Permit

Environmental Protection Act 1994

Environmental authority EPPR00355813

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

Environmental authority number: EPPR00355813

Environmental authority takes effect on 10 June 2019

Environmental authority holder(s)

Name(s)	Registered address
OAKEY POWER HOLDINGS PTY LTD	Level 52 111 Eagle Street BRISBANE CITY QLD 4000 Australia

Environmentally relevant activity and location details

Environmentally relevant activity/activities	Location(s)
Prescribed ERA, ERA 14 - Electricity Generation, 2: Generating electricity by using a fuel, other than gas, at a rated capacity of, (b) more than 150MW electrical	Lot 2/RP117990
Prescribed ERA, ERA 08 - Chemical Storage, 3: Storing more than 500 cubic metres of chemicals of class C1 or C2 combustible liquids under AS 1940 or dangerous goods class 3 under subsection (1)(c)	Lot 2/RP117990
Prescribed ERA, ERA 14 - Electricity Generation, 1: Generating electricity by using gas at a rated capacity of 10MW electrical or more	Lot 2/RP117990

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).

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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.

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.

Clancy Mackaway
Department of Environment and Science
Delegate of the administering authority
Environmental Protection Act 1994

Date issued: 10 June 2019

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

Agency interest: General

G1 A copy of this environmental authority must be kept in a location readily accessible to personnel carrying out the activity.

G2 **Records**
All **records** must be kept for a period of at least five years and provided to the **administering authority** upon request. For daily and weekly records, the record retention requirements of this condition will be satisfied if any daily and weekly records are kept for a period of at least three (3) years and these records are then kept in the form of annual summaries after that period.

G3 **Alterations**
No change, replacement or operation of any plant or equipment is permitted if the change, replacement or operation of the plant or equipment increases, or is likely to substantially increase, the risk of environmental harm above that expressly provided by this environmental authority. An example of a substantial increase in the risk of environmental harm is an increase of 10% or more in the quantity of the contaminant to be released into the environment.

G4 All laboratory analysis required under this environmental authority must be carried out by a laboratory with National Association of Testing Authorities (NATA) certification, or equivalent certification, for such analysis.

G5 A **suitably qualified person** must undertake all monitoring required by this environmental authority.

G6 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.

G7 A copy of the written procedures must be kept in a location readily accessible to personnel carrying out the activity.

Agency interest: Air

A1 **Release of Contaminants to the Atmosphere**
Contaminants resulting from the operation of the sources described in *Schedule A – Table 1* must only be released to the atmosphere from the release points, at the minimum height and velocity specified in *Schedule A – Table 1.*

Schedule A – Table 1

Source Description	Release Point Number and Stack description	Minimum Release Height (Above ground level) (meters)	Minimum Efflux Velocity @Maximum Rated Load (metres/second)
Turbine Stack	A1	35	35
Turbine Stack	A2	35	35

A2 The concentration of oxides of nitrogen (NO_x) in the effluent gas at the release point number A1 and A2 (*Schedule A – Table 1)* is not to exceed 150 mg in each normal cubic metre of effluent gas calculated as NO_2 at a 15 percent oxygen reference level, **under normal operating conditions**.

A3 **Fuel Burning**
The sulphur content of any fuel burned in industrial fuel burning equipment is not to exceed 0.5 percent by weight.

Agency interest: Land

L1 **Quality of Contaminants Released to Land**
The contaminants released must comply, at the sampling and in-situ measurement point W1, with each of the release limits specified in *Schedule L – Table 2* for each quality characteristic.

Schedule L – Table 2

Quality Characteristic	Release Limit (mg/l)	Limit Type
Total Dissolved Solids (calculated)	3000	Not to exceed
Chloride (calculated)	1000	Not to exceed

L2 **Wet Weather Storage**
When weather conditions or soil conditions preclude the release of contaminants, the contaminants must be directed to a wet weather storage.

L3 The wet weather storage must be designed to hold a volume equivalent to 10 days discharge.

L4 **Release of Contaminants to Land**
A formal contractual agreement is to be entered into between Oakey Power Holdings Pty Ltd and the land owner who accepts wastewater from the power station for irrigation purpose. The agreement should consist of at least the following;

(i) Specify property description such as Lot No., Plan, Country, Parish, Title reference, Volume, and Folio of the proposed irrigation land.

(ii) Define the roles, responsibilities and obligations of the parties with respect to managing the inflow, storage and disposal of wastewater.

(iii) Specify the operational methods and practices that will be adopted by both parties to effectively manage the transportation, storage and disposal system. Information on the system's design, storage and flow rates and the provisions to manage the system in periods of wet weather is also to be provided.

(iv) Define how both parties will comply with the General Environmental Duty under the Environmental Protection Act 1994.

(v) A copy of this agreement must be submitted to the administering authority prior to the commencement of the irrigation activity.

Agency interest: Acoustic

N1 **Emission of Noise**
The operation of the power station shall not increase the **background noise level** at residences 1 to 7 by more than 5 dB(A) under neutral weather conditions as referenced in *Table 2 of the Richard Heggie Associates Pty Ltd, Report C31\6762-R1, Proposed Power Station Noise Impact Assessment, dated 6 December 1996*.

Agency interest: Waste

W1 **General**
The holder of this environmental authority must not:
(i) Allow waste to burn or be burned at or on the licensed place; nor
(ii) Remove waste from the licensed place and burn such waste elsewhere.

W2 **Off Site Movement**
Where regulated waste is removed from the licensed places (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.

Agency interest: Water

WT1 Records must be kept of the results of all determinations of the average daily quantity of contaminants released to lands.

WT2 **Release of Contaminants to Waters**
Contaminants that may cause unlawful environmental harm must not be directly or indirectly released from any source on the licensed place to any waters at any location.

WT3 **General**
All ponds used for the storage or treatment of wastewater at the power plant must maintain a freeboard of at least 175 mm at all times to prevent the direct discharge of contaminated liquid through the banks or sides of the storage.

WT4 The holder of this environmental authority must take all reasonable and practical measures to ensure that oil spills are cleaned up, and the materials used must be disposed of in a way which minimises the likelihood of environmental harm being caused.

WT5 **Fuel Unloading Area**
The fuel unloading bay shall be roofed.

WT6 The fuel unloading facilities shall be designed, constructed and operated in accordance with Section 8 "Tank Loading Facilities" of ***AS 1940****, "The storage and handling of Flammable and Combustible Liquids".*

WT7 **Spillage Control**
Each tank which is used only for storage of oil must be enclosed by bunding so that the capacity of each bunded area is not less than 110% of the capacity of the largest tank it encloses.

WT8 Distillate storage and chemical storage tanks must be bunded in accordance with AS 1940 to prevent the spread of fire from one tank to another and to prevent cross contamination.

WT9 Each bunded area must be constructed and maintained so as to be sufficiently impervious to allow retention and recovery of any materials being stored within the bunded area.

WT10 Washing, degreasing, servicing or other maintenance of vehicles, plant, or other equipment must not occur on the licensed place in any area where resulting contaminants will or may be released to any stormwater drain or waters.

WT11 Stormwaters within the bunds are not to be released directly to waters.

WT12 All oil-contaminated or potentially oil-contaminated waters generated on the licensed place must be directed to an oil-water separator.

Agency interest: Monitoring and Reporting

H1 **Complaint Recording**
All complaints received by the holder of this environmental authority relating to releases of contaminants from operations at the licensed place must be recorded and kept with the following details:

(i) Time, date and nature of complaint;
(ii) Type of communication (telephone, letter, personal etc.);
(iii) Name, contact address and contact telephone number of complainant (Note: if the complainant does not wish to be identified then "Not identified" is to be recorded);
(iv) Response and investigation undertaken as a result of the complaint;
(v) Name of person responsible for investigating complaint; and
(vi) Action taken as a result of the complaint investigation and signature of responsible person.

H2 **Monitoring of Contaminant Releases to the Atmosphere**
The holder of this environmental authority must conduct and keep records of a monitoring program of contaminant releases to the atmosphere at the release points, frequency, and for the parameters specified in *Schedule H – Table 3* and which complies with the following:

a) Monitoring provisions for the release points listed in *Schedule H – Table 3* 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 required in *Schedule H – Table 3*:
   (i) Gas velocity and volume flow rate;
   (ii) Temperature;
   (iii) Water vapour concentration;
c) Where practicable samples taken must be representative of the contaminants discharged when emissions are expected to be normal.

Schedule H – Table 3

Determination Required	Release Point	Frequency
Nitrogen Oxide (NO_x)	A1 and A2	Every three years.

H3 **Monitoring of Contaminant Releases to Land**
The holder of this environmental authority is responsible for the making of determinations and keeping of records of the quality of the contaminants released for the release points, quality characteristics, and at the frequency specified in *Schedule H – Table 4.*

H4 All determinations of the water quality of contaminants released to land must be made in accordance with methods prescribed in the administering authority's Water Quality Sampling Manual, 2nd Edition, February 1995, or more recent additions or supplements to that document as such become available.

H5 A suitably qualified person(s) must monitor and record all quality characteristics required by and in accordance with *Schedule H – Table 4.*

Schedule H – Table 4

QUALITY CHARACTERISTIC DETERMINATION	RELEASE POINTS*	FREQUENCY
Total Dissolved Solids (calculated)	W1	quarterly
pH	W1	quarterly
Chloride (calculated) (mg/l)	W1	quarterly
Sodium (mg/l)	W1	quarterly
Calcium (mg/l)	W1	quarterly
Magnesium (mg/l)	W1	quarterly
Sodium Adsorption Ratio	W1	Quarterly

*Monitoring location after dilution pond, up to and including the irrigation discharge point.

H6 **Monitoring of Volume of Release**
A flow meter must be installed to measure the average daily quantity of wastewater released to the irrigation land.

H7 **Soil Monitoring**
An suitably qualified person(s) must monitor and record all parameters required by and in accordance with *Schedule H – Table 5.*

Schedule H – Table 5[1]

PARAMETER	FREQUENCY	SOIL DEPTH[2]
Electrical Conductivity	6 monthly	40, 90, 120 cm
pH	6 monthly	40, 90, 120 cm

Associated requirements

1. A suitably qualified person must carry out the designing of sampling locations, analysis of soil, analysis of data, and preparation of reports as they relate to *Schedule H – Table 5*.
2. Monitoring must comprise of not less than five (5) sampling locations on the irrigated land.

H8 **Monitoring of Groundwater Quality**
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 irrigation farm.

H9 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.

H10 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 administering authority's Sampling Manual, 2nd Edition, February 1995, or more recent additions or supplements to that document as such become available.
b) Samples of groundwater must be taken at least quarterly from each of the bores.
c) The samples obtained in accordance with paragraph (b) of this condition must be analysed for:
    (i) Total dissolved solids,
    (ii) Chloride,
    (iii) Sodium,
    (iv) Calcium,
    (v) Magnesium,
    (vi) Sodium Adsorption Ratio, and
    (vii) pH.

H11 **Monitoring of Surface water Quality**
The holder of this environmental authority is responsible for ensuring a surface water monitoring program is performed which complies with the following requirements:

a) All determinations of the quality of surface water must be made in accordance with methods prescribed in the Department of Environment and Heritage Water Quality Sampling Manual, 2nd Edition, February 1995, or more recent additions or supplements to that document as such become available.
b) Samples of surface water must be taken at least quarterly from two locations in Oakey Creek; one upstream and one downstream of the irrigation land.
c) The samples obtained in accordance with paragraph (b) of this condition must be analysed for:
    (i) total dissolved solids,
    (ii) pH.

H12 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.

H13 The method of measurement and reporting of noise levels must comply with the administering authority's Noise Measurement Manual, second edition, March 1995, or more recent additions or supplements to that document as become available.

H14 **Report Submission**
Upon request by the administering authority, the holder of this environmental authority must submit the results of all monitoring performed in accordance with this environmental authority.

H15 **Incident Recording**
A record must be maintained of at least the following events:

(i) The time, date and duration of equipment malfunctions where the failure of the equipment resulted in the release of contaminants reasonably likely to cause environmental harm;
(ii) Any uncontrolled release of contaminants reasonably likely to cause environmental harm; and
(iii) Any emergency involving the release of contaminants reasonably likely to cause material or serious environmental harm requiring the use of fire fighting equipment.

H16 **Notification of Emergencies and Incidents**
Where the licensee has not given notification to the administering authority under the Environmental Protection Act, as soon as practicable after becoming aware of any emergency or incident which results in the release of contaminants not in accordance, or reasonably expected to be not in accordance with the conditions of this environmental authority, the holder of this environmental authority must notify the administering authority of the release by telephone or facsimile.

H17 Where the licensee has not given notification to the administering authority the *Environmental Protection Act 1994*, the notification of emergencies or incidents as required by condition number H16 must include but not be limited to the following:

(i) The holder of the environmental authority;
(ii) The location of the emergency or incident;
(iii) The number of the environmental authority;
(iv) The name and telephone number of the designated contact person;
(v) The time of the release;
(vi) The time the holder of the environmental authority became aware of the release;
(vii) The suspected cause of the release;
(viii) The environmental harm and or environmental nuisance caused, threatened, or to be caused by the release; and
(ix) Actions taken to prevent further any release and mitigate any environmental harm and or environmental nuisance caused by the release.

H18 Where the licensee has not given notification to the administering authority the *Environmental Protection Act 1994*, not more than 14 days following the initial notification of an emergency or incident, the holder of the environmental authority must provide written advice of the information supplied in accordance with condition number H17 in addition to:

(i) Proposed actions to prevent a recurrence of the emergency or incident;
(ii) Outcomes of actions taken at the time to prevent or minimise environmental harm and or environmental nuisance.

H19 **Exception Reporting**
The holder of this environmental authority must notify the administering authority in writing of any monitoring result which indicates an exceedance of any licence limit within 28 days of completion of analysis.

H20 The written notification required by condition number H19 above must include:

(i) The full analysis results, and
(ii) Details of investigation or corrective actions taken, and
(iii) Any subsequent analysis.

Definitions

Key terms and/or phrases bolded in this environmental authority 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.

Term	Definition
AS 1940	means the most recent edition of *Australian Standard 1940 Storage and Handling of Flammable and Combustible Liquids*.
Background Noise Level	means either: $L_{A90, T}$ being A-weighted sound pressure level exceeded for 90 percent of the time period of 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.
Freeboard	means the vertical distance between the water surface and any overflow point.
$L_{Amax, adj\ T}$	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.
Normal Cubic Meter (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, not in a transitional state and not operating at a load lower than either diffusion wet mode or premix dry mode. For the purpose of this definition: "diffuse wet" mode is where water is added into the combustion chamber to lower the maximum flame temperature. "premix dry" mode is where fuel gas and air is mixed before combustion to lower the maximum flame temperature.

Regulated waste	has the meaning given in *schedule* 7 of the *Environmental Protection Regulation 2008.*
Suitably qualified person	means a person who has qualifications, training, skills and 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.

END OF ENVIRONMENTAL AUTHORITY