacts: mid-level	**Rare** The risk event may only occur in exceptional circumstances	**Medium**		The applicant's controls are sufficient

Risk Event					Consequence rating[1]	Likelihood rating[1]	Risk[1]	Reasoning	Regulatory controls
Source/ Activities		**Potential emissions**	**Potential receptors, pathway and impact**	**Applicant controls**					
			groundwater.	rainfall events and to contain wastewater spills to manage a loss of containment event. The volume of the bund should be sufficient to hold the volume of the largest storage vessel, plus 10% (i.e., 75,000 L, plus 10% = 82,500 L). All drainage works to the wastewater treatment compound must be undertaken by a licenced plumber and comply with Department of Health requirements. All pipework must comply with Department of Health requirements. The minimum standard for pipework must be polyethylene complying with AS 2698.2:2000. Installation of pipe work must comply with AS/NZS 3500.1:2021 and be suitable for use with wastewater.					
Travel irrigators and irrigation sprinklers	Irrigation of wastewater to Land Application Areas (LAA's) using travel irrigators and/or irrigation sprinklers	Odour	Odour emissions from the irrigation of odorous wastewater travelling via air/windborne pathways impacting health and amenity. **Receptors**: 3 Residential premises and 2 commercial premises within 500 m of LAAs.	Lime-treated wastewater is not expected to produce nuisance odours if irrigated within a few days of generation. Raising the pH set point to pH of 8 following wet season storage to minimise odour. Commence irrigation when wind is forecast to be blowing away from the nearest residential receptor (west). If odour is found to be inadequately managed the applicant will investigate the use of a moving bed biofilm reactor (MBBR) to treat stored wastewater	**Moderate** Local scale impacts: Mid-level impact to amenity	**Possible** The risk event could occur at some time	**Medium**		The applicant's controls are sufficient.

Risk Event					Consequence rating[1]	Likelihood rating[1]	Risk[1]	Reasoning	Regulatory controls
Source/ Activities		Potential emissions	Potential receptors, pathway and impact	Applicant controls					
				and remove odour prior to irrigation.					
		Nutrient rich and/or high sodium wastewater	Insufficiently treated wastewater being irrigated to land impacting soil quality, crop health and potentially infiltrating soil and contaminating groundwater. Irrigation of high sodium containing wastewater increasing the sodium adsorption ratio (SAR) damaging soil structure increasing water infiltration and nutrient runoff, potentially impacting groundwater. **Receptors**: Margaret River Catchment at north-east corner of premises and 28.5 hectares of native vegetation along the entirety of the eastern boundary of the premises .	Irrigation will not occur during the wet season or during a rain event or for 24 hours after the rain event of greater than 3mm Monthly hydraulic loading limits in kL/day have been calculated for each LAA to mitigate potential runoff of excess nutrients. Nitrogen (N) and Potassium (K) loading have been determined as nutrients limited by Phosphorus (P) loading. LAAs have been assessed for required supplementing of N and K for each LAA in kg per hectare per year. The nitrogen requirement will be met by incorporating legume into pasture mix or applying fertiliser nitrogen during the growing season at a rate of no more than 50 kg per hectare per month until the design deficit has been met. The potassium requirement will be met by swapping sodium hydroxide in the brewery with potassium hydroxide until the annual potassium deficit has been achieved. Wastewater pH is to be controlled with an automated lime dosing pump and pH controller. The irrigation control system will be set so irrigation cannot occur outside of the pH limits specified in the Waste Management Plan (WMP). Monitoring parameters and	**Moderate** Offsite impacts local scale: low level	**Unlikely** The risk event will not occur in most circumstances	**Medium**	The use of travel irrigators can pose the risk of excess irrigation if not shut off manually leading to exceedances of the LAA hydraulic loading, potentially harming the environment.	**If using travel irrigators, the operator must ensure it automatically stops irrigating at the end of each run or is supervised and can be manually stopped.**

Risk Event				Consequence rating[1]	Likelihood rating[1]	Risk[1]	Reasoning	Regulatory controls
Source/ Activities		Potential emissions	Potential receptors, pathway and impact	Applicant controls					
				frequency for wastewater, soils, groundwater depth within the LAAs are proposed as per the Site and Soil Evaluation and Wastewater Management Plan provided alongside the licence application.					

Note 1: Consequence ratings, likelihood ratings and risk descriptions are detailed in the *Guideline: Risk Assessments* (DWER 2020).

Note 2: Proposed applicant controls are depicted by standard text. **Bold and underline text** depicts additional regulatory controls imposed by department.

8. Consultation

Table 23 provides a summary of the consultation undertaken by the department.

Table 2: Consultation

Consultation method	Comments received	Department response
Application advertised on the department's website on 27 June 2025	None received	N/A
Local Government Authority (Shire of Augusta/Margaret River) advised of proposal on 27 June 2025	None received	N/A.
Applicant was provided with draft licence and decision report on 6 August 2025.	Comments received on 22 August 2025. Only minor and typographical changes suggested.	Changes incorporated

9. Decision

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

References

1. *Site and Soil Evaluation for Onsite Wastewater Management and Wastewater Management Plan: Existing brewery - CBCo Brewing*. May 2025. Enviro Consulting Australia. APP-0029366.
2. Application for Licence under Part V of the Environmental Protection Act. M*emorandum.* 22 May 2025. Enviro Consulting Australia. APP-002