Government of Western Australia
Department of Water and Environmental Regulation

Licence

Licence number	L9330/2022/1
Licence holder	Koojan Downs Pty Ltd
ACN	628 244 628
Registered business address	171-173 Mounts Bay Road PERTH WA 6000
DWER file number	DER2022/000186
Duration	23/06/2023 to 22/06/2043
Date of issue	23/06/2023
Premises details	'Koojan Downs' Cattle Feedlot 1096 Boundary Road YATHROO WA 6507 Lot 3559 on Plan 206175, Lots 102 & 103 on Plan 76331, Lot 3556 on Plan 206191 As shown in the premises map in Schedule 1

Prescribed premises category description (Schedule 1, Environmental Protection Regulations 1987)	**Assessed design capacity**
Category 1: Cattle feedlot: premises on which the watering and feeding of cattle occurs, being premises – (a) situated less than 100 metres from a watercourse; and (b) on which the number of cattle per hectare exceeds 50.	Not more than 20,000 animals (18,750 SCU equivalent) at any time (Stage 1)

This licence is granted to the licence holder, subject to the attached conditions, on 23 June 2023, by:

Caron Goodbourn

Digitally signed by Caron Goodbourn
Date: 2023.06.23 12:40:11 +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
14/08/2020	W6330/2021/1	Works approval granted
06/10/2021	W6330/2021/1	Amendment to allow provision of installing a synthetic liner on key infrastructure
23/11/2021	W6330/2021/1	CEO-initiated amendment to include provision to operate pens 2 weeks in advance of the effluent pond being completed, and to correct unintentional errors
23/06/2023	L9330/2022/1	Initial licence granted for Stage 1 operations (20,000 head)

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 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[1]
	Stage 1 feedlot infrastructure		

1	Cattle handling facility	(a) Must only be used for processing animals at arrival/dispatch;
		(b) Must remain located within the controlled drainage area;
		(c) Floor area must be maintained:
		  (i) with a slope of at least 1.5% and cross fall of at least 0.5%; and
		  (ii) at least 125 mm thick concrete;
			"Cattle handling facility"

	Infrastructure and equipment	Description and design requirements	Infrastructure location[1]
2	Feedlot pens – including cattle alleys and feed delivery roads	(a) Must be maintained as five (5) separate rows, comprising: (i) Row A – 20 full size production pens and 10 half size production pens; (ii) Rows B, D & E – each row comprising 24 full size production pens and 2 half size pens; (iii) Row C – 22 full size production pens and 2 half size pens (includes 4 hospital pens); (b) Each full size production pen must be maintained with dimensions not exceeding 53 m x 54.5 m; (c) Each half size pen must be maintained with dimensions not exceeding 29 m x 54.5 m; (d) Pen floors and cattle alleys must be maintained with: (i) a fall of at least 3% towards the effluent catch drains; and (ii) a dual lining system;	"A, B, C, D, & E" and "Feed delivery road"
3	Effluent catch drains	(a) Cattle handling facility and feedlot rows A – E each must be maintained with an outer effluent catch drain, with minimum dimensions: 3.5 m bed width, 1V:4H batter and 0.5 m depth; (b) Must be maintained with: (i) a long fall of at least 0.5% and connect to the sedimentation basin; and (ii) a dual lining system;	"Cattle hospital facility/ cattle lane/ effluent catch drain"
4	Controlled Drainage Area 1 (CDA 1)	(a) Must comprise all operational areas relating to the Stage 1 feedlot, including pen areas, hard catchment (feed roads, cattle lanes, effluent catch drains, sedimentation basin 2 & 3, effluent holding pond 1) and soft catchment; (b) Area must be maintained with a slope to facilitate drainage of surface water runoff to effluent holding pond 1;	As per design requirements
5	Sedimentation basin 2 & 3	(a) Must be maintained immediately downgradient of CDA1, with min. holding capacity of 5,800 m^3 and max. operational depth of 1.0 m; (b) Must be maintained with a slatted concrete weir discharge assembly on the discharge point to effluent holding pond 1; (c) Must be maintained with a dual lining system;	"Sedimentation Basin 2 & 3"
6	Effluent holding pond 1	(a) Must be maintained downgradient of sedimentation basin 2 & 3, with a holding capacity of at least 107,000 kL (once upgraded in accordance with condition 2, and including minimum operational freeboard of 0.9 m); (b) Pond floor and walls must be maintained with a dual lining system;	"Holding Pond 1 (Stage 1)"
7	Manure storage and processing area	(a) Must be maintained with a surface area of at least 30,000 m^2; (b) Must be maintained with a dual lining system;	"Solid waste storage and carcass composting area (Stage 1)"

	Infrastructure and equipment	Description and design requirements	Infrastructure location[1]
8	Controlled Drainage Area 2 (CDA 2)	(a) Must comprise all operational areas relating to the Stage 1 solid waste storage and composting area; (b) Area must be maintained with diversion drains or banks to ensure manure and compost leachates and contaminated surface water runoff is contained within CDA2; (c) Area must be maintained with a long fall of at least 2.5% to facilitate drainage of surface water runoff to effluent holding pond 2;	As per design requirements
9	Sedimentation basin 4	(a) Must be maintained immediately downgradient of CDA2, with min. holding capacity of 1,000 m^3 and max. operational depth of 1.0 m; (b) Must be maintained with a slatted concrete weir discharge assembly on the discharge point to effluent holding pond 2; (c) Must be maintained with a dual lining system;	"Sedimentation Basin 4"
10	Effluent holding pond 2	(a) Must be maintained downgradient of sedimentation basin 4, with a holding capacity of at least 3,000 kL (including minimum operational freeboard of 0.9 m); (b) Pond floor and walls must be maintained with a dual lining system.	"Holding Pond 2"
Ancillary infrastructure			
1	Grain storage and processing facility	Must maintain the following: (a) 2 x grain processing roller mills, each with capacity of 20 t/hr; (b) Grain intake rate of 250 t/hr; (c) 4 x 1,140 tonne grain storage silos.	"Grain Storage and Processing Facility"
2	Weather station	Must maintain an on-site automatic weather station capable of recording daily rainfall, air temperature, humidity and wind speed, for direct use in estimating evapotranspiration (ET_0) at the premises.	Within proximity to Holding Pond 1

Note 1: As shown in Schedule 1: Map of infrastructure.

Upgrade works – infrastructure requirements

2. The licence holder must upgrade the infrastructure listed in Table 2 in accordance with the corresponding design and construction requirements as set out in that table.

Table 2: Upgrade works – infrastructure design and construction requirements

	Infrastructure	Design and construction requirements	Infrastructure location
1	Effluent holding pond 1	(a) Must increase the holding capacity of the pond to at least 107,000 kL (including minimum operational freeboard of 0.9 m); (b) Must ensure the pond wall raise is constructed with a dual liner system, including: (i) at least 150 mm moisture conditioned and recompacted in-situ subgrade or other suitable fill material, compacted to 98% MDD at ±2% optimum moisture content;	"Holding Pond 1 (Stage 1)", as shown in Schedule 1: Map of infrastructure

	Infrastructure	Design and construction requirements	Infrastructure location
		(ii) a primary lower liner comprising a geosynthetic clay liner with a minimum manufacturer specified MARV rating of 4,000 g/m^2 bentonite at 0% moisture content; (iii) a secondary surcharge layer comprising at least 300 mm of clay or other suitable compactable soil; and (iv) a capping layer comprising at least 150 mm of compacted gravel material with a minimum CBR wet and dry of 20%; (c) Must ensure that permeability and compaction requirements for clay and gravel materials used to comply with clause 1(b) of this table are demonstrated by geotechnical testing conducted by a suitably qualified engineer and in accordance with AS 1289; (d) Must conduct quality assurance, including visual inspection and materials testing, for all geosynthetic clay liners in accordance with the requirements specified in Table 3; (e) Must ensure all laboratory tests required by clause 1(d) of this table are tested by a laboratory with current NATA accreditation for the parameters being measured; (f) Must prepare a Construction Quality Assurance Validation Report (CQAVR) following installation of the geosynthetic clay liner; (g) Must ensure the report required by clause 1(f) of this table is written and certified by a qualified professional engineer and includes: (i) documentation of the quality of the completed works; (ii) demonstration of whether all requirements of the works specifications and QA provisions in Table 3 have been complied with; (iii) an assessment of test results against the minimum values specified in Table 3; (iv) certification the installed liner is free of default or defect and is fit-for-purpose; and (v) copies of all surveys and drawing of the 'as installed' liner, inspections and materials testing results.	

Table 3: Upgrade works – Geosynthetic clay liner QA requirements

Property	Test method	Frequency	Minimum value
Swell index	ASTM D5890	MARV using frequency as prescribed in each ASTM standard	≥ 24 cm^3/2g
Fluid loss	ASTM D5981		< 15 mL
Montmorillonite content	X-ray diffraction		70 – 110 cmol/kg of bulk sample
Cation exchange capacity	NH_4 displacement;		70 – 110 cmol/kg of

Property	Test method	Frequency	Minimum value
of bentonite	Methylene blue; Barium saturation		bulk sample
Bentonite mass @ 0% moisture content	ASTM D5993	Every 3,700 m^2	≥ 3,700 g/m^2
Mass per unit area of GCL		Every 3,600 m^2	≥ 4,030 g/m^2
Thickness	ASTM D5199	Visual inspection on site for variability	≥ 6 mm
Moisture content (MaxARV)	ASTM D5993	MARV using frequency as prescribed in each ASTM standard	≤ 25% at manufacturer
Peel strength (min avg.)	ASTM D6496		≥ 360 N/m
Tensile strength	ASTM D6768		≥ 7 kN/m
CBR strength	AS 3706.4		≥ 1,400 N
CBR elongation (MaxARV)	AS 3706.4		≤ 10%
Hydraulic conductivity, k	ASTM D5887	MARV using frequency as prescribed in ASTM standard, supplemented by 2 performance tests	≤ 2.5 x 10^{-11} m/s

Upgrade works – compliance reporting

3. The licence holder must, within 30 days of the completion of infrastructure upgrades specified in condition 2:

(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.

4. The report required by condition 3, must include as a minimum:

(a) certification whether the pond upgrade has been completed in accordance with the relevant requirements specified in condition 2;
(b) as constructed plans for the upgraded pond specified in condition 2;
(c) details that demonstrate how the upgraded pond has been designed and constructed to be fit for purpose; and
(d) be signed by a person authorised to represent the licence holder and contains the printed name and position of that person.

Operational requirements

5. The licence holder must ensure the site infrastructure listed in Table 4 is operated in accordance with the requirements set out in that table.

Table 4: Infrastructure operational requirements

	Site infrastructure	Operational requirement
1	Stage 1 feedlot pens – Rows A, B, C, D & E	<u>Stocking density</u> (a) Stocking density must not exceed 19.2 m^2/SCU within individual pens; <u>Pen cleaning and manure removal</u> (b) Pens must be cleaned to ensure the depth of dry manure on the pen surface and under pen fence lines does not exceed 50 mm; (c) Manure harvested from pen surfaces must be removed directly to the designated manure storage and processing area (CDA2); (d) Must only use machine control-equipped mobile plant for cleaning pen surfaces;

	Site infrastructure	Operational requirement
		<u>Pen maintenance</u> (e) Must ensure a minimum 450 mm thick surcharge layer is maintained above the GCL (±75 mm); (f) Pens must be maintained to ensure there are no depressions, potholes and wet spots in the pen surface; <u>Mortalities</u> (g) All mortalities must be removed from the pens within 24 hours of death; (h) Following post mortem at the cattle handling yards (if required), mortalities removed from pens must be: (i) taken directly to the designated manure storage and processing area; or (ii) taken directly off-site for further processing or disposal, to a premises that is lawfully able to accept that kind of waste (such as a licensed rendering facility or composting facility);
2	Effluent catch drains (Stage 1)	(a) 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 basins without scouring; (b) Must only use machine control-equipped mobile plant for cleaning effluent catch drains; (c) Must ensure a minimum 450 mm thick surcharge layer is maintained above the GCL (±75 mm);
3	CDA 1 & 2 (Stage 1)	Must be maintained to ensure all surface water runoff is able to flow freely to the respective sedimentation basins;
4	Sedimentation basins 2 & 3 and 4 (Stage 1)	(a) Must be maintained such that each basin flows freely after rainfall events; (b) An operational freeboard of at least 0.9 m must be maintained at all times; (c) Must only use machine control-equipped mobile plant for cleaning sedimentation basins; (d) Must ensure a minimum 450 mm thick surcharge layer is maintained above the GCL (±75 mm); (e) Basins must be cleaned of sludge before it takes up more than 10% of the design capacity of the basin; (f) Sludge removed from basins must be taken directly to the manure storage and processing area;
5	Effluent holding ponds 1 & 2 (Stage 1)	An operational freeboard of at least 0.9 m must be maintained at all times;
6	Manure storage and processing area (Stage 1)	<u>Management of manure and mortalities</u> (a) Manure storage and/or processing, and composting of mortalities, must only occur on the manure storage and processing area; (b) Only low risk organic materials may be brought onto the premises for use in the composting process; <u>Management of pond sludge</u> (c) Following pond desludging, the sludge must be: (i) dried within dedicated bays on the manure storage and processing area; or (ii) applied directly to manure or mortalities 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 12; <u>Pad maintenance</u>

	Site infrastructure	Operational requirement
		(e) Must only use machine control-equipped mobile plant for cleaning solid waste stockpile pads; (f) Must ensure a minimum 450 mm thick surcharge layer is maintained above the GCL (±75 mm); (g) Must be maintained to ensure all leachate and surface water runoff can flow freely to sedimentation basin 4; (h) Must be operated to prevent ingress of surface water runoff from entering the area.

Backgrounding

6. The licence holder must not conduct backgrounding of animals outside of the feedlot complex on the premises, unless it is done:

(a) outside of designated effluent irrigation and manure utilisation areas; and
(b) where the number of cattle per hectare is less than 50.

Inspection of infrastructure

7. The licence holder must undertake inspections of the scope and type and at the corresponding frequency specified in Table 5.

8. Where any inspection required by condition 7 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 5: Inspection of infrastructure requirements

Scope of inspection	Type of inspection	Frequency of inspection
Sedimentation basins 2 & 3 and 4 Effluent holding ponds 1 & 2	Visual integrity (including signs of leakage and deterioration), freeboard capacity	Daily during May to October, weekly during November to April (whilst operating)

Emissions

Effluent management

9. The licence holder may manage effluent from the holding ponds in accordance with the requirements in Table 6.

Table 6: Authorised management of effluent

Reference point	Requirements
“Effluent utilisation area”, as shown in Schedule 1: Waste utilisation map	Irrigation of effluent via centre pivot, in accordance with conditions 10, 11 and 26
Manure storage and processing area (Stage 1)	Application of effluent to manure and/or mortalities windrows to optimise the composting (microbiological breakdown) process

10. The licence holder must ensure that when irrigating effluent to land in accordance with condition 9:

(a) it is only irrigated over the designated (centre pivot) 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 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 rain or heavy cloud is expected within the following 24 hours; and
    (v) not when an inversion layer is present;
(f) the effluent utilisation areas are harvested at least once every 12 months.

11. The licence holder must keep accurate records of the date, time, area, and volumes of effluent irrigated in accordance with conditions 9 and 10.

Manure and mortalities management

12. The licence holder must ensure manure, including fresh or unprocessed manure, and wet or dried pond sludge, is:

(a) managed as an unprocessed material, by:
    (i) ageing in windrows for at least 12 months, prior to applying to land in accordance with the requirements of Table 7 (as aged manure); and/or
    (ii) taken off-site to a premises that is lawfully able to accept that type of waste, such as a licensed composting facility or solid waste facility; and/or
(b) processed (i.e., pasteurised), to significantly reduce the number of 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.

13. The licence holder must ensure mortalities are:

(a) composted (i.e., pasteurised), to significantly reduce the number of pathogens, prior to applying to land in accordance with the requirements of Table 7; and/or
(b) taken off-site to a premises that is lawfully able to accept that type of waste, such as a licensed composting facility or solid waste facility.

14. The licence holder must ensure mortalities composted in accordance with condition 13(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 or windrow; and
(c) after turning, the mass is allowed to cure for a period of at least 4 months.

Table 7: Authorised management of manure and mortalities compost

Reference point	Requirements
"Manure utilisation area", as shown in Schedule 1: Waste utilisation map	Spreading of: (a) aged manure at a rate of not more than 1.25 t dm/ha; (b) mortalities compost at a rate of not more than 1.0 t dm/ha; and in accordance with conditions 16, 17 and 26

15. The licence holder may manage manure processed in accordance with condition 12(b), by:

(a) removing from the premises for off-site reuse, subject to the requirements of condition 18; and/or
(b) directly applying to land in accordance with the requirements of condition 16.

16. The licence holder must ensure that when applying manure and mortalities compost to land in accordance with conditions 12(a)(i) and 15(b):

(a) processed manure, aged manure and mortalities compost generated from operations at the premises are the only solid wastes that are spread over the manure utilisation areas;
(b) it is evenly distributed over the manure utilisation areas;
(c) it is only spread onto areas growing crops or pasture within the 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 not spread under the following conditions:
    (i) when rain or heavy cloud is expected within the following 24 hours; and
    (ii) when an inversion layer is present;
(f) the manure utilisation areas are harvested at least once every 12 months.

17. The licence holder must keep accurate records of the date, time, area, and volumes of processed manure, aged manure and mortalities compost applied in accordance with conditions 12(a)(i), 13(a), 15(b) and 16.

Off-site removal of manure

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

(a) has been processed to achieve pasteurisation, in accordance with condition 12(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.

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

20. The licence holder must conduct quality sampling and testing for processed manure in accordance with the requirements of Table 8.

Table 8: Processed 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 500 tonnes of processed manure
Viable plant propagules		AS 4454 – Appendix M	

Monitoring

General monitoring

21. 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;
(c) all groundwater samples are submitted to and tested by a laboratory with current NATA accreditation for the parameters being measured, unless otherwise specified;

(d) all soil samples are collected in accordance with DPIRD guidelines for soil sampling; and
(e) all soil samples are submitted to and tested by a laboratory with current ASPAC certification (or equivalent).

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

23. 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.

24. 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

25. The licence holder must monitor and record the results of ambient groundwater in accordance with Table 9.

Table 9: Monitoring of groundwater requirements

Monitoring location	Parameter	Units	Averaging period	Frequency
KDMB08 – KDMB13; KDMB15 – KDMB17	Standing water level[1]	m (AHD) m (BGL)	Spot sample	Quarterly
	pH[1]	-		
	Electrical conductivity[1]	µS/cm		
	Total nitrogen, Ammonia nitrogen	mg/L		
	Total phosphorus			
	Total dissolved solids			
	Biological oxygen demand			
	Na, K, Ca, Mg, Cl, SO_4, HCO_3 and As			

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

Soil monitoring

26. The licence holder must conduct soil testing in accordance with Table 10.

Table 10: 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 farm paddock across the waste utilisation area[1,2]	0 – 10 cm, 10 – 20 cm, 20 – 30 cm	pH	$CaCl_2$	Annually, prior to application of effluent or manure
		Electrical conductivity	mS/cm	
		Moisture content	%	
		Total nitrogen, ammonium-nitrogen, nitrate-nitrogen	mg/kg	
		Total phosphorus		
		Phosphorus retention index (PRI)	-	
		Phosphorus buffering index (PBI)	-	
		Aluminium	$CaCl_2$ 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.

27. The licence holder must monitor and record inputs and outputs in accordance with Table 11, where applicable.

Table 11: Monitoring and recording of inputs and outputs

Input / Output	Parameter	Units	Frequency
Animals received and dispatched at the premises	Animals	Number	Aggregated total monthly summary
Mortalities			Monthly
Low risk organic materials brought onto the premises	Organic material type	Tonnes	Each load brought onto the premises, by type
Yield harvested, dry matter yield	Harvested crops or fodder	t/ha	Each crop harvested from the effluent & manure utilisation areas
N & P removal rate		kg/ha	

Complaints management

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

29. 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

30. The licence holder must record the following information in relation to complaints it receives (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.

31. 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 10(e)(iii);

(d) records of effluent irrigation required by condition 11;
(e) records of manure spreading required by condition 17;
(f) records of processed manure taken off site in accordance with condition 18;
(g) results of groundwater monitoring required by condition 25;
(h) results of soil monitoring required by condition 26;
(i) records of inputs and outputs in accordance with condition 27; and
(j) records of complaints required by condition 30.

32. The books specified under condition 31 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

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

34. The licence holder must notify the CEO, within 7 days after, the completion of any pond desludging works at the premises:

(a) the total volume of sludge removed; and
(b) on-site management of all sludge removed.

Annual reporting requirements

35. 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.

36. The licence holder must submit to the CEO, by 1 March in each year, an environmental report containing the information listed in Table 12 for the preceding annual period.

Table 12: Annual environmental report

Condition or table	Parameter
-	Summary of any environmental incidents that have occurred during the annual period and any action taken
Condition 10	Records of phosphorus sustainability calculations
Condition 11	Records to demonstrate compliance with effluent irrigation requirements, including the volumes of effluent irrigated, the location(s) in which the effluent was irrigated, and the total irrigation area
Condition 17	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
Conditions 18, 19 & 20	Records of processed manure taken off-site, including records to demonstrate pasteurisation requirements, and testing requirements, have been met
Table 9	Results of groundwater monitoring
Table 10	Results of soil monitoring
Table 11	Records of inputs and outputs
Condition 30	Complaints summary

Condition or table	Parameter
Conditions 33 & 34	Summary of notifications
Condition 35	Compliance

Definitions

In this licence, the terms in Table 13 have the meanings defined.

Table 13: Definitions

Term	Definition
aged manure	means manure that has been aged in windrows for a period of 12 months or longer
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 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 5667.11	means the Australian Standard AS/NZS 5667.11 Water quality – sampling – guidance on sampling groundwater, as amended from time to time
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
backgrounding	means grouping, growing or acclimatising animals prior to entry into a feedlot
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
dual lining system	means a lining system that comprises, in ascending order: (a) at least 150 mm thick subgrade; (b) a primary lower liner comprising a geosynthetic clay liner; (c) a subsurface drainage layer (feedlot pens, effluent catch drains, solid waste storage and carcass composting area only); (d) a 300 mm thick secondary surcharge layer; and

Term	Definition
	(e) a 150 mm thick capping layer
Environmental Compliance Report	means a report to satisfy the CEO that the conditioned infrastructure and/or equipment has been constructed and/or installed in accordance with the works approval
effluent utilisation area	means an area of land in which pond effluent may be irrigated on the premises
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
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 effluent pond sludge
manure utilisation area	means an area of land in which manure generated from operations at the premises may be applied as a soil ameliorant, subject to conditions
MARV	Minimum Average Roll Value, being the mean or typical values less 2 standard deviations
mortalities compost	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	means the ratio of phosphorus adsorbed by soil (micrograms per gram)

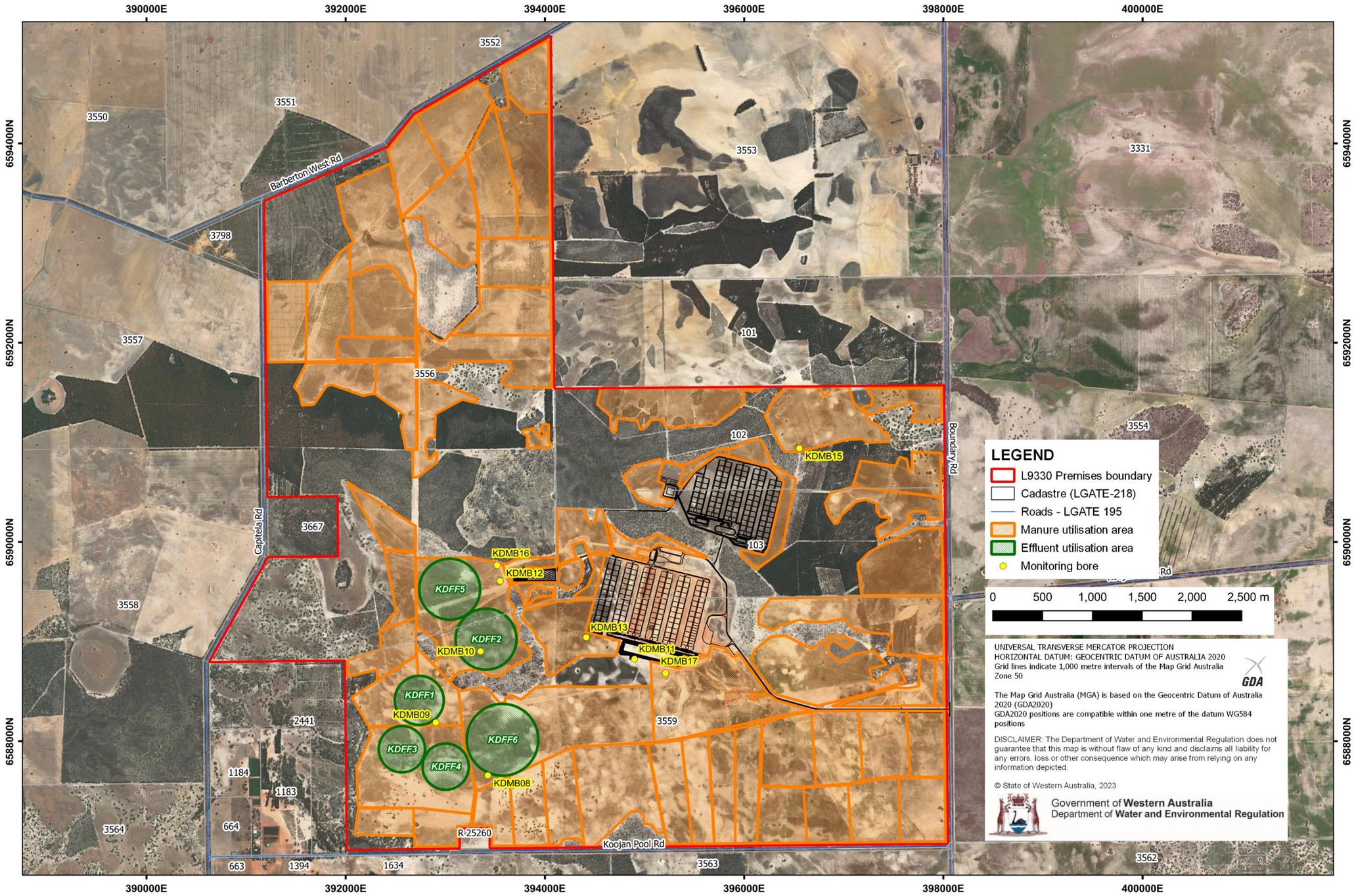
Term	Definition
retention index (PRI)	compared to that remaining in a solution (of initial concentration of 10 mg phosphorus per litre) after 16 hours
phosphorus sorption capacity	means the ability of a soil material to sorb phosphorus compounds onto soil particles thereby rendering the phosphorus unavailable to plants and 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
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
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
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
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
soil water holding capacity	means the maximum amount of water the soil can hold and wilting point where the plant can no longer extract water from the soil
spot sample	means a discrete sample representative at the time and place at which the sample is taken
Standard Cattle Unit (SCU)	means a Standard Cattle Unit, which is equivalent to an animal with a liveweight of 600 kg and calculated using the method outlined in the *National Beef Cattle Feedlot Environmental Code of Practice*, Meat & Livestock Australia Limited, June 2012

END OF CONDITIONS

Schedule 1: Maps

Premises map, map of waste utilisation areas, and map of monitoring locations

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



Schedule 1: Maps

Map of infrastructure

The location of key Stage 1 feedlot infrastructure is shown in the map below.