

ATTACHMENT 3

COMMONWEALTH DEPARTMENT OF AGRICULTURE, WATER AND THE ENVIRONMENT - ENVIRONMENTAL ASSESSMENT REQUIREMENTS

Guidelines for preparing assessment documentation relevant to the EPBC Act for proposals being assessed under the Bilateral Agreement

Mount Pleasant Optimisation Project (EPBC 2020/8735) (SSD 10418)

Introduction

On 26 August 2020, a delegate of the Commonwealth Minister for the Environment determined that the Mount Pleasant Optimisation Project is a controlled action under section 75 of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). The EPBC Act controlling provisions for the proposed action are:

- listed threatened species and communities (sections 18 and 18A); and
- a water resource, in relation to coal seam gas development and large coal mining development (section 24D & section 24E).

The delegate also decided that the proposed action will be assessed in a manner specified in Schedule 1 to the *Bilateral Agreement made under section 45 of the EPBC Act relating to environmental assessment* (2015).

These guidelines provide information on environmental assessment requirements for the proposed action.

Matters of National Environmental Significance

All matters of national environmental significance (MNES) protected under the triggered controlling provisions are potentially relevant, however the Department of Agriculture, Water and the Environment (DAWE) considers that there is likely or potential to be a significant impact on the following:

- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland – Critically Endangered
- Swift Parrot (*Lathamus discolor*) – Critically Endangered
- Regent Honeyeater (*Anthochaera phrygia*) – Critically Endangered
- Striped Legless Lizard (*Delpa impar*) – Vulnerable
- Water Resources

In addition, without further detailed assessment of potential impacts of the proposed action, DAWE considers that there is a real chance or possibility that the proposed action will significantly impact the following protected matters:

- Austral Toadflax (*Thesium australe*) – Vulnerable
- Slaty Red Gum (*Eucalyptus glaucina*) – Vulnerable

Please note that this may not be a complete list as additional impacts may be identified during the preparation of the environmental impact statement. In this regard, it is the responsibility of the applicant to undertake an analysis of the significance of the relevant impacts and ensure that all protected matters that are likely to be significantly impacted are assessed for the Commonwealth Minister's consideration.

Key Issues

The EIS must include the following:

- A detailed water management plan for the proposed project with sufficiently detailed information on operational water requirements of the project and associated infrastructure;

- a detailed assessment of potential groundwater impacts, especially if data and modelling suggests impacts may propagate to the Hunter alluvium and flow in the Hunter River;
- the use of baseline or pre-existing data to inform the groundwater models, surface water models, and to inform any GDE assessments, including:
 - a numerical ground water model which has appropriate resolution to determine impacts to rivers and creeks in the project area, including the Hunter River, Sandy Creek, Rosebrook Creek, Muscle Creek and other unnamed drainage lines both upstream and downstream of the proposed project area;
 - a hydrogeological conceptualisation to identify areas of shallow groundwater and potential areas of groundwater discharge;
 - consideration of the methods provided in the 2019 report *Information Guidelines Explanatory Note: Assessing groundwater-dependent ecosystems*, by Doody TM, Hancock PJ, Pritchard JL. For more information on how to assess groundwater use by vegetation (especially during dry periods), the guidelines are available at: <http://www.iesc.environment.gov.au/system/files/resources/422b5f66-dfba-4e89-adda-b169fe408fe1/files/information-guidelines-explanatory-note-assessing-groundwater-dependent-ecosystems.pdf>;
 - mapping of vegetation, seasonal depths to groundwater, and shallow groundwater drawdown maps overlaid to identify areas of potential GDEs, supported by monitoring data gathered near the regions occupied by potential GDEs, with the shallow groundwater monitoring locations also plotted on the maps;
 - ecohydrological conceptualisations and models that integrate results from hydrogeological, hydrological, geomorphological and ecological investigations at a spatial and temporal scale that is suitable for predicting potential impacts to GDEs and pathways of likely effects of the proposed development; and
 - proposed mitigation strategies (and measured to monitor the effectiveness of those strategies), based on the potential impact pathways identified above;
- the use of baseline or pre-existing surface and groundwater water quality data to establish water quality monitoring guidelines at the site, with particular attention given to mine-affected water entering and leaving the Bengalla mine site's controlled release dam when establishing an updated water quality monitoring regime as part of the Water Management Plan required above.
- consideration of closure and rehabilitation activities that will be undertaken and what the final landform will be at the end of mining to avoid long-term impacts to groundwater and surface water resources at the site; and
- an assessment of cumulative impacts identifying the extent to which the impacts from the proposed action interact with impacts from neighbouring approved coal mines.

General Assessment Requirements

The EIS must address the matters outlined in Schedule 4 of the *Environment Protection and Biodiversity Conservation Regulations 2000* and the matters outlined below in relation to the controlling provisions.

For each of the EPBC Act-listed threatened species and ecological communities impacted by the proposed action, the EIS must provide the following information:

- Survey results, including details of the scope, timing and methodology for studies or surveys used and how they are consistent with (or justification for divergence from) published Commonwealth guidelines and policy statements. For ecological communities, this includes any condition thresholds provided in the listing advice or approved conservation advice.

- A description and quantification of habitat in the study area (including suitable breeding habitat, suitable foraging habitat, important populations and habitat critical for survival), with consideration of, and reference to, any relevant Commonwealth guidelines and policy statements including species and communities listing advice, conservation advice, recovery plans and threat abatement plans.
- Maps displaying the above information (specific to EPBC matters) overlaid with the proposed action. It is acceptable, where possible, to use the mapping and assessment of Plant Community Types (PCTs) and the species surveys prescribed by the BAM as the basis for identifying EPBC Act-listed species and communities. The EIS must clearly identify which PCTs are considered to align with habitat for the relevant EPBC Act-listed species or communities, and provide individual maps for each species or community.
- A description of the nature, geographic extent, magnitude, timing and duration of any likely direct, indirect and consequential impacts on any relevant EPBC Act-listed species and communities. It must clearly identify the location and quantify the extent of all impact areas to each relevant EPBC Act-listed species or community.
- Information on proposed avoidance and mitigation measures to deal with the impacts of the action, and a description of the predicted effectiveness and outcomes that the avoidance and mitigation measures will achieve.
- Quantification of the offset liability for each species and community significantly impacted, and information on the proposed offset strategy, including discussion of the conservation benefit for each species and community, how offsets will be secured, and the timing. It is a requirement that offsets directly contribute to the ongoing viability of the specific protected matter impacted by a proposed action i.e. 'like-for-like'.

Note: Like-for-like includes protection of native vegetation that is the same ecological community or habitat being impacted (preferably in the same region where the impact occurs), or funding to provide a direct benefit to the matter being impacted e.g. threat abatement, breeding and propagation programs or other relevant conservation measures.