

# **Works Approval**

Works approval number W6492/2021/1

Works approval holder Central Stockcare Pty Ltd

**ACN** 122 321 500

Registered business address Echua

Lot 43 Stock Road

BULLSBROOK WA 6084

**DWER file number** DER2021/000020

**Duration** 22/06/2021 to 21/06/2026

**Date of issue** 22/06/2021

Premises details Coalara Feedlot

2530 Coalara Road

BADGINGARRA WA 6521

Legal description -

Lot 10331 on Plan 206634

Prescribed premises category description (Schedule 1, Environmental Protection Regulations 1987)	Assessed design capacity
Category 68: Cattle feedlot: premises on which the watering and feeding of cattle occurs, being premises —  (a) situated more than 100 metres from a watercourse; and (b) on which the number of cattle per hectare exceeds 50.	Not more than 8,000 Standard Cattle Units at any time
Category 23: Animal feed manufacturing: premises (other than premises within category 15 or 16) on which animal feed is manufactured or processed.	Not more than 29,200 tonnes of animal feed processed per year

This works approval is granted to the works approval holder, subject to the attached conditions, on 22 June 2021, by:

# MANAGER, PROCESS INDUSTRIES REGULATORY SERVICES

an officer delegated under section 20 of the Environmental Protection Act 1986 (WA)

### Works approval history

Date	Reference number	Summary of changes
22/06/2021	W6492/2021/1	Works approval granted

### Interpretation

In this works approval:

- (a) the words 'including', 'includes' and 'include' in conditions mean 'including but not limited to', and similar, as appropriate;
- (b) where any word or phrase is given a defined meaning, any other part of speech or other grammatical form of that word or phrase has a corresponding meaning;
- (c) where tables are used in a condition, each row in a table constitutes a separate condition:
- (d) any reference to an Australian or other standard, guideline or code of practice in this works approval:
  - (i) if dated, refers to that particular version; and
  - (ii) if not dated, refers to the latest version and therefore may be subject to change over time;
- (e) unless specified otherwise, any reference to a section of an Act refers to that section of the EP Act: and
- (f) unless specified otherwise, all definitions are in accordance with the EP Act.

**NOTE:** This works approval requires specific conditions to be met but does not provide any implied authorisation for other emissions, discharges, or activities not specified in this works approval.

### Works approval conditions

The works approval holder must ensure that the following conditions are complied with:

### **Construction phase**

#### Infrastructure and equipment

- **1.** The works approval holder must:
  - (a) construct the infrastructure;
  - (b) in accordance with the corresponding design and construction requirements; and
  - (c) at the corresponding infrastructure location,

as set out in Table 1.

Table 1: Design and construction requirements

	Infrastructure	Design and construction requirements	Infrastructure location
	Stage 1 feedlot infra	structure	
1	Processing barn	<ul> <li>Must construct one (1) area for processing animals at arrival/dispatch, with maximum dimensions: 100 m x 120 m;</li> <li>Floor must be constructed with a long fall of at least 0.25%;</li> <li>Floor must be underlain by at least 300 mm of clay or other suitable compactable soil or a synthetic liner able to achieve a permeability of 1x10<sup>-9</sup> m/s or less;</li> <li>Permeability and compaction requirements</li> </ul>	"Processing Barn Rec/Dispatch Pens", as shown in Schedule 1: Map of infrastructure

	Infrastructure Design and construction requirements		Infrastructure location
		must be demonstrated by geotechnical testing conducted by a suitably qualified engineer and in accordance with AS 1289.	
2	Feedlot pens – Rows A & B, including cattle alleys	<ul> <li>Must only construct two (2) rows, each with 16 pens;</li> <li>Each pen must be constructed with maximum dimensions: 30 m x 45 m;</li> <li>Pen floors and cattle alleys must be constructed with a long fall of at least 0.25%;</li> <li>Pen floors and cattle alleys must be underlain by at least 300 mm of clay or other suitable compactable soil or a synthetic liner able to achieve a permeability of 1x10-9 m/s or less;</li> <li>Permeability and compaction requirements must be demonstrated by geotechnical testing conducted by a suitably qualified engineer and in accordance with AS 1289.</li> </ul>	"A Row Pens", "B Row Pens" and "Cattle alleys", as shown in Schedule 1: Map of infrastructure
3	Effluent catch drains	<ul> <li>Processing barn and feedlot rows A &amp; B each must be constructed with an effluent catch drain, with minimum dimensions: 4 m bed width, 1:5 batter and 0.1 m depth;</li> <li>Effluent catch drains must be constructed with a long fall of at least 0.25% and connect to the sedimentation system;</li> <li>Effluent catch drains must be underlain by at least 300 mm of clay or other suitable compactable soil or a synthetic liner able to achieve a permeability of 1x10-9 m/s or less;</li> <li>Permeability and compaction requirements must be demonstrated by geotechnical testing conducted by a suitably qualified engineer and in accordance with AS 1289.</li> </ul>	"Drain", as shown in Schedule 1: Map of infrastructure
4	Controlled drainage area	<ul> <li>Must comprise all operational areas relating to the feedlot rows, including pens, bunks, feedrows, cattle alleys, effluent catch drains, mill &amp; silo complex, processing barn receival-dispatch pens;</li> <li>Area must be sloped to facilitate drainage of surface water runoff to the effluent storage pond.</li> </ul>	Not specified
5	Sedimentation basins x 3	<ul> <li>Must construct three (3) separate sedimentation basins located downgradient of the controlled drainage area, each with minimum holding capacity of 1,020 m³ and maximum holding depth of 0.8 m;</li> <li>Each basin must be constructed with a slatted concrete weir discharge assembly on the discharge point of each basin;</li> <li>Sedimentation basins must be underlain by at least 300 mm of clay or other suitable compactable soil or a synthetic liner able to achieve a permeability of 1x10-9 m/s or less;</li> <li>Permeability and compaction requirements</li> </ul>	"Sed 01", "Sed 02" and "Sed 03", as shown in Schedule 1: Map of infrastructure

	Infrastructure	Design and construction requirements	Infrastructure location
		must be demonstrated by geotechnical testing conducted by a suitably qualified engineer and in accordance with AS 1289.	
6	Stage 1 effluent holding pond	<ul> <li>Must construct an effluent holding pond downgradient of the final sedimentation basin, with a minimum holding capacity of 30,300 kL (including minimum operational freeboard of 0.5 m);</li> <li>Pond floor and walls must be constructed with at least 300 mm of clay or other suitable compactable soil or a synthetic liner able to achieve a permeability of 1x10-9 m/s or less;</li> <li>Permeability and compaction requirements must be demonstrated by geotechnical testing conducted by a suitably qualified engineer and in accordance with AS 1289.</li> </ul>	"Holding Pond Stage 01", as shown in Schedule 1: Map of infrastructure
7	Stage 1 manure storage and composting area	<ul> <li>Must construct a manure storage area with minimum dimensions: 245 m x 100 m;</li> <li>Area must be underlain by at least 300 mm of clay or other suitable compactable soil or a synthetic liner able to achieve a permeability of 1x10<sup>-9</sup> m/s or less;</li> <li>Permeability and compaction requirements must be demonstrated by geotechnical testing conducted by a suitably qualified engineer and in accordance with AS 1289;</li> <li>Area must be bunded to ensure manure and compost leachates and contaminated surface water runoff is contained within the controlled drainage area;</li> <li>Area must be sloped to facilitate drainage of leachates and surface water runoff to the effluent holding pond.</li> </ul>	"Manure Storage Stage 01", as shown in Schedule 1: Map of infrastructure
	Stage 2 feedlot infra		
1	Feedlot pen – Row C, including cattle alley	<ul> <li>Must only construct one (1) row, with 16 pens;</li> <li>Each pen must be constructed with maximum dimensions: 30 m x 45 m;</li> <li>Pen floors and cattle alleys must be constructed with a long fall of at least 0.25%;</li> <li>Pen floors and cattle alleys must be underlain by at least 300 mm of clay or other suitable compactable soil or a synthetic liner able to achieve a permeability of 1x10-9 m/s or less;</li> <li>Permeability and compaction requirements must be demonstrated by geotechnical testing conducted by a suitably qualified engineer and in accordance with AS 1289.</li> </ul>	"C Row Pens" and "Cattle alley", as shown in Schedule 1: Map of infrastructure
2	Effluent catch drains	<ul> <li>Feedlot row C must be constructed with an effluent catch drain, with minimum dimensions: 4 m bed width, 1:5 batter and 0.1 m depth;</li> <li>Effluent catch drain must be constructed with a long fall of at least 0.25% and connect to</li> </ul>	"Drain", as shown in Schedule 1: Map of infrastructure

	Infrastructure	Design and construction requirements	Infrastructure location
		<ul> <li>the sedimentation system;</li> <li>Effluent catch drain must be underlain by at least 300 mm of clay or other suitable compactable soil or a synthetic liner able to achieve a permeability of 1x10-9 m/s or less;</li> <li>Permeability and compaction requirements must be demonstrated by geotechnical testing conducted by a suitably qualified engineer and in accordance with AS 1289.</li> </ul>	
3	Stage 2 effluent holding pond	<ul> <li>Must construct an extension to the Stage 1 effluent holding pond, with a minimum extra holding capacity of 20,600 kL (50,900 kL total capacity, including minimum operational freeboard of 0.5 m);</li> <li>Pond floor and walls must be constructed with at least 300 mm of clay or other suitable compactable soil or a synthetic liner able to achieve a permeability of 1x10-9 m/s or less;</li> <li>Permeability and compaction requirements must be demonstrated by geotechnical testing conducted by a suitably qualified engineer and in accordance with AS 1289.</li> </ul>	"Holding Pond Stage 02", as shown in Schedule 1: Map of infrastructure
4	Stage 2 manure storage and composting area	<ul> <li>Must expand the Stage 1 manure storage area by at least a further 245 m x 100 m;</li> <li>Area must be underlain by at least 300 mm of clay or other suitable compactable soil or a synthetic liner able to achieve a permeability of 1x10<sup>-9</sup> m/s or less;</li> <li>Permeability and compaction requirements must be demonstrated by geotechnical testing conducted by a suitably qualified engineer and in accordance with AS 1289;</li> <li>Area must be fully bunded to ensure manure and compost leachates and contaminated surface water runoff is contained within the controlled drainage area;</li> <li>Area must be sloped to facilitate drainage of leachates and surface water runoff to the effluent holding pond.</li> </ul>	"Manure Storage Stage 02", as shown in Schedule 1: Map of infrastructure
	Stage 3 feedlot infra	• .	
1	Feedlot pen – Row D, including cattle alley	<ul> <li>Must only construct one (1) row, with 16 pens;</li> <li>Each pen must be constructed with maximum dimensions: 30 m x 45 m;</li> <li>Pen floors and cattle alleys must be constructed with a long fall of at least 0.25%;</li> <li>Pen floors and cattle alleys must be underlain by at least 300 mm of clay or other suitable compactable soil or a synthetic liner able to achieve a permeability of 1x10-9 m/s or less;</li> <li>Permeability and compaction requirements must be demonstrated by geotechnical testing conducted by a suitably qualified engineer and in accordance with AS 1289.</li> </ul>	"D Row Pens" and "Cattle alley", as shown in Schedule 1: Map of infrastructure

	Infrastructure	Design and construction requirements	Infrastructure location
2	Effluent catch drains	<ul> <li>Feedlot row D must be constructed with an effluent catch drain, with minimum dimensions: 4 m bed width, 1:5 batter and 0.1 m depth;</li> <li>Effluent catch drain must be constructed with a long fall of at least 0.25% and connect to the sedimentation system;</li> <li>Effluent catch drain must be underlain by at least 300 mm of clay or other suitable compactable soil or a synthetic liner able to achieve a permeability of 1x10-9 m/s or less;</li> <li>Permeability and compaction requirements must be demonstrated by geotechnical testing conducted by a suitably qualified engineer and in accordance with AS 1289.</li> </ul>	"Drain", as shown in Schedule 1: Map of infrastructure

- 2. The works approval holder must, within 28 calendar days of the infrastructure being constructed for each of Stage 1, Stage 2 and Stage 3 specified in condition 1:
  - (a) undertake an audit of their compliance with the requirements of condition 1 for each stage; and
  - (b) prepare and submit to the CEO an Environmental Compliance Report on that compliance for each stage.
- **3.** The Environmental Compliance Report required by condition 2, must include as a minimum:
  - (a) certification by a suitably qualified engineer, whether or not the items of infrastructure or components thereof, as specified in condition 1, have been constructed in accordance with the relevant requirements specified in condition 1;
  - (b) as constructed plans and a detailed site plan for each item of infrastructure or component of infrastructure specified in condition 1; and
  - (c) be signed by a person authorised to represent the works approval holder and contains the printed name and position of that person.
- 4. Subject to condition 3(a), where an item of infrastructure or component of infrastructure has been certified as not being constructed, or does not comply with the corresponding requirements, or contains material defects, the works approval holder must:
  - (a) correct the non-compliant or defective works, prior to re-certifying in accordance with condition 3(a); or
  - (b) provide to the CEO a description of, and explanation for, any departures from the requirements specified in Table 1 that do not require rectification and do not constitute a material defect along with the Environmental Compliance Report required by condition 2.

### Time limited operational phase

#### **Commencement and duration**

- 5. The works approval holder may only commence time limited operations for each of Stage 1, Stage 2 and Stage 3 where the Environmental Compliance Report as required by condition 2 has been submitted by the works approval holder for that item of infrastructure.
- **6.** The works approval holder may conduct time limited operations for an item of infrastructure specified in condition 7 (as applicable):

- (a) for a period not exceeding 90 calendar days from the day the works approval holder meets the requirements of condition 5 for that item of infrastructure; or
- (b) until such time as a licence for that item of infrastructure in each of Stage 1, Stage 2 and Stage 3 is granted in accordance with Division 3, Part V of the *Environmental Protection Act 1986*,

whichever is sooner.

#### Infrastructure and equipment

7. During time limited operations, the works approval holder must ensure the premises infrastructure listed in Table 2 is maintained and operated in accordance with the corresponding operational requirement set out in Table 2.

Table 2: Infrastructure requirements during time limited operations

	Site infrastructure	Operational requirement
1	Feedlot pens	<ul> <li>Stocking density must be no less than 10.8 m²/SCU within pens;</li> <li>Pens must be cleaned once the depth of dry manure on the pen surface exceeds 50 mm, or at least once every 13 weeks, whichever is sooner;</li> <li>Manure harvested from pen surfaces must only be stockpiled on an impermeable hardstand surface designed for that purpose;</li> </ul>
2	Effluent catch drains	<ul> <li>Must be maintained to ensure all leachate and surface water runoff from the feedlot pens, bunks and cattle alleys can flow freely to the sedimentation system without scouring;</li> </ul>
3	Controlled drainage area	Must be maintained to ensure all surface water runoff is able to flow freely to the sedimentation system;
4	Sedimentation basins	<ul> <li>Must be maintained such that each basin flows freely after rainfall events;</li> <li>Basins must be cleaned of solids before sludge takes up more than 10% of the design capacity of the basin;</li> <li>An operational freeboard of at least 0.8 m must be maintained at all times;</li> </ul>
5	Effluent holding ponds	An operational freeboard of at least 0.5 m must be maintained at all times.
6	Manure storage/composting area	<ul> <li>All deceased animals must be composted on the designated compost pad, or taken off-site to a disposal facility that is licensed to accept that kind of waste;</li> <li>Deceased animals must be covered with organic matter at least 1.2 m in the centre and at least 0.5 m on the sides;</li> <li>Only low risk feedstocks may be brought onto the premises as supplementary organic material for use in the composting process;</li> <li>Compost windrows must be turned and aerated to ensure oxygen levels are maintained above 5%;</li> <li>Moisture levels of compost windrows must be maintained between 50 – 60%;</li> <li>The carbon to nitrogen ratio of compost windrows must be maintained between 15:1 and 40:1;</li> <li>Temperature of compost windrows must be maintained between 40 and 65°C.</li> </ul>

#### **Manure utilisation**

**8.** During time limited operations, the works approval holder must ensure manure is disposed to land only in accordance with the requirements specified in Table 3.

Table 3: Authorised disposal of composted manure to land

Disposal point reference	Disposal (to land) requirements	
Waste utilisation area 1	Spreading of manure and compost to land at a rate of not more than 8.2 t/ha/yr, and in accordance with conditions 9 and 12	

- **9.** The works approval holder must ensure that when spreading manure:
  - (a) only manure and finished compost processed in accordance with condition 7 is spread over the waste utilisation area;
  - (b) manure is evenly distributed over the waste utilisation area;
  - (c) manure is only spread onto areas growing crops or pasture within the waste utilisation area;
  - (d) spread manure is incorporated into the soil profile within 7 days; and
  - (e) the waste utilisation area is harvested at least once every 12 months.

### **Monitoring**

#### **General monitoring**

- **10.** The works approval holder must ensure that:
  - (a) all soil samples are collected in accordance with DPIRD guidelines for soil sampling;
  - (b) all soil samples are submitted to and tested by a laboratory with current ASPAC certification (or equivalent); and
  - (c) all laboratory samples are submitted to and tested by a laboratory with current NATA accreditation for the parameters being measured.
- **11.** The works approval holder must ensure that annual monitoring is undertaken at least 9 months apart.

#### Soil monitoring

**12.** During time limited operations, the works approval holder must conduct soil testing at the locations listed in Table 4, at the corresponding depths down the soil profile, for the corresponding parameters, units and frequency specified in that table.

**Table 4: Soil testing requirements** 

Soil sampling locations	Soil profile	Parameter	Units	Frequency
At least one	0 - 10  cm;	pH <sup>1</sup>	CaCl <sub>2</sub>	Prior to the first
sample made	10 – 20 cm;	Electrical conductivity	mS/cm	manure spreading
up of at least 5 individual cores	20 – 30 cm;	Moisture content	%	event to establish baseline, and
for each farm paddock across		Total nitrogen, ammonium- nitrogen, nitrate-nitrogen	mg/kg	annual thereafter for each paddock
the waste		Total phosphorus		receiving manure
utilisation area <sup>1,2</sup>		Phosphorus retention index (PRI)	-	in the previous 12 months period
alea <sup>-,-</sup>		Phosphorus buffering index (PBI)	-	months pendd
		Aluminium	CaCl <sub>2</sub>	
			extract	

Note 1: For soil sampling purposes, each farm paddock must represent a maximum area of 50 ha.

Note 2: GPS coordinates must be recorded for each sampling location, to ensure subsequent sampling events are in the same location.

#### Monitoring of inputs and outputs

**13.** During time limited operations, the works approval holder must keep accurate records for the items specified in Table 5.

**Table 5: Monitoring of inputs and outputs** 

Input / Output	Parameter	Units	Frequency	
Animals received and dispatched at the premises	Animals	Number	Each truck arriving/leaving at the premises	
Deceased animals			Monthly	
Compost feedstock brought onto the premises	Feedstock type	Tonnes	Each load brought onto the premises, by type	

### Records and reporting (general)

- 14. The works approval holder must record the following information in relation to complaints received by the works approval holder (whether directly from a complainant or forwarded to them by the department or another party) about any alleged emissions from the premises:
  - (a) the name and contact details of the complainant (if provided);
  - (b) the time and date of the complaint;
  - (c) the complete details of the complaint and any other concerns or issues raised; and
  - (d) the complete details and dates of action(s) taken by the works approval holder to investigate or respond to any complaint.
- **15.** The works approval holder must maintain accurate and auditable books including the following records, information, reports and data required by this works approval:
  - (a) the works conducted in accordance with condition 1;
  - (b) any maintenance of infrastructure that is performed in the course of complying with condition 7:
  - (c) results of soil monitoring required by condition 12;
  - (d) records of inputs and outputs in accordance with condition 13; and
  - (e) complaints received under condition 14.
- **16.** The books specified under condition 15 must:
  - (a) be legible;
  - (b) if amended, be amended in such a way that the original version(s) and any subsequent amendments remain legible and are capable of retrieval;
  - (c) be retained by the works approval holder for the duration of the works approval; and
  - (d) be available to be produced to an inspector or the CEO as required.

## **Definitions**

In this works approval, the terms in Table 6 have the meanings defined.

**Table 6: Definitions** 

Term	Definition	
AS 1289	means the most recent version and relevant parts of the Australian Standard AS 1289 Methods of testing soils for engineering purposes	
ASPAC	Australian Soil and Plant Analysis Council	
ASPAC certification	means in relation to the analysis of a sample that the laboratory is certified by ASPAC for the specified analysis at the time of the analysis	
books	has the same meaning given to that term under the EP Act	
CEO	means Chief Executive Officer of the Department CEO for the purposes of notification means: Director General Department administering the Environmental Protection Act 1986 Locked Bag 10 JOONDALUP DC WA 6919 info@dwer.wa.gov.au	
condition	means a condition to which this works approval is subject under s.62 of the EP Act	
Department	means the department established under section 35 of the <i>Public Sector Management Act 1994</i> and designated as responsible for the administration of Part V, Division 3 of the EP Act	
discharge	has the same meaning given to that term under the EP Act	
DPIRD guidelines for soil sampling	means the document entitled "A guide for fit for purpose soil sampling" (Fertilizer Australia 2019), available at <a href="https://fertilizer.org.au">https://fertilizer.org.au</a>	
emission	has the same meaning given to that term under the EP Act	
Environmental Compliance Report	means a report to satisfy the CEO that the conditioned infrastructure has been constructed in accordance with the works approval	
EP Act	Environmental Protection Act 1986 (WA)	
EP Regulations	Environmental Protection Regulations 1987 (WA)	
freeboard	means the distance between the maximum surface water elevations and the top of retaining banks or structures at their lowest point	
low risk feedstock	means green waste derived from controlled collections and landscaping sources (e.g., grass, leaves, plants, branches, etc.), untreated timber (e.g., sawdust, wood shavings, timber off-cuts, etc.) and natural fibrous organics (e.g. peat, seed hulls/husks, straw, bagasse and other natural organic fibrous organics)	
NATA	National Association of Testing Authorities, Australia	
NATA accreditation	means in relation to the analysis of a sample that the laboratory is NATA accredited for the specified analysis at the time of the analysis	
premises	the premises to which this works approval applies, as specified at the front of this works approval and as shown on the map in Schedule 1 to this works approval	
prescribed premises	has the same meaning given to that term under the EP Act	
Phosphorus retention index (PRI)	means the ratio of phosphorus adsorbed by soil (micrograms per gram) compared to that remaining in a solution (of initial concentration of 10 mg phosphorus per litre) after 16 hours	
time limited operations	means operation of the infrastructure identified under this works approval that is authorised for that purpose, subject to the relevant conditions	

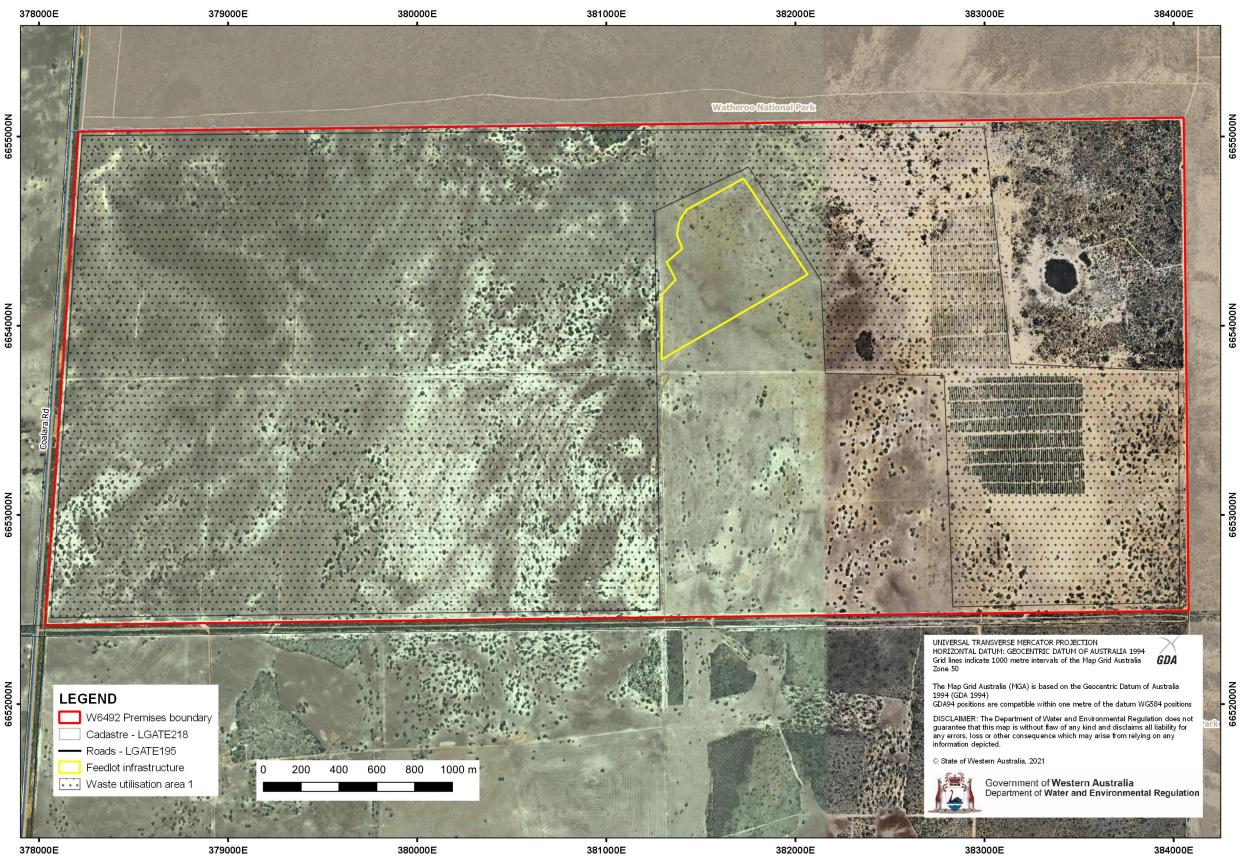
Standard cattle unit (SCU)	means equivalent to animal with a liveweight of 600 kg
suitably qualified engineer	means a person who holds a tertiary academic qualification in engineering and has a minimum 5 years of experience working in their area of expertise
waste utilisation area	means an area of land in which manure or compost is applied
works approval	refers to this document, which evidences the grant of the works approval by the CEO under s.54 of the EP Act, subject to the conditions
works approval holder	refers to the occupier of the Premises being the person to whom this works approval has been granted, as specified at the front of this works approval

### **END OF CONDITIONS**

# Schedule 1: Maps

### Premises map and map of waste utilisation area

The boundary of the prescribed premises is shown in the map below (red line), in addition to the location of the proposed feedlot infrastructure (yellow line). The waste utilisation area 1 is shown as the black dotted area.



# **Schedule 1: Maps**

## **Map of infrastructure**

The location of key feedlot infrastructure is shown in the map below.

