Permit

Environmental Protection Act 1994

Environmental authority EPPR00336213

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

Environmental authority number: EPPR00336213

Environmental authority takes effect on 29 August 2023

Environmental authority holder(s)

Name(s)	Registered address
ORIGIN ENERGY POWER LIMITED	Level 45, Australia Square 264-278 George Street SYDNEY NSW 2000

Environmentally relevant activity and location details

Environmentally relevant activity/activities	Location(s)
ERA 14 - Electricity generation - 1 - Generating electricity by using gas at a rated capacity of 10MW electrical or more	121/SP178856

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

Queensland Government

- 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.

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.



Signature

29 August 2023

Date

Daniel Spelchan
Department of Environment and Science
Delegate of the administering authority
Environmental Protection Act 1994

Enquiries:
Energy and Extractive Resources
GPO Box 2454, BRISBANE QLD 4001

Phone: (07) 3330 5715

Email: EnergyandExtractive@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).

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

The environmentally relevant activities 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	**Prevent and/or minimise likelihood of environmental harm** In carrying out an ERA to which this approval relates, all reasonable and practicable measures must be taken to prevent and/or to minimise the likelihood of environmental harm being caused.
G2	**Maintenance of Measures, Plant and Equipment** The operator of an ERA to which this approval relates must: (a) install all measures, plant and equipment necessary to ensure compliance with the conditions of this approval; and (b) maintain such measures, plant and equipment in a proper and efficient condition; and (c) operate such measures, plant and equipment in a proper and efficient manner.
G3	**Site Based Management Plan** From commencement of an ERA to which this approval relates, a site based management plan (SBMP) must be implemented. The SBMP must identify all sources of environmental harm, including but not limited to the actual and potential release of all contaminants, the potential impact of these sources and what actions will be taken to prevent the likelihood of environmental harm being caused. The SBMP must also provide for the review and 'continual improvement' in the overall environmental performance of all ERAs that are carried out. The SBMP must address the following matters: (a) Environmental commitments - a commitment by senior management to achieve specified and relevant environmental goals. (b) Identification of environmental issues and potential impacts. (c) Control measures for routine operations to minimise likelihood of environmental harm. (d) Contingency plans and emergency procedures for non-routine situations. (e) Organisational structure and responsibility. (f) Effective communication. (g) Monitoring of contaminant releases. (h) Conducting environmental impact assessments. (i) Staff training. (j) Record keeping. (k) Periodic review of environmental performance and continual improvement.
G4	The site based management plan must not be implemented or amended in a way that contravenes any condition of this approval.

G5	**Records** Record, compile and keep all monitoring results required by this approval and present this information to the administering authority when requested.
G6	All records required by this approval must be kept for 5 years.
G7	All ponds used for the storage or treatment of acid sulfate soils or other contaminants must be constructed, installed and maintained: (a) so as to prevent any release of contaminants through the bed or banks of the pond to any waters (including groundwater); (b) so that a freeboard of not less than 0.5 metres is maintained at all times; and (c) so as to ensure the stability of the ponds' construction.
G8	Suitable banks and/or diversion drains must be installed and maintained to exclude stormwater runoff from entering any ponds or other structures used for the storage or treatment of contaminants including acid sulfate soils or wastes.
G9	**Notification** Telephone the administering authority's Pollution Hotline as soon as practicable after becoming aware of any release of contaminants not in accordance with the conditions of this approval.
G10	Despite condition G9, the following non-compliances need only be recorded, with records provided to the administering authority upon request: (a) unauthorised unintentional releases (i.e., spills) of any of the following to land and which does not subsequently enter any waters: (i) <5,000 L of service/firewater (for a maximum of two events per annum); or (ii) <10,000 L of heat recovery steam generators (HRSG) blowdown water (for a maximum of five events per annum); or (iii) <5,000 L or raw bore water (for a maximum of two events per annum); or (iv) <200 L of close cooling water (CCW) (for a maximum of two events per annum).
G11	**Monitoring** A competent person(s) must conduct any monitoring required by this approval.
G12	**Equipment Calibration** All instruments, equipment and measuring devices used for measuring or monitoring in accordance with any condition of this approval must be calibrated, and appropriately operated and maintained.

Agency interest: Waste	
Condition number	**Condition**
W1	All regulated waste removed from the site must be removed by a person who holds a current approval to transport such waste under the provisions of the *Environmental Protection Act 1994*.

<table>
<tr><th colspan="2">Agency interest: Air</th></tr>
<tr><th>Condition number</th><th>Condition</th></tr>
<tr><td>Air 1</td><td>Dust Nuisance
The release of dust and/or particulate matter resulting from the ERA must not cause an environmental nuisance at any nuisance sensitive or commercial place.</td></tr>
<tr><td>Air 2</td><td>The Release of Contaminants To The Atmosphere
The release of contaminants to the atmosphere from a point source must only occur from those release points identified in Table: Air 1 - Contaminant release limits to air (contaminants release characteristics) and must be directed vertically upwards without any impedance or hindrance.
Table: Air 1 - Contaminants release limits to air (contaminants release characteristics)
<table>
<tr><th>Release point number</th><th>Minimum release height (metres)</th><th>Minimum velocity (m/sec)</th><th>Contaminant release</th><th>Maximum release limit[1]</th></tr>
<tr><td>A1-Generator Stack</td><td>35</td><td>22</td><td>Oxides of Nitrogen</td><td>35 ppmv (dry) @15% O_2 and 21.5 grams/second</td></tr>
<tr><td>A2-Generator Stack</td><td>35</td><td>22</td><td>Oxides of Nitrogen</td><td>35 ppmv (dry) @15% O_2 and 21.5 grams/second</td></tr>
<tr><td>A3-Generator Stack</td><td>35</td><td>22</td><td>Oxides of Nitrogen</td><td>35 ppmv (dry) @15% O_2 and 21.5 grams/second</td></tr>
</table>
Note 1: The above NOx release limits are applicable during all timings except start-up, shut-down and calibration of emission monitoring devices. The start-up duration is allowed up to 275 minutes.</td></tr>
<tr><td>Air 3</td><td>Contaminants must be released to the atmosphere from a release point at a height and a flow rate not less than the corresponding height and velocity stated for that release point in Table: Air 1 - Contaminant release limits to air (contaminants release characteristics).</td></tr>
<tr><td>Air 4</td><td>Contaminants must not be released to the atmosphere from a release point at a mass emission rate/concentration, as measured at a monitoring point, in excess of that stated in Table: Air 1 - Contaminant release limits to air (contaminants release characteristics).</td></tr>
</table>

<table>
<tr><td>Air 5</td><td>Contaminants must be monitored not less frequently than specified in Table: Air 2 - Contaminant release limits to air (required release point determinations).

Table: Air 2 — Contaminant release limits to air (required release point determinations)
<table><tr><th>Determination Required</th><th>Release Point Numbers</th><th>Frequency</th></tr><tr><td>Mass emission rate and concentration of oxides of nitrogen (NOx) in the flue gas at a 15 percent oxygen reference level.</td><td>Generator Stacks A1 to A3 inclusive</td><td>All stacks must be monitored (See Note 1) once every two years.</td></tr></table>Note 1: Twice yearly monitoring shall resume for a period of two years if any of the following occur:
a) Significant change to the monitoring conditions of the power station
b) If any release limit is exceeded
c) If requested by the administrating authority</td></tr>
<tr><td>Air 6</td><td>Nuisance
The release of noxious or offensive odours or any other noxious or offensive airborne contaminants resulting from the activity must not cause a nuisance at any nuisance sensitive or commercial place.</td></tr>
<tr><td>Air 7</td><td>The only type of fuel to be burnt in power generation under normal operating conditions is natural gas.</td></tr>
<tr><td>Air 8</td><td>The sulphur content of any fuel burned in power generation is not to exceed 0.5 percent by weight.</td></tr>
<tr><td>Air 9</td><td>Monitoring of Contaminant Releases to Atmosphere
The holder of this approval must conduct and keep records of a monitoring program of contaminant releases to the atmosphere at the release points, frequency, and for the parameter specified in Table: Air 2 - Contaminant release limits to air (required release point determinations) and which complies with the following:
(a) Monitoring provision for the release points listed in Table: Air 2 - Contaminant release limits to air (required release point determinations) must comply with the Australian Standard AS 4323.1 - 1995 "Stationary source emissions Method 1: Selection of sampling provisions".
(b) The following tests must be performed for each required determination specified in Table: Air 2 - Contaminant release limits to air (required release point determinations):
(i) gas velocity and volume flow rate;
(ii) temperature and oxygen content;
(iii) water vapour concentration.
(c) where practicable samples taken must be representative of the contaminants discharged when emissions are expected to be at maximum rates.
(d) during the sampling period the following additional information must be gathered: electricity generation rate at the time of sampling;
▪ fuel type and consumption rate;
▪ number of generating units in use; and</td></tr>
</table>

	▪ reference to the actual test methods and accuracy's.
Air 10	The holder of this approval must have due regard to comments made by the administering authority regarding air quality monitoring protocol.
Air 11	**Complaint Investigation, Monitoring and Recording** When requested by the administering authority, contaminant monitoring and recording must be undertaken to investigate any complaint of contamination, and the results notified within 14 days to the administering authority. If you can provide evidence through monitoring that the limits in *Table: Air 1 - Contaminant release limits to air (contaminants release characteristics)* are not being exceeded then you shall not be in breach of condition Air 4 with regards to any release of the contaminants listed in *Table: Air 1 - Contaminant release limits to air (contaminants release characteristics)*. When monitoring is requested the following must be complied with: ▪ monitoring provisions for the release points listed in *Table: Air 1 - Contaminant release limits to air (contaminants release characteristics)* must comply with the Australian Standard AS 4323.1 - 1995 'Stationary source emissions Method 1: Selection of sampling positions'. ▪ the following tests must be performed for each required determination specified in *Table: Air 1 - Contaminant release limits to air (contaminants release characteristics):* o gas velocity and volume flow rate; o temperature and oxygen content; o water vapour concentration (moisture content). ▪ where practicable samples must be taken when emissions are expected to be at maximum rates. ▪ during the sampling period the following additional information must be gathered: o production rate at the time of sampling; o raw materials used; o number of equipment and operating units; and o reference to the actual test methods and accuracy's.
Agency interest: Land	
Condition number	**Condition**
L1	**Preventing Contaminant Release to Land** Other than as permitted by this environmental authority, contaminants must not be released to land.
L2	Spillage of all chemicals and fuels must be contained within an on-site containment system and controlled in a manner that prevents environmental harm. NOTE: All petroleum product storage's must be designed, constructed and maintained in accordance with AS 1940 - Storage and Handling of Flammable and Combustible Liquids.

<table>
<tr><th colspan="2">Agency interest: Acoustic</th></tr>
<tr><th>Condition number</th><th>Condition</th></tr>
<tr><td>N1</td><td>Noise Nuisance
Noise from the ERA must not cause an environmental nuisance at any nuisance sensitive place or commercial place.</td></tr>
<tr><td>N2</td><td>Noise Monitoring
When requested by the administering authority, noise monitoring must be undertaken to investigate any complaint of noise nuisance, and the results notified within 14 days to the administering authority. Monitoring must include:
$L_{A\ 10,\ adj,\ 10\ mins}$;
$L_{A\ 1,\ adj,\ 10\ mins}$;
the level and frequency of occurrence of impulsive or tonal noise;
atmospheric conditions including wind speed and direction;
effects due to extraneous factors such as traffic noise; and
location, date and time of recording.</td></tr>
<tr><td>N3</td><td>The method of measurement and reporting of noise levels must comply with the latest edition of the administering authority’s Noise Measurement Manual.</td></tr>
<tr><td>N4</td><td>All noise from activities must not exceed the levels specified in Table: Noise 1 - Noise limits at any nuisance sensitive place.
Table: Noise 1- Noise limits
<table>
<tr><th></th><th colspan="3">Monday to Saturday</th><th colspan="3">Sunday and Public Holidays</th></tr>
<tr><th rowspan="2">Noise level dB(A) measured as</th><th>7am–6pm</th><th>6pm–10pm</th><th>10pm–7am</th><th>7am–6pm</th><th>6pm–10pm</th><th>10pm–7am</th></tr>
<tr><th colspan="6">Noise measured at a ‘nuisance sensitive place’</th></tr>
<tr><td>$L_{A\ 10,}$ adj, 10 mins</td><td>35</td><td>33</td><td>33</td><td>33</td><td>33</td><td>33</td></tr>
</table>
Note 2: No noise limits are specified for a 'commercial place'</td></tr>
<tr><th colspan="2">Agency interest: Water</th></tr>
<tr><th>Condition number</th><th>Condition</th></tr>
<tr><td>Water 1</td><td>The size of any sedimentation dam must be sufficient to contain the run-off expected from a 24 hour storm with an average recurrence interval of 1 in 5 years.</td></tr>
</table>

<table>
<tr><td>Water 2</td><td>Contaminants other than settled/treated stormwater runoff waters must not be released from the site to surface waters or the bed or banks of surface waters.</td></tr>
<tr><td>Water 3</td><td>Stormwater Management
There must be no release of stormwater runoff that has been in contact with any contaminants at the site to any waters, roadside gutter or stormwater drain other than as authorised under conditions Water 4 and Water 6.</td></tr>
<tr><td>Water 4</td><td>Condition Water 3 does not prohibit the release of stormwater provided that the stormwater has been treated in an oil/water interceptor, sedimentation basin or other process to effectively remove contaminants before the stormwater is released to waters.</td></tr>
<tr><td>Water 5</td><td>Suitable banks and/or diversion drains must be installed and maintained to exclude stormwater runoff from entering any ponds or other structures used for the storage or treatment of contaminates or wastes.</td></tr>
<tr><td>Water 6</td><td>Water may be released from the sedimentation dam if water quality samples are collected from the sedimentation dam sample point (Location W1 described in Table: Water 1 - Water Quality Monitoring Locations) prior to release, and the analysis of water quality samples shows that the water quality (WQ) parameters are in accordance with criteria listed in Table: Water 2 - Stormwater Discharge Criteria.
Table: Water 1 - Water Quality Monitoring Locations
<table>
<tr><th>Site Name</th><th>Location</th><th>Latitude</th><th>Longitude</th></tr>
<tr><td>Sedimentation pond</td><td>W1</td><td>- 27.1195 S</td><td>150.8943 E</td></tr>
</table>
Table: Water 2 - Stormwater Discharge Criteria
<table>
<tr><th>Site Name</th><th>Location</th><th>WQ Parameter</th><th>Release Limit</th><th>Limit Type</th></tr>
<tr><td rowspan="2">Stormwater pond sample point</td><td rowspan="2">W1</td><td>Electrical Conductivity</td><td>1500 µS/cm</td><td>Maximum</td></tr>
<tr><td>pH</td><td>6.5-9.0</td><td>Range</td></tr>
</table></td></tr>
<tr><td>Water 7</td><td>In addition to condition Water 6, weekly water quality samples will be collected from the sedimentation dam sample point (Location W1 described in Table: Water 1 - Water Quality Monitoring Locations) and analysed for water quality (WQ) parameters in accordance with criteria listed in Table: Water 2 - Stormwater Discharge Criteria.</td></tr>
<tr><td>Water 8</td><td>Records of all water samples taken in accordance with conditions Water 6 and Water 7 will be maintained onsite and made available to the administering authority upon request.</td></tr>
<tr><td>Water 9</td><td>Under normal operation the stormwater dam outlet valve will be maintained in a 'closed' position so that it may act as a buffer in the event of a spill onsite.</td></tr>
<tr><td>Water 10</td><td>The stormwater dam outlet valve may be opened manually to allow for releases in accordance with conditions Water 4 and Water 6. All releases will be conducted with consideration of minimising disruptions to environmental flows in the downstream waterway.</td></tr>
</table>

Agency interest: Social	
Condition number	**Condition**
S1	**Complaint Response** The operator of the ERA must record the following details for all complaints received and provide this information to the administering authority on request: (a) time, date, name and contact details of the complainant; (b) reasons for the complaint; (c) any investigations undertaken; (d) conclusions formed; and (e) any actions taken.

Definitions

Key terms and/or phrases used in this document are defined in this section. 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.

"administering authority" means the Department of Environment and Science or its predecessor or successor.

“closed cooling water” means water stored within the CCW Expansion Tank located.

"commercial place" means a place used as an office or for business or commercial purposes.

"dwelling" means any of the following structures or vehicles that is principally used as a residence —

- a house, unit, motel, nursing home or other building or part of a building;
- a caravan, mobile home or other vehicle or structure on land;
- a water craft in a marina.

“**heat recovery steam generator blowdown water"** means process water used to correct temperature, pressure and process chemistry within different parts of the heat recovery steam generators (HRSG).

"$L_{A\ 10,\ adj,\ 10\ mins}$" means the A-weighted sound pressure level, (adjusted for tonal character and impulsiveness of the sound) exceeded for 10% of any **10** minute measurement period, using Fast response.

"$L_{A\ 1,\ adj,\ 10\ mins}$" means the A-weighted sound pressure level, (adjusted for tonal character and impulsiveness of the sound) exceeded for 1% of any 10 minute measurement period, using Fast response.

"land" in the "land schedule" of this document means land excluding waters and the atmosphere.
"noxious" means harmful or injurious to health or physical well being.

"nuisance sensitive place" includes —

- a dwelling, residential allotment, mobile home or caravan park, residential marina or other residential premises; or
- a motel, hotel or hostel; or
- a kindergarten, school, university or other educational institution; or
- a medical centre or hospital; or
- a protected area under the *Nature Conservation Act 1992,* the *Marine Parks Act 1992* or a World Heritage Area; or
- a public thoroughfare, park or gardens; or
- 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.

"offensive" means causing offence or displeasure; is disagreeable to the sense; disgusting, nauseous or repulsive.

“raw bore water” means water taken from underground and stored.

“service water” means water that has undergone reverse osmosis and stored in the service water/firewater tank.

"site" means land or tidal waters on or in which it is proposed to carry out the development approved under this approval.

"watercourse" means a river, creek or stream in which water flows permanently or intermittently-

- in a natural channel, whether artificially improved or not; or
- in an artificial channel that has changed the course of the watercourse.

"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 ENVIRONMENTAL AUTHORITY