



## Application for licence

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

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<b>Licence number</b>	L9348/2022/1
<b>Applicant</b>	Fotheringham Pty Ltd
<b>ACN</b>	078 569 589
<b>DWER file number</b>	DER2022/000463
<b>Premises</b>	Pederah Creek Feedlot 462 Pederah West Road KARLGARIN WA 6358
<b>Date of report</b>	25 November 2022
<b>Status of report</b>	Final

## 1. Purpose and scope of assessment

Fotheringham Pty Ltd (the applicant) is seeking retrospective approval to operate its existing cattle feedlot near Karlgarin. An application for licence was submitted under Division 3 Part V of the *Environmental Protection Act 1986* (EP Act) on 6 July 2022.

This report sets out the delegated officer's assessment of potential risk events arising from emissions and discharges that are generated from feedlot operations at the premises.

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>.

## 2. Application details

### Overview of existing premises

Pederah Creek feedlot is an existing cattle feedlot that has been operating since 2010 on the outskirts of Karlgarin, about 320 km southeast of Perth.

The existing premises comprises a 2,772 head open-air cattle feedlot that was subject to works approval W4580/2009/1 and is accredited under the National Feedlot Accreditation Scheme (NFAS).

Table 1 describes the prescribed premises category the application is subject, as defined in Schedule 1 of the Environmental Protection Regulations 1987.

**Table 1: Prescribed premises category**

Classification of premises	Assessed design capacity (as per application)
Category 1: Cattle feedlot: premises on which the watering and feeding of cattle occurs, being premises – (a) situated less than 100 metres from a watercourse; and (b) on which the number of cattle per hectare exceeds 50.	Not more than 2,772 animals (2,245 SCUs equivalent)

### Background

W4580 was granted in 2009 for construction of a 5,000 head feedlot at the premises. It was only partially constructed before an application to extend the duration was submitted by the applicant; this was unable to be processed before the works approval expired in 2015.

The application indicates the first stage of the feedlot has been operational since 2010, however no compliance documentation has been received for the works completed to date, meaning the department is yet to verify whether the works have been completed in accordance with the condition of W4580.

### Feedlot design and operation

Stage 1 of the feedlot comprises 20 pens with a back-to-back design, with individual pens measuring 33 m x 42 m (1,386 m<sup>2</sup>/pen) and a total operational footprint of 27,720 m<sup>2</sup>. At a stocking density of 10 m<sup>2</sup>/head, this equates to 139 head per pen and 2,772 head total.

Key feedlot infrastructure is located with a controlled drainage area (CDA) comprising the existing pens, feed lane, effluent catch drains located on the downslope side of both pen rows, 3 x evaporation ponds and a compost pad. All have been constructed with a 300 mm thick hardstand base using in situ soils, compacted to a minimum dry density ratio of 95%.

The three evaporation ponds have been constructed with a combined containment capacity of 9,367 m<sup>3</sup>, which is more than sufficient when compared to the calculated minimum storage capacity of 4,063 m<sup>3</sup> that is required to contain the estimated volume of runoff of 1:20 year ARI winter rainfall over a 3-year simulation (including safety factor and minimum 900 mm freeboard).

Manure is harvested from the pens and composted on a designated hardstand pad, along with deceased animals. Finished compost is spread onto paddocks over the premises that are to be cropped during January and May each year, at a rate of 2.6 t/ha for manure compost and 4.3 t/ha for carcass compost. Cropping and pasture paddocks are rotated each year, with the application of compost to paddocks also rotated. A total area of 4,300 ha is available for spreading.

### **Exclusions to this assessment**

The following matters are out of the scope of this assessment and have not been considered within the risk assessment detailed in this report:

- other general farming activities being conducted on the premises, including but not limited to machinery movements, land application of synthetic fertilisers outside of manure utilisation areas, etc.;
- the keeping of animals on the premises outside of feedlot pens – should the applicant wish to keep animals outside of the feedlot pens, this will need to be supported by an updated and balanced nutrient budget that demonstrates how all nutrient inputs and outputs within the waste utilisation areas have been accounted for;
- vehicle (i.e., livestock truck) movements on private or public roads; and
- land use zoning and compatibility with surrounding land uses.

## **3. Industry code of practice**

The *National Beef Cattle Feedlot Environmental Code of Practice* (MLA 2012a) provides nationally consistent requirements for lot feeders regarding the environmentally relevant aspects of establishing and operating beef cattle feedlots in Australia.

The performance measures outlined in the Code of Practice have been used as a baseline for rating the vulnerability of major natural resources from the feedlot and the risk of environmental impacts from its design and operational features.

Table 2 provides a summary of the existing feedlot against the relevant environmental performance measures outlined in the Code of Practice for the site selection and design and operational aspects.

**Table 2: Summary of Pederah Creek feedlot against the Code of Practice (MLA 2012b)**

	Performance measures	Pederah Creek feedlot	Compliant (Y/N)
<b>Site selection and design</b>			
<b>Surface water</b>			
1.1.1	The feedlot complex is not located in a flood prone area and should generally be above the 1:100 year ARI flood height	The feedlot is not within a flood prone area and is sited above the 1:100 year ARI flood height	Yes
1.1.2	The feedlot complex is enclosed within a controlled drainage area (CDA) which is designed to an acceptable hydrological standard to prevent unauthorised discharges of runoff	A CDA is in place with all runoff from manured hardstand areas contained within catch drains and evaporation ponds. Pens, feed lane, catch drains, compost pad and ponds are underlain with compacted in situ soils Catch drains are in place and divert effluent runoff to a series of evaporation ponds There is no sedimentation system in place, however, there have been no issues from operations to date due to the frequency of pen and drain cleaning and small amount of manure reaching the evaporation ponds The evaporation ponds have been shown to have sufficient capacity to store runoff from a 1:20 year ARI storm event	Yes
1.1.3	Feedlot waste utilisation areas are designed to enable the sustainable use of effluent and any solid waste that is applied	Composted manure is spread at a sustainable rate (1.25 t/ha) on cropping paddocks on the premises. Effluent is evaporated (no on-site discharges)	Yes
<b>Groundwater</b>			
1.2.1	The feedlot complex and waste utilisation areas are not sited above vulnerable groundwater resources	The premises is within the Kondinin-Ravensthorpe proclaimed groundwater area characterised by a fractured rock system (paleochannel). Groundwater is mapped as being saline (14,000 – 35,000 mg/L TDS), with no beneficial uses. Depth to groundwater is at least 20 mbgl beneath the feedlot pens and evaporation ponds	Yes
1.2.2	Leachate from the feedlot complex does not contaminate groundwater	Key feedlot infrastructure (i.e., pens, feed lane, catch drains, compost pad and ponds) comprise compacted hardstand with testing confirming the permeability of the soils meets the standard recommended in the National Guidelines (MLA 2012a) of $1 \times 10^{-9}$ m/s	Yes
1.2.3	The risk of new salinity outbreaks are minimised and existing outbreaks are not exacerbated	There are no existing outbreaks of salinity in the area surrounding the feedlot. The risk of new outbreaks occurring is minimal due to the management practices in place being consistent with the National Guidelines	Yes

Community			
1.3.1	Feedlot is sited away from incompatible land uses	The feedlot is well separated from populated areas and exceeds the minimum separation distances to sensitive receptors / nearby rural dwellings. Surrounding land use is predominantly farming and broadacre cropping  The feedlot is well separated from main roads and is generally not visible to the public  The design of the feedlot, such as the slope of pens, has been effective in promoting drainage so that pens do not become wet and odourous	Yes
1.3.2	Feedlot does not detract from visual amenity		Yes
1.3.3	Feedlot is sited and designed such that odour, dust and noise do not unreasonably impact community amenity		Yes
Ecology			
1.4.1	Feedlot siting and design does not have a significant impact on threatened or endangered species	Key feedlot infrastructure is located within the centre of a cleared paddock with no significant stands of remnant vegetation or known threatened or endangered species	Yes
Resources			
1.5.1	Feedlot is sited on land with sufficient suitable soil resources for utilisation of feedlot wastes	Manure and cattle carcasses generated by the 2,245 SCU feedlot are composted and then spread over 654 ha of dryland cropping land, with soils comprising valley alluvium originating from surrounding granites with alkaline brown and red hard setting loamy earths and duplexes. Oaten hay is grown to remove nutrients from the cropping areas. A nutrient budget submitted with the application demonstrates how compost applied at a rate of 1.25 t/ha over the available land area is sustainable	Yes
1.5.2	Feedlot has a sustainable water supply under normal conditions	Up to 90% of water used in the feedlot is supplied by surface dams on the premises. The applicant also has access to up to 9,000 L/d of scheme water	Yes
Operational management			
Surface water			
3.1.1	The quality of surface waters external to the CDA and waste utilisation area is not adversely affected by effluent and manure utilisation	Compost is applied to designated paddocks on the premises at a sustainable rate (see above), therefore, the risk of deterioration of soil condition is low. Periodic soil testing is conducted as part of the ongoing cropping program, where any adverse soil results will be identified and addressed  Compost is not applied within 25 m of any identified watercourse or drainage line. Effluent is not applied to land	Yes
3.1.2	The structures containing and controlling runoff from within the CDA and effluent utilisation area are maintained to ensure	Feedlot pens and drains are cleaned at least once every 8 weeks and the evaporation pond every 5 years. A visual check of key feedlot infrastructure will be made weekly to ensure integrity, with any identified issues or repairs addressed as	Yes

	their integrity and ongoing compliance with design criteria	required (repairs to pen floors have not been required to date)	
<b>Groundwater</b>			
3.2.1	The quality of groundwater in the vicinity of the feedlot is not adversely affected by feedlot operations and waste utilisation	The nutrient budget submitted with the application demonstrates that compost is being applied in a sustainable manner. Soil condition is periodically monitored as part of the cropping program; there is a low risk of soil deterioration	Yes
3.2.2	Feedlot is operated to prevent or minimise the risk of new salinity outbreaks	Key infrastructure comprises hardstand pads, with effluent runoff controlled and contained. The depth to groundwater indicates a low risk of being impacted by feedlot activities  Pens and drains are regularly cleaned and maintained in an effective working condition, with weekly checks being made  There is very little mapped salinity in the minor valley below the feedlot. The sustainable application of compost in the manner described should ensure that salt is not leached at unacceptable rates, with soil testing conducted to provide assurance of low impacts	Yes
<b>Community</b>			
3.3.1	Feedlot is operated such that odour, dust and noise do not unreasonably impact community amenity	Pens and drains are regularly cleaned and maintained in an effective working condition. Spilt and spoilt feedstuffs are removed regularly and not allowed to build up  Pens are stocked at a density of 12 m <sup>2</sup> /SCU, which is consistent with the National Guidelines and is ideal for ensuring minimal dust levels due to the formation of a manure interface layer on the pen floors  Deceased animals are removed immediately from pens and covered with a 300 mm layer of compost. Carcass windrows are not disturbed throughout the decomposition process  Compost spreading on paddocks will not be conducted when there is a high risk of dust and odour causing off-site impacts. Compost will not be applied within 25 m of the property boundary  A complaints register is in place and kept as per the National Guidelines	Yes
<b>Ecology</b>			
3.4.1	Feedlot is operated such that it does not have a significant impact on remnant vegetation or ecological communities	The premises predominantly comprises cleared agricultural paddocks with no significant stands of remnant vegetation or known ecological communities	Yes

## Summary of compliance with Code of Practice

The feedlot is located on priority agricultural land and is well separated from populated areas. Its location in a climate with high annual moisture deficit (i.e., low rainfall and high evaporation) further reduces the risk of common environmental issues associated with wet conditions, such as managing odour, runoff and manure build-up.

The feedlot has been sited, designed, and constructed in accordance with the Code of Practice. Operations to date also indicate compliance with the Code of Practice and the *National Guidelines for Beef Cattle Feedlots in Australia* (MLA 2012b).

The management of composted manure by applying to dryland cropping land over the premises at the proposed nutrient loading rates, and in conjunction with the proposed cropping program, appears to be sustainable.

## 4. Other approvals

### Planning approvals

Planning approval for a 5,000 head feedlot was issued by the Shire of Kondinin in December 2009. A condition of the approval required the applicant to comply with the requirements of W4580, the EP Act and subsidiary legislation.

## 5. Consultation

The application was referred to relevant public authorities and adjacent landholders and was advertised for public comment on the department's website during October 2022.

### Public authorities

The Department of Primary Industries and Regional Development (DPIRD) does not object to the feedlot operation and provided comment on compliance with the environment and design aspects of the feedlot, and the capability of the applicant to manage the amount of solid wastes produced.

A response from the shire was not received within the specified comment period.

### Public submissions

No public submissions were received during the specified comment period.

## 6. Risk assessment

### Determination of emission, pathway and receptor

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.

### 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 identified potential source-pathway and receptor linkages. Where linkages are in-complete they have not been considered further in the risk assessment.

Where the applicant has proposed mitigation measures/controls, 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 the below table.



## Risk assessment table

The table below describes the risk events associated with the proposal consistent with the *Guideline: Risk Assessments* (DWER 2020a). 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 <sup>1</sup>	Likelihood rating <sup>1</sup>	Risk <sup>1</sup>	Reasoning	Regulatory controls	
Source/ Activities	Potential emissions	Potential receptors, pathway and impact	Applicant controls						
Category 1: Feedlot operations									
Holding, feeding and watering of animals within uncovered pens	Nutrient-laden leachate from manure, urine, mobilised by surface water runoff	Seepage/infiltration, causing contamination of shallow groundwater	Pens, cattle lanes and catch drains constructed with 300 mm compacted hardstand	Low-level on-site impacts <b>Minor</b>	Likely to occur only in exceptional circumstances <b>Rare</b>	<b>Low</b> Acceptable, based on applicant controls being implemented	To protect the underlying groundwater resource, the feedlot has been constructed in accordance with the requirements outlined in the National Code of Practice (MLA 2012a), namely pen and yard surfaces and cattle alleys, effluent catch drains, holding pond floors and manure storage pad have been constructed with a compacted hardstand that complies with a permeability of at least 1 x 10 <sup>-9</sup> m/s.  The delegated officer considers these controls will ensure the risk of groundwater contamination from ongoing feedlot activities is acceptable, providing an appropriate surcharge layer is maintained.	- Infrastructure design and operational requirements specified in infrastructure table  - All infrastructure within controlled drainage area must be maintained to ensure integrity is sustained	
		Uncontrolled discharge, causing soil contamination or groundwater contamination	Feedlot infrastructure constructed within a controlled drainage area, comprising a bunded hardstand that diverts surface water runoff to evaporation ponds	Low-level on-site impacts <b>Minor</b>	Likely to occur only in exceptional circumstances <b>Rare</b>		<b>Low</b> Acceptable, based on applicant controls being implemented	Key feedlot infrastructure is located within a CDA, in which all contaminated or potentially contaminated surface water runoff is contained and diverted to a series of evaporation ponds.  The delegated officer considers the above controls ensure the risk of uncontrolled discharges, resulting in soil or groundwater contamination, is acceptable.	- Controlled drainage area must be maintained to ensure all contaminated surface water runoff is fully contained within
		Overtopping of evaporation ponds, causing soil contamination or groundwater contamination	Ponds designed with sufficient storage capacity during a 95 <sup>th</sup> percentile rainfall year	Low-level on-site impacts <b>Minor</b>	Likely to occur only in exceptional circumstances <b>Rare</b>			<b>Low</b> Acceptable, based on applicant controls being implemented	The evaporation ponds have been constructed with a combined storage capacity that exceeds the estimated runoff from within the CDA.  The annual water balance determined by the applicant indicates the ponds are sufficiently sized to ensure the frequency of spill events are less than an average of one in 20 years, assuming that most of the stored effluent is evaporated during the spring and summer period and the ponds are empty at the start of each winter season.
	Odour, from manure accumulated in feedlot pens and catch drains	Unreasonable interference with the health, welfare, convenience, comfort or amenity of nearby sensitive receptors (>1.7 km)	Stocking density 12m <sup>2</sup> /SCU Pens and drains cleaned every 8 weeks	Low level impacts to amenity on local scale <b>Minor</b>	Likely to occur only in exceptional circumstances <b>Rare</b>	<b>Low</b> Acceptable, based on applicant controls being implemented	The delegated officer considers there is sufficient separation in place (>1.7 km to nearest rural dwelling, >9.5 km to nearest town). Providing the stocking density in pens does not exceed the assessed density (12 m <sup>2</sup> /SCU) and pens are cleaned at a frequency that exceeds the recommendations in the National Guidelines (MLA 2012b), the delegated officer considers it unlikely that odour from feedlot operations will significantly impact on the amenity or health of off-site human receptors.		- Stocking density must not exceed 12 m <sup>2</sup> /SCU in pens;  - Pens and catch drains must be cleaned at least once every 13 weeks
	Odour, from evaporation ponds		Pens and drains cleaned every 8 weeks to reduce amount of manure reaching ponds	Low level impacts to amenity on local scale <b>Minor</b>	Likely to occur only in exceptional circumstances <b>Rare</b>		<b>Low</b> Acceptable, based on applicant controls being implemented	The delegated officer considers there is sufficient separation in place (>1.7 km to nearest rural dwelling, >9.5 km to nearest town). Providing the evaporation ponds are maintained in accordance with the National Guidelines (MLA 2012b) (i.e., ponds are cleaned of solids before sludge takes up more than 10% of the holding capacity), the delegated officer considers it unlikely that odour from the evaporation ponds will significantly impact on the amenity or health of off-site human receptors.	- Ponds must be cleaned of solids before 10% buildup of sludge
	Noise and dust, from animals and machinery movements		Sufficient separation distance in place to nearby human receptors	Minimal impacts to amenity on local scale <b>Slight</b>	Likely to occur only in exceptional circumstances <b>Rare</b>			<b>Low</b> Acceptable, not subject to controls	The delegated officer considers there is sufficient separation in place (>1.7 km to nearest rural dwelling, >9.5 km to nearest town), and therefore does not reasonably foresee that noise and dust from vehicle movements as part of feedlot operations will impact on the amenity or health of off-site human receptors.
Category 1: Solid waste storage and composting operations (manure and mortalities)									
Transfer of manure and dead animals from feedlot pens, generation of manure and	Nutrient-laden leachate from manure, urine, mobilised by surface water runoff	Uncontrolled discharge, causing soil contamination or groundwater contamination	Manure and carcass composting pad comprising a bunded hardstand that diverts surface water runoff to evaporation ponds	Low-level on-site impacts <b>Minor</b>	Likely to occur only in exceptional circumstances <b>Rare</b>	<b>Low</b> Acceptable, based on applicant controls being implemented	The manure and carcass composting pad comprises a bunded hardstand pad that slopes toward the existing evaporation ponds, to ensure all surface water runoff is contained.  The delegated officer considers the above controls will ensure the risk of uncontrolled discharges, resulting in soil or groundwater contamination, is acceptable.	- Manure and carcass composting pad must be maintained to ensure all contaminated surface water runoff is fully contained within	



Risk Event				Consequence rating <sup>1</sup>	Likelihood rating <sup>1</sup>	Risk <sup>1</sup>	Reasoning	Regulatory controls
Source/ Activities	Potential emissions	Potential receptors, pathway and impact	Applicant controls					
composting windrows, disturbance of stockpiles and windrows, etc.	Odour, from manure storage area (stockpiled manure, composting operations, etc.)	Unreasonable interference with the health, welfare, convenience, comfort or amenity of nearby sensitive receptors (>1.7 km)	Manure stockpiled in low profile windrows, consistent with National Guidelines Composting manure and dead animals in accordance with National Guidelines	Low-level on-site impacts <b>Minor</b>	Likely to occur only in exceptional circumstances <b>Rare</b>	<b>Low</b> Acceptable, based on applicant controls being implemented	The delegated officer considers there is sufficient separation in place (>1.7 km to nearest rural dwelling, >9.5 km to nearest town). Providing the manure is handled, stockpiled and composted in accordance with the National Guidelines (MLA 2012b) (i.e. using an aerobic composting process, turning and aerating the material, maintaining suitable moisture levels and temperature, having a suitable C:N ratio, etc.), the delegated officer considers it unlikely that odour from manure storage or composting operations will significantly impact on the amenity or health of off-site human receptors.  This also assumes that only low risk feedstocks are brought onto the premises for incorporating into the composting process, such as green waste, untreated timber and natural fibrous organics, which all have low odour potential.	<ul style="list-style-type: none"> <li>- Optimum conditions for rapid composting, as per National Guidelines;</li> <li>- Only low risk feedstocks brought onto the premises for incorporating into composting process</li> </ul>
<b>Category 1: Solid waste utilisation</b>								
Spreading of solid waste (composted manure and carcasses) over minimum 654 ha of dryland cropping land	Leaching or runoff of nutrients from spread compost	Contamination of soil, causing contamination of shallow groundwater Soil acidification Excessive build-up of soil P	Solid waste to be evenly spread at consistent application rates (1.25 t/ha) determined based on soil and cropping requirements	Low-level on-site impacts <b>Minor</b>	Not likely to occur in most circumstances <b>Unlikely</b>	<b>Medium</b> Acceptable, subject to regulatory controls	The delegated officer has considered advice provided by DPIRD on the applicant's proposal to spread composted manure on the premises and has determined the yearly application rates of 1.2 t/ha of manure compost and 1.5 t/ha of carcass compost over the available 654 ha of cropping land is the most appropriate method to maintain the soil's capacity to absorb nutrients and to limit water repellence.  As the proposed controls are critical for maintaining an acceptable level of risk, they will be imposed on the licence as ongoing operational controls.  In addition, the delegated officer considers the suggestion by DPIRD for soil testing before and after the application of manure has merit, to allow the ability to track movement of P and other nutrients down the soil profile and indicate if there is leaching at greater depth.	<ul style="list-style-type: none"> <li>- Waste utilisation areas delineated on licence;</li> <li>- Maximum application rates specified;</li> <li>- Spreading requirements specified to ensure manure is spread evenly, only spread onto areas growing crops, not spread within distance to watercourses, boundary and public roads, crop must be harvested at least once per year;</li> <li>- Annual soil sampling requirements</li> </ul>
	Odour, from spread solid waste	Unreasonable interference with the health, welfare, convenience, comfort or amenity of nearby sensitive receptors	Not spreading within 25 m of premises boundary Timing of spreading during optimal weather conditions	Low-level on-site impacts <b>Minor</b>	Likely to occur only in exceptional circumstances <b>Rare</b>	<b>Low</b> Acceptable, based on applicant controls being implemented	The delegated officer notes there are several receptors within proximity to the proposed paddocks and that careful management and timing of solid waste spreading is required to minimise off-site amenity impacts.  The National Guidelines (MLA 2012b) provide detailed recommendations on the optimal times and conditions for solid waste spreading, such as not spreading if heavy rain is expected or has fallen over the past 48 hours, spreading during conditions that maximise odour dispersion, incorporating spread manure into the soil as soon as practicable after application, etc.	<ul style="list-style-type: none"> <li>- Must only spread during optimal weather conditions, as per National Guidelines (MLA 2012b)</li> </ul>

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

## 7. Decision

The delegated officer has determined that ongoing operation of stage 1 of the Pederah Creek cattle feedlot, with an assessed design capacity of 2,245 SCUs, does not pose an unacceptable risk of impacts to public health or the environment. This determination is based on the following:

- being located in a climate with high annual moisture deficit, which lowers the overall risk of environmental impacts commonly associated with wet conditions;
- the feedlot complex being located on priority agricultural land and well separated from populated areas and nearby (human) sensitive receptors;
- the proposed stocking density of 12 m<sup>2</sup>/SCU, which complies with the minimum required for animal welfare purposes and is considered ideal for ensuring minimal dust generation in pens;
- feedlot pens, cattle lanes, effluent catch drains and evaporation ponds being constructed with an impermeable barrier to limit groundwater impacts;
- appropriate controlled drainage being in place for the feedlot complex, to contain and control runoff and minimise impacts to groundwater and surface waters;
- evaporation ponds being designed with sufficient storage capacity so that they spill no more frequently than an average of one in 20 years;
- manure and carcass composting being conducted on a suitably constructed hardstand pad, with compost to be prepared for spreading on the premises; and
- finished compost and straw/manure being spread at acceptable application rates over designated manure utilisation areas.

In addition, the applicant proposes to conduct soil testing on a biannual basis, to provide assurance that compost spreading is acceptable and sustainable.

The delegated officer is satisfied the above controls and monitoring lower the overall risk profile of the premises and are critical for maintaining an acceptable level of risk of impacts during operations; as such they will be imposed on the licence as infrastructure controls.

### Draft decision and applicant comments

Draft licence L9348/2022/1 that accompanies this report authorises emissions and discharges from ongoing operations of stage 1 only (2,245 SCU capacity). The proposed conditions in the licence, as outlined in the above risk table, have been determined in accordance with the *Guideline: Setting Conditions* (DWER 2020).

The applicant was provided with drafts of the licence and this report on 1 November 2022 and sought minor clarifications only.

## 8. Conclusion

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

## References

1. Department of Environment Regulation (DER) 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.
2. Department of Water and Environmental Regulation (DWER) 2019, *Guideline: Industry Regulation Guide to Licensing*, Perth, Western Australia.
3. DWER 2020, *Guideline: Risk Assessments*, Perth, Western Australia.

4. MLA 2012a, *National Beef Cattle Feedlot Environmental Code of Practice*, 2<sup>nd</sup> Ed. Meat & Livestock Australia Limited.
5. MLA 2012b, *National Guidelines for Beef Cattle Feedlots in Australia*, 2<sup>nd</sup> Ed. Meat & Livestock Australia Limited.