

ATTACHMENT 3

Commonwealth Department of Environment and Energy assessment requirements

Guidelines for preparing assessment documentation relevant to the EPBC Act for proposals being assessed under an Accredited NSW Assessment Process

Narrabri Underground Mine Stage 3 Extension Project (EPBC 2019/8427) (SSD 10269)

Introduction

1. On 30 September 2019, a delegate of the Federal Minister for the Department of the Environment and Energy (DoEE) determined that the Narrabri Underground Mine Stage 3 Project was 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:
 - i. listed threatened species and communities (sections 18 and 18A); and
 - ii. a water resource, in relation to coal seam gas development and large coal mining development (sections 24D and 24E).
2. The proposed action will be assessed using an accredited process for the purposes of the EPBC Act. The assessment documentation must include:
 - i. an assessment of all impacts that the action is likely to have on each matter protected by a provision of Part 3 of the EPBC Act;
 - ii. enough information about the proposal and its relevant impacts to allow the Federal Minister to make an informed decision on whether or not to approve; and
 - iii. information addressing the matters outlined in Schedule 4 of the *Environment Protection and Biodiversity Conservation Regulations 2000* (EPBC Regulations).
3. The Applicant must undertake an assessment of all protected matters that may be impacted by the development under the controlling provisions identified in paragraph 1. The DoEE considers that the proposed action is likely to have a significant impact on the following:
 - i. listed threatened species and communities (sections 18 and 18A):
 - a) White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland - Critically Endangered;
 - b) Koala (*Phascolarctus cinereus*) – Vulnerable;
 - c) Piliga Mouse (*Pseudomys pilligaensis*) – Vulnerable;
 - d) South-eastern Long-eared Bat (*Nyctophilus corbeni*) – Vulnerable;
 - e) *Tylophora linearis* (a vine) – Endangered; and
 - f) *Bertya opposens* (a shrub) – Vulnerable.
 - ii. a water resource, in relation to coal seam gas development and large coal mining development (sections 24D and 24E):
 - a) the proposed action is likely to result in changes to groundwater and surface water.
4. Based on DoEE's Environment Reporting Tool and information provided by the Species Profiles and Threats Database (SPRAT), DoEE also considers that the proposed action may result in significant impacts to the following species:
 - a) Regent Honeyeater (*Anthochaera phrygia*) - Critically Endangered;
 - b) Superb Parrot (*Polytelis swainsonii*) – Vulnerable; and
 - c) Large-eared Pied Bat (*Chalinolobus dwyeri*) – Vulnerable.

These species require further assessment, surveys and analysis to determine whether they are likely to be significantly impacted. Note that this may not be a complete list and it is the responsibility of the Applicant to ensure any protected matters under this controlling provision are assessed for the Commonwealth decision-makers consideration.

5. The Applicant must consider each of the protected matters under the triggered controlling provisions that may be impacted by the action. Note that this may not be a complete list and 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.

General Requirements

Relevant Regulations

6. The Environmental Impact Statement (EIS) must address the matters outlined in Schedule 4 of the EPBC Regulations and the matters outlined below in relation to the controlling provisions.

Project Description

7. The title of the action, background to the action of the action and current status.
8. 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.
9. How the action relates to any other actions that have been, or are being taken in the region affected by the action.
10. 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

11. The EIS must include an assessment of the relevant impacts¹ of the action on the matters protected by the controlling provisions, including:
 - i. 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;
 - ii. a statement whether any relevant impacts are likely to be unknown, unpredictable or irreversible;
 - iii. analysis of the significance of the relevant impacts; and
 - iv. any technical data and other information used or needed to make a detailed assessment of the relevant impacts.

Avoidance, mitigation and offsetting

12. For each of the relevant matters protected that are likely to be significantly impacted by the action, the EIS must provide information on proposed avoidance and mitigation measures to manage the relevant impacts of the action including:
 - i. a description, and an assessment of the expected or predicted effectiveness of the mitigation measures,
 - ii. any statutory policy basis for the mitigation measures;
 - iii. the cost of the mitigation measures;
 - iv. 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, including any provisions for independent environmental auditing;
 - v. the name of the agency responsible for endorsing or approving each mitigation measure or monitoring program.

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

13. Where a significant residual adverse impact to a relevant protected matter 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.
14. For each of the relevant matters likely to be impacted by the action the EIS must provide reference to, and consideration of, relevant Commonwealth guidelines and policy statements including any:
 - i. conservation advice or recovery plan for the species or community,
 - ii. relevant threat abatement plan for a process that threatens the species or community
 - iii. wildlife conservation plan for the species
 - iv. any strategic assessment.

[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 Issues

Biodiversity (threatened species and communities and migratory species)

Comments

15. The significant impacts associated with the proposed action on threatened species relate to the removal of native vegetation, fragmentation of the remaining native vegetation (and subsequent indirect impacts), as well as subsidence. These impacts must be appropriately offset for EPBC Act purposes.

Assessment Requirements

For each of the EPBC Act listed species predicted to occur in the project site, and each of the EPBC Act listed ecological communities likely to be significantly impacted, the EIS must provide:

16. 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 and/or the relevant NSW offsetting method.
17. 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 listing advices, conservation advices, recovery plans, and threat abatement plans.
18. Maps displaying the above information (specific to each EPBC protected matter) 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 community, and provide individual maps for each species or community.
19. 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.

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

Comments

20. To date, the Applicant has provided preliminary hydrological information that is insufficient for an adequate assessment of the impacts of the proposed action on water resources, however the Department considers key impacts to water resources are likely to arise from altered surface hydrology and quality as well as increased groundwater drawdown. The Department understands that the Applicant will provide detailed water modelling as part of the EIS which will allow a detailed assessment of the potential impacts of the proposed action on water resources be undertaken. A

joint Request for Advice (RFA) from the Independent Expert Scientific Committee on Coal Seam Gas and Large Coal Mining Development (I ESC) will need to be developed for this project.

Assessment Requirements

The EIS must include a detailed water assessment. The water assessment must be undertaken in accordance with the IESC Information Guidelines

(<http://iesc.ervirurlnerll.yov.Clu/publiGCllions/information-guidelines-independent-expertscientific-committee-advice-coal-seam-gas>) and provide the information outlined in these guidelines including:

Improved groundwater modelling

- 21. Include a refined groundwater model that uses a wider variety of parameters and predictions to enable clarification of potential drawdown impacts and revise, accordingly, the assessment of impacts on both the Upper Namoi Alluvium and the Namoi River.
- 22. Include a groundwater model that has been integrated with the subsidence model to provide an improved understanding of impacts on surface water and alluvium.
- 23. Address the issues identified in Paragraph 3 of the IESC 2019-102: Narrabri Underground Mine Stage 3 Extension Project (Narrabri Mine Extension) (State Ref No 9882) - Expansion, February 2019 (IESC advice) in regards to further information and refinements to the groundwater model.

Analysing potential impacts to groundwater dependant ecosystems (GOEs)

- 24. Confirm the distribution of GOEs in the region and the depth to groundwater in areas of potential GOE's.
- 25. Conduct a detailed cumulative impact assessment of potential risks to groundwater and surface water ecosystems of the Namoi River catchment that may be impacted by the project.
- 26. Include an assessment of GOEs as outlined in Paragraph 18 of the IESC advice.

Improved surface water modelling

- 27. The EIS should provide surface water modelling which considers water loss from surface waters due to groundwater drawdown, cracking and ponding.
- 28. Include a surface water assessment in accordance with Paragraph 17 of the IESC advice. Include a quantitative site-specific water balance modelling approach as per the recommendations provided in Paragraph 14 of the IESC advice.

Comprehensive and detailed monitoring

- 29. The EIS should derive site-specific water quality guidelines and provide more information on how they plan to monitor impacts. For example, the parameters and frequency of monitoring should be detailed.
- 30. The groundwater monitoring network should be expanded to include locations to the west and south of the project.

EPBC Act and NSW EP&A Project Differences

Comments

31. It is noted the project referred under the EPBC Act differs to the project seeking approval (works not already approved) under the NSW Environment Planning and Assessment Act 1979 (EP&A Act). The table below outlines the key components of the EPBC Act action.

Action component	EPBC Act action
Total run-of mine (ROM) coal production	192 million tonnes (mt)
Extraction rate	11 mt per annum (pa)

Project footprint	Approximately 5,425 ha Includes the entire length of the longwall panels 203-210
Surface infrastructure	Development of additional surface infrastructure associated with mine ventilation and gas management, and other ancilliary infrastructure above, and adjacent to, Longwalls 203 to 210 (see Appendix B)

Other approvals and conditions

32. Information in relation to any other approvals or conditions required must include the information prescribed in Schedule 4 Clause 5 (a) (b) (c) and (d) of the EPBC Regulations 2000.

Environmental Record of person proposing to take the action

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

Information Sources

34. For information given in an 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

- *Environment Protection and Biodiversity Conservation Act 1999* - section 51-55, section 96A(3)(a)(b), 101A(3)(a)(b), section 136, section 527E
- *Environment Protection and Biodiversity Conservation Regulations 2000 Schedule 4*
- NSW Assessment Bilateral Agreement (2015) - Item 18.1, Item 18.5, Schedule 1
- *Matters of National Environmental Significance - Significant impact guidelines 1.1* (2013) EPBC Act
- *Environment Protect and Biodiversity Conservation Act 1999 Environmental Offsets Policy* October 2012
- *Information Guidelines for Independent Expert Scientific Committee advice on coal seam gas and large coal mining development proposals* (2014)