

ATTACHMENT 3

Commonwealth Department of Climate Change, Energy, the Environment and Water assessment requirements

Guidelines for preparing assessment documentation relevant to the *Environment Protection and Biodiversity Conservation Act 1999* for proposals being assessed in accordance with the bilateral assessment agreement between the Australian and NSW governments (*Amending Agreement No.1, 2020*)

**Angus Place West, Lithgow City, NSW
(EPBC 2022/09270) (SSD-26254212)**

Introduction

1. On 26 August 2022, a delegate of the Minister for the Environment and Water, determined that the Angus Place West project (the proposed action) 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:
 - i. World Heritage Properties (sections 12 and 15A);
 - ii. National Heritage Places (sections 15B and 15C);
 - iii. listed threatened species and communities (sections 18 and 18A);
 - iv. listed migratory species (sections 20 and 20A); and
 - v. a water resource, in relation to coal seam gas development and large coal mining development (section 24D and 24E).
2. The delegate confirmed that the proposed action will be assessed under the accredited bilateral agreement with New South Wales (*Amending Agreement No. 1*), and as such, is required to be assessed in the manner specified in Schedule 1 to that Agreement, including, addressing the matters outlined in Schedule 4 of the *Environment Protection and Biodiversity Conservation Regulations 2000* (EPBC Regulations).
3. The designated proponent must undertake an assessment of all protected matters that may be impacted by the proposed action under the controlling provisions identified in paragraph 1. The Commonwealth Department of Climate Change, Energy, the Environment and Water considers that the proposed action is likely to have a significant impact on the protected matters listed in **Appendix A**.
4. The designated proponent 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 proponent to undertake an analysis of the relevant impacts and ensure all protected matters that are likely to be impacted are assessed for the Commonwealth Minister's consideration.

General Requirements

Relevant Regulations

5. 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

6. The title of the action, background to the action and current status.
7. 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 Matters of National Environmental Significance (MNES).
8. How the action relates to any other actions that have been, or are being taken in the region affected by the action.
9. 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

10. The EIS must include an assessment of the relevant impacts 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

11. 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; and

- v. the name of the agency responsible for endorsing or approving each mitigation measure or monitoring program.
12. 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.
13. For each of the relevant matters likely to be impacted by the action the EIS must provide reference to, and consideration of, relevant international conventions, Commonwealth guidelines and policy statements including any:
- i. conservation advice or recovery plan for the species or community;
 - ii. relevant threat abatement plan for the species;
 - iii. wildlife conservation plan for the species;
 - iv. management plan for a World Heritage property or National Heritage place; and
 - v. any strategic assessment.

Note: relevant conventions, guidelines and policy statements are listed in **Appendix B**.

Key Issues

14. Key risks associated with the proposed action from the Commonwealth perspective include:
- i. Impacts on values of a World Heritage property and a National Heritage place:
 - Impacts to the integrity of the property's geological structure, geomorphology, and water systems, and the species and habitats that depend on those attributes, especially wetland habitats and species.
 - Downstream impacts to the Greater Blue Mountain Area from changes to groundwater drawdown and quality and surface water quality and quantity.
 - ii. Impacts on threatened species and ecological communities:
 - Potential impacts on threatened species and ecological communities associated with the underground mining component of the project, including subsidence and groundwater drawdown events which may have implications for species and threatened ecological communities within and surrounding the proposed action area.
 - iii. Impacts on migratory species
 - Potential impacts on the quality of important wetland habitat for Latham's Snipe as a result of surface water losses and groundwater drawdown arising from the proposed action.
 - iv. Impacts on water resources:
 - Potential impacts to groundwater and surface water resources within the project area and surrounding area, including:

- Groundwater drawdown and depressurisation of aquifers
- Additional or altered connectivity between surface water and groundwater features
- Impacts related to subsidence events and their associated impact on water resources within the vicinity of the project site
- Activation or movement of faults and other geological features
- Impacts related to groundwater dependent ecosystems (GDEs)
- Additional or altered connectivity between aquifers
- Changes to surface flow volumes, inflows and flow paths
- Changes in groundwater levels associated with undermining via drawdown
- Cracking, erosion and rockfalls associated with undermining
- Cracking erosion and rockfalls associated with subsidence
- Flow on effects from changes in resource availability (e.g. water, food, nutrients) associated with undermining
- Modelling and potential mitigations, including the provision of the following information:
 - Detailed drawdown predictions and modelling, especially in order to explore impacts to GDEs
 - Cumulative impacts from adjacent mining activities
 - Adequacy of exclusion zones
 - Surface water assessment
 - Location and extent of faults, and the possible pathways that could develop due to displacement of the geology in the area.

Assessment Requirements

Heritage (World and National Heritage)

15. The EIS must identify and describe the characteristics and values, including Outstanding Universal values, of any World Heritage property(s), and/or any National Heritage places that are likely to be impacted by all stages of the proposed development with appropriate reference to relevant management plans.
16. The assessment of impacts should include information on:
 - i. impacts to the integrity of the property's geological structure, geomorphology, and water systems, and the species and habitats that depend on those attributes, especially wetland habitats and species;

- ii. downstream impacts to the Greater Blue Mountain Area from changes to groundwater drawdown and quality and surface water quality and quantity;
 - iii. impacts on other users of the area;
 - iv. the potential impacts on important amenities, culturally or historically significant sites;
 - v. the potential visual impacts; and
 - vi. a description of any specific mitigation and management measures proposed to protect or enhance the affected values of the World Heritage property or National Heritage place.
17. Where a significant residual adverse impact to a World Heritage property and/or a National Heritage place is considered likely the EIS must provide information on the proposed offset strategy. The offset strategy must:
- i. include a discussion and supporting evidence of the conservation benefit associated with the proposed offset strategy. The conservation benefit must demonstrate, at a minimum, how the proposed offset will improve the integrity and resilience of the heritage values of the impacted heritage place or property; and
 - ii. be consistent with the *Environment Protection and Biodiversity Conservation Act 1999 Environmental Offset Policy* (2012): www.environment.gov.au/epbc/publications/epbc-actenvironmental-offsets-policy or an endorsed state policy.

Biodiversity (threatened species and ecological communities and migratory species)

18. The EIS must identify each EPBC Act listed threatened species, threatened ecological community and migratory species likely to be impacted by the action. For any species and communities that are likely to be impacted, the proponent must provide a description of the nature, quantum and consequences of the impacts. For species and communities potentially located in the proposed action area or in the vicinity that are not likely to be impacted, provide evidence why they are not likely to be impacted.
19. For each of the EPBC Act listed species, ecological communities and migratory species likely to be significantly impacted by the proposed action, the EIS/Biodiversity Development Assessment Report (BDAR) must provide a separate:
- i. description of the habitat (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;
 - ii. 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;
 - iii. description of the relevant impacts of the action having regard to the full national extent of the species or community's range;

- iv. description of the specific proposed avoidance and mitigation measures to deal with relevant impacts of the action;
 - v. identification of significant residual adverse impacts likely to occur after the proposed activities to avoid and mitigate all impacts are taken into account;
 - vi. description of any offsets proposed to address residual significant impacts and how these offsets will be established;
 - vii. details of how the current published NSW Biodiversity Assessment Methodology has been applied in accordance with the objects of the EPBC Act to offset significant residual adverse impacts; and
 - viii. details of the offset package to compensate for significant residual impacts including details of the credit profiles required to offset the action in accordance with the NSW Biodiversity Assessment Methodology and/or mapping and descriptions of the extent and condition of the relevant habitat and/or threatened communities occurring on proposed offset sites.
20. Any significant residual impacts not addressed by the NSW Biodiversity Assessment Methodology may need to be addressed in accordance with the *Environment Protection and Biodiversity Conservation Act 1999* Environmental Offset Policy.

<http://www.environment.gov.au/epbc/publications/epbc-act-environmental-offsets-policy>.

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 and deliver an overall conservation outcome that improves or maintains the viability of the MNES i.e. 'like for like'. Like-for-like includes protection of native vegetation that is the same EEC or habitat being impacted, or funding to provide a direct benefit to the matter being impacted i.e. threat abatement, breeding and propagation programs or other relevant conservation measures.

A water resource, in relation to coal seam gas development and large coal mining development (section 24D & 24E)

21. The EIS must include a detailed water assessment. The water assessment must be undertaken in accordance with the IESC Information Guidelines (<https://iesc.environment.gov.au/information-guidelines>) and provide the information outlined in these guidelines including:

A description of current regional and proposed impacts to water resources and water-dependent assets

- i. A regional overview of the action area including a description of the geological setting, coal resource, surface water catchments, groundwater systems, water-dependent assets, and current and reasonably foreseeable coal mining development and other water-intensive activities.
- ii. A description of existing conditions, values and sensitivity to potential impacts.
- iii. A description of location and extent of faults, and the possible pathways that could develop due to displacement of the geology in the area.

- iv. Numerical modelling of potential impacts.
- v. Proposed mitigation and management measures, including specific consideration of the adequacy and effectiveness of proposed mitigation and management measures such as exclusion zones.

Groundwater modelling

- vi. Include a groundwater model that uses a wide variety of parameters and predictions to identify potential changes to:
 - the hydrological regime of the water resource, for example changes to the volume, timing, duration or frequency of ground and surface water flows;
 - the water quality and quantity of the water resource, for example changes in the level of salinity, pollutants, or nutrients; or water temperature that may adversely impact biodiversity, ecological integrity, social amenity or human health; and
 - connectivity between aquifers, and between surface water and groundwater features.
- vii. Include detailed drawdown predictions and modelling.
- viii. Include a groundwater model that has been integrated with the subsidence model to provide an improved understanding of impacts on surface water and alluvium.

Analysing potential impacts to groundwater dependant ecosystems (GDEs)

- i. Confirm the distribution of GDEs in the region and the depth to groundwater in areas of potential GDE's.
- ii. Conduct a detailed cumulative impact assessment of potential risks to groundwater and surface water ecosystems that may be impacted by the project.
- iii. Include an assessment of GDEs, including a detailed assessment of potential impacts from the predicted drawdown.

Surface water modelling

- iv. The EIS should provide surface water modelling which considers water loss from surface waters due to groundwater drawdown, cracking and ponding. The modelling should show the range and likelihood of possible outcomes, based on sensitivity and uncertainty analysis.
- v. Include a surface water assessment.

Cumulative impact assessment

- vi. The EIS should include a cumulative impact assessment and consider all relevant past, present and reasonably foreseeable actions, and programs and policies that are likely to impact water resources. Where impacts from a new project are considered small, these need to be considered with the impacts from existing development and the cumulative impact must be assessed to determine if a threshold of acceptable total impact may be crossed.

Comprehensive and detailed monitoring

- vii. The EIS should derive site-specific water quality guidelines and provide more information on how the proponent plans to monitor impacts. For example, the parameters and frequency of monitoring should be detailed.

Other approvals and conditions

- 22. 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.

Environmental Record of person proposing to take the action

- 23. 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.

Information Sources

- 24. 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.

Anticipated Engagement

25. The proponent should consult with the Department of Climate Change, Energy, the Environment and Water again after detailed survey work is undertaken and before the EIS is finalised to ensure that all relevant species have been considered and the above assessment requirements have been met.

REFERENCES

- [Amending Agreement No. 1](#) (2020) - Item 18.1, Item 18.5, Schedule 1
- *Environment Protection and Biodiversity Conservation Act 1999* - section 51-55, section 101A, section 136, section 527E
- [Environment Protect and Biodiversity Conservation Act 1999 Environmental Offsets Policy](#) (Department of Sustainability, Environment, Water, Population and Communities, 2012)
- [EPBC Act Policy Statement 3.21—Industry guidelines for avoiding, assessing and mitigating impacts on EPBC Act listed migratory shorebird species](#) (Department of the Environment and Energy. 2017)
- *Environment Protection and Biodiversity Conservation Regulations 2000 Schedule 4*
- [Information Guidelines for Independent Expert Scientific Committee advice on coal seam gas and large coal mining development proposals](#) (IESC, 2014)
- [Significant impact guidelines 1.1: Matters of National Environmental Significance](#) (Department of the Environment, 2013)
- [Significant Impact Guidelines 1.3: Coal Seam Gas and Large Coal Mining Developments – impacts on water resources](#) (Department of the Environment, 2013)

Appendix A

Matters of National Environmental Significance

There are likely to be significant impacts on the following controlling provisions:

- World Heritage Properties (sections 12 and 15A);
- National Heritage Places (sections 15B and 15C);
- listed threatened species and communities (sections 18 and 18A);
- listed migratory species (sections 20 and 20A); and
- a water resource, in relation to coal seam gas development and large coal mining development (section 24D and 24E).

All matters of national environmental significance (MNES) protected under the triggered controlling provisions are potentially relevant, and it is the responsibility of the proponent to ensure any protected matters under these controlling provisions are assessed for the Commonwealth decision-maker's consideration.

The Department of Climate Change, Energy, the Environment and Water also considers that there is likely to be a significant impact on the following matters protected under Part 3:

- Greater Blue Mountains World Heritage Area;
- Greater Blue Mountains National Heritage Place;
- Temperate Highland Peat Swamps on Sandstone;
- Swamp Everlasting (*Xerochrysum palustre*) – Vulnerable;
- Black Gum (*Eucalyptus aggregata*) – Vulnerable;
- Latham's Snipe (*Gallinago hardwickii*) – Migratory; and
- A water resource, in relation to coal seam gas development and large coal mining development (section 24D and 24E).

The Department considers that the following are possibly at risk of being impacted:

- Australian Painted Snipe (*Rostratula australis*) – Vulnerable;
- Deane's Boronia (*Boronia deanie*) – Vulnerable;
- Greater Glider (*Petauroides volans*) – Vulnerable;
- Kunzea Cambagei – Vulnerable;
- Large-eared Pied Bat (*Chalinolobus dwyeri*) – Vulnerable;

- Rufous Pomaderris (*Pomaderris brunnea*) – Vulnerable;
- Silver-leafed Gum (*Eucalyptus pulverulenta*) – Vulnerable;
- Stuttering Frog (*Mixophyes balbus*) – Vulnerable;
- Superb Parrot (*Polytelis swainsonii*) – Vulnerable;
- Velleia perfoliate – Vulnerable;
- Wollemi Mint-bush (*Prostanthera cryptandroides*) – Vulnerable;
- Australasian Bittern (*Botaurus poiciloptilus*) – Endangered;
- Blue Mountains Water Skink (*Eulamprus leuraensis*) – Endangered;
- Gang-gang Cockatoo (*Callecephalon fimbriatum*) – Endangered;
- Littlejohn’s Tree Frog (*Litoria littlejohni*) – Endangered;
- Macquarie Perch (*Macquaria australasica*) – Endangered;
- Natural Temperate Grassland of the South Eastern Highlands – Critically Endangered;
- Upland Basalt Eucalypt Forests of the Sydney Basin Bioregion – Endangered; and
- White Box-Yellow Box-Blakely’s Red Gum Grassy Woodland and Derived Native Grassland – Critically Endangered.

The above may not be a complete list and it is the responsibility of the proponent to ensure any protected matters under these controlling provisions are assessed for the Commonwealth decision-maker’s consideration.

Appendix B

Relevant References and Guidelines

The international conventions, management plans and principles that must be considered in relation to this proposed include:

- Greater Blue Mountains World Heritage Area:
 - Australia's obligations under the World Heritage Convention;
 - the Australian World Heritage management principles;
 - any management plan that has been prepared for the property under section 316 of the EPBC Act or as described in section 321 of the EPBC Act.
- Greater Blue Mountains National Heritage Place:
 - any management plan that has been prepared for the place under section 324S of the EPBC Act or as described in section 324X of the EPBC Act;
 - the National Heritage management principles;
 - any agreement to which the Commonwealth is a party in relation to a National Heritage place.
- Listed threatened species and communities:
 - Australia's obligations under the:
 - Convention on Biological Diversity;
 - the Convention on Conservation of Nature in the South Pacific (Apia Convention);
 - the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).
 - any relevant recovery plans or threat abatement plans.
- Listed migratory species:
 - Australia's obligations under the:
 - Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention);
 - the China-Australia Migratory Bird Agreement (CAMBA);
 - the Japan-Australia Migratory Bird Agreement (JAMBA);
 - the Republic of Korea-Australia Migratory Bird Agreement (ROKAMBA).
 - any other international agreement approved under section 209(4) of the EPBC Act.

The policies and plans that must be considered in relation to this proposed include:

- Relevant conservation advice/s: <http://www.environment.gov.au/cgi-bin/sprat/public/sprat.pl>
- Relevant strategic assessment reports;
- Any relevant plan prepared for the management of a declared World Heritage property – include link: <http://www.environment.gov.au/heritage/places/world-heritage-list>
- Any relevant plan prepared for the management of a National Heritage place – include link: <http://www.environment.gov.au/heritage/places/national-heritage-list>.

Commonwealth Listing Advice, Survey Guidelines and Referral Guidelines contain information on threatened species and ecological communities which may provide further support to proponents in considering and

evaluating the significance of residual impacts on the action's controlling provisions. These documents may be found in the Department of Climate Change, Energy, the Environment and Water's Species Profile and Threats Database: <http://www.environment.gov.au/cgi-bin/sprat/public/sprat.pl>