Approved form

Environmental Protection Act 1994

Transitional environmental program

This form must be used when proposing a transitional environmental program (TEP) to the administering authority pursuant to section 331 of the Environmental Protection Act 1994. *For further information on TEPs refer to the Transitional Environmental Programs Guideline (ESR/2016/2277) and Annual return for a transitional environmental program form (ESR/2016/2139).*

TRANSITIONAL ENVIRONMENTAL PROGRAM FOR RTA WEIPA PTY LTD
Section 330 of the *Environmental Protection Act 1994*

Individual or Company Responsible:	123 Albert Street BRISBANE CITY QLD 4000 54 137 266 285
Environmental Authority number (if relevant)	EPML00725113
Environmental Authority holder names (if relevant)	RTA Weipa Pty Ltd
Development Approval number (if relevant)	n/a
Title:	Transitional environmental program for Lorim Point Power Station
Date:	15/1/2021
Reason for TEP:	Section 330(1)(c): Comply with a condition of an environmental authority (EA)/development condition/prescribed condition for carrying out a small scale mining activity*:*
Site details:	ML7024
Period of TEP:	On approval to October 2021
Start date:	On approval
Finish date:	31/10/2021

Content of Program:

To comply with a condition of Environmental Authority (EPML00725113): section 330(1)(c)

C**omply with a condition of an environmental authority:** (section 331(e))

On 21 March 2020, there was a critical failure of one of the diesel turbines that supply electricity to the operation of the town at the Lorim Point Power Station, Weipa. Six temporary generation units were installed at the Lorim Point Power Station (only 3 operational) to ensure continuation of critical power supply mid July 2020.

Condition B12 of RTA Weipa Pty Ltd's Environmental Authority states that power emissions must only be released to the atmosphere from the release points specified in Table B3, which includes Weipa (Lorim Point) Power Station Stacks 1-6.

These temporary units are not a release point in Table B3. The temporary units will only be present until repairs are complete.

In addition to the 21 March 2020 diesel turbine issue, there is a need to perform a Lorim Point Power Station 'shut-down' in September 2021 of all but two (2) permanent generators. Works include the replacement of a safety critical switch room which feeds the towns of Weipa and Andoom high voltage network feeders. As such, during September for a maximum period of 48 hours, 3 temporary generation units will be required to directly replace power that would otherwise be generated by the Lorim Point Power Station permanent units to provide uninterrupted power supply the community. Without this contingency, there will be extended interruption of power. This scenario is consistent with the number of temporary units used to mitigate the previous power disruption in March 2020. Attached as Appendix A are preliminary dispersion modelling results that compare the Lorim Point permanent power station units and the 3 temporary units (mitigated case) with that of the 'base case', normal dispersion for a permanent power station without temporary units. The outcome of this modelling illustrates that the mitigated case oxides of nitrogen emissions are less than the base case. As such, the shutdown scenario is expected to deliver even lower emissions.

This TEP will allow the temporary units to release emissions to the atmosphere from a point that is not an authorised release point.

The temporary units aren't adding any additional power to the grid, just replacing it. Plume dispersion modelling has been conducted and confirmed that the overall emission profile of this temporary scenario, including the shutdown, is lower than the normal operating scenario.

Description of transition:

Compliance will be achieved when repairs to the Lorim Point Power Station and associated switchroom are complete.

TABLE 1
Objective(s) [section 331(a)] State the objectives to be achieved and maintained under the TEP for the activity. The objectives must be **specific** and **clear** and **relate to achieving compliance** with the Act*,* the *Environmental Protection Regulation 2008*, environmental protection policies, or if relevant, the conditions of approval.
The objective of the TEP is to **provide a framework by which the Lorim Point Power Station may transition back to an operational state consistent with that under which Environmental Authority EPML00725113 whilst demonstrating that the interim state of the Lorim Point Power Station i.e. supported by temporary 1.1 MW power generating units, does not pose an increased risk of environmental harm.** .
2. The objectives will be achieved by: A) repairing the Lorim Point Power station 4.5 MW unit(s) (H3, H4 and H5); B) Undertaking emissions source sampling of the temporary 1.1 MW power generating units; C) Undertaking dispersion modelling and demonstrating that the results of the dispersion modelling do not suggest an increased risk of environmental harm when compared to impacts associated with the pre-TEP operating state of the Lorim Point Power Station; and D) decommissioning the interim 1.1 MW power generating units once repairs have been completed on the Lorim Point Power Station and associated switchroom.

Actions [section 331(b)] List the actions to be taken to achieve each of the objectives. Actions must take into account: 1. Best practice environmental management for the activity (including how these measures stand against the measures currently used nationally and internationally for the activity [section 331(b)(i)]); and 2. The risks of environmental harm being caused by the activity (including the proposed actions, how the risks have been considered and how they will be treated or mitigated [section 331(b)(ii)]).	**Commencement date** [section 331(b)] A start and finishing date for each action or groups of actions must be included.	**Completion date**
1. A NATA accredited stack testing company will be engaged to conduct source emisson testing for 60% and 80 % load operations for all of the temporary 1.1 MW units located at the Lorim Point Power Station at the time of testing. Sampling will be undertaken for oxides of nitrogen, carbon monoxide and oxygen as a minimum. In accordance with Results will be corrected to 3% oxygen). **Emissions from the temporary units will be compared against the NSW Protection of the Environment Operations (Clean Air) Regulation 2010.** **It is noted that the gas or diesel-fuelled reciprocating engine's NOx emissions limit is 450 mg/Nm3 (dry) at 3% O2 (Group 6)**	**As soon as practicable**	**30 April 2021**
2. A suitably qualified person will be engaged to review the stack emission report and develop an emissions inventory for the temporary 1.1 MW units. An emissions inventory based on (up to 5 years) of historical stack sampling data will be developed for the Lorim Point Power Station 4.5 MW units under typical operations. Emissions scenarios will be developed that are representative of Pre-TEP and TEP-related Lorim Point power station emission sources based on typical operating conditions of 60% and 80% load. Notes: * Due to the short duration of start up/shut down conditions (i.e. less than 10 minute duration) impacts due to emissions during start-up/shut-down will not be explicitly modelled,	**Upon receipt of the results of the stack testing**	**30 May, 2021**

3.A suitably qualified person will be engaged to conduct air dispersion modelling in consideration of the requirements outlined inthe NSW EPA "Approved Methods for the Modelling and Assessmentof Air Pollutants in New South Wales (DECC, 2005)". Consideration will be given to meteorological conditions over the period during which the interim units were located at the Lorim Point power station. Meteorological data from the Bureau of Meteorology monitoring station at Weipa will be considered as part of the assessment. Predicted ground-level concentrations of nitrogen dioxide and carbon monoxide will be presented as contour plots and tabulated at the nearest sensitive receptor locations. Results of the dispersion modelling for the emissions scenarios developed under Task 2, will be compared with the relevant ambient air objectives as specified in Schedule 2 of the Queensland Environmental Protection (Air) Policy. Notes: ***** Focus of the dispersion modelling will be on quantifying impacts associated with the Lorim Point Power Station (including temporaryunits) in isolation for the period ending 30 June 2021. ***** Dispersion modelling will be based on the TAPM/CALMET/CALPUFF suite of modelling tools Results will be reported as per The Queensland guideline “Application requirement for activities with impacts to air” ***** As the focus is on demonstrating that the operation of the temporaryunits is able to be undertaken within the envelop of environmental harm permitted by the site’s existing EA, airshed modelling will not beundertaken	**30 May, 2021**	**31 August, 2021**
4.Decomissioning of the 1.1 MW units	**1 October**	**15 October**

Performance indicators [section 331(g)] Detail how and when each action will be measured to indicate that the action was completed successfully and that the objective of the TEP is being achieved. Performance indicators must not be measured more than six months apart [section 331(g)] and must be quantitative (that is, able to be measured, assessed and audited in a consistent, objective and repeatable manner).	**Commencement date**	**Completion date**

1. After Repairs to the 4.5 MW units have been completed (i.e. end of June 2021), the interim 1.1MW units will be placed on standby until the September shutdown is required, at which point the interim 1.1MW units will be brought back on line as replacement power for the permanent power station.	**Currently ongoing**	**30 September 2021**
2. A comparison of results of the dispersion modelling for the Lorim Point power station a) prior to and b) including the interim power generating units (to end of June 2021), will indicate that the use of the interim 1.1 MW power generating units has not increased the risk of environmental harm.	**Once stack sampling results have been received and CSIRO synoptic data is available.**	**31 August 2021**
3.		

Monitoring [section 331(h)] Provide details of the monitoring activities required to ensure compliance with the proposed TEP actions and dates. This includes details of who will conduct the activities, how monitoring needs to occur and the environmental and scientific testing that may be required.	**Commencement date**	**Completion date**
1. All source sampling will be undertaken by a NATA accredited stack testing company	**As soon as practicable**	**30 April, 2021**
2.		

Reporting [section 331(h)] Regular progress reports are to be provided to EHP on specified dates including monitoring results, a description of activities and issues from the previous month and any proposed activities for the next month. A final report describing how the objective(s) of the TEP was achieved must be provided within one month of the final action being completed and prior to the end date of the TEP. Failure to carry out prescribed actions must be reported.	**Commencement date**	**Completion date**
1. A brief memo will be provided to DES following receipt of the results from the stack sampling program. Results of the stack sampling program will be attached to the memo provided to DES.	**1 April 2021**	**15 June 2021**
2. A final report describing how the objectives of the TEP were achieved will be provided to DES on or before **31 October 2021**.	**31 October 2021**	**31 October 2021**

Declaration

As per section 481 of the *Environmental Protection Act 1994*, it is an offence to state anything to an authorised person that you know is false or misleading in a material particular or omit from a statement made to an

authorised person anything without which the statement is, to your knowledge, misleading in a material particular.

I declare that:

- I do solemnly and sincerely declare that the information provided is true and correct to the best of my knowledge. I understand that it is an offence under section 480 of the *Environmental Protection Act 1994* to give to the administering authority, or an authorised person, a document containing information that I know is false, misleading or incomplete in a material particular[1].
- I understand that information supplied on or with this application form may be disclosed publicly in accordance with the *Right to Information Act 2009* and the *Evidence Act 1977.*

INDIVIDUAL OR IF COMPANY, EXECUTIVE OFFICER NAME Dan Kelleher
SIGNATURE
POSITION OF SIGNATORY (IF RELEVANT) General Manager DATE

Please return your completed application to

Post:
Department of Environment and Heritage Protection
GPO Box 2454
BRISBANE QLD 4001

Courier or hand delivery:
Permit and Licence Management
Department of Environment and Heritage Protection
Level 3, 400 George Street
BRISBANE QLD 4000
Business hours: 8:30am–4:30pm business days

Enquiries:
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Phone: 1300 130 372
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