Development Proposal and
Environmental Management Plan
Project Specific Guidelines

for

Epuron Projects Pty Ltd

Western Plains Wind Farm

Northwest, Tasmania

Board of the Environment
Protection Authority

March 2018

1. *General*

This document identifies the key issues that must be addressed in the Development Proposal and Environmental Management Plan (DPEMP) for Epuron Projects Pty Ltd's proposed Western Plains Wind Farm, northwest Tasmania.

This document should be read in conjunction with the *General Guidelines for the preparation of a Development Proposal and Environmental Management Plan* (http://epa.tas.gov.au/regulation/guidance-documents), which provides general information on preparing a DPEMP.

While the DPEMP should evaluate all potential effects of the proposal, the DPEMP should be principally focused on the key issues identified below. The level of detail provided on other issues should be appropriate to the level of significance of that issue for the proposal.

This document identifies the minimum survey requirements and studies required as part of the DPEMP in relation to the key issues.

This document should not be interpreted as excluding from consideration other matters deemed to be significant or matters that emerge as significant from environmental studies, public comments or otherwise during the course of the preparation of the DPEMP.

This document has been prepared on the basis of a Notice of Intent.

The following guidelines may be of use in preparing the DPEMP.

- Environment Protection and Heritage Council, 2010, *National Wind Farm Development Guidelines* – Draft, July 2010.
- New Zealand Standard NZS 6808:2010 Acoustics – wind farm noise.
- NSW Planning and Environment, 2016, *Wind Energy Guideline for State significant wind energy development*, December 2016.
- Victoria Environment, Land, Water and Planning, 2016, *Policy and Planning Guidelines for the Development of Wind Energy Facilities in Victoria*, January 2016.

2. *Key issues*

The key issues that have been identified for consideration in relation to the proposal, and which should be the principal focus of the DPEMP, are as follows:

	Key issue
1	Potential impacts to threatened fauna, in particular avifauna species during operation
2	Potential impacts to threatened flora and ecological communities during construction
3	Potential noise impacts for nearby residents

3. *Survey and study requirements*

The following surveys and studies will be required as part of the DPEMP in relation to the key issues. The relevant sections of the DPEMP General Guidelines are also identified.

Key Issue	Survey requirements for DPEMP	Other studies for DPEMP	Relevant section of DPEMP General Guidelines
1. Fauna	• Habitat survey, including terrestrial fauna (incl. invertebrates), avifauna and bats for the wind farm and transmission line corridor		S5.2 and s6.7
2. Flora	• Site survey, for the wind farm and transmission line corridor with particular emphasis on threatened species and ecological communities • *Phytophthora cinnamomi* survey		S5.2 and s6.7
3. Noise	• Measurement of pre-existing ambient noise levels at nearest residences.	• Modelling to determine the 30, 35, 40 and 45 dB(A) noise contours.	S6.4

4. *Detailed requirements for the DPEMP*

The following DPEMP requirements are in addition to the requirements of the DPEMP General Guidelines. These additional requirements are grouped under the relevant section number corresponding to the DPEMP General Guidelines.

2.1 General

In addition to the matters stipulated in Section 2.1 of the DPEMP General Guidelines the DPEMP must contain the following.

- Details of wind turbine specifications, ancillary facilities such as new and up-graded roads/access tracks, underground infrastructure (i.e. cable network), transmission line, maintenance facilities and on-site amenities. The proposed generating capacity, number and dimensions of wind turbines must be specified.
- The width of the proposed transmission line corridor should be specified.

2.2 Pre-construction and Construction Phases

- Details of any pre-construction works, including site preparation works, and any temporary or permanent removal of vegetation including, stockpiling of vegetation, erosion control measures and the potential transport of pollutants (e.g. suspended solids) from areas of disturbance during construction.
- Details of any pre-clearance surveys to be carried out prior to commencement of construction, including flora and fauna and geotechnical studies.
- Estimates of the quantities of major raw materials required for construction (e.g. gravel, sand/aggregate and water) and how and where these will be sourced.
- Nature, capacity and location(s) of temporary construction equipment required on-site (such as cranes, concrete batch plants, construction camps).
- Volume, composition, origin, destination and route for vehicle movements likely to be generated during the construction phase, including a breakdown for over-dimension and heavy vehicles.

- Information on the number of construction workers required in the various stages of construction, sources of labour, transport of workers to and from the site, accommodation, and support servicing requirements.
- Proposed hours per day and days per week of construction activities.
- A draft Construction and Environmental Management Plan should be included as an appendix to the DPEMP.

4. Consultation

The following information should be provided in the DPEMP.

a) Details on community and stakeholder consultation already undertaken (in early planning stages).

b) The outcomes of consultation undertaken thus far (e.g. surveys, public meetings, liaison/discussions with interested groups), clearly identifying input provided by community and stakeholders and any resultant changes made to the proposal as a result of consultation process.

c) A description of community and stakeholder attitudes in relation to the proposal.

d) Details of plans for on-going engagement with the community and stakeholders throughout the assessment process and throughout the life of the proposal.

Early community engagement often leads to better outcomes for all and is strongly encouraged. The Board has produced a guide to community engagement which is available on the EPA Tasmania website at: http://epa.tas.gov.au/regulation/guidance-documents.

Comments from the following agencies have been provided:

- TasNetworks - welcomes continued discussions with the developer regarding connection to the electricity transmission network in Tasmania.
- AirServices Australia – an Aviation Impact Statement report is required to be submitted along with the Wind Farm Development application.
- CASA - based on the details provided in the NOI, the proponent does not need to install obstacle lighting on the wind turbines. However the proponent should provide details of the proposed wind turbines to Airservices by using the Reporting of Tail Structures form and emailing it to VOD@airservicesaustralia.com. A copy of the form can be downloaded from the following link http://www.airservicesaustralia.com/WD-content/uploads/ATS-FORM-0085ObstacleNotificationForm.pdf.
- Mineral Resource Tasmania - during pre-construction contact Manager Geological Survey (andrew.mcneill@stategrowth.tas.gov.au) to discuss opportunities for mapping and sampling of drill core or other exposures created as a result of geotechnical studies.
- Department of State Growth (State Roads Division) – an approved temporary access permit will be required to access roads on the Stanley Highway. Refer permit applications at http://www.transport.tas.gov.au/road/permits/road-access.

6.4 Noise emissions

In addition to the matters stipulated in Section 6.4 of the DPEMP General Guidelines the DPEMP must contain the following.

Noise emissions need to be assessed and managed to ensure that sleep is not disturbed and to avoid unreasonable interference with normal domestic activities. Noise can contribute to annoyance which, if not properly addressed, could result in health impacts.

This section should identify existing conditions, identify performance requirements to be achieved, identify any potential effects of the proposal on ambient (surrounding) noise levels (during both the construction and operational phases), identify measures to avoid and mitigate any possible

adverse effects, and assess the overall effects on ambient noise levels following implementation of the proposed avoidance and mitigation measures.

The following should be provided.

a) Ambient noise monitoring data sufficient to establish pre-existing noise conditions. At least 2 weeks of data will be required for the acoustic assessment.

b) All major sources of noise must be identified and described.

c) The potential for noise emissions (during both the construction and operational phases) to cause nuisance for nearby land users should be considered and any proposed measures to mitigate noise impacts should be described.

d) The potential for noise emissions to affect terrestrial, marine and freshwater wildlife and livestock.

The noise assessment is to be carried out following a contemporary procedure which is generally consistent with NZS6808 Standards. However, it should be noted that noise limit criteria will be established by the EPA. The proponent should have regard to the national and state noise limit standards and guidelines. It is recommended that the EPA's Noise Specialist be consulted when developing noise measurement and modelling protocols

6.7 Biodiversity and natural values

In addition to the matters stipulated in Section 6.7 of the DPEMP General Guidelines the DPEMP must contain the following:

Threatened Flora

The NOI states that flora surveys were carried out in January 2018 within the footprint of the windfarm, but that proposed road alignments were only surveyed from afar with binoculars due to access difficulties. Long-range surveys with binoculars are not considered appropriate for threatened flora, and the DPEMP should address this limitation with follow-up surveys in accordance with the *Guidelines for Natural Values Surveys – Terrestrial Development Proposals* (http://dpipwe.tas.gov.au/Documents/Guidelines%20for%20Natural%20Values%20Surveys%20related%20to%20Development%20Proposals.pdf), with results provided in the DPEMP.

The outcome of the analysis of field samples taken for identification by the herbarium (p. 7 of the NOI) should be included in the DPEMP, and if these are confirmed to belong to a listed threatened species then appropriate avoidance or mitigation measures should be provided in the DPEMP.

Threatened Vegetation Communities

The NOI suggests that two threatened vegetation communities will be impacted by the proposal: DOV (*Eucalyptus ovata* forest and woodland) and NME (*Melaleuca ericifolia* swamp forest). The DPEMP should outline if the impact on these communities can be avoided (for example, by re-aligning the transmission line and road access routes). Impacts to these communities should be avoided or minimised as much as practicable.

Threatened Fauna

Tasmanian Devils and Spotted-Tailed Quolls
Tasmanian devils and spotted-tailed quolls are known to occur on the Stanley peninsula and within the area between Stanley and Port Latta. The entire impact area (including windfarm, road and transmission lines) should be surveyed for devil and quoll dens, in accordance with the *Survey Guidelines and Management Advice for Development Proposals that may Impact on the Tasmanian Devil (Sarcophilus harrisii)* (the Guidelines). The Guidelines can be found at: http://dpipwe.tas.gov.au/Documents/Devil%20Survey%20Guidelines%20and%20Advice.pdf. Should

any dens be found within the impact area, then appropriate mitigation options should be provided in the DPEMP, in accordance with the Guidelines.

As outlined in the Guidelines, the DPEMP should consider the likely impact on these species from any increase in traffic as a result of the proposed development, including increases during the construction phase as well as the operational phase. Roadkill mitigation measures may be required and should be outlined in the DPEMP if required.

Avifauna
The avifauna study mentioned in the NOI should include targeted utilisation and nest search surveys for wedge-tailed eagles (WTEs) and white-bellied sea-eagles (WBSEs).

Targeted utilisation surveys
Targeted utilisation surveys should be carried out across the proposed project footprint (including transmission lines) to determine utilisation of the area by eagle species. It is recommended that these surveys are carried out in the following manner.

- Surveys should be undertaken by suitably qualified persons.
- Multiple observers should be used for each survey so that utilisation (activity/behaviour/type of flight) and flight paths, heights and time budgets can be adequately recorded.
- Survey methodology should be such that spatial use of the site (any favoured areas, any common flight paths, etc.) can be determined.
- Five-day surveys are recommended at the mid-point of each season (summer, autumn, winter and spring), undertaken from dawn to dusk each day (as opposed to set hours).
- Since utilisation by WTEs has been known to vary significantly between years, it is usually recommended that surveys are undertaken over a period of at least two years (i.e. over at least two summers, two autumns, two winters and two springs). However, depending on the findings after Year 1, there may be adequate information and/or mitigation proposed to justify no further utilisation surveys. In this case, PCAB could review the preliminary report and provide further advice at that time regarding a recommendation for further surveys or otherwise.

It is recommended that utilisation survey data are presented in the form of “contour maps” for different seasonal activity periods, and that supporting information from field observations are included (e.g. flight heights, commonly used flight paths and time budgets).

If the proponent wishes to use a collision risk model (CRM) in support of their proposal, it is recommended that details of the model are provided for review by PCAB prior to use.

The DPEMP should provide appropriate avoidance/mitigation/offset options in accordance with the mitigation hierarchy. The proponent may consider a carcass monitoring and management program, as well as livestock management during calving season, to ensure that any carrion is removed from site as quickly as possible.

Targeted eagle nest search surveys
The avifauna study should include a targeted eagle nest search survey by a suitably qualified person/s which covers any potential nesting habitat in or within one kilometre of areas proposed to be impacted (including the windfarm footprint and the transmission line corridor). Surveys should be undertaken following one of the methods outlined in Section 4 of the Forest Practices Authority (FPA) guidelines for nest searches. If there is not suitable access to undertake surveys on foot, a survey by helicopter will be required (note time of year restrictions apply for undertaking these surveys). A copy of the FPA guidelines is available at: http://www.fpa.tas.gov.au/__data/assets/pdf_file/0012/110208/Fauna_Tech_Note_1_Eagle_nest_management_May_2015.pdf.

Other avifauna
There are several species of shorebirds, seabirds and other migratory bird species that utilise the marine, intertidal and coastal areas of the proposed development site. This includes, but is not limited

to, listed threatened species such as the eastern curlew, fairy tern, little tern and hooded plover. The DPEMP should consider the potential impact of the proposal on these species, and outline appropriate avoidance or mitigation measures. In addition to collision, habitat loss and noise disturbance, consideration should also be given to the impact of light and noise pollution.

Weeds & diseases

The DPEMP should include a commitment to manage weeds and diseases during construction and operation of the windfarm. Steps should also be taken to ensure that additional weed species and diseases such as *Phytophthora cinnamomi* are not introduced to the site and that existing weeds on the property are not spread any further as a result of the project. The development of a weed and disease management plan, and its inclusion in the DPEMP, should be prepared in accordance with the *Weed and Disease Planning and Hygiene Guidelines - Preventing the spread of weeds and diseases in Tasmania*, which can be found at: http://dpipwe.tas.gov.au/Documents/Weed%20%20Management%20and%20Hygiene%20Guidelines.pdf.

Sites of Geoconservation Significance

The project area (roads and transmission lines) may intersect with several sites of geoconservation significance, including the Perkins Bay Coastal Depositional Landforms, Cowrie Point Section and Green Hills Miocene Submarine Lavas. The DPEMP should address the potential impacts on any site of geoconservation significance, and outline avoidance/mitigation/offset options where appropriate.

Acid Sulfate Soils

Some areas within the transmission line corridor are mapped as having a high probability (>70%) of Acid Sulfate Soil (ASS), whilst the windfarm site has a low probability (6-70%). The DPEMP should address the potential for ASS disturbance, in accordance with the Tasmanian Acid Sulfate Soil Management Guidelines (http://dpipwe.tas.gov.au/Documents/ASS-Guidelines-FINAL.pdf).

General comments

It is noted that the natural values assessment occurred over one day only in early February 2018, and field examinations were limited to the windfarm site and two small sections of road nearby. To gain a full understanding of the natural values to be impacted by the proposal, the entire impact area should be surveyed, including the transmission line route from the windfarm to Port Latta, and any existing roads that may be modified as part of the project. The DPEMP should include the results of these surveys and how the project proposes to manage any potential impacts to threatened species.

6.10 Heritage

Comments from Aboriginal Heritage Tasmania (AHT) are provided below.

- Aboriginal heritage investigations throughout Tasmania must meet AHT's *Guide to the Aboriginal Heritage Assessment Process*. A copy of the Guide and further relevant information regarding the Aboriginal heritage assessment process can be found on AHT's website www.aboriginalheritage.tas.gov.au.

- Once the Aboriginal heritage investigation has been completed a copy of the report must be forwarded to AHT for review/comment.