Government of Western Australia
Department of Water and Environmental Regulation

Licence

Licence number	L9364/2022/1
Licence holder	Westpork Pty Ltd
ACN	009 148 789
Registered business address	1/7 Foundry Road MAYLANDS WA 6051
DWER file number	DER2022/000470
Duration	19/03/2024 to 18/03/2044
Premises details	Westpork Moora 3 Piggery 898 Agaton Road DANDARAGAN WA 6507 Lot 3616 on Plan 206451 As shown in the premises map in Schedule 1

Prescribed premises category description (Schedule 1, Environmental Protection Regulations 1987)	Assessed design capacity
Category 2: Intensive piggery: premises on which pigs are fed, watered and housed in pens.	Not more than 34,000 animals (35,675 Standard Pig Units (SPUs)

This licence is granted to the licence holder, subject to the attached conditions, on 19 March 2024, by:

Caron Goodbourn

Digitally signed by Caron Goodbourn
Date: 2024.03.19 13:10:56 +08'00'

Caron Goodbourn
MANAGER, PROCESS INDUSTRIES
REGULATORY SERVICES
an officer delegated under section 20 of the *Environmental Protection Act 1986* (WA)

Licence and works approval history

Date	Ref number	Summary of changes
12/12/2017	W6006/2016/1	Works approval granted
17/01/2023	W6006/2016/1	Amendment to include time limited operations for the Moora 2 and Moora 3 piggery modules, and extend the duration by a further 3 years
19/03/2024	L9364/2022/1	Licence granted for operation of Moora 3 (35,675 SPU capacity)

Interpretation

In this licence:

(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 licence:
  (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 licence requires specific conditions to be met but does not provide any implied authorisation for other emissions, discharges, or activities not specified in this licence.

Licence conditions

The licence holder must ensure the following conditions are complied with:

Premises operation

Infrastructure and equipment

1. The licence holder must ensure the site infrastructure and equipment listed in Table 1 is maintained in accordance with the corresponding design requirements in that table.

Table 1: Infrastructure and equipment requirements

	Infrastructure and equipment	Description and design requirements	Infrastructure location
Moora 3 piggery infrastructure			
1	24 x conventional indoor pig sheds, with design capacity 35,675 SPUs	(a) Farrowing and nursery sheds (4) must be maintained with mechanical ventilation and be fully enclosed; (b) Gilt, breeding, dry sow and finisher sheds (20) must be maintained with a ventilation system that is capable of both mechanical and natural ventilation; (c) The building ventilation system must be maintained to allow the opening of curtains on the side of sheds during autumn and spring and the closure of curtains during summer and winter with the use of	'Moora 3' as depicted in Schedule 1 map

	Infrastructure and equipment	Description and design requirements	Infrastructure location
Moora 3 piggery infrastructure			
		mechanical ventilation; (d) All sheds must be maintained with concrete pits underneath to enable effluent to be disposed via a pull-plug effluent management system; (e) All sheds must be maintained with concrete and partially slatted floors; (f) The flooring and drainage system of all sheds must be maintained to prevent the discharge of effluent to the environment; (g) All underfloor pits must be maintained to direct effluent to the CAP via the central effluent sump through enclosed effluent pipelines;	
2	Effluent transfer pipelines	(a) Effluent pipelines for the sheds and wastewater treatment system must be maintained as impermeable unplasticised polyvinyl chloride (uPVC); (b) The pipelines must be maintained to connect each modular shed system to the wastewater treatment system; (c) Pipelines must be maintained with "Y" pieces at regular intervals; (d) Pipelines must be maintained with a minimum slope of 1 – 2% to allow gravity to flow;	As per description
3	Central effluent sump	(a) Must be maintained as a watertight concrete storage sump; (b) Must be maintained with minimum storage capacity of 125 kL;	'Central effluent sump' as depicted in Schedule 1 map
4	Covered anaerobic pond (CAP)	(a) Must be maintained with a concrete floor with four mixer support blocks for stirrers; (b) Must be maintained with minimum dimensions of 85 m x 85 m from the top of the crest and 8 m deep; (c) Must be maintained with minimum working capacity of 32.8 kL, including freeboard; (d) Sides of the CAP must be maintained with minimum 1.5 mm thick HDPE; (e) Cover of the CAP must be maintained with minimum 2.0 mm thick HDPE and gastight, except during maintenance; (f) Underground trenches must be maintained to allow the installation of pipes and cables for the transport of influent and effluent in and out of the CAP; (g) Must be maintained with safety vents and gas pressure monitors;	'CAP' as depicted in Schedule 1 map
6	2 x settlement trenches	(a) Each trench must be maintained with minimum dimensions 90 m long, 15 m wide and 2.5 m deep; (b) Capacity of each trench must be maintained as minimum 2,137 m^3 (including a 400 mm freeboard); (c) Must be maintained to allow at least one trench to be operational at any given time while the other trench is offline for drying and/or desludging; (d) Trenches must be maintained with a compacted clay lining system that achieves a permeability of at	'Settlement trenches' as depicted in Schedule 1 map

	Infrastructure and equipment	Description and design requirements	Infrastructure location
Moora 3 piggery infrastructure			
		least 1 x 10^{-9} m/s, overlain with a single HDPE geomembrane liner with a manufacturer specified thickness of at least 1.5 mm (or equivalent);	
7	1 x facultative pond	(a) Must be maintained with minimum dimensions 380 m long, 140 m wide and 2.5 m deep; (b) Capacity of the pond must be maintained as minimum 143,550 m^3 (including 400 mm freeboard); (c) Must be maintained with a single HDPE geomembrane liner with a manufacturer specified thickness of at least 1.5 mm (or equivalent);	'Facultative Pond' as depicted in Schedule 1 map
8	1 x evaporation pond	(a) Must be maintained with minimum dimensions 380 m long, 140 m wide and 1.5 m deep; (b) Capacity of the pond must be maintained as minimum 101,267 m^3 (including 500 mm freeboard); (c) Pond must be maintained with a single HDPE geomembrane liner with a manufacturer specified thickness of at least 1.5 mm (or equivalent).	'Evaporation Pond' as depicted in Schedule 1 map
Ancillary infrastructure			
1	Co-generation plant	(a) Generator must not exceed a design capacity of 800 kW; (b) Height of stack must be maintained at least 3 m above the as-built ground level;	'Biogas Generator' as depicted in Schedule 1 map
2	Flare	(a) Height of flare must be maintained at least 3 m above the as-built ground level; (b) Flare must be maintained with an auto ignition system; (c) Flare must be maintained in a topographic low point to minimise line-of-sight from the premises boundary.	'Flare pad' as depicted in Schedule 1 map

Operational requirements

2. The licence holder must ensure the premises infrastructure listed in Table 2 is operated in accordance with the requirements set out in that table.

Table 2: Infrastructure operational requirements

	Site infrastructure	Operational requirement
1	Conventional indoor pig sheds	<u>Stocking density</u> (a) Combined stocking density for Moora 3 sheds must not exceed 34,806 SPUs at any one time; <u>Pen cleaning</u> (b) Sheds must be cleaned daily to ensure clean lanes, pens and handling areas; (c) Flushing channels must be flushed at least twice a week; (d) Effluent stored in underfloor pits must be released at least once every 4 weeks via the pull-plug system to the central effluent sump; (e) Effluent from underfloor pits must only be transferred to the CAP, via the central effluent sump; (f) Following the release of effluent from the underfloor pits, clean water must be used to partially refill the pits to dislodge manure stuck to the floor;

	Site infrastructure	Operational requirement
		<u>Odour management – ventilation</u> (g) Farrowing and nursery sheds must remain fully enclosed at all times and be operated with mechanical ventilation; (h) Gilt, breeding, dry sow and finisher sheds: (i) must be operated with mechanical ventilation during the summer (1 December –28 February) and winter (1 June – 31 August) periods, to ensure optimal internal temperature is maintained for animal welfare; and (ii) may be operated with mechanical or natural ventilation during the autumn (1 March – 31 May) and spring (1 September – 30 November) periods; <u>Odour management – vegetative barrier</u> (i) Must maintain a vegetative barrier to the north of the sheds to mitigate odour from the sheds, as depicted in Schedule 1 map; <u>Mortalities</u> (j) Deceased pigs, afterbirth and foreign materials must be removed from pens by the end of the working day in which they were discovered; (k) Following post mortem (if required), deceased pigs, and afterbirth and foreign materials, removed from pens must be: (i) directly taken to the carcass disposal pit; or (ii) directly taken off-site for further processing or disposal, to a premises that is licensed to accept that kind of waste, such as a licensed composting facility or licensed solid waste facility;
2	Covered anaerobic pond (CAP)	(a) Must be operated to ensure stormwater runoff is excluded from entering the pond; (b) Effluent from the CAP must only be released to the settlement trenches; (c) Must be maintained as a gas tight enclosure at all times whilst operational; (d) Effluent must be continuously stirred to break up suspended solids and avoid the settlement of solids; (e) Must be operated with safety vents and gas and pressure monitors; (f) CAP must be desludged prior to sludge taking up more than 75% of the design capacity of the pond;
3	Biogas collection and flaring/power generation	(a) Biogas extracted from the CAP must be directed to the co-generation plant, for power generation; (b) Flaring must only occur under normal operating conditions for purging requirements; (c) Flaring emissions must occur at least 3 m above as-built ground level; (d) All captured condensate must be returned to the facultative pond;
4	Settlement trenches	(a) Must be rotated prior to sludge taking up more than 75% of the design capacity of the trench; (b) Must be operated to ensure stormwater runoff is excluded from entering the trenches; (c) Effluent from active trenches must only be released to the facultative pond;
5	Facultative pond	(a) Must be operated to ensure stormwater runoff is excluded from entering the pond;
6	Evaporation pond	(a) Must be operated to ensure stormwater runoff is excluded from entering the pond; (b) An operational freeboard of at least 500 mm must be maintained at

	Site infrastructure	Operational requirement
		all times;
7	Carcass disposal pit	(a) Deceased animals must be placed within the pit within 24 hours of death; (b) All carcasses must be covered with at least 500 mm of soil immediately after being disposed within the pit.

Inspection of infrastructure

3. The licence holder must undertake inspections of the scope and type and at the corresponding frequency specified in Table 3.

4. Where any inspection required by condition 3 identifies an appropriate level of environmental protection is not being maintained, the licence holder must:

(a) take corrective action to mitigate adverse environmental consequences as soon as practicable; and
(b) maintain a written log of all inspections undertaken, with each inspection signed off by the person who conducted the inspection.

Table 3: Inspection of infrastructure requirements

Scope of inspection	Type of inspection	Frequency of inspection
Wastewater treatment system, including all effluent channels, pipework, central sump, CAP and ponds	Visual integrity (including signs of leakage), pipe blockages, sludge levels and freeboard capacity	Daily whilst operating, monthly if not operating

Improvements

Pond solids management plan

5. The licence holder must, by **31 January 2025**, submit to the CEO a Pond Solids Management Plan for the premises.

6. The plan required by condition 5 must outline:

(a) the proposed method of removing dried pond solids from the settlement trenches, including how the machinery will access the solids and how the solids will be handled;
(b) the proposed measures that will be in place to protect the integrity of the HDPE liner (pond floor and embankments) from machinery;
(c) the proposed measures that will be in place to protect the integrity of the pond wall embankments from machinery; and
(d) the proposed post-removal inspections and validation of the integrity of the liner and embankments.

Carcass disposal pit

7. The licence holder must either:

(a) conduct an investigation into alternative disposal locations on the premises, in which there is at least 5 m separation from the base of the pit to the highest known water table in that location; or
(b) propose to construct a new disposal pit with a low permeability liner (at least $1x10^{-9}$ m/s), to prevent seepage of contaminated fluid into the soil and groundwater; or
(c) propose to construct a bunded pad with a low permeability liner (at least $1x10^{-9}$ m/s) for the composting of deceased animals, instead of burial.

8. The licence holder must, by **1 June 2024**, submit to the CEO the results of the investigation specified in condition 7(a) or the proposal specified in condition 7(b) or 7(c).

9. The licence holder must cease burying deceased pigs within the existing carcass burial pit by **1 July 2025**.

Central effluent sump – secondary containment

10. The licence holder must, by **1 August 2024**, construct secondary containment around the central effluent sump.

11. The secondary containment required by condition 10 must:

    (a) be constructed of brick, stone, concrete or other impervious material around the perimeter of the central effluent sump;
    (b) be sealed with appropriate waterproofing, to ensure no leaks can escape the confines of the secondary containment;
    (c) be designed with an effective containment capacity of two full sumps plus 40%;
    (d) be constructed with a collection sump in the floor to facilitate removal of accumulated rainwater and spilt effluent;
    (e) floor must be graded to ensure liquids collect in the collection sump;
    (f) must not install any taps, bolts, valves or other holes through the bund walls (pipes must go over the bund wall); and
    (g) have a suitable pump on standby for managing accumulation of rainwater and spilt effluent inside the bunded area.

12. The licence holder must, within 30 calendar days of the secondary containment being constructed:

    (a) undertake an audit of their compliance with the requirements of condition 11; and
    (b) prepare and submit to the CEO a compliance report on that compliance.

13. The report required by condition 12 must include as a minimum, the following:

    (a) certification whether the secondary containment has been constructed in accordance with the corresponding requirements specified in condition 11 (including sufficient details to support the certification);
    (b) as constructed plans for the secondary containment; and
    (c) be signed by a person authorised to represent the licence holder and contains the printed name and position of that person.

Emissions

Effluent management

14. The licence holder must not cause or allow any effluent generated from piggery operations at the premises to be discharged into the environment.

Management of pond sludge

15. The licence holder must ensure pond sludge removed from the CAP and settlement trenches:

    (a) that meets the definition of a solid, is directly taken off-site to a premises that is licensed to accept that kind of waste, such as a licensed composting facility or licensed solid waste facility; or
    (b) that does not meet the definition of a solid, is directly taken off-site by a licensed controlled waste carrier.

16. The licence holder must keep and maintain records of:

    (a) the volume of dried pond sludge (in cubic metres) and the receiving premises for each load taken off-site in accordance with condition 15(a); and
    (b) the controlled waste tracking receipts for each load of sludge taken off-site in accordance with condition 15(b).

Monitoring

General monitoring

17. The licence holder must ensure that:

(a) all water samples are collected and preserved in accordance with AS/NZS 5667.1;
(b) all groundwater sampling is conducted in accordance with AS/NZS 5667.11; and
(c) all laboratory samples are submitted to and tested by a laboratory with current NATA accreditation for the parameters being measured.

18. The licence holder must ensure that quarterly monitoring is undertaken at least 45 days apart.

19. The licence holder must ensure all monitoring equipment used on the premises to comply with conditions of this licence is calibrated in accordance with the manufacturer's specifications.

20. The licence holder must, where the requirements for calibration cannot be practicably met, or a discrepancy exists in the interpretation of the requirements, bring these issues to the attention of the CEO accompanied with a report comprising details of any modifications to the methods.

Groundwater monitoring

21. The licence holder must conduct ambient groundwater monitoring in accordance with the requirements of Table 4.

Table 4: Groundwater monitoring requirements

Monitoring point and reference	Parameter	Unit	Averaging period	Monitoring frequency
MW5, MW6, MW7, MW8	Standing water level[1]	m (AHD) m (BGL)	Spot sample (in-field)	Quarterly
	pH[1]	-		
	Electrical conductivity @ 25°C[1]	µS/cm	Spot sample (laboratory determined)	
	Total nitrogen, Ammonia nitrogen	mg/L		
	Total phosphorus			
	Total dissolved solids			
	Biological oxygen demand			
	Na, K, Ca, Mg, Cl, SO_4, HCO_3			

Note 1: In field, non-NATA accredited analysis permitted.

22. The licence holder must monitor and record inputs and outputs in accordance with Table 5.

Table 5: Monitoring and recording of inputs and outputs

Input / Output	Parameter	Units	Frequency
Animals received and dispatched at the premises	Animals	Number, specified for each pig class	Aggregated total monthly summary
Deceased animals			Monthly
Biogas generator	Power generated	kW	Aggregated total monthly summary

Complaints management

23. The licence holder must investigate any complaints received by the licence holder (whether received directly from a complainant or forwarded to them by the department or another party) about any alleged emissions from the premises.

24. Following receipt of a complaint directly from a complainant about any alleged emissions from the premises, the licence holder must:

(a) respond to the complainant within 72 hours of receipt of the complaint; and
(b) within 10 calendar days of receipt of the complaint, provide a summary of the outcomes of any investigation(s) conducted in response to the complaint, including any corrective and preventative action(s) taken in response to the complaint, unless such communication is not requested by the complainant.

Records and reporting

Record-keeping

25. The licence holder must record the following information in relation to complaints received by the licence 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 other issues raised;
(d) the complete details of any activities being undertaken, where, and the weather and wind conditions at the time of the complaint;
(e) the complete details and dates of any investigation(s) conducted in response to the complaint;
(f) a summary of the findings of any investigation(s) conducted in response to the complaint, including details of the person(s) responsible for the investigation(s);
(g) a summary of any corrective and preventative action(s) taken in response to the complaint;
(h) a summary of the time taken to respond to the complaint; and
(i) a summary of all communications with the complainant.

26. The licence holder must maintain accurate and auditable books including the following records, information, reports, and data required by this licence:

(a) the calculation of fees payable in respect of this licence;
(b) any maintenance of infrastructure that is performed in the course of complying with condition 1;
(c) results of groundwater monitoring required by condition 21;
(d) records of inputs and outputs in accordance with condition 22; and
(e) details of complaints received under condition 25.

27. The books specified under condition 26 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 licence holder for the duration of the licence; and
(d) be available to be produced to an inspector or the CEO as required.

Notification requirements

28. The licence holder must notify the CEO, at least 14 days prior to, the commencement of any pond maintenance works at the premises.

29. The licence holder must notify the CEO, within 14 days after, the completion of any pond maintenance works at the premises:

    (a) the total volume of solids removed; and
    (b) records of off-site removal required by condition 16.

30. The licence holder must notify the CEO, within 24 hours of a mass mortalities event and/or an emergency animal disease (EAD) incident, including:

    (a) the number of pigs that have died;
    (b) the proposed plan for on-site handling and management of all carcasses; and
    (c) the proposed disposal method and site.

Annual reporting requirements

31. The licence holder must:

    (a) undertake an audit of their compliance with the conditions of this licence during the preceding annual period; and
    (b) prepare and submit to the CEO, by no later than 1 March in each year, an Annual Audit Compliance Report in the approved form.

32. The licence holder must submit to the CEO, by no later than 1 March in each year, an environmental report containing the information listed in Table 6 for the preceding annual period.

Table 6: Annual environmental report

Condition or table	Parameter
-	Summary of any environmental incidents that have occurred during the annual period and any action taken
Condition 16	Records of dried pond solids removed from the premises
Table 4	Results of groundwater monitoring
Table 5	Monitoring of inputs and outputs
Condition 25	Records of complaints
Conditions 28, 29 & 30	Summary of notifications
Condition 31	Compliance (AACR)

Definitions

In this licence, the terms in Table 7 have the meanings defined.

Table 7: Definitions

Term	Definition
AHD	Australian Height Datum
Annual Audit Compliance Report (AACR)	means a report submitted in a format approved by the CEO (relevant guidelines and templates may be available on the Department's website)
annual period	means a 12-month period commencing from 1 January until 31 December in that same year
AS/NZS 5667.1	means the Australian Standard AS/NZS 5667.1 Water quality – sampling – guidance on the design of sampling programs, sampling techniques and the preservation and handling of samples, as amended from time to time
AS/NZS 5667.11	means the Australian Standard AS/NZS 5667.11 Water quality – sampling – guidance on sampling groundwater, as amended from time to time
averaging period	means the time over which a limit or target is measured or a monitoring result is obtained
BGL	below ground level
books	has the same meaning given to that term under the EP Act
CAP	Covered Anaerobic Pond
CEO	means Chief Executive Officer. 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 licence is subject under s.62 of the EP Act
Department	means the department established under section 35 of the *Public Sector Management Act 1994* and designated as responsible for the administration of Part V, Division 3 of the EP Act
EAD	Emergency Animal Disease; means a disease that is: (a) exotic to Australia; (b) a variant of an endemic disease; (c) a serious infectious disease of unknown or uncertain cause; or (d) a severe outbreak of a known endemic disease; and that is considered to be of national significance with serious social or trade implications
EP Act	means the *Environmental Protection Act 1986* (WA)
freeboard	means the distance between the maximum water surface elevations and the top of retaining banks or structures at their lowest point
licence	means this document, which evidences the grant of a licence by the CEO under section 57 of the EP Act, subject to the specified conditions contained within
licence holder	refers to the occupier of the premises being the person to whom this licence has been granted, as specified at the front of this licence
licensed controlled	means a person licensed as a carrier under the Environmental Protection

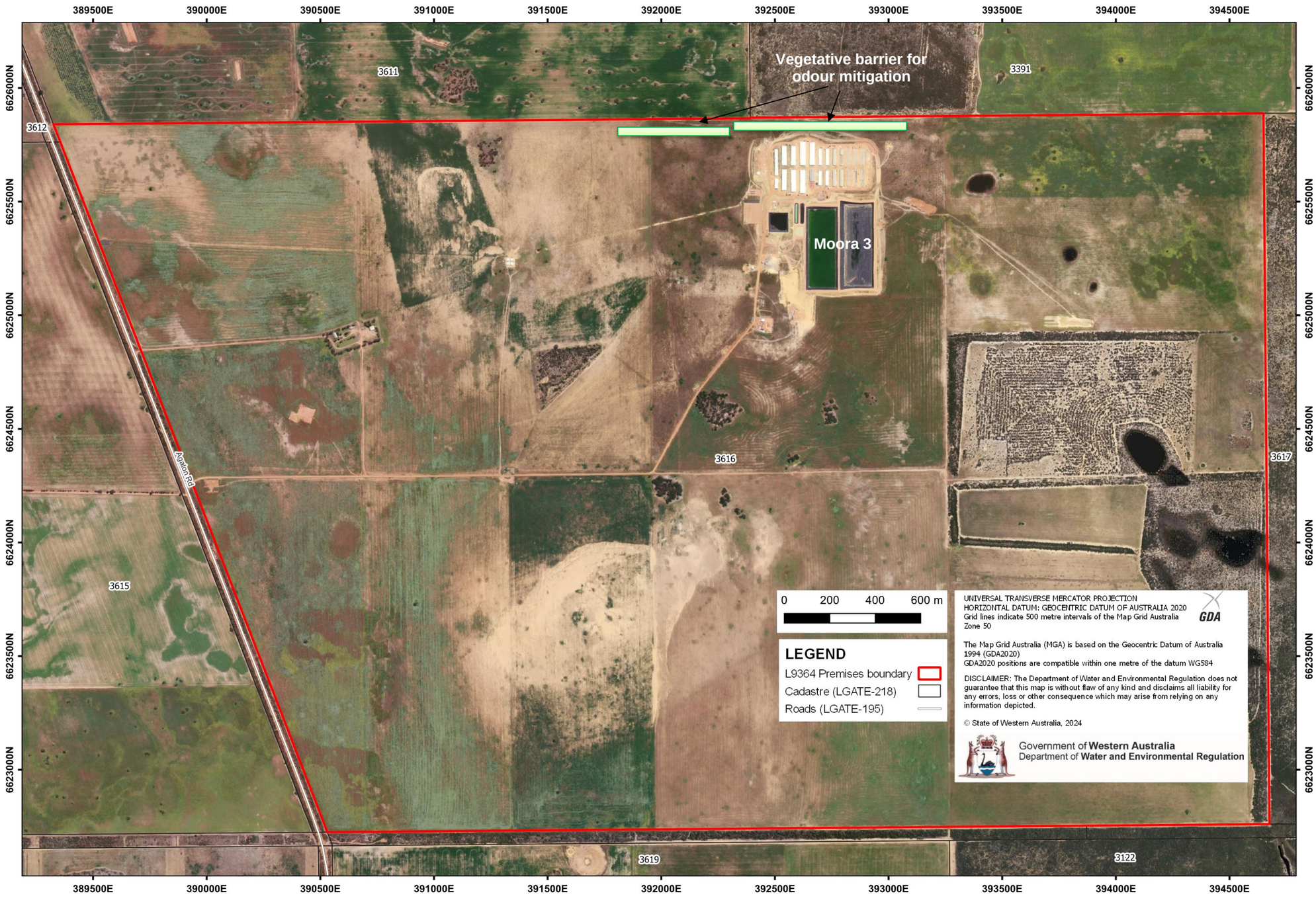
Term	Definition
waste carrier	(Controlled Waste) Regulations 2004 to transport animal effluent and residues (K100)
licensed composting facility	means a premises that holds a current and valid licence granted by the CEO under section 57 of the EP Act for a compost manufacturing and soil blending facility (category 67A)
licensed solid waste facility	means a premises that holds a current and valid licence granted by the CEO under section 57 of the EP Act for a solid waste facility (category 61A)
mass mortalities event	means a noteworthy occurrence of one or more sick or dead animals clustered in space and time, especially where the cause of death is unknown or where the mortality rate exceeds baseline mortality expectations
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
pig class	refers to the different classes of pigs, depending on sex, age, weight and/or purpose within a piggery, including males (gilts, boars), females (dry sows, lactating sows), and progeny (suckers, weaners, growers, finishers and heavy finishers)
pond sludge	means dried pond sludge following desludging of the CAP and settlement trenches
premises	refers to the premises to which this licence applies, as specified at the front of this licence and as shown on the map in Schedule 1 to this licence
prescribed premises	has the same meaning given to that term under the EP Act
quarterly	means the 4 inclusive periods from 1 January – 31 March, 1 April – 30 June, 1 July – 30 September, and 1 October – 31 December in the same year
solid	means material that: (a) has an angle of repose of greater than 5 degrees; (b) does not contain, or is not comprised of, any free liquids; (c) does not contain, or is not comprised of, any liquids that are capable of being released when the waste is transported; (d) does not become free flowing at or below 60°C or when it is transported; and (e) is generally capable of being moved by a spade at normal temperatures (i.e., is spadeable)
spot sample	means a discrete sample representative at the time and place at which the sample is taken
Standard Pig Unit (SPU)	has the same meaning given to that term under the *National Environmental Guidelines for Indoor Piggeries (NEGIP)*, Pork Australia Ltd, May 2018, being a pig equivalent to a grower pig (average weight 40 kg) based on volatile solids production in manure

END OF CONDITIONS

Schedule 1: Maps

Premises map

The boundary of the prescribed premises is shown in the map below (red line).



Schedule 1: Maps

Map of infrastructure

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