Government of Western Australia
Department of Water and Environmental Regulation

Licence

Licence number	L9290/2021/1
Licence holder	Yornaning Grazing Pty Ltd
ACN	633 449 082
Registered business address	57 Fortune Street NARROGIN WA 6312
DWER file number	DER2021/000084
Duration	12/05/2023 to 11/05/2043
Date of amendment	13/06/2023
Premises details	Wyatt's Piggery 15983 Great Southern Highway YORNANING WA 6311 Lot 1664 on Plan 107226, Lot 1697 on Plan 107229, Lot 2909 on Plan 111431, Lot 2979 on Plan 111429, Lot 3785 on Plan 111430, Lot 6030 on Plan 119267, Lot 6461 on Plan 121905, Lot 10129 on Plan 83919, Lot 14043 on Plan 255047 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 2,576 pigs (2,016 Standard Pig Units (SPUs)

This amendment is granted to the licence holder, subject to the attached conditions, on 13 June 2023, by:

Daniel Hartnup

Digitally signed by Daniel Hartnup
Date: 2023.06.14 14:04:42 +08'00'

Daniel Hartnup
A/MANAGER, PROCESS INDUSTRIES
REGULATORY SERVICES
an officer delegated under section 20 of the *Environmental Protection Act 1986* (WA)

Licence history

Date	Ref number	Summary of changes
12/05/2023	L9290/2021/1	Licence granted for existing piggery complex (2,016 SPU capacity) and construction works for expansion to 4,893 SPUs
13/06/2023	L9290/2021/1	Amendment to correct an unintentional error

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
	Breeder site		
1	3 x conventional indoor pig sheds: (i) Farrowing Shed (10 x 38.5m) (ii) Dry Sow Shed 1 (12 x 35m) (iii) Dry Sow Shed 2 (9 x 24m)	(a) All sheds must be maintained: (i) with concrete flushing channels underneath to enable transfer of effluent to the anaerobic pond via manual flushing or a pull plug system; (ii) with concrete and/or partially slatted floors; (iii) a flooring and drainage system that prevents the discharge of effluent to the environment; (b) All underfloor pits must direct effluent to the anaerobic pond via PVC and/or concrete pipes;	"Farrowing shed", "Dry sow shed 1" and "Dry sow shed 2", as shown in Schedule 1: Map of infrastructure

	Infrastructure and equipment	Description and design requirements	Infrastructure location
2	Effluent transfer pipes	Pipes must be maintained: (a) to connect the flooring and drainage system of farrowing shed 1 and dry sow sheds 1 & 2 to the anaerobic pond; (b) with minimum dimensions: (i) PVC pipes – 250 mm diameter; (ii) concrete pipes – 600 mm diameter; (c) with a constant slope of 1 – 2 % to allow gravity to flow;	As per infrastructure description
3	2 x effluent treatment ponds: (i) Anaerobic pond (2,460 m^3); (ii) Holding pond (240 m^3)	Ponds must be maintained: (a) as an impermeable barrier of 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; (b) for adequate treatment of influent from the maximum number of pigs that can be held within the 3 x conventional sheds and of suitable capacity allowing for: (i) a minimum freeboard of 500 mm; and (ii) overtopping does not occur on average more than once every 20 years;	"Anaerobic pond", "Holding pond", as shown in Schedule 1: Map of infrastructure
	Weaner/finisher site		
4	11 x deep litter shelters: (i) 1 x dry sow shelter (9 x 22m) (ii) 3 x weaner shelters (7 x 12m) (iii) 5 x small grower/finisher shelters (9 x 22m) (iv) 2 x large grower shelters (9 x 30m)	All shelters must be maintained with: (a) concrete flooring with sufficient bunding that prevents runoff of effluent to the environment; (b) a raised base that prevents overland water running into the shelter;	"Dry sow shelter", "Weaner shelters", "Small grower shelters" and "Large grower shelters", as shown in Schedule 1: Map of infrastructure
	Solids management		
5	Manure storage and processing pad	Area must be maintained: (a) as a single pad for the storage and/or processing of spent bedding, pond sludge and carcasses; (b) with a floor comprising an impermeable barrier of 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; (c) with a minimum 300 mm high bund around the perimeter to divert ingress of stormwater and contain surface runoff; (d) with sufficient slope to facilitate drainage of stormwater and surface runoff to a containment pond;	"Manure storage and processing pad", as shown in Schedule 1: Map of infrastructure

	Infrastructure and equipment	Description and design requirements	Infrastructure location
6	Runoff containment pond (240 m^3 capacity)	Pond must be maintained: (a) at the lowest point of the manure storage and processing area; (b) with sufficient capacity to contain the volume of runoff from the manure storage and processing area, allowing for: (i) a minimum freeboard of 500 mm; and (ii) overtopping does not occur on average more than once every 20 years; (c) as an impermeable barrier comprising 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.	"Runoff pond", as shown in Schedule 1: Map of infrastructure
	Animal feed manufacturing		
1	Grain storage and processing facility	(a) 1 x portable hammermill (3.2 t/hr capacity); (b) 8 x 500 tonne grain storage silos; (c) Mixing shed, with storage of liquid additives (meatmeal, bloodmeal, fishmeal, soybean meal, tallow) within self-bunded containers.	"Mixing shed and silos", as shown in Schedule 1: Map of infrastructure

Expansion works – infrastructure and equipment

2. The licence holder must construct the infrastructure listed in Table 2:

(a) in accordance with the corresponding design and construction requirements; and
(b) at the corresponding infrastructure location;

as set out in that table.

Table 2: Infrastructure design and construction / installation requirements

	Infrastructure	Design and construction requirements	Infrastructure location
	Breeder site		
1	2 x conventional indoor pig sheds: (i) New Farrowing Shed; (ii) New Dry Sow Shed	(a) New farrowing shed must be constructed with dimensions not exceeding: 15 x 36.5 m; (b) New dry sow shed must be constructed with dimensions not exceeding: 12 x 50 m); (c) Both sheds must be constructed with concrete pits underneath to enable effluent to be disposed via a pull-plug effluent management system; (d) Both sheds must comprise of concrete and partially slatted floors; (e) The flooring and drainage system of both sheds must prevent the discharge of effluent to the environment; (f) All underfloor pits must direct effluent to the existing anaerobic pond through the existing effluent drainage lines;	"New farrowing shed" and "New dry sow shed", as shown in Schedule 1: Map of infrastructure
	Weaner/finisher site		
2	2 x conventional indoor pig sheds: (i) Finisher Shed 1	(a) Both sheds must be constructed with: (i) dimensions not exceeding 12 x 50 m; (ii) concrete pits underneath to enable	"Finisher shed 1" and "Finisher shed 2", as shown in

	Infrastructure	Design and construction requirements	Infrastructure location
	(ii) Finisher Shed 2	effluent to be disposed via a pull-plug effluent management system; (iii) concrete and partially slatted floors; (b) The flooring and drainage system of both sheds must prevent the discharge of effluent to the environment; (c) All underfloor pits must direct effluent to a new anaerobic pond through effluent drainage lines;	Schedule 1: Map of infrastructure
3	Effluent transfer pipes	(a) Effluent pipelines for the new finisher sheds must comprise impermeable unplasticised polyvinyl chloride (uPVC); (b) The pipelines must connect both sheds to the new anaerobic pond; (c) Pipelines must be constructed with a minimum slope of 1 – 2% to allow gravity to flow;	As per infrastructure description
4	2 x effluent treatment ponds: (i) New Anaerobic Pond (1,850 m^3); (ii) New Holding Pond (2,000 m^3)	Ponds must be designed and constructed to be fit for purpose for receiving all effluent from the maximum number of pigs within the new finisher sheds and of suitable capacity allowing for: (a) A minimum top of embankment freeboard of 400 mm at all times on the anaerobic pond; (b) A minimum top of embankment freeboard of 500 mm for the evaporation pond; (c) Overtopping to not occur on average more than once every 10 years; Ponds must be constructed with a lining system that complies with the requirements specified in condition 3;	"New anaerobic pond" and "New holding pond", as shown in Schedule 1: Map of infrastructure
5	9 x deep litter shelters, with design capacity: (i) 1 x New Dry Sow Shelter; (ii) 3 x New Weaner Shelters; (iii) 5 x New Grower Shelters	New dry sow shelter must be constructed with dimensions not exceeding 12 x 40 m; Each new weaner shelter must be constructed with dimensions not exceeding: 9 x 22 m; Each new grower shelter must be constructed with dimensions not exceeding: 9 x 30 m; All shelters must be constructed with: (a) concrete flooring with sufficient bunding that prevents runoff of effluent to the environment; (b) a raised base that prevents overland water running into the shelter.	"New dry sow shelter", "New weaner shelters" and "New grower shelters", as shown in Schedule 1: Map of infrastructure

Expansion works – clay liner specifications

3. The licence holder must ensure the new anaerobic pond and new evaporation pond for the finisher site are constructed with a lining system that comprises at least 300 mm of clay or other suitable compactable soil constructed in two 150 mm layers following compaction with an in-situ coefficient of permeability of 1 x 10^{-9} m/s or less.

4. The licence holder must ensure that:

(a) clay materials used to comply with the requirements of condition 3 are well graded

and tested for conformance against the particle size distribution, plasticity index and other characteristics listed in Schedule 2; and

(b) permeability and compaction requirements for clay and gravel materials used to comply with condition 3 are demonstrated by geotechnical testing conducted by a suitably qualified engineer and in accordance with AS 1289.

Expansion works – compliance reporting

5. The licence holder must, within 30 days of the infrastructure specified in condition 2 being constructed:

(a) undertake an audit of their compliance with the requirements of condition 2; and
(b) prepare and submit to the CEO a report on that compliance.

6. The report required by condition 5, must include as a minimum:

(a) certification whether the items of infrastructure or components thereof, as specified in condition 2, have been constructed in accordance with the relevant requirements specified in that condition;
(b) as constructed plans and a detailed site plan for each item of infrastructure or component of infrastructure specified in condition 2;
(c) details that demonstrate how the anaerobic pond, evaporation pond and deep litter collection pond are designed and constructed to be fit for purpose;
(d) results of clay materials testing and/or geotechnical testing required by condition 4; and
(e) be signed by a person authorised to represent the licence holder and contains the printed name and position of that person.

7. Subject to condition 6(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 licence holder must:

(a) correct the non-compliant or defective works, prior to re-certifying in accordance with condition 6(a); or
(b) provide to the CEO a description of, and explanation for, any departures from the requirements specified in Table 2 that do not require rectification and do not constitute a material defect along with the report required by condition 5.

Expansion works – commencement of stocking

8. The licence holder may only commence stocking the new conventional indoor pig sheds at the breeder site specified in Table 2 where:

(a) the effluent transfer pipelines beneath the sheds have been certified as being connected to the existing anaerobic pond; and
(b) the compliance report required by condition 5(b) has been submitted by the licence holder.

9. The licence holder may only commence stocking one or both of the new conventional indoor pig sheds at the weaner/finisher site where:

(a) the following infrastructure has been certified as being constructed in accordance with the relevant requirements specified in Table 2:
    (i) the new anaerobic pond; and
    (ii) the new evaporation pond;
(b) effluent transfer pipelines beneath the shed(s) to be stocked have been certified as being connected to the newly constructed anaerobic pond; and
(c) the compliance report required by condition 5(b) has been submitted for the shed(s) to be stocked.

Operational requirements

10. The licence holder must ensure the premises infrastructure listed in Table 3 is operated in accordance with the requirements set out in that table.

Table 3: Infrastructure operational requirements

	Site infrastructure	Operational requirement
1	Conventional indoor pig sheds	<u>Stocking numbers</u> (a) Stocking numbers for each shed must not exceed the following at any one time (excluding boars): (i) Farrowing Shed – 54 sows, excluding suckers; (ii) Dry Sow Shed 1 – 200 sows; (iii) Dry Sow Shed 2 – 132 sows; <u>Pen cleaning</u> (b) Dry sow sheds must be washed down daily to ensure clean lanes, pens and handling areas; (c) Farrowing shed must be flushed out at least once every 5 weeks; <u>Effluent management</u> (d) Effluent stored in underfloor pits must be released at least once per week via the pull-plug system; (e) Effluent from underfloor pits must only be released to the anaerobic pond, via the effluent transfer pipelines; (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; <u>Mortalities</u> (g) Deceased pigs, afterbirth and foreign materials must be removed from sheds or pens by the end of the working day in which they were discovered;
2	Anaerobic pond	(a) Must be operated to ensure stormwater runoff, including roof runoff, is excluded from entering the ponds; (b) Pond must be desludged at least once every 2 years; (c) Removed pond sludge must be directly taken: (i) to the manure storage and processing area; and/or (ii) off-site by a licensed controlled waste carrier;
3	Evaporation pond	(a) Must be operated to ensure stormwater runoff, including roof runoff, is excluded from entering the pond; (b) An operational freeboard of at least 500 mm must be maintained at all times;
4	Deep litter shelters	(a) Stocking numbers for each shelter module must not exceed the following at any one time: (i) Dry sow shelter – 132 sows; (ii) Weaner shelters – 250 pigs (124 SPUs); (iii) Small grower/finisher shelters – 282 pigs (282 SPUs); (iv) Large grower/finisher shelters – 315 pigs (503 SPUs); (b) Spent bedding must be replaced within each shelter at least once every 7 weeks; (c) Spent bedding removed from shelters must be: (i) directly taken to the manure storage and processing pad; and/or (ii) directly removed 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; (d) Deceased pigs and foreign materials must be removed from shelters or pens by the end of the working day in which they were discovered;

	Site infrastructure	Operational requirement
5	Manure storage and processing pad	Purpose and maintenance (a) Must be maintained to ensure all leachate and surface water runoff can flow freely to the runoff containment pond; (b) Must be operated to ensure stormwater runoff is excluded from entering the hardstand area; Management of pond sludge (c) Following pond desludging, the pond sludge must be: (i) dried within dedicated bays within the hardstand area; or (ii) applied directly to spent bedding windrows; (d) If sludge is dried in bays, the resulting dried sludge must remain stored on the hardstand area, until being managed in accordance with condition 16; Manure storage and/or processing and mortalities composting (e) Storage and/or processing of manure, and mortalities composting, must only occur on the manure storage and processing pad; (f) Only low risk organic materials may be brought onto the premises for use in the treatment process;
6	Runoff containment pond	An operational freeboard of at least 0.5 m must be maintained at all times.

Inspection of infrastructure

11. The licence holder must undertake inspections of the scope and type and at the corresponding frequency specified in Table 4.

12. Where any inspection required by condition 11 identifies an appropriate level of environmental protection is not being maintained, the works approval 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 4: Inspection of infrastructure requirements

Scope of inspection	Type of inspection	Frequency of inspection
Wastewater treatment system, including all channels, sumps, pipework and drainage lines	Visual integrity (including signs of leakage), pipe blockages, sludge levels and freeboard capacity	Daily whilst operating, monthly if not operating
Drains, pits and sumps, pond inlets and outlets	Visual integrity (including signs of leakage and deterioration), solids accumulation	After each flush
Anaerobic pond and holding pond	Visual integrity (including signs of leakage and deterioration), freeboard capacity, health and condition of native vegetation within proximity to ponds	Daily whilst operating, monthly if not operating

Emissions

Effluent management

13. The licence holder may manage effluent from the holding pond in accordance with the requirements in Table 5.

Table 5: Authorised irrigation of effluent

Disposal point reference	Disposal requirements
"Effluent utilisation area", as shown in Schedule 1: Waste utilisation map	Irrigation of effluent via non-fixed infrastructure at an average rate of 3.1 mm/yr, and in accordance with conditions 14, 15 and 33
"Manure utilisation area", as shown in Schedule 1: Waste utilisation map	Application of effluent to manure and/or mortalities windrows to optimise the treatment (microbiological breakdown) process

14. The licence holder must ensure that when irrigating effluent to land in accordance with condition 13:

(a) it is only irrigated over the designated effluent utilisation areas;
(b) it is only irrigated over areas that are about to be sown with, or are actively growing, crops or pasture;
(c) it is irrigated with even distribution;
(d) it is irrigated in a manner that does not produce surface runoff beyond the designated effluent utilisation areas;
(e) it is only irrigated under the following conditions:
    (i) within 28 days of sowing or during periods of active plant growth;
    (ii) at a rate where the soil water storage capacity is not exceeded;
    (iii) not beyond 95% of the phosphorus sorption capacity of the soil (to be determined through a phosphorus sustainability calculation at the start of each irrigation season);
    (iv) not when the wind direction is towards dwellings within 200 m of the premises boundary;
    (v) not when rain or heavy cloud is expected within the following 24 hours;
    (vi) not within 24 hours of a weekend or public holiday; and
    (vii) not when an inversion layer is present;
(f) the effluent utilisation areas are harvested at least once every 12 months.

15. The licence holder must keep accurate records of the date, time, area, and volumes of effluent irrigated in accordance with conditions 13 & 14.

Manure and mortalities management

16. The licence holder must ensure manure (including spent bedding and dried pond sludge, or a mixture of the two), is:

(a) managed as an unprocessed material, by:
    (i) ageing in windrows, prior to applying to land in accordance with the requirements in Table 6; and/or
    (ii) taken off-site to a premises that is lawfully able to accept that kind of waste, such as a licensed composting facility or licensed solid waste facility; and/or
(b) processed (i.e., pastuerised), to significantly reduce the number pathogens, by:
    (i) maintaining the core of the windrow mass at 55°C or higher for 15 consecutive days or longer; and
    (ii) turning the windrow at least 5 times during the 15-day period, with the outer material being effectively turned to the inside of the windrow mass to ensure the whole mass is subjected to the required temperature and process;

to enable the material to be taken off-site for reuse.

17. The licence holder must ensure mortalities are:

(a) processed (i.e., pastuerised), to significantly reduce the numbers of pathogens, prior to applying to land in accordance with the requirements in Table 6; and/or
(b) taken off-site to a premises that is lawfully able to accept that kind of waste, such as

a licensed composting facility or licensed solid waste facility.

18. The licence holder must ensure mortalities processed in accordance with condition 17(a):

(a) the core of the mass is maintained at 55°C or higher for at least 3 consecutive days;
(b) the whole mass is turned at least once 3 months after the last carcasses were added within each bay; and
(c) after turning, the mass is allowed to cure for a period of at least 4 months.

Table 6: Authorised disposal of manure and processed mortalities to land

Disposal point reference	Disposal requirements
"Effluent utilisation area", as shown in Schedule 1: Waste utilisation map	Spreading of processed mortalities at a rate of not more than 1.5 t/ha/yr, and in accordance with conditions 20 and 33
"Manure utilisation area", as shown in Schedule 1: Waste utilisation map	Spreading of: (i) raw or unprocessed spent bedding at a rate of not more than 1.1 t/ha/yr; and/or (ii) raw or unprocessed pond sludge (dried or mixed with spent bedding) at a rate of not more than 0.65 t/ha/yr; and/or (iii) processed manure at a rate of not more than 0.65 t/ha/yr; and in accordance with conditions 20 and 33

19. The licence holder may manage processed manure by:

(a) removing from the premises for off-site reuse, subject to the requirements of condition 22; and/or
(b) directly applying to land in accordance with the requirements of condition 20.

20. The licence holder must ensure that when applying manure and mortalities to land in accordance with conditions 16(a)(i), 17(a) and 19(b):

(a) processed manure, raw or unprocessed manure (spent bedding and dried pond sludge, or a mixture of the two) and processed mortalities generated from operations at the premises are the only solid wastes that may be spread over the designated manure utilisation areas;
(b) it is evenly distributed over the designated manure utilisation areas;
(c) it is only spread onto areas growing crops or pasture within the designated manure utilisation areas;
(d) it is not spread within 50 m of any defined watercourse or within 25 m of the premises boundary;
(e) it is only spread under the following conditions:
    (i) during the months of February to May;
    (ii) not when the wind direction is towards dwellings within 200 m of the premises boundary;
    (iii) not early in the morning or late in the afternoon;
    (iv) not when rain or heavy cloud is expected within the following 24 hours;
    (v) not within 24 hours of a weekend or public holiday; and
    (vi) not when an inversion layer is present;
(f) the designated manure utilisation areas are harvested at least once every 12 months.

21. The licence holder must keep accurate records of the date, time, area, and volumes of processed manure, raw or unprocessed manure (spent bedding and dried pond sludge, or a mixture of the two) and processed mortalities applied in accordance with conditions 16(a)(i), 17(a), 19(b) & 20.

Off-site removal of manure

22. The licence holder must ensure all manure removed from the premises:

(a) has been processed to achieve pasteurisation, in accordance with condition 16(b); and
(b) meets the following testing requirements for indicator pathogens and plant propagules:
  (i) *Salmonella* spp.: absent in 50 g (dry weight equivalent);
  (ii) faecal coliforms: <1,000 MPN or CFU/g (dry weight equivalent); and
  (iii) nil germination of viable plant propagules after 21 days.

23. The licence holder must maintain accurate records to provide evidence of pasteurisation for all manure removed from the premises.

24. The licence holder must conduct quality sampling and testing for treated manure in accordance with the requirements of Table 7.

Table 7: Treated manure monitoring requirements

Parameter	Sampling method	Analytical method	Testing frequency
Faecal coliforms, *Salmonella* spp.	AS 4454 – Appendix A	AS 4454 – Appendix D	At least one sample per batch of treated manure
Viable plant propagules		AS 4454 – Appendix M	

Improvements

Nutrient Management Plan

25. The licence holder must, by **1 October 2023**, submit to the CEO a Nutrient Management Plan (NMP) for the premises.

26. The NMP required by condition 25 must, for each waste type, outline appropriate sustainable application rates based on soil type and crop rotation program.

27. The application rates referred to in condition 26 must be based on:

(a) a nutrient budget determined using a mass balance that considers:
  (i) nutrient input values based on actual test results from operations on the premises;
  (ii) nutrient output values based on yield data for the premises, by soil type;
(b) the results of a comprehensive soil study for the premises, to a depth of at least 600 mm, that as a minimum establishes:
  (i) a baseline for nutrient levels; and
  (ii) the potential for phosphorus leaching.

Monitoring

General monitoring

28. The licence holder must ensure that:

(a) all water samples are collected and preserved in accordance with AS/NZS 5667.1;
(b) all surface water sampling is conducted in accordance with AS/NZS 5667.6;
(c) all soil samples are collected in accordance with DPIRD guidelines for soil sampling;
(d) all soil samples are submitted to and tested by a laboratory with current ASPAC certification (or equivalent); and
(e) all surface water samples are submitted to and tested by a laboratory with current NATA accreditation for the parameters being measured.

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

30. 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.

31. 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 with a report comprising details of any modifications to the methods.

Surface water monitoring

32. The licence holder must conduct ambient surface water monitoring in accordance with the requirements of Table 8.

Table 8: Surface water monitoring requirements

Monitoring point and reference	Parameter	Unit	Averaging period	Monitoring frequency
Hotham River South[2] – • SW1, SW2 (upstream of manure utilisation areas); • SW3 (adjacent to entry to premises); • SW4 (existing the premises)	pH[1]	No unit	Spot sample	At least twice following the break of the season, with the first within 1 week of stream flow commencing
	Electrical conductivity @ 25°C[1]	µS/cm		
	Total nitrogen, Ammonia nitrogen	mg/L		
	Total phosphorus			
	Total dissolved solids			
	Total suspended solids			
	Biological oxygen demand			
	E. coli	CFU/100mL		

Note 1: In field, non-NATA accredited analysis permitted.
Note 2: GPS coordinates must be recorded for each sampling location, to ensure subsequent sampling events are in the same location.

Soil monitoring

33. The licence holder must conduct soil testing in accordance with Table 9.

Table 9: Soil testing requirements

Soil sampling locations	Soil profile	Parameter	Units	Frequency
At least one sample made up of at least 5 individual cores for each of the effluent and manure utilisation areas[1]	0 – 10 cm, 30 – 60 cm	pH	$CaCl_2$	Annually, prior to the first application of effluent for the season, and prior to the application of manure for the season
		Electrical conductivity	mS/cm	
		Moisture content	%	
		Nitrate-nitrogen	mg/kg	
		Available phosphorus		
		Potassium		
		Phosphorus retention index (PRI)	-	
		Phosphorus buffering index (PBI)	-	
		Aluminium	$CaCl_2$ extract	

Note 1: GPS coordinates must be recorded for each sampling location, to ensure subsequent sampling events are in the same location.

34. The licence holder must monitor and record inputs and outputs in accordance with Table 10.

Table 10: Monitoring and recording of inputs and outputs

Input / Output	Parameter	Units	Frequency
Pigs received and dispatched at the premises	Pigs	Number, specified for each pig class	Aggregated total monthly summary
Deceased pigs	Pigs, disposal method/location		Monthly
Raw or unprocessed manure removed from the premises in accordance with condition 16(a)(ii)	Raw or unprocessed manure (spent bedding and dried pond sludge, or a mixture of the two), details of the receiving premises	Cubic metres or tonnes	Each load removed from the premises, by type
Processed manure removed from the premises	Processed manure		Aggregated total annual summary

Complaints management

35. 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.

36. 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

37. 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.

38. 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) records of phosphorus sustainability calculations required by condition 14(e)(iii);
(d) records of effluent irrigation required by condition 15;
(e) records of manure spreading required by condition 21;
(f) results of soil monitoring required by condition 33;
(g) records of inputs and outputs in accordance with condition 34; and
(h) complaints received under condition 37.

39. The books specified under condition 38 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

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

(a) the proposed commencement date and duration of desludging activities;
(b) the proposed on-site handling and management of all sludge removed; and
(c) the proposed details of the receiving premises (if proposed to remove off the premises).

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

(a) the total volume of sludge removed;
(b) on-site management of all sludge removed; and
(c) if removed off the premises:
    (i) if the material has been dewatered and meets the definition of a solid, the details of the receiving premises for each load; or
    (ii) if the material has not been dewatered and does not meet the definition of a solid, a copy of the controlled waste tracking receipt for each load removed.

Annual reporting requirements

42. 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.

43. 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 11 for the preceding annual period.

Table 11: Annual environmental report

Condition or table	Parameter
-	Summary of any environmental incidents that have occurred during the annual period and any action taken
Condition 15	Records of effluent irrigation, including the volumes of effluent irrigated, the

Condition or table	Parameter
	location(s) in which the effluent was irrigated, and the total application area
Condition 21	Records to demonstrate compliance with manure spreading rates, including the amount of manure applied, the location(s) in which the manure was applied, and the total application area
Condition 23	Records to demonstrate pasteurisation of manure
Table 7	Results of processed manure testing
Table 8	Results of surface water monitoring
Table 9	Results of soil monitoring
Table 10	Records of inputs and outputs
Condition 37	Complaints summary
Conditions 40 & 41	Summary of notifications
Condition 42	Compliance

Definitions

In this licence, the terms in Table 12 have the meanings defined.

Table 12: Definitions

Term	Definition
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 1289	means the most recent version and relevant parts of the Australian Standard AS 1289 *Methods of testing soils for engineering purposes*
AS 4454	means the most recent version and relevant parts of the Australian Standard AS 4454 *Composts, soil conditioners and mulches*
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/NZS 5667.6	means the Australian Standard AS/NZS 5667.6 Water quality – sampling – guidance on sampling rivers and streams
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
averaging period	means the time over which a limit or target is measured or a monitoring result is obtained
boar	means an uncastrated male pig over nine months of age
books	has the same meaning given to that term under the EP Act
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
CFU	colony forming units – a measure of viable colonogenic cell numbers in CFU/mL
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
DPIRD guidelines for soil sampling	means the document entitled "*A guide for fit for purpose soil sampling*" (Fertilizer Australia 2019), available at https://fertilizer.org.au
effluent utilisation area	means an area of land in which pond effluent and composted mortalities may be applied as a soil ameliorant
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
harvested	means the process of cutting and gathering a ripened crop by mechanical means, such as a combine harvester

Term	Definition
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 waste carrier	means a person licensed as a carrier under the Environmental Protection (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)
low risk organic material	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)
manure	means faeces and urine. For the purpose of this licence, manure also means solids separated from the effluent stream, effluent pond sludge and spent bedding
manure utilisation area	means an area of land in which solid manures, including spent bedding and pond sludge (or a combination of the two) generated from operations at the premises, may be applied as a soil ameliorant
processed manure	means pastuerised material resulting from the controlled microbiological transformation of organic waste under aerobic and thermophilic conditions, including: (a) the core of the windrow mass has been maintained at 55°C or higher for 15 days or longer; and (b) the windrow has been turned at least 5 times during the 15-day period, with the outer material effectively turned to the inside of the windrow mass to ensure the whole mass is subjected to the required temperature and process
processed mortalities	means the product of the partial decomposition of carcasses, which have been managed within bays or windrows were the centre of the mass has been subjected to temperatures of ≥55°C for at least 3 consecutive days, the pile is turned at least once after 3 months after the last carcasses were added, and cured for at least 3 – 4 months
MPN	most probable number – a statistical method used to estimate the viable numbers of bacteria in a sample
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
pasteurisation	means a process whereby organic materials are treated to significantly reduce the numbers of plant and animal pathogens, and plant propagules
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
phosphorus sorption capacity	means the ability of a soil material to sorb phosphorus compounds onto soil particles thereby rendering the phosphorus unavailable to plants and

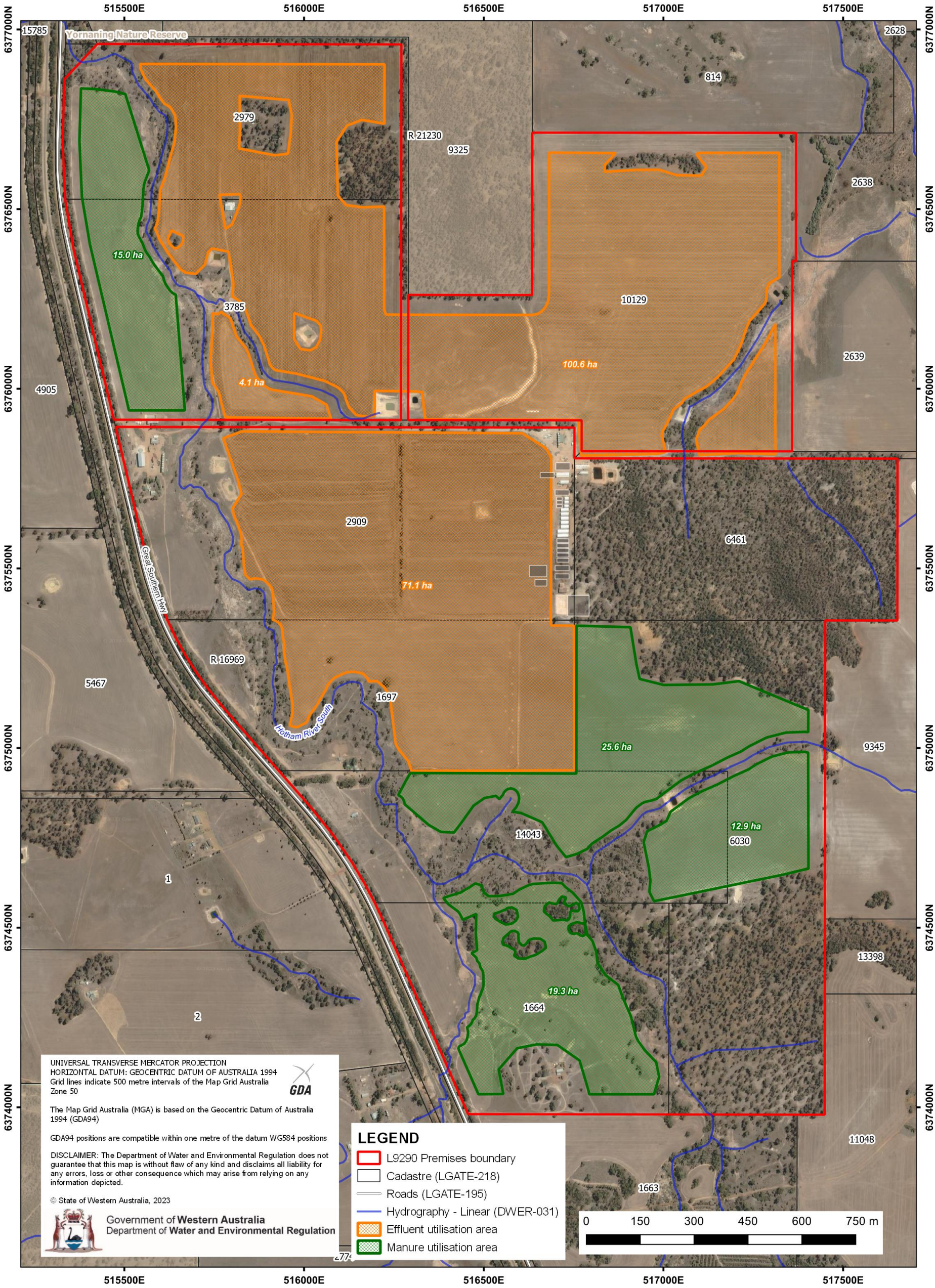
Term	Definition
	immobilising it within the soil itself
phosphorus sustainability calculation	means a calculation of the amount of phosphorus that can sustainably be applied to land, to establish the sorption saturation point (at which phosphorus leaching will occur). See example calculation within *Effluent Guidelines, Use of effluent by irrigation* (NSW DEC 1995) available at: www.epa.nsw.gov.au/-/media/epa/corporate-site/resources/epa/effguide.pdf
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)
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
qualified professional engineer	means a person who: (a) holds a tertiary academic qualification specialising in geotechnical or civil engineering; and (b) has a minimum of 3 years of experience working in the area of geotechnical or civil engineering; or is otherwise approved by the CEO to act in this capacity
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)*, Australian Pork 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 and map of waste utilisation areas

The boundary of the prescribed premises is shown in the map below (red line), in addition to the location of the effluent and manure utilisation areas.



Schedule 1: Maps

Map of infrastructure

The location of key infrastructure is shown in the map below, including expansion works.