Permit[1]

Environmental Protection Act 1994

Environmental authority

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

Permit[1] number: EPPR00203413

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

The anniversary date of this environmental authority is 1 February.

An annual return and the payment of the annual fee will be due each year on this day.

Environmental authority holder

Name	Registered address
Ergon Energy Queensland Pty Ltd	32 - 46 Dalrymple Road GARBUTT QLD 4814

Environmentally relevant activity and location details

Environmentally relevant activity	Location
14-(1) Electricity generation >10MW gas	Barcaldine Power Station Capricorn Highway, Barcaldine QLD 4725 Lot 2 Plan RP902908

Additional information for applicants

Environmentally relevant activities

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

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

[1] Permit includes licences, approvals, permits, authorisations, certificates, sanctions or equivalent/similar as required by legislation

Queensland Government

Contaminated land

It is a requirement of the EP Act that if an owner or occupier of land becomes aware a notifiable activity (as defined in Schedule 3 and Schedule 4) is being carried out on the land, or that the land has been, or is being, contaminated by a hazardous contaminant, the owner or occupier must, within 22 business days after becoming so aware, give written notice to the chief executive.

Signature	Date
CMooney	25/8/15

Chris Mooney
Department of Environment and Heritage Protection
Delegate of the administering authority
Environmental Protection Act 1994

Enquiries:
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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)

Conditions of environmental authority

Environmentally relevant activity	**Location**
14-(1) Electricity generation >10MW gas	Barcaldine Power Station Capricorn Highway, Barcaldine QLD 4725 Lot 2 Plan RP902908

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

Agency interest: General	
Condition number	**Condition**
G1	Any breach of a condition of this environmental authority must be reported to the **administering authority** as soon as practicable within 24 hours of becoming aware of the breach. **Records** must be kept including full details of the breach and any subsequent actions taken.
G2	All reasonable and practicable **measures** must be taken to prevent or minimise environmental harm caused by the activities.
G3	The **activity** must be undertaken in accordance with written procedures that: a) identify potential risks to the environment from the **activity** during routine operations and emergencies; and b) establish and maintain control **measures** that minimise the potential for environmental harm; and c) ensure plant, equipment and **measures** are maintained in a proper and effective condition; and d) ensure plant, equipment and **measures** are operated in a proper and effective manner; and e) ensure that staff are trained and aware of their obligations under the *Environmental Protection Act 1994*; and f) ensure that reviews of environmental performance are undertaken at least annually.
G4	All **records** must be kept for a period of at least five years and provided to the **administering authority** upon request.
G5	Chemicals and fuels in containers of greater than 15 litres must be stored within a **secondary containment system**.

G6	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.
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	You must record the following details for all environmental complaints received: a) date and time complaint was received b) name and contact details of the complainant c) nature of the complaint d) investigations undertaken e) conclusions formed f) actions taken.

Agency interest: Air

Condition number	**Condition**
A1	Contaminants resulting from the operation of the sources described in Table 1 – *Contaminant release points*, must only be released to the atmosphere from those release points specified in Table 1 – *Contaminant release points*.
A2	Contaminants released from each release point specified in Table 1 – *Contaminant release points* must be directed vertically upwards without any impedance or hindrance.
A3	Contaminants must be released to the atmosphere from a release point at a height not less than the corresponding height stated for that release point in Table 1 – *Contaminant release points*.
A4	Contaminants must be released to the atmosphere from a release point at a velocity not less than the corresponding velocity stated for that release point in Table 1 – *Contaminant release points*.
A5	The concentration of oxides of nitrogen (NOx) in the effluent gas at the release point number A1 (Table 1 – *Contaminant release points*) is not to exceed 275 mg in each **normal cubic metre** of effluent gas calculated as NO2 at a 15 percent oxygen reference level, under **normal operating conditions**.

Table 1 – *Contaminant release points*

SOURCE DESCRIPTION	RELEASE POINT NUMBER AND STACK DESCRIPTION	MINIMUM RELEASE HEIGHT (above ground level) (metres)	MINIMUM EFFLUX VELOCITY @ MAXIMUM RATED LOAD (metres/second)
Stack of Heat Recovery Steam Generator	A1	24	20.5
Bypass Stack of Heat Recovery Steam Generator	A2	24	20.5

Agency interest: Water	
Condition number	**Condition**
WT1	Contaminants must not be released to any **waters**.
WT2	The holder of this environmental authority must maintain bores for the purpose of sampling and analysing groundwater at not less than three locations near the Evaporation Ponds.
WT3	The holder of this environmental authority must take all reasonable and practicable **measures** to obtain groundwater samples that are representative of the groundwater around bores maintained for the purpose of sampling and analysing groundwater.
WT4	The holder of this environmental authority is responsible for ensuring a groundwater monitoring program is performed which complies with the following requirements: (a) All determinations of the quality of groundwater must be made in accordance with methods prescribed in the Department of Environment and Heritage Protection *Water Quality Sampling Manual.* (b) Standing water levels in metres must be measured and recorded on each occasion that samples are obtained. Such measurement must be undertaken prior to any disturbance by sampling, and must be reported as the depth in metres from ground level to the water surface within the bore. (c) Samples of groundwater must be taken from each of the bores at quarterly intervals each year. (d) The samples obtained in accordance with paragraph (c) of this condition must be analysed for: (i) pH (ii) specific electrical conductivity (iii) total dissolved salts (calculated) (iv) Calcium (as CaCo3) (v) sodium (Na) (vi) chloride (Cl) (vii) sulphate (SO4) (viii) fluoride (F)
Agency interest: Noise	
Condition number	**Condition**
N1	Noise generated by the **activity** must not cause **environmental nuisance** to any **sensitive place** or **commercial place**.
N2	In the event of a complaint about noise that the **administering authority** considers is reasonable, then the holder of this environmental authority must monitor and record the $L_{Amax\ adj,T}$ and **Background noise level** at the place from where the complaint originates during the operation period.
N3	The method of measurement and reporting of noise levels must comply with the most recent version of the **administering authority's** *Noise Measuring Manual.*

Agency interest: Waste	
Condition number	**Condition**
W1	Where regulated waste is removed from the licensed place (other than by a release as permitted under another schedule of this environmental authority), the holder of this environmental authority must monitor and keep **records** of the following: (a) the date, quantity and type of waste removed; and (b) name of the waste transporter and/or disposal operator that removed the waste; and (c) the intended treatment/disposal destination of the waste.

Definitions

Key terms and/or phrases used in this document are defined in this section and **bolded** throughout this document. Applicants should note that 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 Heritage Protection or its successors or predecessors.

Appropriately qualified person(s) means a person or persons who has professional qualifications, training, skills and experience relevant to the EA requirement and can give authoritative assessment, advice and analysis in relation to the EA requirement using the relevant protocols, standards, methods or literature.

Background noise level means either:
- (A90,T) being the A-weighted sound pressure level exceeded for 90 percent of the time period not less than 15 minutes, using Fast response, or
- L (Abg,T) being the arithmetic average of the minimum readings measured in the absence of the noise under investigation during a representative time period of not less than 15 minutes, using Fast response.

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.

Environmental nuisance as defined in Chapter 1 of the *Environmental Protection Act 1994*.

$L_{Amax\ adj,T}$ means the average maximum A-weighted sound pressure level, adjusted for noise character and measured over a time period of not less than 15 minutes, using Fast response.

Measures have the broadest interpretation and includes plant, equipment, physical objects, monitoring, procedures, actions, directions and competency.

Normal cubic metre (Nm^3) means the volume of dry gas which occupies 1 cubic metre at a temperature of zero degrees Celsius and at an absolute pressure of 101.3 kiloPascals.

Normal operating conditions is the normal operating state of a unit, and means that the unit is operating on a stable flame. For all practical purposes, this shall be defined as "at, or above, a load of 30 MW".

Records include breach notifications, written procedures, analysis results, monitoring reports and monitoring programs required under a condition of this authority.

Secondary containment system means a system designed, installed and operated to prevent any release of contaminants from the system, or containers within the system, to land, groundwater, or surface waters.

Sensitive place includes the following and includes a place within the curtilage of such a place reasonably used by persons at that place:
1. a dwelling, residential allotment, mobile home or caravan park, residential marina or other residential premises; or
2. a motel, hotel or hostel; or
3. a kindergarten, school, university or other educational institution; or
4. a medical centre or hospital; or
5. a protected area under the *Nature Conservation Act 1992*, the *Marine Parks Act 2004* or a World Heritage Area; or
6. a public thoroughfare, park or garden; or
7. for noise, a place defined as a sensitive receptor for the purposes of the *Environmental Protection (Noise) Policy 2008*.

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.

END OF PERMIT