

### Environmental authority - EPPR03026015

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

**Permit<sup>1</sup> number: EPPR03026015**

#### Environmental authority takes effect on the 1 October 2015

The anniversary date of this environmental authority remains the 18 March. An annual return and the payment of the annual fee will be due each year on this day.

#### Environmental authority holder

Name	Registered address
Diamantina Power Station Pty Ltd	Diamantina Development Road MOUNT ISA QLD 4825

#### Environmentally relevant activity and location details

Environmentally relevant activities	Location
14-(1) Electricity generation by using gas at a rated capacity of 10MW electrical or more	Diamantina Power Station and Leichardt Power Station
14-(2a) Electricity generation by using a fuel, other than gas, at a rated capacity of - 10MW electrical to 150MW electrical	Diamantina Development Road, MOUNT ISA Lot 10 Plan SP240553 (Sublease Lot 130 and 137 on Surface Area 4 of ML8058)

#### 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.

<sup>1</sup> Permit includes licences, approvals, permits, authorisations, certificates, sanctions or equivalent/similar as required by legislation



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 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

1-OCT-2015

Date

James Mackenzie  
Department of Environment and Heritage Protection  
Delegate of the administering authority  
*Environmental Protection Act 1994*

**Enquiries:**  
Department of Environment and Heritage  
Protection  
GPO Box 2454  
BRISBANE QLD 4001  
Phone: 1300 130 372  
Fax: 07 3330 6037  
palm@ehp.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); and
- offence to place contaminant where environmental harm or nuisance may be caused (section 443).

### Conditions of environmental authority

#### Schedule 1: Diamantina Power Station and Leichardt Power Station

The environmentally relevant activities conducted at the locations as described in **Table 1** below must be conducted in accordance with the following conditions of approval.

**Table 1 – Approved Activities and Locations**

Environmentally relevant activities	Locations
14-(1) Electricity generation by using gas at a rated capacity of 10MW electrical or more	Diamantina Power Station and Leichardt Power Station
14-(2a) Electricity generation by using a fuel, other than gas, at a rated capacity of - 10MW electrical to 150MW electrical	Diamantina Development Road, MOUNT ISA Lot 10 Plan SP240553 (Sublease Lot 130 and 137 on Surface Area 4 of ML8058)

Agency interest: General	
Condition number	Condition
1G1	<p>You must:</p> <ul style="list-style-type: none"> <li>(a) Install all plant and equipment necessary to ensure compliance with the conditions of this approval; and</li> <li>(b) maintain such plant and equipment in a proper and efficient condition; and</li> <li>(c) operate such plant and equipment in a proper and efficient manner. In this condition, 'plant and equipment' includes, but is not limited to: <ul style="list-style-type: none"> <li>• plant and equipment used to prevent and/or minimise the likelihood of environmental harm being caused;</li> <li>• devices and structures to contain foreseeable escapes of contaminants and waste;</li> <li>• devices and structures used to store, handle, treat and dispose of waste;</li> <li>• monitoring equipment and associated alarms; and</li> <li>• backup systems that act in the event of failure of a primary system.</li> </ul> </li> </ul>

1G2	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 approval. An example of a substantial increase in the risk of environmental harm is an increase of ten percent (10%) or more in the quantity of the contaminant to be released into the environment.
1G3	Record, compile and keep all monitoring results required by this approval and present this information to the administering authority when requested. All records required by this approval must be kept for 5 years.
1G4	Ensure that the operation and maintenance of all plant and equipment is carried out by or under the supervision of a person competent to operate and maintain the plant and equipment.
1G5	<p>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.</p> <p>The SBMP must address the following matters:</p> <ul style="list-style-type: none"> <li>(a) Environmental commitments - a commitment by senior management to achieve specified and relevant environmental goals;</li> <li>(b) Identification of environmental issues and potential impacts;</li> <li>(c) Control measures for routine operations to minimise likelihood of environmental harm;</li> <li>(d) Contingency plans and emergency procedures for non-routine situations;</li> <li>(e) Organisational structure and responsibility;</li> <li>(f) Effective communication;</li> <li>(g) Monitoring of contaminant releases;</li> <li>(h) Conducting environmental impact assessments;</li> <li>(i) Staff training;</li> <li>(j) Record keeping; and</li> <li>(k) Periodic review of environmental performance and continual improvement.</li> </ul>
1G6	The SBMP must not be implemented or amended in a way that contravenes any condition of this approval.
1G7	<p>All complaints received relating to releases of contaminants from operations at the place to which this environmental authority relates must be recorded and kept in a logbook with the following details:</p> <ul style="list-style-type: none"> <li>(i) time, date and nature of complaint;</li> <li>(ii) type of communication (telephone, letter, personal etc.);</li> <li>(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);</li> <li>(iv) response and investigation undertaken as a result of the complaint;</li> <li>(v) name of person responsible for investigating complaint; and</li> <li>(vi) action taken as a result of the complaint investigation and signature of responsible person.</li> </ul>
1G8	<p>A record must be maintained of events including but not limited to:</p> <ul style="list-style-type: none"> <li>(i) the time, date and duration of any malfunctions of plant and equipment which caused or is likely to cause environmental harm;</li> <li>(ii) any fire at the place to which this environmental authority relates; and</li> <li>(iii) any release of wastes and contaminants to the environment not likely to be in accordance with the conditions of this environmental authority.</li> </ul>
1G9	<p>Notify the administering authority by telephone or facsimile as soon as practicable after becoming aware of any release of contaminants that occurs other than in accordance with the conditions of this approval, or any event where environmental harm is caused or threatened.</p> <p>Please Note: The Pollution Hotline (1300 130 372) is the most appropriate contact for pollution incidents.</p>

1G10	<p>Written advice detailing the following information must be provided to the administering authority within fourteen (14) days following any notification in accordance with condition 1G9:</p> <ul style="list-style-type: none"> <li>(i) the name of the operator, including their approval number;</li> <li>(ii) the name and telephone number of a designated contact person;</li> <li>(iii) the quantity and substance released;</li> <li>(iv) the location of the release/event;</li> <li>(v) the time of the release/event;</li> <li>(vi) the time you became aware of the release/event;</li> <li>(vii) the suspected cause of the release/event;</li> <li>(viii) description of the resulting effects of the release/event;</li> <li>(ix) the results of any sampling performed in relation to the release/event;</li> <li>(x) actions taken to mitigate any environmental harm (including environmental nuisance) caused by the release/event; and</li> <li>(xi) proposed actions to prevent a recurrence of the release/event.</li> </ul>
1G11	All determinations of the quality or contaminants released to the environment and all sampling and measurements that are required by this approval must be undertaken by a person or body possessing appropriate experience and qualifications to perform the required determinations and the required measurements.
1G12	All instruments, equipment and measuring devices used for measuring or monitoring in accordance with any condition of this must be calibrated, and appropriately operated and maintained.
1G13	<p>An annual monitoring report must be prepared each year and presented to the administering authority when requested. This report must include at least the following information:</p> <ul style="list-style-type: none"> <li>a) a summary of the previous 12 months monitoring results required under this approval, including monitoring performed under the SBMP, in graphical form showing relevant limits;</li> <li>b) an evaluation/explanation of the data from any monitoring programs;</li> <li>c) a summary of any record of quantities of releases required to be kept under this approval;</li> <li>d) a summary of the record of equipment failures or events recorded which have resulted in non-compliance with approval conditions; and</li> <li>e) an outline of actions taken or proposed to minimise the environmental risk from any deficiency identified by the monitoring or recording programs.</li> </ul>
1G14	Notify the administering authority in writing of any monitoring result which indicates an exceedance of any approval limit within 14 days of completion of analysis.
<b>Agency interest: Air</b>	
<b>Condition number</b>	<b>Condition</b>
1A1	The release of dust and/or particulate matter must not cause environmental harm.
1A2	The release of noxious or offensive odours or any other noxious or offensive airborne contaminants must not cause environmental harm.
1A3	The release of contaminants to the atmosphere from a point source must only occur from those release points specified in <i>Table 3 - Contaminant release limits to air – Diamantina Power Station in Schedule 2</i> and <i>Table 5 - Contaminant release limits to air – Leichardt Power Station in Schedule 3</i> and must be directed vertically upwards without any impedence or hindrance.
1A4	Contaminants released to the atmosphere from a release point at a height and a velocity not less than the corresponding height and velocity stated for that release point in <i>Table 3 - Contaminant release limits to air – Diamantina Power Station in Schedule 2</i> and <i>Table 5 - Contaminant release limits to air – Leichardt Power Station in Schedule 3</i> .

1A5	The only type of fuel to be burned in commercial power generation is natural gas under routine operations and ultra low sulphur diesel under non-routine operations.
1A6	The sulphur content of any fuel burned in power generation is not to exceed 0.5 percent by weight.
<b>Agency interest: Water</b>	
<b>Condition number</b>	<b>Condition</b>
1WT1	Contaminants must not be released to any waters or the bed and banks of any waters.
1WT2	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.
1WT3	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.
1WT4	The maintenance and cleaning of vehicles and any other equipment or plant must be carried out in areas where contaminants cannot be released to any waters.
1WT5	Any spillage of wastes, contaminates or other materials must be cleaned up as quickly as practicable. Such spillages must not be cleaned up by hosing, sweeping or otherwise releasing such wastes, contaminants or material to any stormwater drainage system, roadside gutter or waters.
<b>Agency interest: Noise</b>	
<b>Condition number</b>	<b>Condition</b>
1N1	Noise from the activities must not cause an environmental nuisance at any nuisance sensitive place.
1N2	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: <ul style="list-style-type: none"> <li>• <math>L_{Aeq, 1hour}</math>;</li> <li>• the level and frequency of occurrence of impulsive or tonal noise;</li> <li>• atmospheric conditions including wind speed and direction;</li> <li>• effects due to extraneous factors such as traffic noise; and</li> <li>• location, date and time of recording.</li> </ul>
1N3	The method of measurement and reporting of noise levels must comply with the latest edition of the administering authority's Noise Measurement Manual.
<b>Agency interest: Land</b>	
<b>Condition number</b>	<b>Condition</b>
1L1	Contaminants must not be released to land.

Agency interest: Waste	
Condition number	Condition
1W1	All waste generated at the site must be disposed of to a facility which can lawfully accept such waste.

## Schedule 2: Diamantina Power Station

In addition to the conditions in **Schedule 1**, the environmentally relevant activities conducted at the location described in **Table 2** below must be conducted in accordance with the following site specific conditions of approval.

**Table 2 – Approved Activities and Locations**

Environmentally relevant activity	Location
14-(1) Electricity generation by using gas at a rated capacity of 10MW electrical or more	Diamantina Power Station Diamantina Development Road, MOUNT ISA Lot 10 Plan SP240553 (Sublease Lot 130 and 137 on Surface Area 4 of ML8058)

### Agency interest: General

Condition number	Condition
2G1	This environmental authority authorises the operation of a combined cycle gas fired power generation plant with a generation capacity of 240 megawatts electrical in general accordance with the approved drawings as per <i>Figure 2</i> .

### Agency interest: Air

Condition number	Condition												
2A1	<p>Contaminants must not be released to the atmosphere from a release point, at a height and a concentration as measured at a monitoring point, in excess of the concentration stated in <i>Table 3 - Contaminant release limits to air – Diamantina Power Station</i>.</p> <p><b>Table 3 – Contaminant release limits to air – Diamantina Power Station</b></p> <table border="1"> <thead> <tr> <th>Release point Monitoring point<sup>1</sup></th> <th>Minimum release height (metres)</th> <th>Minimum velocity (m/sec)</th> <th>Contaminant parameter</th> <th>Maximum release limit<sup>2</sup></th> <th>Monitoring frequency</th> </tr> </thead> <tbody> <tr> <td>Gas Turbine Stacks - A1, A2, A3 &amp; A4</td> <td>30</td> <td>15 (at full loading), 8.9 (at partial loading)</td> <td>Oxides of Nitrogen (as NO<sub>2</sub> equivalent)</td> <td>25ppmv [51mg/Nm<sup>3</sup> (dry)@15% O<sub>2</sub>]</td> <td>All stacks must be monitored within 3 months of commissioning the facility and annually thereafter.</td> </tr> </tbody> </table> <p>Note 1: Any point source emission points for release of contaminants to air that are not listed in the above table (or Table 5) are not authorised by this approval. Note 2: The above release limits are applicable during all times except start-up, shut-down and calibration of emission monitoring devices. The gas turbine start-up duration is allowed up to 30 minutes.</p>	Release point Monitoring point <sup>1</sup>	Minimum release height (metres)	Minimum velocity (m/sec)	Contaminant parameter	Maximum release limit <sup>2</sup>	Monitoring frequency	Gas Turbine Stacks - A1, A2, A3 & A4	30	15 (at full loading), 8.9 (at partial loading)	Oxides of Nitrogen (as NO <sub>2</sub> equivalent)	25ppmv [51mg/Nm <sup>3</sup> (dry)@15% O <sub>2</sub> ]	All stacks must be monitored within 3 months of commissioning the facility and annually thereafter.
Release point Monitoring point <sup>1</sup>	Minimum release height (metres)	Minimum velocity (m/sec)	Contaminant parameter	Maximum release limit <sup>2</sup>	Monitoring frequency								
Gas Turbine Stacks - A1, A2, A3 & A4	30	15 (at full loading), 8.9 (at partial loading)	Oxides of Nitrogen (as NO <sub>2</sub> equivalent)	25ppmv [51mg/Nm <sup>3</sup> (dry)@15% O <sub>2</sub> ]	All stacks must be monitored within 3 months of commissioning the facility and annually thereafter.								

2A2	<p>Conduct and keep records of a monitoring program of contaminant releases to the atmosphere at the monitoring points, frequency, and for the parameters specified in <i>Table 3 - Contaminant release limits to air – Diamantina Power Station</i>. The monitoring program must comply with the following requirements:</p> <ul style="list-style-type: none"> <li>(a) The Australian Standard AS 4323.1:1995 stationary source emissions Method 1: Selection of sampling provisions.</li> <li>(b) The following determinations must be made for each monitoring event: <ul style="list-style-type: none"> <li>(i) gas velocity and volume flow rate;</li> <li>(ii) temperature and pressure;</li> <li>(iii) water vapour, oxygen and carbon dioxide concentration;</li> <li>(iv) fuel type and consumption rate of the boiler;</li> <li>(v) electricity and steam generation rate at the time of sampling; and</li> <li>(vi) reference to the actual test methods and accuracy.</li> </ul> </li> <li>(c) Samples are representative of near maximum plant emissions and all pollution control equipment is in operation.</li> </ul>
2A3	<p>Within one year of the commissioning of the power station, an ambient air quality study must be conducted to determine the ground level concentration of nitrogen dioxide of the neighbouring environment. The results of the monitoring must be compared to the model predictions specified in the report "Air Quality Assessment- Diamantina Power Station, Mount Isa, Queensland, Katestone Environmental Pty Ltd, April 2011". A report on the monitoring program must be submitted to the administering authority.</p>
2A4	<p>Before the commissioning of the power station, an ambient air quality monitoring program must be submitted to the administering authority. The monitoring program must address the following requirements:</p> <ul style="list-style-type: none"> <li>(a) a description of the sampling practices and procedures for contaminant testing;</li> <li>(b) a description of the sampling locations that are representative of the air quality of the area;</li> <li>(c) a description of the frequency of sampling and the number of samples to be taken at each location;</li> <li>(d) a sampling period of at least three months; and</li> <li>(e) collection of meteorological data including at least the wind speed and wind direction during the air quality monitoring program at the monitoring locations.</li> </ul>
<b>Agency interest: Water</b>	
<b>Condition number</b>	<b>Condition</b>
2WT1	<p>All ponds used for the storage or treatment of contaminants or wastes must be constructed, installed and maintained:</p> <ul style="list-style-type: none"> <li>(a) so as to minimise the likelihood of any release through the bed or banks of the pond to any waters (including groundwater);</li> <li>(b) so that a freeboard of not less than 0.5 metres is maintained at all times, except in emergencies; and</li> <li>(c) so as to ensure the stability of the ponds' construction.</li> </ul>
<b>Agency interest: Noise</b>	
<b>Condition number</b>	<b>Condition</b>
2N1	<p>At all times noise from the activities must not exceed the respective levels at the GPS locations A, B, C and D specified in <i>Figure 1 - Compliance points A, B, C and D for noise level measurement</i> (<math>L_{Aeq, 1hour}</math>).</p>

2N2

If monitoring indicates exceedance of the noise levels specified in *Figure 1 - Compliance points A, B, C and D for noise level measurement ( $L_{Aeq, 1hour}$ ) - Diamantina Power Station* then **you** must:

- address the complaint including the use of appropriate dispute resolution if required; and
- immediately implement noise abatement measures so that emissions of noise from the activity do not result in further environmental nuisance.

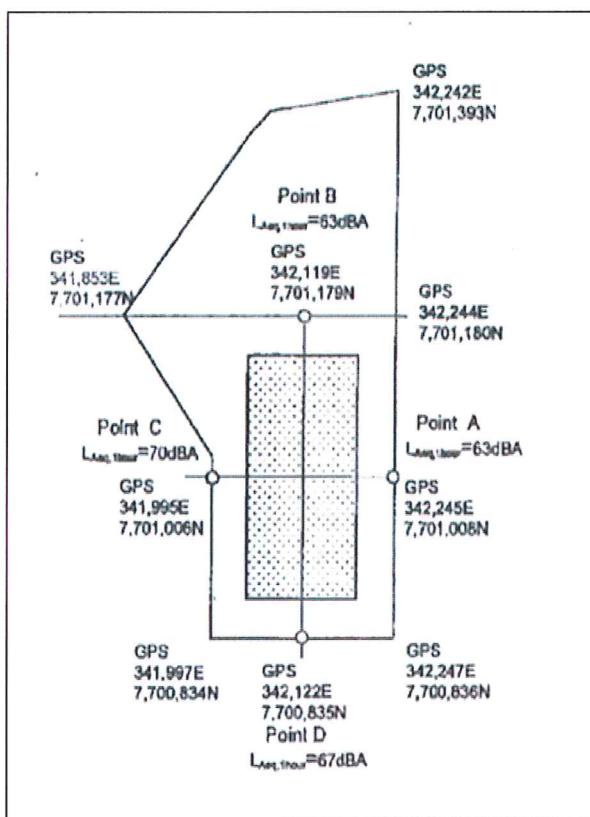


Figure 1 – Compliance points A, B, C and D for noise level measurement ( $L_{Aeq, 1hour}$ ) – Diamantina Power Station

**Schedule 3: Leichardt Power Station**

In addition to the conditions in **Schedule 1**, the environmentally relevant activities conducted at the location described in **Table 4** below must be conducted in accordance with the following site specific conditions of approval.

**Table 4 – Approved Activities and Locations**

Environmentally relevant activities	Location
14-(1) Electricity generation by using gas at a rated capacity of 10MW electrical or more  14-(2a) Electricity generation by using a fuel, other than gas, at a rated capacity of - 10MW electrical to 150MW electrical	Leichardt Power Station  Diamantina Development Road, MOUNT ISA  Lot 10 Plan SP240553 (Sublease Lot 130 and 137 on Surface Area 4 of ML8058)

**Agency interest: General**

Condition number	Condition
3G1	This environmental authority authorises the operation of an open cycle gas fired power generation plant with a generation capacity of up to 62 megawatts electrical in general accordance with the approved drawings as per <i>Figure 3</i> and <i>Figure 4</i> .

**Agency interest: Air**

Condition number	Condition															
3A1	<p>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 the concentration stated in <i>Table 5</i> and monitored not less frequently than <i>Table 6</i>.</p> <p><b>Table 5 – Contaminant release limits to air – Leichardt Power Station</b></p> <table border="1"> <thead> <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<sup>1</sup></th> </tr> </thead> <tbody> <tr> <td>Turbine Stack (natural gas as fuel)</td> <td>22</td> <td>40 (100% load) 27.1 (52% load)</td> <td>NO<sub>x</sub></td> <td>25ppmv [51mg/Nm<sup>3</sup> (dry)@15% O<sub>2</sub>]</td> </tr> <tr> <td>Turbine Stack (low sulphur diesel as fuel)</td> <td>22</td> <td>22.3 (37% load)</td> <td>NO<sub>x</sub></td> <td>42ppmv [85mg/Nm<sup>3</sup> (dry)@15% O<sub>2</sub>]</td> </tr> </tbody> </table> <p>Note 1: The above NO<sub>x</sub> release limits are applicable during all timings except start-up and shut-down of the units. The start-up duration is allowed up in 30 minutes.</p>	Release point number	Minimum release height (metres)	Minimum velocity (m/sec)	Contaminant release	Maximum release limit <sup>1</sup>	Turbine Stack (natural gas as fuel)	22	40 (100% load) 27.1 (52% load)	NO <sub>x</sub>	25ppmv [51mg/Nm <sup>3</sup> (dry)@15% O <sub>2</sub> ]	Turbine Stack (low sulphur diesel as fuel)	22	22.3 (37% load)	NO <sub>x</sub>	42ppmv [85mg/Nm <sup>3</sup> (dry)@15% O <sub>2</sub> ]
Release point number	Minimum release height (metres)	Minimum velocity (m/sec)	Contaminant release	Maximum release limit <sup>1</sup>												
Turbine Stack (natural gas as fuel)	22	40 (100% load) 27.1 (52% load)	NO <sub>x</sub>	25ppmv [51mg/Nm <sup>3</sup> (dry)@15% O <sub>2</sub> ]												
Turbine Stack (low sulphur diesel as fuel)	22	22.3 (37% load)	NO <sub>x</sub>	42ppmv [85mg/Nm <sup>3</sup> (dry)@15% O <sub>2</sub> ]												

3A2	<p>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 <i>Table 5</i> and <i>Table 6</i> and which complies with the following:</p> <ul style="list-style-type: none"> <li>a) Monitoring provision for the release points listed in <i>Table 6</i> must comply with the Australian Standard AS 4323.1 - 1995 "Stationary source emissions Method 1: Selection of sampling positions".</li> <li>b) The following tests must be performed for each required determination specified in <i>Table 6</i>: <ul style="list-style-type: none"> <li>i) gas velocity and volume flow rate;</li> <li>ii) temperature;</li> <li>iii) water vapour concentration.</li> </ul> </li> <li>c) All determinations of contaminant releases to the atmosphere must be made in accordance with methods prescribed in the Department of Environment and Heritage Protection (EHP) Air Quality Sampling Manual. If monitoring requirements are not described in the EHP's Air Quality Sampling Manual, monitoring protocols must be in accordance with a method as approved by New South Wales DECCW (ex EPA), Victorian EPA or United States EPA.</li> <li>d) Where practicable samples taken must be representative of the contaminants discharged when emissions are expected to be at maximum rates.</li> <li>e) During the sampling period the following additional information must be gathered: <ul style="list-style-type: none"> <li>i) electricity generation rate at the time of sampling;</li> <li>ii) fuel type and consumption rate;</li> <li>iii) number of generating units in use; and</li> <li>iv) reference to the actual test methods and accuracy.</li> </ul> </li> </ul> <p><b>Table 6 – Required Release Point Determinations – Leichardt Power Station</b></p> <table border="1" data-bbox="296 1133 1302 1339"> <thead> <tr> <th>Determination Required</th> <th>Release Point Numbers</th> <th>Frequency</th> </tr> </thead> <tbody> <tr> <td>Mass emission rate and concentration of oxides of nitrogen (NO<sub>x</sub>) in the flue gas at a 15 percent oxygen reference level.</td> <td>Turbine Stack</td> <td>During commissioning of the power plant (see Note 1) and at least annually thereafter.</td> </tr> </tbody> </table> <p>Note 1: Within 3 months of commissioning the power station, the holder of this authority must conduct air emission monitoring to demonstrate compliance with air emission limits listed in <i>Table 5</i>.</p>	Determination Required	Release Point Numbers	Frequency	Mass emission rate and concentration of oxides of nitrogen (NO <sub>x</sub> ) in the flue gas at a 15 percent oxygen reference level.	Turbine Stack	During commissioning of the power plant (see Note 1) and at least annually thereafter.
Determination Required	Release Point Numbers	Frequency					
Mass emission rate and concentration of oxides of nitrogen (NO <sub>x</sub> ) in the flue gas at a 15 percent oxygen reference level.	Turbine Stack	During commissioning of the power plant (see Note 1) and at least annually thereafter.					
3A3	<p>On or before the commencement of the operation of the power station, the holder of this approval must submit to the administering authority an ambient air quality monitoring protocol that must address the following requirements:</p> <ul style="list-style-type: none"> <li>(a) sampling practices and procedures for contaminant testing;</li> <li>(b) the selection of sampling locations to demonstrate that samples collected will be representative of the air quality of the area;</li> <li>(c) the frequency of sampling to be undertaken at each location including the number of samples to be taken, the time spent in collecting the samples (the sampling period must be at least three months);</li> <li>(d) meteorological data collection including at least the wind speed and wind direction during the air quality monitoring program the monitoring locations; and</li> <li>(e) monitoring is only required if the plant is operating longer than 36 consecutive days in a year.</li> </ul>						
3A4	<p>Within one year after commencement of operation of the power station, the holder of this approval must conduct a study to determine the ground level concentration of nitrogen dioxide of the neighbouring environment and compare results with the model predictions specified in the report entitled: "Leichardt Power Station (formerly Diamantina B Power Station), Mount Isa, Queensland - Air Quality Assessment, Katestone Environmental Pty Ltd, March 2013" and lodge a report on the study with the administering authority within one year of commencement of operation. This monitoring must be conducted over a period of at least three months to obtain a representative number of samples, as specified in the air quality monitoring protocol (see condition 3A3).</p>						

Agency interest: Noise	
Condition number	Condition
3N1	At all times noise from the activities must not exceed 61dBA at the eastern boundary monitoring location, described as 342,563.50E; 7,701,144.80N; zone 54K, approximately displayed in <i>Figure 3 - Leichardt Power Station Context Plan, including approximate monitoring location.</i>
3N2	If monitoring indicates exceedance of the noise levels specified in condition 3N1 then you must: <ul style="list-style-type: none"> <li>(a) address the complaint including the use of appropriate dispute resolution if required; and</li> <li>(b) immediately implement noise abatement measures so that emissions of noise from the activity do not result in further environmental nuisance.</li> </ul>

## Definitions

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

**Administering authority** means the Department of Environment and Heritage Protection or its successor or predecessors.

**Approval** means this environmental authority..

**Authorised place** means the place authorised under this environmental authority for the carrying out of the specified environmentally relevant activities.

**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.

**Commissioning** means when all systems and equipment required for commercial operation of the plant have been implemented and are fully operational. Commissioning is the end of the preparation phase in order to start operating and producing steam/electricity. This includes the completion of all performance tests.

**Contaminant** means (section 11 of the *Environmental Protection Act 1994*) –

- A gas, liquid or solid; or
- An odour; or
- An organism (whether dead or alive, including a virus); or
- Energy, including noise, heat, radioactivity and electromagnetic radiation; or
- A combination of contaminants.

**Department of Environment and Heritage Protection** means the department or agency (whatever called) administering the *Environmental Protection Act 1994*.

**Dwelling** means any of the following structures or vehicles that are 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.

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

**Intrusive noise** means noise that, because of its frequency, duration, level, tonal characteristics, impulsiveness or vibration –

- Is clearly audible to, or can be felt by, an individual; and
- Annoys the individual.

In determining whether a noise annoys an individual and is unreasonably intrusive, regard must be given to Australian Standard AS 1055.2 - 1997 *Acoustics – Description and Measurement of Environmental Noise, Part 2: Application to Specific Situations*.

$L_{Aeq,adj,1\text{ hour}}$  means an A weighted sound pressure level of a continuous steady sound, adjusted for tonal character, that within a 1 hour period has the same mean square sound pressure of a sound that varies with time.

**Land** in the 'land schedule' of this document means land excluding waters and the atmosphere.

**Mg/L** means milligrams per litre.

**Normal cubic metres (m<sup>3</sup>)** means the volume of dry gaseous contaminant which occupies 1 cubic metre at a temperature of zero degrees Celsius and at an absolute pressure of 101.3 kilopascals.

**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 2004*, 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 unreasonably disagreeable to the sense; disgusting, nauseous or repulsive.

**Protected area** means –

- A protected area under the *Nature Conservation Act 1992*; or
- A marine park under the *Marine Parks Act 2004*; or
- A World Heritage Area.

**Regulated waste** means non-domestic waste mentioned in Schedule 7 of the Environmental Protection Regulation 2008 (whether or not it has been treated or immobilised), and includes –

- For an element – any chemical compound containing the element; and
- Anything that has contained the waste.

**Site** means land or tidal waters on or in which it is proposed to carry out the development approved under this environmental authority.

**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.

**Works or operation** means the activity approved under this environmental authority.

**You** means the holder of the environmental authority.

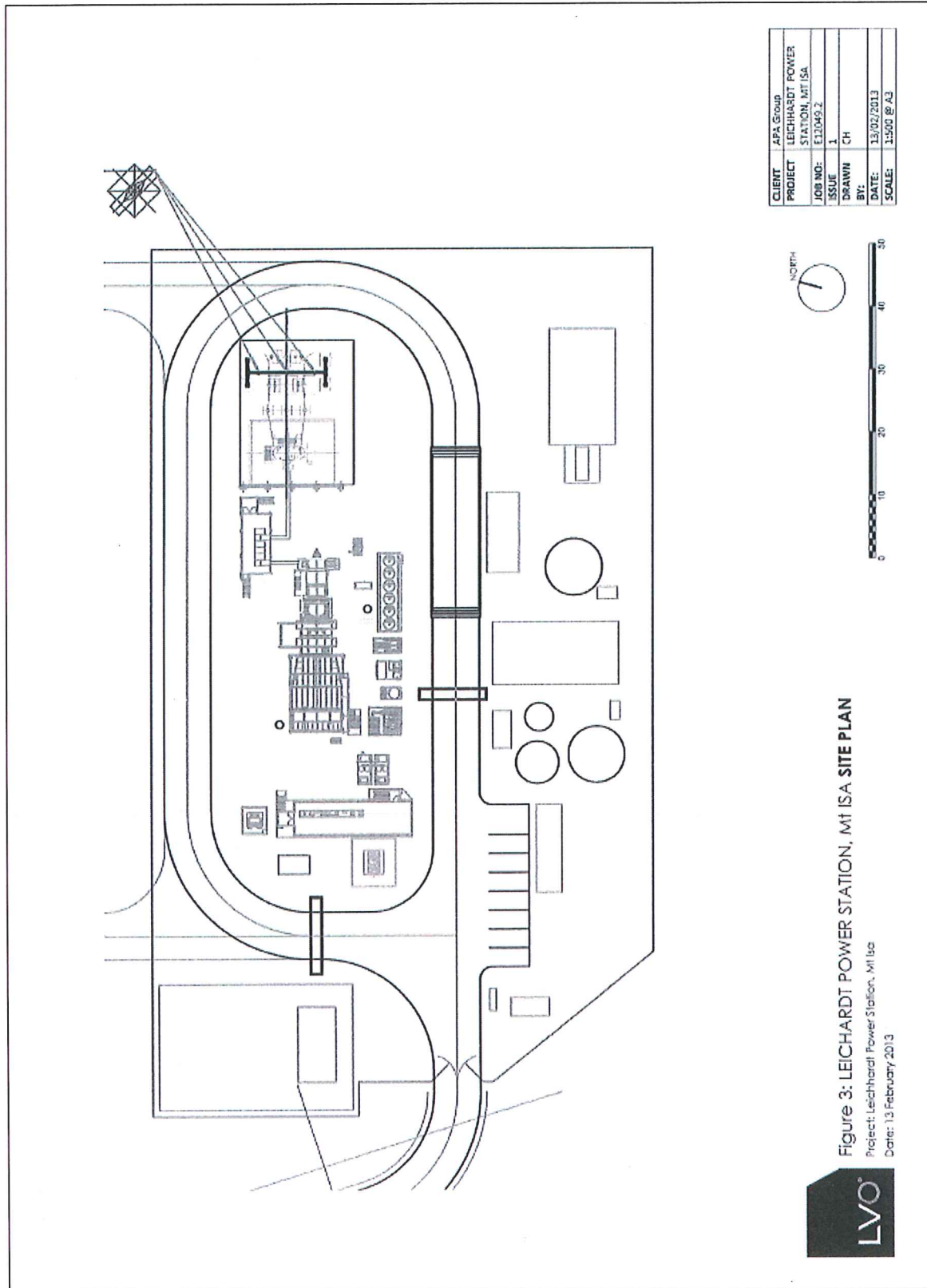
Figure 2 – Diamantina Power Station



Figure 3 – Leichhardt Power Station Context Plan, including approximate monitoring location.



Figure 4 – Leichardt Power Station Site Plan



END OF PERMIT