Permit

Environmental Protection Act 1994

Environmental authority EPPR00474613

This environmental authority is issued by the administering authority under Chapter 5 of the Environmental Protection Act 1994*.*

Environmental authority number: EPPR00474613

Environmental authority takes effect on the date signed by the delegate.

The anniversary date of this environmental authority is 12 November each year.

Environmental authority holder

Name	Registered address
Thomas Borthwick & Sons (Australia) Pty. Ltd. (A.B.N. 12 006 525 104)	113 Main Street Bakers Creek MACKAY QLD 4740

Environmentally relevant activity and location details

Environmentally relevant activities	Locations
ERA 25 (2c) Meat processing: Processing, including rendering, in a year, more than 50,000t of meat or meat products ERA 53(b) Organic material processing: Processing more than 200t of organic material in a year by composting the organic material	Lot 4 on Plan RP714821, 109 Main Street, Bakers Creek, QLD Lot 3 on Plan RP704776, Main Street, Bakers Creek, QLDLot 5 on Plan RP714821, 111 Main Street, Bakers Creek, QLD Lot 1 on Plan RP739555, 113 & 113A Main Street, Bakers Creek, QLD Lot 1 Plan CI2746 - Main Street, Bakers Creek

Additional information for applicants

Environmentally relevant activities

The description of any environmentally relevant activity (ERA) for which an environmental authority (EA) is issued is a restatement of the ERA as defined by legislation at the time the EA is issued. Where there is any inconsistency between that description of an ERA and the conditions stated by an EA as to the scale, intensity or manner of carrying out an ERA, the conditions prevail to the extent of the inconsistency.

An EA authorises the carrying out of an ERA and does not authorise any environmental harm unless a condition stated by the EA specifically authorises environmental harm.

A person carrying out an ERA must also be a registered suitable operator under the *Environmental Protection Act 1994* (EP Act).

Contaminated land

It is a requirement of the EP Act that an owner or occupier of contaminated land give written notice to the administering authority if they become aware of the following:

- the happening of an event involving a hazardous contaminant on the contaminated land (notice must be given within 24 hours); or
- a change in the condition of the contaminated land (notice must be given within 24 hours); or
- a notifiable activity (as defined in Schedule 3) having been carried out, or is being carried out, on the contaminated land (notice must be given within 20 business days)

that is causing, or is reasonably likely to cause, serious or material environmental harm.

For further information, including the form for giving written notice, refer to the Queensland Government website www.qld.gov.au, using the search term 'duty to notify'.

Take effect

Please note that, in accordance with section 200 of the EP Act, an EA has effect:

a) if the authority is for a prescribed ERA and it states that it takes effect on the day nominated by the holder of the authority in a written notice given to the administering authority – on the nominated day; or

b) if the authority states a day or an event for it to take effect – on the stated day or when the stated event happens; or

c) otherwise – on the day the authority is issued.

However, if the EA is authorising an activity that requires an additional authorisation (a relevant tenure for a resource activity, a development permit under the *Planning Act 2016* or an SDA Approval under the *State Development and Public Works Organisation Act 1971*), this EA will not take effect until the additional authorisation has taken effect.

If this EA takes effect when the additional authorisation takes effect, you must provide the administering authority written notice within 5 business days of receiving notification of the related additional authorisation taking effect.

The anniversary day of this environmental authority is the same day each year as the effective date. The payment of the annual fee will be due each year on this day.

If you have incorrectly claimed that an additional authorisation is not required, carrying out the ERA without the additional authorisation is not legal and could result in your prosecution for providing false or misleading information or operating without a valid environmental authority.

	23 November 2021
Signature	Date

Liz Clarke
Department of Environment and Science
Delegate of the administering authority
Environmental Protection Act 1994

Enquiries:
Utilities and Government Organisations Assessment
Department of Environment and Science
Phone: 1300 130 372
Email: palm@des.qld.gov.au

Obligations under the *Environmental Protection Act 1994*

In addition to the requirements found in the conditions of this environmental authority, the holder must also meet their obligations under the EP Act, and the regulations made under the EP Act. For example, the holder must comply with the following provisions of the Act:

- general environmental duty (section 319)
- duty to notify environmental harm (section 320-320G)
- offence of causing serious or material environmental harm (sections 437-439)
- offence of causing environmental nuisance (section 440)
- offence of depositing prescribed water contaminants in waters and related matters (section 440ZG)
- offence to place contaminant where environmental harm or nuisance may be caused (section 443)

Other permits required

This permit only provides an approval under the *Environmental Protection Act 1994*. In order to lawfully operate you may also require permits / approvals from your local government authority, other business units within the department and other State Government agencies prior to commencing any activity at the site. For example, this may include permits / approvals with your local Council (for planning approval), the Department of Transport and Main Roads (to access state controlled roads), the Department of Resources (to clear vegetation), and the Department of Agriculture and Fisheries (to clear marine plants or to obtain a quarry material allocation).

Obligations under the *Mining and Quarrying Safety and Health Act 1999*

If you are operating a quarry, other than a sand and gravel quarry where there is no crushing capability, you will be required to comply with the *Mining and Quarrying Safety and Health Act 1999*. For more information on your obligations under this legislation contact Mine Safety and Health at www.resources.qld.gov.au, or phone 13 QGOV (13 74 68) or your local Mines Inspectorate Office.

Development Approval

This permit is not a development approval under the *Planning Act 2016*. The conditions of this environmental authority are separate, and in addition to, any conditions that may be on the development approval. If a copy of this environmental authority is attached to a development approval, it is for information only, and may not be current. Please contact the Department of Environment and Science to ensure that you have the most current version of the environmental authority relating to this site.

Conditions of environmental authority

Environmentally relevant activities	Locations
ERA 25(2c) Meat processing: Processing, including rendering, in a year, more than 50,000t of meat or meat products ERA 53(b) Organic material processing: Processing more than 200t of organic material in a year by composting the organic material	Lot 4 Plan RP714821, 109 Main Street, Bakers Creek, QLD Lot 3 Plan RP704776, Main Street, Bakers Creek, QLDLot 5 Plan RP714821, 111 Main Street, Bakers Creek, QLD Lot 1 Plan RP739555, 113 & 113A Main Street, Bakers Creek, QLD Lot 1 Plan CI2746 - Main Street, Bakers Creek

The environmentally relevant activity conducted at the location as described above must be conducted in accordance with the following site-specific conditions of the approval.

Agency interest: General	
Condition number	**Condition**
G1	All reasonable and practicable **measures** must be taken to prevent the likelihood of environmental harm being caused.
G2	Other than permitted by this environmental authority, the **release of a contaminant into the environment** must not occur.
G3	Any breach of a condition of this environmental authority must be reported to the **administering authority** as soon as practicable, or at most, within 24 hours of becoming aware of the breach. Records must be kept including full details of the breach and any subsequent actions undertaken.
G4	All **records** must be kept for a period of at least five years and provided to the **administering authority** upon request.
G5	An **appropriately qualified person(s)** must monitor, record and interpret all parameters that are required to be monitored by this environmental authority and in the manner specified by this environmental authority.
G6	**You** must record the following details of all environmental complaints received: a) date and time the complaint was received; b) name and contact details of the complainant when provided and authorised by the complainant; c) nature of the complaint; d) investigation undertaken; e) conclusions formed; and f) actions taken.

G7	When required by the **administering authority,** monitoring must be undertaken in the manner prescribed by the **administering authority** to investigate a complaint of **environmental nuisance** arising from the **activity.** The monitoring results must be provided within 10 business days to the **administering authority** upon its request.
G8	The **activity** must be undertaken in accordance with written procedures that: a) identify potential risks to the environment from the **activity** during routine operations, closure and an emergency; b) establish and maintain control **measures** that minimise the potential for environmental harm; c) ensure plant, equipment and **measures** are maintained in a proper and effective condition; d) ensure plant, equipment and **measures** are operated in a proper and effective manner; e) ensure that staff are trained in and aware of their obligations under the *Environmental Protection Act 1994;* and f) ensure that reviews of environmental performance are undertaken at least annually.
G9	All reasonable and practicable **measures** must be taken to exclude vectors and pest species to the extent necessary to prevent: a) **environmental nuisance** to occupiers of neighbouring premises; and b) any danger or risk to the health of any persons.
G10	All analyses required under this environmental authority must be carried out by a laboratory that has National Association of Testing Authorities **(NATA)** certification, or an equivalent certification, for such analyses.
G11	Chemicals and fuels in containers of greater than 15 litres must be stored within a **secondary containment system.**
Agency interest: Air	
Condition number	**Condition**
A1	Odours or airborne contaminants must not cause **environmental nuisance** to any **sensitive place** or **commercial place.**
A2	Contaminants must only be released to air from the point source(s) in accordance with *Table 1— Point source air release limits, Table 2— Required Release Point Determinations* and the associated requirements.

Table 1 — Point source air release limits

Source Description	Release Point Number and Stack Description	Minimum Release Height (metres)	Contaminant	Release Limit	Minimum Efflux Velocity (Metres/second)
Main Boiler Stack	A1	28	Particulates	0.1 g/Nm3	15
Odour Condener Stack #1	A2	2	-	-	10
Odour Condenser Stack #2	A3	2	-	-	10
Blood Furnace Stack	A4	5	-	-	20

Table 2 – Required Release Point Determinations

Determination Required	Release Point Number	Frequency
Particulates (g/Nm^3) Gas velocity (m/sec) Volume flow rate (Nm3/min) Temperature (°C) Moisture concentration (%)	A1	Every 6 months

Associated requirements

1. Air Monitoring must be in accordance with the current edition of the administering authority's *Air Quality Sampling Manual.*
2. Monitoring must comply with the *Australian Standard AS 4323.1 - 1995 "Stationary source emissions Method 1: Selection of sampling provisions".*
3. Samples taken must be representative of the contaminants discharged when emissions are expected to be normal.
4. Contaminants released from each release point specified in Table 1 of the Air Schedule must be directed vertically upwards without any impedance or hindrance.

A3	**Dark Smoke: Normal Operations** Dark smoke must not be emitted to the atmosphere from release point A1, except as permitted by condition A5.
A4	**Dark Smoke: Start up and soot blowing**

	Dark smoke may be emitted to the atmosphere for a period **not** exceeding thirty minutes after start-up of the coal fired boiler and during use of any soot blowers associated with the use of the coal fired boiler.
A5	The sulphur content of any fuel burned in industrial fuel burning equipment is not to exceed 1 percent by weight.
A6	The fuels that may be burned in fixed industrial fuel burning equipment are coal and propane gas.
Agency interest: Water	
Condition number	**Condition**
W1	Contaminants must only be released to surface **waters** in accordance with *Table 3 - Contaminant release points and release limits,* the associated requirements and condition W7.

Table 3 — Contaminant release points and release limits

Authorised Released Location	Quality Characteristics	Minimum	Median	Maximum	Frequency of monitoring
RP1: The 100mm PVC pipe from the NW corner of the property to Bakers Creek to a reference point marked "RP1" on attached plan (Schedule 1 and 2)	5-day Biochemical Oxygen Demand	-	-	20 (mg/L)	Fortnightly
	Suspended Solids	-	-	30 (mg/L)	Fortnightly
	pH	6.5		8.5	Fortnightly
	Dissolved Oxygen	5 (mg/L)	-	-	Fortnightly
	Free Residual Chlorine	-	-	0.7 (mg/L)	Fortnightly
	Ammonia	-	-	10 (mg/L)	Fortnightly
	Total Nitrogen	-	-	100 (mg/L)	Fortnightly
	Total Phosphorus as P.	-	-	30 (mg/L)	Fortnightly
	Oil and Grease	-	-	10 (mg/L)	Fortnightly
	Thermotolerant coliforms		1000 (cfu/100ml)	4000 (cfu/100m1)	Fortnightly

Associated requirements

1. Release locations must be in accordance with Thomas Borthwick and Sons, Mackay, Site Map 2016 attached.
2. Monitoring must be in accordance with the relevant guidelines.
3. Monitoring must be undertaken any time the activity is in operation.
4. Monitoring must be undertaken during a release.

	5. Monitoring records must be kept for a minimum of 5 years. 6. All monitoring devices must be effectively calibrated and maintained in accordance with the relevant Australian standard. 7. Monitoring must be taken when emissions are expected to be representative of actual operating conditions for the sample frequency period. 8. Water Quality Monitoring must be in accordance with the methods prescribed in the current edition of the **administering authority's** *Monitoring and Sampling Manual.*
W2	In addition to condition W1, the release to **waters** must not produce any slick or other visible evidence of oil or grease, nor contain visible floating oil, grease, scum, litter or other visually objectionable matter.
W3	The total quantity of contaminants released from release point RP1 during any day must not exceed 2000 cubic metres on any one day.
W4	**Times of Release** The release of contaminants to waters must only occur on ebbing tides, for not more than 4 hours per ebb, and only during the period from 60 minutes before local high water until 3 hours after local high water.
W5	The daily quantity of contaminants released from discharge point RP1 must be determined by a method that is accurate within +/- 5%.
W6	The stormwater runoff from disturbed areas, generated by (up to and including) a **24 hour storm event with an average recurrence interval (ARI) of one-in-ten years** must be retained on site and can only be released after the event where: a) beneficial reuse on site is not viable; b) a release is required to maintain the required stormwater retention capacity; and c) there are no contaminants present or at concentrations which may cause environmental harm. *NOTE: RP3: The stormwater release point of the detention basin discharging into Bakers Creek. Marked "RP3" on attached Thomas Borthwick and Sons, Mackay, Site Map 2016.*
W7	Ponds used for the storage of industrial waters must be constructed and maintained to achieve a) a 0.5 metre freeboard; or b) a continuous levee around the perimeter of all ponds of at least 0.5 metres in height above the highest water level.
W8	Suitable banks and or diversion drains must be installed and maintained to exclude stormwater runoff from any ponds or other structures used for the storage or treatment of contaminants or wastes.
W9	You are responsible for the making of determinations and keeping of records of the water quality of the receiving environment, quality characteristics and at the frequency specified in *Table 4 — Surface water monitoring requirements.*

Table 4 — Surface water monitoring requirements

QUALITY CHARACTERISTIC DETERMINATION	MONITORING POINTS	Frequency
Enterococci (cfu/100ml)	Mid-stream within Bakers Creek approximately 50 metres downstream from RP1	Three Monthly (within 1 hour of high tide during a discharge event)
Enterococci (cfu/100ml)	Mid-stream within Bakers Creek approximately 20 metres upstream from RP1	Three Monthly (within 1 hour of high tide during a discharge event)
Enterococci (cfu/100ml)	Mid-stream within Bakers Creek approximately 10 metres from RP1	Three Monthly (within 1 hour of high tide during a discharge event)
Enterococci (cfu/100ml)	Mid-stream within Bakers Creek approximately 20 metres upstream from the Bruce Highway bridge	Three Monthly (within 1 hour of high tide during a discharge event)

Associated monitoring requirements

1. Monitoring must be in accordance with the relevant guidelines.
2. Monitoring must be undertaken any time the activity is in operation.
3. Monitoring must be undertaken during a release.
4. Monitoring records must be kept for a minimum of 5 years.
5. All monitoring devices must be effectively calibrated and maintained in accordance with the relevant Australian Standard.
6. Monitoring must be taken when emissions are expected to be representative of actual operating conditions for the sample frequency period.
7. Water Quality Monitoring must be in accordance with the methods prescribed in the current edition of the **administering authority's** *Monitoring and Sampling Manual.*

Agency interest: Noise	
Condition number	**Condition**
N1	Noise generated by the **activity** must not cause **environmental nuisance** to any **sensitive place** or **commercial place.**
Agency interest: Land	
Condition number	**Condition**
L1	Land that has been disturbed for activities conducted under this environmental authority must be rehabilitated in a manner such that: (a) the potential for erosion is minimised;

<table>
<tr><td></td><td>(b) the quality of water, including seepage, released from the site does not cause environmental harm;
(c) the potential for environmental nuisance caused by dust is minimised;
(d) the water quality of any residual water body does not have potential to cause environmental harm; and
(e) suitable native species of vegetation for the location are established and sustained for earthen surfaces where beneficial for the end land use.</td></tr>
<tr><td>L2</td><td>An area which provides an impervious barrier to subsoil and groundwater must be used for:
(a) receiving, mixing and storing processing materials for the activity; and
(b) collecting and storing leachate.</td></tr>
<tr><td>L3</td><td>Contaminants must only be released to land in accordance with Table 5 – Land release limits. The only contaminants to be released from the licenced place to land at the authorised release point RP2, RP4 and RP5 are treated effluent and collected stormwater.

Table 5 – Land release limits

<table>
<tr><th>Authorised Release Point</th><th>Quality Characteristics</th><th>Minimum</th><th>Maximum</th><th>Monitoring Frequency</th></tr>
<tr><td rowspan="6">RP2, RP4 and RP5: Point of transfer to irrigation system – reference point marked “RP2, RP4 and RP5” on attached plan (Schedule 1 and 2).</td><td>5-day Biochemical Oxygen Demand (BOD_5)</td><td>-</td><td>-</td><td>Monthly</td></tr>
<tr><td>pH</td><td>6.5</td><td>9.0</td><td>Monthly</td></tr>
<tr><td>Total Nitrogen</td><td>-</td><td>100mg/L</td><td>Monthly</td></tr>
<tr><td>Total Phosphorus</td><td>-</td><td>50mg/L</td><td>Monthly</td></tr>
<tr><td>Total Dissolved Salts</td><td>-</td><td>2,000mg/L</td><td>Monthly</td></tr>
</table></td></tr>
<tr><td>L4</td><td>Treated effluent released to land must be done in accordance with documentation that ensures:
a) drainage to groundwater and subsurface flows of contaminants to surface waters are prevented;
b) surface pondage and run-off of effluent is prevented;
c) degradation of soil structure is minimised;
d) soil sodicity and the build-up of nutrients and heavy metals in the soil and subsoil are minimised;
e) spray drift or overspray does not carry beyond effluent disposal areas;
f) effluent disposal areas are maintained with an appropriate crop in a viable state for transpiration and nutrient uptake; and
g) sufficient buffer zones are maintained between irrigation sites and sensitive environmental receptors.</td></tr>
<tr><td>L5</td><td>When weather conditions or soil conditions preclude the release of treated effluent to land, effluent must not be irrigated to land.</td></tr>
</table>

L6	Treated effluent may be removed from the site and used for an alternate purpose, with the written consent of any third party involved.
L7	The use of effluent should be practised in a way which protects the long term use of the land for agriculture or other existing use, protects the groundwater system and does not result in environmental harm to waters through either surface or subterranean flows.
L8	**You** must submit details of the quantity of effluent discharged to each third party for each calendar year with the Annual Return.
Agency interest: Waste	
Condition number	**Condition**
WA1	All waste generated in carrying out the **activity** must be lawfully reused, recycled or removed to a facility that can lawfully accept the waste.
WA2	Any organic solid waste materials including paunch, yard scrapings, treatment sludges and vehicle washdown sludges must be handled and treated so that: a) no **leachate** is released to any **waters**; b) no odour nuisance is caused; and c) wastes are managed in accordance with any control measures implemented.
WA3	Waste storage areas must be bunded to prevent contamination of stormwater flows.
WA4	The tallow storage area must be appropriately bunded, with a lockable drainage valve.

Definitions

Key terms and/or phrases used in this document are defined in this section and bolded throughout this document. Where a term is not defined, the definition in the *Environmental Protection Act 1994*, its regulations or environmental protection policies must be used. If a word remains undefined it has its ordinary meaning.

Activity means the environmentally relevant activities, whether resource activities or prescribed activities, to which the environmental authority relates.

Administering authority means the Department of Environment and Science or its successor or predecessors.

Appropriately qualified person(s) means a person or persons who has professional qualifications, training, skills or experience relevant to the nominated subject matter and can give authoritative assessment, advice and analysis to performance relative to the subject matter using the relevant protocols, standards, methods or literature.

Commercial place means a place used as a workplace, an office or for business or commercial purposes and includes a place within the curtilage of such a place reasonably used by persons at that place.

Measures has the broadest interpretation and includes plant, equipment, physical objects, bunding, containment systems, monitoring, procedures, actions, directions and competency.

Waters includes river, stream, lake, lagoon, pond, swamp, wetland, unconfined surface water, unconfined water, natural or artificial watercourse, bed and bank of any waters, dams, non-tidal or tidal waters (including the sea), stormwater channel, stormwater drain, roadside gutter, stormwater run-off, and groundwater and any part thereof.

You means the holder of the environmental authority.

24 hour storm event with an average recurrence interval (ARI) of one-in-ten years means the maximum rainfall depth from a 24 hour duration precipitation event with an average recurrence interval of once in 10 years. For example, at location XX an Intensity-Frequency-Duration table for a 24 hour duration event with an average recurrence interval of 1 in 10 years, identifies a rainfall intensity of 8.2mm/hour. The rainfall depth for this event is therefore 24 hour x 8.2mm/hour = 196.8mm.

Schedules

Schedule 1 – Site Map



Schedule 2 – GPS Release points

Table 1: GPS coordinates for water release points to waters and land

Water Release Point	Physical Description	GPS Location
RP-1	RP1: The outlet NW corner of the property into Bakers Creek	-21.215015998252415, 149.1491966353993
RP-2	RP2: Pumping station northern bank of Pond 7 to irrigation system	-21.210332906960073, 149.1555350185968
RP-4	RP4: Pumping station eastern bank of Pond 6 to irrigation system	-21.210705482821268, 149.15495297928783
RP-5	RP5: Pumping station northern bank of Pond 9 to irrigation system	-21.21353516579108, 149.1490753167574

Table 2: GPS coordinates for the Bakers Creek monitoring points

Bakers Creek Monitoring Point	Physical Description	GPS Location
MP 50 DS	Mid-stream within Bakers Creek approximately 50 metres downstream from RP1	-21.215376060160413, 149.14931733481126
MP 20 US	Mid-stream within Bakers Creek approximately 20 metres upstream from RP1	-21.21533535159301, 149.14836465961062
MP =10	Mid-stream within Bakers Creek approximately 10 metres from RP1	-21.21515532069918, 149.14905666948025
MP 50 DS	Mid-stream within Bakers Creek approximately 20 metres upstream from the Bruce Highway bridge	-21.215765424506092, 149.14874016884218

END OF ENVIRONMENTAL AUTHORITY