

**Requirements for preparing Assessment Documentation relevant to the
*Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)***

Dendrobium Mine Extension Project (EPBC 2017/7855) (SSD 8194)

1. On 6 March 2017 it was determined that the Dendrobium Mine Extension Project may impact upon the following matters of national environmental significance (MNES) protected under the *Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)*:
 - threatened species and communities; and
 - a water resource, in relation to coal seam gas and large coal mining developments.

The project will be assessed in accordance with the NSW Assessment Bilateral Agreement 2015 (the Agreement) and as such will be assessed in the manner specified in Schedule 1 to that Agreement.

These requirements are a supplement to the Secretary's Environmental Assessment Requirements issued on 6 February 2017, and should be addressed in conjunction with those requirements.

2. Assessment documentation prepared for the purposes of approval under the EPBC Act must, in addition to providing sufficient information for a decision in accordance with the Agreement, address the matters outlined in Schedule 4 of the *Environment Protection and Biodiversity Conservation Regulations 2000 (Cth)*. Proponents are advised to check that requirements in Schedule 4 of the EPBC Regulations have been appropriately addressed. http://www.austlii.edu.au/au/legis/cth/consol_reg/epabcr2000697/.
3. The supplementary requirements are intended such that there is sufficient information in the assessment report relevant to MNES, to allow the Commonwealth decision-maker to determine whether or not to approve the action. The Applicant must undertake an assessment of all the protected matters that may be impacted by the development under the controlling provision identified in paragraph 1. A list of protected matters that are considered likely to be significantly impacted is provided at Attachment A to these requirements. Note that this may not be a complete list and it is the Applicant's responsibility to ensure any protected matters under this controlling provision, likely to be significantly impacted, are assessed for the Commonwealth decision-maker's consideration.

General Requirements

Project Description

4. The title of the action, background to the development and current status.
5. The precise location and description of all works to be undertaken (including associated offsite works and infrastructure), structures to be built or elements of the action that may have impacts on MNES.
6. How the action relates to any other actions that have been taken, or are being taken, in the region affected by the action.
7. How the works are to be undertaken and design parameters for those aspects of the structures or elements of the action that may have relevant impacts on MNES.

Impacts

8. The EIS must include an assessment of the relevant impacts¹ of the action on threatened species and communities, including:

¹ Relevant impacts are those impacts likely to significantly impact any matter protected under the EPBC Act

- a description and detailed assessment of the nature and extent of the likely direct, indirect and consequential impacts, including short term and long term relevant impacts;
- a statement whether any relevant impacts are likely to be known, unpredictable or irreversible, and analysis of the significance of the relevant impacts;
- any technical data and other information used or needed to make a detailed assessment of the relevant impacts; and
- a comparative description of the impacts of alternatives, if any, on the threatened species and communities.

Avoidance, mitigation and offsetting

9. For each of the relevant protected matters that are likely to be significantly impacted by the development, the EIS must provide information on proposed avoidance and mitigation measures to deal with the relevant impacts of the action, including:
 - a description and an assessment of the expected or predicted effectiveness of the mitigation measures;
 - any statutory policy basis for the mitigation measures;
 - the cost of the mitigation measures;
 - a description of the outcomes that the avoidance and mitigation measures will achieve;
 - an outline of an environmental management plan that sets out the framework for continuing management, mitigation and monitoring programs for the relevant impacts of the action;
 - the name of any agency responsible for endorsing or approving a mitigation measure or monitoring program; and
 - a description of the offsets proposed to address the residual adverse significant impacts and how these offsets will be established.
10. Where a significant residual adverse impact to a threatened species or community is considered likely, the EIS must provide information on the proposed offset strategy, including discussion of the conservation benefit associated with the proposed offset strategy. Paragraphs 13 & 14 provide further requirements in relation to offsets.

Key Issue – Biodiversity

11. The EIS must address the following issues in relation to Biodiversity including separate:
 - identification of each EPBC Act listed threatened species and community likely to be impacted by the development. Provide evidence why other EPBC Act listed threatened species and communities likely to be located in the project area or in the vicinity will not be impacted.
12. For each of the relevant EPBC Act listed threatened species and communities likely to be impacted by the development the EIS must provide a separate:
 - description of the habitat and habits (including identification and mapping of 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 listing advice, conservation advice and recovery plans, threat abatement plans and wildlife conservation plans; and
 - details of the scope, timing and methodology for studies or surveys used and how they are consistent with (or justification for divergence from) published Australian Government guidelines and policy statements.

- description of the impacts of the action having regard to the full national extent of the species or community's range.

[Note: the relevant guidelines and policy statements for each species and community are available from the Department of the Environment Species Profiles and Threats Database. <http://www.environment.gov.au/cgi-bin/sprat/public/sprat.pl>]

13. For each of the relevant EPBC Act listed threatened species and communities likely to be significantly impacted by the development the EIS must provide a separate:

- identification of significant residual adverse impacts likely to occur after the proposed activities to avoid and mitigate all impacts are taken into account.
- details of how the current published NSW Framework for Biodiversity Assessment (FBA) has been applied in accordance with the objects of the EPBC Act to offset significant residual adverse impacts;
- details of the offset package to compensate for significant residual impacts including details of the credit profiles required to offset the development in accordance with the FBA and/or mapping and descriptions of the extent and condition of the relevant habitat and/or threatened communities occurring on proposed offset sites.

Note: For the purposes of approval under the EPBC Act, 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'). In applying the FBA, residual impacts on EPBC Act listed threatened ecological communities must be offset with Plant Community Type(s) (PCT) that are ascribed to the specific EPBC listed ecological community. PCTs from a different vegetation class will not generally be acceptable as offsets for EPBC listed communities.

14. Any significant residual impacts not addressed by the FBA may need to be addressed in accordance with the EPBC Act Environmental Offset Policy. <http://www.environment.gov.au/epbc/publications/epbc-act-environmental-offsets-policy>.

Note: if the EPBC Act Environmental Offset Policy is used to calculate proposed offsets for a threatened species or community you may wish to seek further advice from the Department of Planning and Environment.

15. For each threatened species and community likely to be significantly impacted by the development, the EIS must provide reference to, and consideration of, relevant approved conservation advice or recovery plan for the species or community.

Note: the relevant guidelines and policy statements for each species and community are available from the Department of the Environment Species Profiles and Threats Database: <http://www.environment.gov.au/cgi-bin/sprat/public/sprat.pl>

Key Issue - Water resource, in relation to coal seam gas development and large coal mining development

16. The EIS should provide a description of the location, extent and ecological characteristics and values of the identified water resource potentially affected by the project.

17. The assessment of impacts should include information on:

- any substantial and measurable changes to the hydrological regime of the water resource, for example a substantial change to the volume, timing, duration or frequency of ground and surface water flows;
- the habitat or lifecycle of native species, including invertebrate fauna and fish species, dependent upon the water resource being seriously affected
- substantial and measurable change in the water quality and quantity of the water resource—for example, a substantial change in the level of salinity, pollutants, or nutrients

in the wetland; or water temperature that may adversely impact on biodiversity, ecological integrity, social amenity or human health.

18. The EIS must provide adequate information to allow the project to be reviewed by the Independent Expert Scientific Committee on Coal Seam Gas and Large Coal Mining Development, as outlined in the *Information Guidelines for Independent Expert Scientific Committee advice on coal seam gas and large coal mining development proposals* (IESC, October 2015).
19. Specifically, water resources within the WaterNSW Special Area that supplies drinking water to Sydney, the Blue Mountains and Illawarra are identified to be potentially at risk.

Environmental Record of person proposing to take the action

20. Information in relation to the environmental record of a person proposing to take action must include details as prescribed in Schedule 4 Clause 6 of the EPBC Regulations 2000.

Information Sources

For information given in the EIS, the EIS must state the source of the information, how recent the information is, how the reliability of the information was tested; and what uncertainties (if any) are in the information.

REFERENCES

1. *Environment Protect and Biodiversity Conservation Act 1999* - section 51-55, section 96A(3)(a)(b), 101A(3)(a)(b), section 136, section 527E
2. NSW Assessment Bilateral Agreement (2015) - Item 18.1, Item 18.5, Schedule 1
3. *Matters of National Environmental Significance - Significant impact guidelines 1.1* (2013) EPBC Act
4. *Environment Protect and Biodiversity Conservation Act 1999* Environmental Offsets Policy October 2012
5. *Information Guidelines for Independent Expert Scientific Committee advice on coal seam gas and large coal mining development proposals* (IESC, October 2015)

Attachment A

The Department of the Environment's Environment Reporting Tool (ERT) identifies threatened species and communities that may occur within 5 km of the proposed action. Based on the information in the referral documentation, the location of the action, species records and likely habitat present in the area, there are likely to be significant impacts to:

- Coastal Upland Swamps in the Sydney Basin Bioregion (Coastal Upland Swamps)

In addition, there is some risk that there may be significant impacts on the following matters and levels of impact should be further investigated:

- Shale Sandstone Transitional Forest in the Sydney Basin Bioregion
- Small-flower Grevillea (*Grevillea parviflora subsp. parviflora*)
- Kangaloon Sun-Orchid (*thelymitra kangaloonica*)
- Giant Burrowing Frog (*Heleiporous australiacus*)
- Green and Golden Bell Frog (*Litoria aurea*)
- Littlejohns Tree Frog (*Litoria littlejohn*)
- Macquarie Perch (*Macquaria australasica*)
- Broad-Headed Snake (*Hoplocephalus*)
- Regent Honeyeater (*Anthochaera Phrygia*)
- Eastern Bristlebird (*Dasyornis brachypterus*)
- Spot-tailed Quoll (*Dasyurus maculatus*) (SE mainland population)
- Greater Glider (*Petauroides volans*)

An assessment in accordance with clauses 11-15 of these requirements for all of these matters above must be presented in the EIS.