

South Walker Creek Mulgrave Resource Access: Stage 2C (MRA2C)

EPBC 2017-7957

Appendix A: Preliminary Documentation Requirements



Department of the Environment and Energy

South Walker Creek Mulgrave Resource Access Project, Stage 2C (MRA2C Project), Nebo, Queensland (EPBC 2017/7957)

Appendix A: Additional information required for assessment by preliminary documentation

The delegate of the Minister for the Environment and Energy determined that the proposed action is likely to have a significant impact on the following controlling provisions which are protected under Part 3 of the *Environment Protection and Biodiversity Conservation Act* 1999 (EPBC Act):

- Listed threatened species and communities (section 18 & section 18A); and
- Protection of water resources from coal seam gas development and large coal mining development (section 24D & section 24E).

It has been determined that the proposed action will be assessed by preliminary documentation. The information about the action and its relevant impacts, as outlined in the referral, the additional information provided in the referral determination stage, and in the additional information described below, will make up the required information.

General Content, Format and Style

The preliminary documentation, which includes the referral information and the additional information described below, should be contained as one document with attachments, and include sufficient information to avoid the need to search for supplementary reports. The preliminary documentation should take into consideration the EPBC Act Significant Impact Guidelines that can be downloaded at: www.environment.gov.au/epbc/guidelines-policies.html.

The documentation must enable interested stakeholders and the Minister to understand the environmental consequences of the proposed development on matters of national environmental significance (MNES). The information provided should be objective, clear and succinct and where appropriate, be supported by maps, plans, diagrams or other descriptive detail. The body of the document is to be written in a clear and concise style that is easily understood by the general reader and avoids technical jargon.

Detailed technical information, studies or investigations necessary to support the main text should be included as attachments to the document. It is recommended that any supporting documentation and studies, reports or literature, from which information has been extracted and which are not normally available to the public, be attached as appendices to the main document and made available at appropriate locations during the period of public display of the preliminary documentation. The proponent should also make the documentation and supporting information available on the internet.

If it is necessary to make use of material that is considered to be of a confidential nature, the proponent should consult with the Department of the Environment and Energy (the Department) on the preferred presentation of that material, before submitting the documents to the Minister for approval for publication.

The level of analysis and detail in the preliminary documentation should reflect the level of significance of the expected impacts on the environment. Any variables or assumptions made in the assessment must be clearly stated and discussed. The extent to which the limitations, if



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any, of available information may influence the conclusions of the environmental assessment should be discussed.

The documentation should be written so that any conclusions reached can be independently assessed. To this end, all sources must be appropriately referenced using the Harvard standard of referencing. The reference list should include the address of any internet webpages used as data sources.

The preliminary document must include a list of persons and agencies consulted and the names of, and work done by, the persons involved in preparing the documentation.

Maps, diagrams and other illustrative material should be included in the preliminary documentation. The additional information should be produced on A4 size paper capable of being photocopied with maps and diagrams on A4 or A3 size and in colour where possible. The proponent should consider the format and style of the document appropriate for publication on the internet. The capacity of the website to store data and display the material may have some bearing on how the document is constructed.

The additional information must include a copy of this request for information and a table indicating where the information fulfilling this request is included in the preliminary documentation.

SPECIFIC CONTENT OF THE ADDITIONAL INFORMATION

1. Impact assessment

Listed threatened species and communities

The Department considers the proposed action is likely to impact on:

- Brigalow (Acacia harpophylla dominant and co-dominant) Ecological Community Endangered
- Ornamental Snake (Denisonia maculata) Vulnerable
- Black Ironbox (*Eucalyptus raveretiana*) Vulnerable
- Koala (*Phascolarctos cinereus*) (combined populations of Qld, NSW and the ACT) Vulnerable
- Greater Glider (Petauroides volans) Vulnerable
- Squatter Pigeon (Geophaps scripta scripta) Vulnerable
- Red Goshawk (Erythrotriorchis radiatus) Vulnerable
- Star Finch (Neochmia ruficauda ruficauda) Endangered
- Northern Quoll (*Dasyurus hallucatus*) Endangered
- Ghost Bat (*Macroderma gigas*) Vulnerable
- Cycas ophiolitica Endangered
- Blue-grass sp. (Dichanthium sp.) Endangered
- Quassia (Samadera bidwillii) Vulnerable
- Southern Snapping Turtle (*Elseya albagula*) Critically Endangered



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In order to undertake a robust assessment of these impacts, the preliminary documentation must include:

- A discussion of the survey effort undertaken to determine the presence of the species and community listed above and/or habitat for the above species and ecological community, including reference to relevant departmental survey guidelines;
- Detailed mapping of the known and potential suitable habitat for each species within the project site;
- A habitat assessment of the quality and likely use of known and potential suitable habitat for the above species and ecological community in relation to the project's disturbance footprint;
- Discussion of the impacts direct, indirect, facilitated and residual to the above species and their habitat as a result of this action;
- Consideration of the vegetation to be cleared as habitat in a regional context.

The impacts, including direct, indirect, facilitated and residual, to the all of the above listed threatened species and communities and their habitat, must be assessed in accordance with relevant Departmental policies and guidelines.

Protection of water resources from coal seam gas development and large coal mining development

The Department considers that the project is likely to impact on water resources as a result of groundwater drawdown and depressurisation, groundwater contamination of mining activities, changes to surface water and groundwater quality from the mining activities, and changes to surface water and groundwater quality from the proposed creek diversion.

In order to undertake a robust assessment of the project's impacts on groundwater, surface water and groundwater dependent species and ecosystems, the Department requires:

Groundwater

- Details and results of modelling of the drawdown as a result of all the pits associated with the South Walker Creek Mine to determine the extent of impacts;
- An assessment of the likely impacts of the proposed action on groundwater resources, including from groundwater drawdown;
- Details and results of modelling of the cumulative drawdown associated with proposed action and other pits in the area, including Carlborough, Walker and Toolah pits;
- Detailed modelling of all aquifers in the region, including the alluvial aquifers that are likely to be entirely removed due to mining operations;
- Detailed descriptions of what structures are likely to remain post operation. Details on the infrastructure, long term stability, and potential interactions with surface and groundwater from the dams and final void are required;

Final voids



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- Details of the location, impacts and management of existing and proposed final voids, including ongoing take, drawdown and potential seepage rates. If/where relevant uncertainties exist regarding the final void becoming a sink or source, describe potential impacts and monitoring/mitigation/management measures proposed to reduce impacts;
- Undertake and provide details of assessment of long term water levels and quality within voids using a combination of water balances, surface water models, water quality models, groundwater models and long-term climate variability models;
- Provide an estimate of ongoing annual water loss from voids (due to evaporation) and describe and proposed offset measures associated with this perpetual take.
- Discuss the management of final voids post-mining.

Surface water

- Details and results of studies of the predicted groundwater and surface water interactions that are likely to result from the creek diversion;
- Information and monitoring results of previous stream diversions that may provide details of the effectiveness of the proposed diversion or potential impacts;
- Details of the diversion design and how it adheres to the Queensland Guidelines on watercourse diversions;
- Details on the baseline data and modelling to appropriately identify, quantify and therefore manage likely impacts to surface and groundwater resources;
- Discussion of cumulative impacts to surface waters including Bee Creek and Walker Creek;
- An assessment of the likely impacts of mine affected water on surface water as a result of proposed treated water management measures;
- An assessment of the likely impacts of the proposed action on groundwater dependent species and ecosystems within the project site, including from groundwater drawdown and the creek diversion;
- Detailed mapping of the known and potential suitable habitat for Black Ironbox (*Eucalyptus raveretiana*) within and downstream of the project site to determine possible impacts from the proposed action, including removal of the alluvial aquifer, changes to the availability of groundwater and impacts associated with the final void;
- Details of the mitigation and monitoring measures that will be implemented to ensure that the impacts of the proposed action on species and ecosystems are appropriately managed.

Mitigation measures

- Details of thresholds or triggers for the implementation of management responses;
- An assessment of the expected or predicted effectiveness of the mitigation measures;



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• Details of the mitigation and monitoring measures that will be implemented to ensure that impacts from mine affected water on receiving waters are appropriately managed;

The impacts, including direct, indirect, facilitated and residual, to the water resources must be assessed in accordance with relevant Departmental policies and guidelines.

Cumulative Impacts

The Department considers that the proposed action will likely contribute to cumulative groundwater impacts in the Bowen Basin. The preliminary documentation should identify and address cumulative impacts, where potential project impacts are in addition to existing impacts of other activities (including known potential future expansions or developments by the proponent and other proponents in the vicinity). A detailed Cumulative Impact Assessment needs to be provided and consider the proposed action in relation to the operating and planned coal mines and the coal seam gas exploration within the area.

Cumulative impacts should address the impacts associated with the proposed action alone, the proposed action as part of the broader South Walker Creek Mine and the proposed action at the larger catchment scale. Where cumulative impacts are likely describe management/mitigation measures proposed to reduce impacts.

Referral to the IESC

The Department is required to submit the project to the Independent Expert Scientific Committee on Coal Seam Gas and Large Coal Mining Development (IESC). The Information Guidelines for the IESC advice on coal seam gas and large coal mining development proposals (Guidelines) outlining the requirements for submission to the IESC can be found at: http://www.iesc.environment.gov.au/publications/information-guidelines-independent-expert-scientific-committee-advice-coal-seam-gas

Please refer to these guidelines to ensure that the information requirements for the IESC review have been addressed. After the IESC provides their advice, your response to the IESC advice needs to be included in your preliminary documentation, as should any comments you might choose to make regarding their response.

The proponent must complete the checklist in the Guidelines to ensure that the information requirements for the IESC review have been addressed. The IESC will provide comment on the groundwater modelling presented in the preliminary documentation.

The proponent must include the IESC advice and a response to the IESC advice in the preliminary documentation prior to submitting the preliminary documentation to the Minister for approval to publish the preliminary documentation for public comment.

2. Avoidance, safeguards and mitigation measures

The preliminary documentation must include a consolidated list of mitigation measures proposed to be undertaken by the proponent to avoid, minimise and manage the relevant short and long term impacts of the action to threatened species and their habitat, threatened communities and water resources, including:

 Specific and detailed descriptions of measures proposed to be undertaken to avoid and mitigate the relevant impact of the proposed action, based on best available practices and scientific evidence to support proposed mitigation measures;



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- Details of management and monitoring of vegetation and habitat for listed threatened species and communities;
- Assessment of the expected or predicted effectiveness of the proposed mitigation measures;
- Any statutory or policy basis for the proposed mitigation measures, including reference to approved conservation advices relevant to the listed threatened species and communities, and discussion on how the proposed mitigation measures are not inconsistent with recovery plans and threat abatement plans relevant to the listed threatened species and communities;
- Details of any monitoring programs that will be undertaken in relation to surface water and groundwater quality and quantity;
- Details of any monitoring programs that will be undertaken in relation to erosion and/or sedimentation of watercourses;
- The name of the agency responsible for endorsing or approving each mitigation measure or monitoring program; and
- Details of the mitigation measures that will be implemented to minimise impact to the controlling provisions during mining activities.

3. Environmental Offsets

The preliminary documentation must include an assessment of the likelihood of residual significant impacts occurring, after mitigation and management measures relating to the project have been applied. If a residual significant impact is identified please provide:

- (a) details of an offset package proposed to be implemented to compensate for the residual significant impacts of the project; and
- (b) an analysis of how the offset meets the requirements of the Department's Environment Protection and Biodiversity Conservation Act 1999 Environmental Offsets Policy October 2012 (EPBC Act Offset Policy), available at: <u>http://www.environment.gov.au/epbc/publications/epbc-act-environmental-offsets-policy</u>.

Offsets required by the State/Territory can be applied if the offset/s meet the Department's EPBC Act Offset Policy.

4. Environmental Outcomes

The preliminary documentation should provide information on the outcomes that the proponent will achieve for matters of national environmental significance (MNES). Outcomes need to be specific, measureable and achievable, and must be based on robust baseline data. To allow application of outcomes-based conditions, the preliminary documentation should include:

• Consideration of the draft Outcomes-based Conditions Policy 2015 and Outcomes-based Conditions Guidance 2015, with suitable justification for considerations identified in the policy and guidance.



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- The specific environmental outcomes to be achieved, and reasoning for these in reference to relevant Recovery Plans, Conservation Advices and Threat Abatement Plans.
- For each proposed outcome, please provide:
 - The risks associated with achieving the outcome;
 - The measurability of the outcome, including all suitable performance measures;
 - Appropriate baseline data upon which the outcome has been defined and justified;
 - The likely impacts that the proposed outcome will address;
 - Demonstrated willingness and capability of achieving the outcome;
 - Commitments to independent and periodic audits of performance towards achieving outcomes; and
 - Details of proposed management to achieve the outcome including, but not limited to, performance indicators, periodic milestones, proposed monitoring and adaptive management, and record keeping, publication and reporting processes.

5. Environmental Record of Person(s) Proposing to take the Action

The preliminary documentation must include details of any proceedings under a Commonwealth, State or Territory law for the protection of the environment of the conservation and sustainable use of natural resources against:

- The person proposing to take the action; and
- For an action for which a person has applied for a permit, the person making the application.

If the person proposing to take the action is a corporation details of the corporation's environmental policy and planning framework must also be included.

6. Economic and Social Matters

The proponent must provide a discussion and analysis of the economic and social impacts of the proposed action, both positive and negative, in the preliminary documentation. Economic and social impacts should be considered at the local, regional and national levels. Matters of interest may include:

- Details of any public consultation activities undertaken, and their outcomes;
- · Details of any consultation with Indigenous stakeholders;
- Projected economic costs and benefits of the project, including the basis for their estimation through cost/benefit analysis or similar studies; and
- Employment opportunities expected to be generated by the project (including construction and operational phases).



7. Conclusion

An overall conclusion as to the environmental acceptability of the proposed action should be provided, including discussion on compliance with principles of environmentally sustainable development and the objectives and requirements of the EPBC Act. Reasons justifying undertaking the proposal in the manner proposed should also be outlined.

Measures proposed or required by way of offset for any unavoidable impacts on MNES, and the relative degree of compensation, should be restated here.





Factsheet – stages of assessment under Preliminary Documentation



* If an information request is not required (if no further information is required under section 95(1) of the EPBC Act) then stages 1&2 of the assessment process do not occur and the stages 1&2 fees are not applicable, therefore reducing the overall fee payable by this amount.