Enviromental Management Plan

Piggery name:	*PIC Grong Grong Unit*
Piggery street address:	314 Grong Grong River Road Grong Grong
Photo of piggery / sign on front gate of farm	

Manually enter data
Data comes from another cell
Choose from data in pull-down menu

Year ***2024***

Contact Details

Piggery operator:	*SunPork P/L*
Street Address:	*38 Junee Street*
	Grong Grong
	NSW 2652
Postal Address:	*PO Box 39*
(if different from street address)	*Grong Grong*
	NSW 2652
Piggery Manager:	*Aaron Dochertry*
Contact phone number:	*0269 562105*
Contact email address:	adocherty@picaustralia.com.au
Environmental Manager (if different):	*Stephen Dunbar*
Contact phone number:	*+61436623083*
Contact email address:	swdunbar@bigpond.com

Land Details

Real property description:	*Sunpork Pty Ltd*
	Lot 1 DP 598738 WB 187754 WB 188030 WS 070269
Land area (ha):	*404 ha*
Land owner:	*Sunpork P/L*
Tenure:	*Freehold*

Licences & Approvals

Piggery licence no.:	*EPA L No 5471*
Licenced capacity:	*Discharge 200megL / day / 25657 head of stock*
Planning approval no.:	*insert details*
Approved capacity:	*insert details*
Actual operating capacity (No. of pigs):	*25773* *pigs*
Actual No. of SPU:	*24256.2* *SPU*

These data would feed in from the Piggery Description Sheet

Water licence no.'s:	*40BL 188030 / 40BL 187754 / WAL4119*
Water available under licences:	*740 ML* ML

Environmental Outcomes

Please tick one or more boxes if applicable

To operate in an ecologically sustainable manner

- ☑ by suitable siting taking into account the location of sensitive land uses, watercourses, shallow groundwater and land suitable for reuse
- ☑ through suitable size for location
- ☑ through good design and construction
- ☑ through good management

To reuse manure sustainably

- ☑ by maintaining or improving the productive qualities of land on-farm through effective use of the nutrients, organic matter and water they contain.
- ☑ through exercising a duty of care in relation to piggery manure going off-farm.

To protect groundwater

- ☑ through good siting - no shallow groundwater beneath piggery
- ☑ through good siting – no shallow groundwater beneath piggery or reuse areas
- ☑ through good buffers between piggery and bores
- ☑ through good buffers between piggery and reuse areas and bores
- ☑ through good design and construction - impermeable bases under all areas of the piggery used to store or convey manure
- ☑ through good control all manure and effluent and sustainable reuse of manure nutrients

To protect surface waters

- ☑ through good siting - adequate buffers to watercourses
- ☑ through good siting - vegetative filter strips to waterways
- ☑ through good siting - piggery site is above the 1 in 100 year flood line
- ☐
- ☑ through good design and construction - the piggery is built above ground level
- ☑ through good design and construction - the waste treatment / storage facilities are bunded
- ☑ through good control over manure and contaminated runoff
- ☑ by preventing stormwater runoff from entering the sheds or coming into contact with manure

To protect community amenity

- ☑ through providing suitable separation distances
- ☑ through good design features that reduce odour and make the piggery easy to clean
- ☑ through good ongoing waste management that keeps the piggery clean

To protect flora species or communities, and fauna species and habits

- ☑ by managing vegetation clearing and replacing removed vegetation with appropriate plantings of suitable species.
- ☑ by managing reuse appropriately.

To protect items, sites or places of cultural heritage significance, both to Aboriginal and to other people

- ☑ by identifying and protecting these items.

Land Use - Site and Surrounds

Please select from drop down list where available

The land use zoning of the farm is	rural / farming

Other than the piggery, land uses on-farm include (please tick box)

☑	grazing
☑	broadacre farming
☐	other agricultural / horticultural uses
☐	non-agricultural uses

Surrounding land uses include (please tick box)

☑	grazing
☑	broadacre farming
☐	other agricultural / horticultural uses
☐	non-agricultural uses

The closest houses belonging to others are	are more than 2 km from the piggery.
How many houses are located fairly close to the piggery?	Grong Grong Township 5 km

Houses located fairly close to the piggery are to the (please tick box)

☑	north
☐	north-east
☐	east
☐	south-east
☐	south
☐	south-west
☐	west
☐	north-west

Climate

The annual rainfall is	460 mm
The temperature zone in which the piggery is located is	*Warm*

e.g. inland NSW, SE Qld, SA, southern WA

The predominant wind direction in Summer is from the

☐	east
☐	north-east
☐	south-east
☑	west
☑	north-west
☐	south-west

☐	east
☐	north-east
☐	south-east
☐	west
☐	north-west
☐	south-west

Piggery Description

Please select from drop down list where available

The piggery unit type is *farrow-to-finish*

The piggery herd composition, and housing type for each class of pigs, is shown below

Pig Class	No. of Pigs	No. of SPU	Housing	Manure Management	Totals	
Gilts (24-30 weeks)	*236*	*424.8*	*Conventional*	*Flush channels*	Conventional	8
Boars	*80*	*128*	*Conventional*	*Flush channels*	Deep litter	0
Gestating sows	*1659*	*2654.4*	*Conventional*	*Flush channels*		
Lactating sows	*514*	*1285*	*Conventional*	*Pull plugs*		
Suckers (0-4 weeks)	*4100*	*410*	*Conventional*	*Pull plugs*		
Weaners (4-10 weeks)	*7250*	*3625*	*Conventional*	*Pull plugs*		
Growers (10-16 weeks)	*5609*	*5609*	*Conventional*	*Static pits*		
Finisher (16-24 weeks)	*6325*	*10120*	*Conventional*	*Static pits*		
Finisher 2 (24+ weeks)	*0*	*0*				
Total	*25773*	*24256.2*				

Environmental Risk Assessment

The purpose of this environmental risk assessment is to identify any actual or likely impact that the piggery may pose to the environment.
This provides the basis for reducing impacts (or risks of impacts) through improved design, improved management or monitoring.
There are three steps in this process:

- rate the vulnerability of the major natural resources and amenity
- rate the risk protection afforded by the major design and operational features of the piggery
- evaluate the likelihood of an environmental impact.

The following sections use this process to determine areas where there is a risk of environmental impacts.

Environmental Risk Assessment - Vulnerability Ratings

Soils of Reuse Areas

There	are on-site reuse areas at the piggery	
Rating Criteria	**Response**	**Rating**
Reuse areas are:	suited to growing a broad range of broadacre crops and pastures	**1**
Reuse areas have a soil depth of:	at least 1 m	**1**
The soils are:	loam to medium clay	**1**
The soils are:	non-rocky, non-saline and non-sodic	**2**
Reuse areas are:	not prone to waterlogging	**1**
The flooding frequency is:	less than once every ten years	**1**
promote:	infiltration, rather than runoff or erosion	**1**
OVERALL RATING	Soils of reuse areas are considered to be somewhat vulnerable	**2**

Environmental Risk Assessment - Vulnerability Ratings

Groundwater

Rating Criteria	Response	Rating
The depth to groundwater is:	always at least 5 m below the ground surface or the base of any piggery infrastructure	**3**
Water for potable use is:	not sourced from bores located within 1 km of the piggery	**1**
Groundwater is:	used in the piggery and there is ample allocation and supply that is of suitable quality to meet requirements	**1**
OVERALL RATING	Groundwater resources are considered to be vulnerable	**3**

Environmental Risk Assessment - Vulnerability Ratings

Surface Water

Rating Criteria	Response	Rating
The piggery is:	at least 200 m from the closest watercourse	**1**
It is:	at least 800 m from the closest water supply	**1**
The piggery is located:	above the 1-in-100 year flood line	**1**
Surface water is	not used in the piggery	**1**
Reuse areas:	comply with the buffer distances specified in the National Environmental Guidelines for Indoor Piggeries (NEGIP), and there are additional protection measures (eg. vegetative filter strips or terminal ponds) between these areas and the closest waterways	**1**
Reuse areas are located:	above the 1-in-10 year flood line	**1**
OVERALL RATING	Surface waters are considered to have low vulnerability	**1**

Environmental Risk Assessment - Vulnerability Ratings

Community Amenity

Rating Criteria	Response	Rating
The piggery has received:	no complaints from the public or regulators for at least five years	1
Levels of odour; dust and noise around the property boundary	checked at least weekly	1
The piggery provides:	separation distances meeting the Level 1 criteria specified in Appendix A of the National Guidelines	1
Surrounding land is:	all designated rural, and is not designated for future development or rezoning	1
The piggery is:	well concealed from roads and neighbours	1
The entrance point to the farm provides:	at least 300 m good visibility in both directions	1
Vehicle movements and other noisy activities:	occur only during the day, except under exceptional circumstances	1
Mechanical equipment used on-farm is:	all fitted with manufacturer-specified exhaust devices	1
Dust from traffic movements, feed management and manure handling and reuse is:	controlled as needed	1
There is:	a complaints management procedure in place that includes complaints recording, investigation and corrective action, along with appropriate consultation	1
Mediation is:	used to try to settle disputes with neighbours	1
OVERALL RATING	Overall, community amenity is considered to have low vulnerability	1

Design and Operation Risk Assessment

Pig Housing

This piggery	has conventional sheds
This piggery	doesn't have deep litter shelters
The pig accommodation	is not naturally ventilated

Rating Criteria	Response	Rating
The sheds:	are oriented east-west and are constructed to maintain temperatures within the required range with no mechanical heating or cooling	**1**
Shed bases are:	concreted for conventional sheds and impervious for deep litter sheds (concreted or compacted for a permeability of 1 X 10-9 m/s for a depth of at least 300 mm)	**1**
The feeding systems:	minimise feed wastage	**1**
Stocking densities:	meet the requirement of the Model Code of Practice for the Welfare of Animals Pigs	**1**
The inflow and outflow of water from sheds is:	prevented by controls	**1**
Wash-down water is:	not generated by the piggery	**1**
Conventional sheds are:	frequently cleaned to maintain very clean lanes, pens and handling areas; pigs are clear	**1**
The bedding in deep litter shelters:	is always kept dry and friable (except for dunging areas); pigs are clean	**1**
OVERALL RATING	Overall, the design and management of the sheds minimises the likelihood of risks to the environment	**1**

Design and Operation Risk Assessment

Effluent Collection System

This piggery	has flushing channels
This piggery	has static pits
This piggery	has pull plugs

Rating Criteria	Response	Rating
Stormwater runoff, including roof runoff:	is excluded from entering the effluent collection system (or the system is designed to handle the runoff)	1
Effluent collection systems are:	concreted and impervious (no significant cracks)	1
Facilities pits, sumps, pipes and drains are:	sized and managed so that they do not spill	1
Maintenance of facilities that collect effluent	are self cleaning and very little manure is left in them after draining	1
Contingency measures. There are:	appropriate contingency measures to prevent spills from the system	1
Flushing channels are flushed:	at least daily and static pits and pull plugs are emptied at least weekly (or in accordance with design requirements), with pits emptied in rotation to prtomote uniform loading of the effluent treatment system	1
Inspection of effluent collection facilities (drains,	inspected after each flush or drainage for solids accumulation, leakage and deterioration	1
OVERALL RATING	Overall, the design and management of the effluent collection system minimises the likelihood of risks to the environment	1

Design and Operation Risk Assessment
Solids Separation System
(pre-treatment of effluent)

This piggery	doesn't have a device (e.g. screen, screw press) that separates solids from the liquid effluent
This piggery	doesn't have an outloading bay
OVERALL RATING	Not applicable and not assessed

Design and Operation Risk Assessment

Effluent Treatment System

This piggery	has an on-site effluent treatment system	
Rating Criteria	**Response**	**Rating**
The effluent treatment system:	is designed to capture, treat, store and reuse all effluent; inlets and outlets are positioned to prevent short-circuiting	**1**
Odour. The effluent treatment system:	is designed and managed such that odour emissions are acceptably low	**1**
Sludge. The effluent treatment system:	designed to allow to store at least five years sludge	**2**
Design. The walls and bases:	have a design permeability of 1 X 10-9 m/s for a depth of at least 300 mm of compacted clay and pond depth does not exceed 2 m deep, 450 mm of compacted clay for ponds deeper than 2m, or is fitted with a well maintained impervious synthetic liner	**1**
The depth to the water table from the base of the effluent treatment system is:	at least 2 m	**1**
Freeboard. Depth to the water table from the base of the effluent treatment system is:	at least 600 mm is provided on any effluent treatment system	**1**
The effluent treatment system has a design overtopping frequency:	not exceeding 1 in 10 years where reuse is practiced, or not exceeding 1 in 20 years where effluent disposal is by evaporation	**1**
OVERALL RATING	Overall, the design and management of the effluent treatment system limits the likelihood of risks to the environment	**2**

Design and Operation Risk Assessment

Manure Storage

Rating Criteria	Response	Rating
Manure storage areas:	sit within a controlled drainage area, and all leachate and runoff is directed to effluent ponds, or storage designed to receive this inflow	**1**
The bases of manure storage areas are:	impervious; concreted or sealed for a design permeability of 1 X 10-9 m/s for a depth of 300 mm	**1**
The depth to water tables beneath the base of manure storage areas	exceeds 2 m at all times	**1**
Manure stockpiles/windrows are:	always managed to maintain low odour emissions	**1**
Spilt or spoilt feed is:	promptly cleaned up	**1**
OVERALL RATING	Overall, the design and management of the manure storage system minimises the likelihood of risks to the environment	**1**

Design and Operation Risk Assessment

Manure Nutrients

There	is on-farm reuse of effluent or manure	
Rating Criteria	**Response**	**Rating**
The quantities of nutrients reused are:	effluent and manure used on farm are measured and recorded each time reuse occurs, and each type of effluent or manure product used is tested at least annually	**1**
OVERALL RATING	Overall, knowledge about nutrient output minimises the likelihood of risks to the environment	**1**

Design and Operation Risk Assessment

Design and Management of Reuse Areas

Effluent	is irrigated on-site	
Manure	is not spread on-site	

Rating Criteria	Response	Rating
Weather. Effluent irrigations occur:	only when the soil is dry enough to absorb the water and when rain is not expected	**1**
High pressure spray guns are:	not used	**1**
Gradient and Soil type. Flood Irrigation of effluent is:	used only on sites with an even grade and loam or heavier soils, and with good flow control and runoff collection	**1**
OVERALL RATING	Overall, the design and management of the reuse areas minimises the likelihood of risks to the environment	**1**

Design and Operation Risk Assessment

Mortalities Management

Mortalities management is by:

☐	rendering
☑	composting
☐	burial
☐	proper incineration
☐	burning
☐	dumping

Rating Criteria	Response	Rating
Dead pigs are:	always removed from the sheds or pens within 12 hours of discovery	**1**
Method of mortalities management:	rendering or composting	**1**
Timing of mortalities management:	always occurs within 24 hours of death	**1**
Mortalities management areas:	always provide at least 2 m depth between base level and groundwater; and are impervious (e.g. concreted or sealed for a design permeability of 1 X 10-9 m/s for a depth of 300 mm)	**1**
Mortalities management. Carcasses that are composted or buried are:	always promptly covered with at least 300 mm of sawdust or alternative carbon source (if composting) or soil (if burying) and continuously kept covered	**1**
Mortalities management. Location of carcasses that are composted or buried or burned:	occurs within a controlled drainage area with stormwater diverted away from the area	**1**
In the event of mass mortalities, there is:	a suitable site selected and a detailed management plan in place for managing mass mortalities, including emergency contact details	**1**
OVERALL RATING	Overall, the mortality management minimises the likelihood of risks to the environment	**1**

Design and Operation Risk Assessment

Chemical Use and Storage

There	are not underground petroleum storage systems (UPSS) on-site

Rating Criteria	Response	Rating
MSDS, emergency response plans for spills and spill kits or suitable clean up equipment are:	provided for all chemicals used	**1**
Quantities of chemicals stored on-farm are:	minimised	**1**
Chemicals with a low toxicity and low water contamination potential are:	preferentially selected	**1**
Chemicals are:	always stored and used in accordance with manufacturer's instructions, and legal requirements, and only in accordance with the registered use; records of use are maintained	**1**
Staff members are:	trained in correct handling and use of all chemicals of relevance to their position	**1**
Empty container and sharps disposal is:	always in accordance with manufacturer's instructions	**1**
petroleum storage systems (UPSS) on-site:	applicable regulatory requirements for monitoring are always followed	**1**
Chemical contractors:	only accredited contractors are engaged	**1**

OVERALL RATING	Overall, the management of chemicals minimises the likelihood of risks to the environment	**1**

Design and Operation Risk Assessment

Managing GHG Emissions

GHG emissions	have not been considered in the design and operation of the piggery	
OVERALL RATING	Overall, the management of GHG emissions minimises the likelihood of risks to the environment	**1**

Overall Risk Assessment

		Natural Resource Vulnerability Ratings (1-4)			
		Soils of Reuse Areas	Groundwater Quality & Availability	Surface Water Quality & Availability	Community Amenity
Design and Operation Risk Ratings (1-4)		**2**	**3**	**1**	**1**
Pig housing	**1**	2	3	1	1
Nutrient content of manure	**1**	2	3	1	1
Effluent collection system	**1**	2	3	1	1
Solids separation system	**0**	0	0	0	0
Effluent treatment system	**2**	4	6	2	2
Solid waste storage / treatment	**1**	2	3	1	1
Mortalities management	**1**	2	3	1	1
Reuse areas	**1**	2	3	1	1
Chemical use and storage	**1**	2	3	1	1
Managing GHG emissions	**1**	2	3	1	1

A combined rating of 1-4 means a low risk and would not trigger any action.
A combined rating of 5-11 means a medium risk and may trigger explanation or action.
A combined rating of 12-16 means a high risk and would trigger explanation or action.

Improving environmental performance might involve changes to design or management or further monitoring.

Environmental Monitoring and Assessment of Sustainability

Community Amenity

Management aims for the piggery to operate in harmony with the nearby community.
One measure of the impact of the piggery on nearby residents is the number of complaints received.
Consequently, any complaints from either regulators or neighbours are taken seriously.
Receipt of a complaint triggers an investigation into the possible causes and corrective and / or preventative action as required.

Details of complaints received, investigations, findings of investigations, corrective and / or preventative actions taken and communications with

the party that lodged the complaint and / or the complainant are documented in a "Complaints Register".

Soils

The "National Environmental Guidelines for Indoor Piggeries" recommend soil monitoring frequencies based on the risk posed by reuse at that site.

Where there is high risk of soil impacts, annual soil monitoring is imperative.
If the risk is medium, and three years of annual monitoring data demonstrate the system is sustainable, soils should be sampled and analysed at least every two years.
If the risk is low, and three years of annual monitoring data demonstrate the system is sustainable, soils should be sampled and analysed at least every three years.

In this case the risk is:	Low	**2**

Parameter	Depth
pH	0-0.1 m 0.3-0.6 m or base of root zone
Electrical conductivity (EC_{SE})	0-0.1 m 0.3-0.6 m or 0.3-base of root zone
Available phosphorus	0-0.1 m 0.3-0.6 m or 0.3-base of root zone *(monitor at depth yearly if sandy)*
Phosphorus sorption capacity or phosphorus sorption index	0-0.6 m or 0 m-base of root zone
Potassium	0-0.1 m 0.3-0.6 m or base of root zone
Organic carbon	0-0.1 m
Exchangeable cations and CEC	0-0.1 m 0.3-0.6 m or base of root zone

Effluent and Manure

Before reuse, manure products are tested at least annually for the following parameters before the main reuse period.

Effluent	***Manure***
Total nitrogen or TKN (Kjeldahl nitrogen)	Dry matter
Ammonium-nitrogen	Total nitrogen or TKN (Kjeldahl nitrogen)
Nitrage-nitrogen	Ammonium-nitrogen
Total phosphorus	Nitrage-nitrogen
Ortho-phosphorus	Total phosphorus
Potassium	Ortho-phosphorus
Electrical conductivity (EC) and chloride	Potassium
SAR	Organic carbon
	Electrical conductivity (EC) and chloride

Surface Water

Surface water monitoring is not warranted because there is no direct discharge to waterways and because secondary protection measures are in place.

Groundwater - ideally sample upslope and downslope of source		0	1
In this case the risk is:	Medium	**6**	
		Frequency (quarterly to bi-annually to annually)	
Parameter		High Risk	Med. Risk
EC		Yes	Maybe
Nitrate-nitrogen		Yes	Maybe
Total phosphorus	*sandy soils only*	Maybe	Maybe

Results of monitoring are interpreted against the National Environmental Guidelines for Indoor Piggeries and Action Plans developed if needed.

Contingency Plans

Contingency plans are needed to address potential emergency situations that pose a risk to the environment.
It is not possible to identify all possible emergency situations and further situations may be identified in the future.

In the event of an emergency situation, the 24 hour contact phone number is:	*+61 407948291*

Loss of Water Supply

A constant water supply is integral to the operation of the piggery.

To ensure a constant supply, the piggery has:	arrangements in place to obtain water from an alternative source

Loss of Power

Power:	is needed to operate the piggery and a back-up generator is kept on-site.

Interruption to Feed Supply

To ensure a constant supply of feed:	at least two days prepared feed is kept on-site

Flooding

Flooding:	is not a concern due to the location of the piggery

Fire

In the event of a fire in, or near the piggery, staff safety is the highest priority.

The local rural fire bridgade will be called on:	*000*
If it is safe, piggery staff will:	take action to prevent the spread of the fire to other buildings.

Disease Outbreak

In the event of a disease outbreak, piggery management will contact:	a local veterinarian
by telephoning:	0428270091

Mass Mortalities

In the event of mass mortalities, piggery management will contact:	the Chief Veterinary Officer, EPA and Council
by telephoning:	*0428270091 / 61 2 9995 5555*

Chemical Spill

In the event of a chemical spill:	the spill kit is used

Biogas Risks

Leaking biogas could pose a number of risks including fire and explosion, adverse health risks for humans and animals and asphyxiation risks if released into confined spaces.

Risk:	management needs further consideration
In the event of a biogas leak, fire or explosion ensure staff are safe and contact emergency services and the gas safety regulator for assistance:	*N/A*

Records to be Kept

EMP Review	Yes	All EMPs should include this record.
Action Plans	Yes	Select "yes" if you have plans / intend to develop specific plans to improve design or management to reduce risk
Environmental Training Record	Yes	All EMPs should include this record.
Complaints Record	Yes	All EMPs should include this record.
Environmental Monitoring Record	Yes	If enviromental monitoring is undertaken then this record should be kept.
Effluent Reuse Record	Yes	For on-site reuse
Manure Reuse Record	No	For on-site reuse
Manure Export Record	Yes	Select "yes" if you are exporting any effluent or manure for reuse
Duty of Care for Off-site users	Yes	Select "yes" if you are exporting any effluent or manure for reuse
Pesticide Use Record	Yes	Applies if you use herbicides, insecticides or baits
Environmental Incident Record	Yes	All EMPs should include this record.
Pollution Monitoring Data Report	Yes	Applicable for licenced NSW operations

NPI Reporting

Piggeries trigger NPI reporting responsibilities if they emit over 10 t/yr ammonia, or for emissions to air from fuel or waste combustion exceeding 400 t/yr or 1 t/hr at any time in a reporting year.

NPI reporting is done on-line via: http://www.npi.gov.au/reporting

NGERS Reporting

NGERS reporting is triggered by facilities that produce 25 kt of $C0_2$-e/yr of Scope 1 or 2 emissions or which use or produce over 100 TJ/yr of energy.

Further information is provided in Chapter 20 of the National Environmental Guidelines for Piggeries and at www.cleanenergyregulator.gov.au.

All reporting under the National Greenhouse and Energy Reporting Act 2007 is done through the Emissions and Energy Reporting System (EERS).
For more information, and to report, go to www.cleanenergyregulator.gov.au

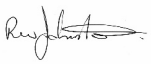
EMP Review

This EMP will be reviewed annually and also whenever significant changes in piggery design or management occur.

Records will be updated as needed.

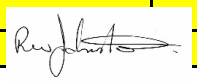
EMP Review Record

Review Date:	*Reviewer Name:*	*Findings:*	*Changes Made (section of EMP, details of change)*	*Reviewer Signature:*
21/01/2021	***R Johnston***	***Meets Standards***	***Secondary Dam walls have been upgraded to meet 300 mm freeboard.***	
1/03/2021	***R Johnston***	***Meets Standards***	Desludge area resurfaced and compacted	
15/10/2020	***R Johnston***	***Meets Standards***	old secondry dam decommisioned	
3/02/2022	R Johnston	Meets Standards	Primamar pond Desludged	
2/02/2024	R Johnston	Meets Standards	Primamar pond Desludged	



Action Plans

Date	*Contact name*	*Need identified*	*Proposed actions (including dates)*	*Actions taken (including dates)*	*Signature*
Feb-21	R Johnston	upgrade irrigation channels	reshape and rebuild irrigation outlets		
Nov-23	R Johnston	increase monitoring points from 3 to 5			



Environmental Training Record

Date of Training	*Trainee Name*	*Training Type*	*Training Provider*	*Training Hours*	*Training Outcomes*	*Supervisor Signature (Signature & Date)*	*Trainee (Signature & Date)*
					chemicals		

Complaints Record

Complaint Details

Date of complaint: Nil Complaints recieved

Time of complaint:

Name of person advising of complaint:

Complainant name (if known):

Complainant phone number (if known):

Method of complaint:

Details

☐ phone call ☐ fax ☐ email ☐ in-person ☐ other:

Nature of complaint:

Details

☐ odour ☐ noise ☐ water ☐ dust ☐ other:

Details:

Investigation Details

Temperature at time of alleged nuisance:

☐ cold ☐ cool ☐ mild ☐ warm ☐ hot ☐ very hot

Wind strength at time of alleged nuisance:

☐ calm ☐ light ☐ moderate ☐ fresh ☐ strong ☐ gale

Wind direction at time of alleged nuisance:

☐ N ☐ NE ☐ E ☐ SE

☐ S ☐ SW ☐ S ☐ SW ☐ W ☐ NW

Direction from piggery (or reuse area) to complainant (if known):

Approximate distance from piggery (or reuse area) to complainant (if known):

Person responsible for investigating complaint:

Investigating method (description, date):

Signficant activities at time of alleged nuisance:

Findings of investigation:

Action Taken

Corrective / preventative actions and date actions taken:

Communications with person advising of complaint and / or complainant (content and date):

Issue resolved? ☐ Yes ☐ No

If no:

Further investigation and corrective / preventative actions (if warranted):

Further communications with complainant:

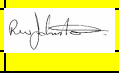
Issue resolved? ☐ Yes ☐ No

If no, continue with investigation and corrective / preventative actions (if warranted)

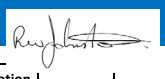
Signature of investigator:

Date investigation closed:

Environmental Monitoring Record

Date	Name	Element	Action	Further Actions Needed	Signature
		e.g. soil, effluent, manure, surface water, groundwater	e.g. sampling, sample dispatch, results received, results sent to regulators, results filed (where), results put on website		
Sep-24		as per attached Return and reported records			

Effluent Reuse Record



Date	Name	Volume of Effluent (l)	for Irrigation	Irrigated (ha)	Irrigation Rate (L/ha)	Concentration (mg/L)	P Concentration (mg/L)	Concentration (mg/L)	N Application (kg/ha)	Application (kg/ha)	K Application (kg/ha)	Signature
1/7/23 to 30/6/24	**Meter Reading**	**247.331**	**287.906**	**40.575**								
Dec-23	Licenced area	16,900,000	Main	20	845,000.0	0.009	0.042	0.0682	7.605	35.49	5.7629	
Jan-24		18,500,000	Corn	22	840,909.1	0.009	0.042	0.0682	7.6	35.3	5.735	
Feb-24		5,170,000	Contingent	22	235,000.0	0.009	0.042	0.0682	2.1	9.9	1.6027	
					#DIV/0!				#DIV/0!	#DIV/0!	#DIV/0!	
					#DIV/0!				#DIV/0!	#DIV/0!	#DIV/0!	
					#DIV/0!				#DIV/0!	#DIV/0!	#DIV/0!	
	Total	40,570,000			#DIV/0!				#DIV/0!	#DIV/0!	#DIV/0!	

Manure Reuse Record

Date	Name	Mass of Manure (t)	Paddock for Spreading	Area Spread (ha)	Spreading Rate (DM t/ha)	N Concentration (kg/t DM)	P Concentration (kg/t DM)	K Concentration (kg/t DM)	N Application (kg/ha)	P Application (kg/ha)	K Application (kg/ha)	Signature
Feb-24	PIC	500	PIC Farmlands	100	5				0	0	0	

Manure Exports Record

Date	Description e.g. aged spent bedding	Quantity (t / m3)	Recipient Name	Recipient Address	Recipient Phone No.	Intended Use	Analysis Provided?	Duty of Care Statement Provided?	Signature
1-Feb	Desludge solids	2600	***B Gawne***	***Grong Grong***	***0427487505***	*soil conditioning*	***Yes***	***no***	
	Desludge solids	1000	A Ferguson	***Grong Grong***	0439648535	*soil conditioning*	***Yes***	***no***	
	Desludge solids	1000	A Gillespie	***Grong Grong***	0429164840	*soil conditioning*	***Yes***	***no***	
	Total	4600							

Duty of Care for Off-Site Users

Aged spent bedding and bedding compost from piggeries are great sources of nutrients for plant growth and carbon for building soil structure.
However, like inorganic fertilisers, they need to be spread on suitable areas and applied at sustainable rates to ensure the environment is protected.
Those utilising spent bedding or compost must take all reasonable and practical steps to prevent harm to the environment and to areas of cultural heritage sensitivity.
Each state has its own Acts detailing duty of care provisions. These typically require:

- sustainable use of natural resources
- conservation of biological diversity
- avoidance of harm to Indigenous cultural heritage.

In particular, spreading of spent bedding or compost needs to be managed to avoid:

- land degradation (e.g. soil erosion, decline in soil structure, nutrient overloading)
- odour and dust nuisance
- surface water and groundwater pollution with nutrients and sediment
- increased weeds
- noise nuisance

To minimise the likelihood of these potential impacts:

- minimise the risk of spent bedding or compost spillage during transportation by not overfilling the truck and by covering the load.
- where practical, avoid transport routes with a large number of houses close to the road.
- spent bedding and compost should not be stored or spread on areas that are flood-prone. Nor should they be stored or spread on areas where they will pose a significant risk of nutrient transfer to watercourses (e.g. sloping land immediately abutting a watercourse).
- check the weather forecast before spreading spent bedding or compost and delay spreading if heavy rain is expected or the soil is still very wet following heavy rain. Also check the wind speed and direction to ensure the prevailing wind is not blowing directly towards nearby residences.
- plan to spread spent bedding or compost from mid-morning to early-afternoon when good odour dispersion is likely. Avoid spreading from mid-afternoon to evening. Avoid spreading just before weekends or during holiday periods, particularly if close to a public area.
- determine a suitable spreading rate based on the N, P and K content of the spent bedding or compost, soil properties and the intended land use of the reuse area. The rate should be consistent with the ability of soils and plants grown on the area to sustainably use the applied nutrients, salts and carbon in the spent bedding or compost.
- calibrate the spreader to spread at the target rate.
- monitor reuse areas for weeds and control these if necessary. Although the aging and composting processes can destroy most weed seeds, some seeds may remain viable.
- avoid spreading spent bedding or compost close to sensitive neighbours at night when noise may create nuisance.
- do not allow grazing stock to access stored manure or reuse areas for at least three weeks after spreading.

Pestcide Use Record

Date	*Name*	*Type of Pesticide*	*Product Name*	*Location Used*	*Method of Use*	*Quantity Used*	*Signature*
		e.g. herbicide, rat bait, insecticide					
Sep-20		Fox Bait	1080	Deadpit and around Piggery	wing bait	3kg	
Apr-21		Fox Bait	1081	Deadpit and around Piggery	wing bait	3kg	
RatBait Program - within piggery - APIQ							

Environmental Incident Record

Date	*Name*	*Incident Description*	*Actions Taken (including regulator contact)*	*Corrective / Preventative Actions Needed*	*Corrective / Preventative Actions Taken (including date)*	*Signature*
	Nil					

Pollution Data Monitoring Report

Under the NSW *Protection of the Environment Operations Act 1997* (POEO Act), holders of environment protection licences (licensees) must publish or make pollution monitoring data available to members of the public.

The specific requirements for providing monitoring results are set out in section 66(6) of the POEO Act. In summary, this provision requires that:

· licensees who undertake monitoring as a result of a licence condition must publish or make available pollution monitoring data within 14 days of obtaining the data and/or receiving a specific request for a copy of the data·

· licensees who maintain a website must make the monitoring data related to pollution available in a prominent position on their website

· licensees who do not maintain a website must provide a free of charge copy of the pollution monitoring data on reasonable written request from any person

· the data must be published in accordance with requirements issued in writing by the EPA.

Date:	30/09/2020
Monitoring Location:	Secondary Dam Discharge point
Material for Sampling:	Meter
Monitoring Frequency Required by Licence:	Daily Discharge volume
Monitoring Frequency Requirement Met:	Met
If not, when and why?	

Pollutant	*Units of Measurement*	*Min. Value (for year)*	*Mean Value (for year)*	*Max. Value (for year)*	*Discharge / Emissions limit*	*If Discharge / Emission limit not met, why?*
Piggery Liquid Waste	***62.47***				***73 Meg***	***Met***
NIP Report- 30/09/2019 Ammonia	kg/year				***46698***	***met***
Attached as per Annual return Sampling						