

Attachment A

1. General

- a. Provide a map showing the project area boundaries proposed for the Project (SSD 7142), Wambo mine (DA 305-7-2003) and the Wambo train load out facility (DA 177-8-2004).
- b. Section 3.2.3 of the Main EIS provides information on the harmonisation modifications. It appears that the EIS proposes a period of time when the Wambo Open Cut will be subject to the existing Wambo Mine development consent as well as the SSD consent. Clarify the timeline for commencement of the SSD consent and for Wambo Open Cut operations to become solely regulated by the SSD consent.
- c. Section 3.5 of the Mine EIS indicates that mining within the Wambo Open Cut will be undertaken at a reduced rate to integrate with the United Open Cut. A number of public submission were received raising concerns about impacts to residences north of the project area. Provide information on whether the reduced mining in the Wambo Open Cut prolongs mining in the northern part of the mine and if so, discuss this proposal in terms of impacts to residences to the north of the project area.
- d. Provide a clear indicative life of mine production schedule for each year of operation of the mine and for the life of the project. Details of ROM coal and waste rock tonnage to be extracted and an estimate of the saleable product produced must be included in the schedule.

2. Air Quality

- a. The Department commissioned a peer review of the Air Quality Impact Assessment (Attachment B). This review identified a number of areas that require clarification and/or revision for the AQIA to be considered adequate for the assessment of air quality impacts. DPE requests the RTS address and respond to each recommendation in the peer review.
- b. Provide verification of the performance of the meteorological modelling against an actual meteorological monitoring dataset.
- c. Provide confirmation that emissions from neighbouring mines were estimated using the same emission factors for the project emission sources.
- d. The mitigation measures provided to manage diesel combustion emissions are incomplete. Consideration of the NSW EPA 2014 *NSW Coal Mining Benchmarking Study: Best practice measures for reducing non-road diesel exhaust emissions* should be made.
- e. Section 9 of the AQIA states that the proposed dust management measures have been compared to the measures in the *NSW Coal Mining Benchmarking Study: Best practice measures for reducing non-road diesel exhaust emissions* and found that the majority of proposed measures are consistent with best practice dust mitigation measures. Please provide an assessment that supports this statement.
- f. Provide a comparative assessment of the Project compared to the air quality impacts of the approved Wambo mine to sensitive receivers. The Department seeks clarification that the closest receivers to the project would experience similar (or lower) air quality impacts than those previously approved.
- g. Provide further detail on the proposed air quality monitoring program including monitoring locations, capabilities and frequency.

3. Noise

- a. The Department shares a number of concerns raised by EPA in regards to noise. In particular, the Department expects the RTS to provide sufficient information that enables an assessment and determination of noise criteria and conditions for a potential Project consent and potential amended Wambo Rail and Wambo Mine consents. The EIS and Noise Impact Assessment should be revised based on one of the options proposed by the EPA, or else provide a suitable methodology for the management of noise for the United Wambo Project, and the associated mining infrastructure under Wambo's management, separately.
- b. The EPA has requested that the calculation of the sleep disturbance criteria be reviewed and amended as necessary. Provide information that demonstrates that the Sleep Disturbance Criteria have been

calculated in accordance with the Industrial Noise Policy. Where a review results in a change to criteria, revise the assessment comparing noise levels associated with mining activities that could lead to sleep disturbance with the new sleep disturbance criteria.

- c. The sleep disturbance assessment in the NIA identifies that $LA_{1\text{ minute}}$ noise levels at R019 could exceed 55 dB(A) due to bulldozer operations and impact noises from heavy objects being dropped into truck trays. Provide the maximum predicted noise level for R019 and the period of time that noise levels at R019 are expected to exceed the sleep disturbance criteria at this receiver.
- d. The EPA has requested that the calculation of the construction noise criteria be reviewed and amended as necessary. Provide information that demonstrates that the Sleep Disturbance Criteria have been calculated in accordance with the Interim Construction Noise Guidelines. Where a review results in a change to criteria, revise the assessment comparing noise levels associated with construction activities with the new construction noise criteria.
- e. Check for inaccuracies as per EPA's comments.
- f. The noise management and mitigation measures should provide clear commitments, and avoid ambiguous or hypothetical language. For example, words such as 'would', 'should', 'where possible', 'may' or 'where necessary' are to be avoided or clearly defined.

4. Biodiversity

- a. A key issue raised in submissions relates to biodiversity impacts and the Upper Hunter Strategic Assessment. The OEH submission identifies areas which must be addressed in the RTS.
- b. Provide information on the existing offset requirements for the United Mine and the Wambo Mine and how these are being considered in the current biodiversity offsets strategy.

5. Groundwater

- a. The Department agrees with DPI's recommendation for an additional external peer review of the groundwater model. While the Department notes Dr Noel Merrick's expertise, Dr Merrick has had significant involvement in the groundwater modelling undertaken at Wambo Mine. Further, the Department notes that Kalf and Associates Pty Ltd was used as an independent peer reviewer for Wambo Mine Modification 12. As such, the Department requests an additional external peer review be undertaken of the groundwater model.
- b. A 6.7m drawdown is expected at bore GW060780. Provide details of any consultation that has occurred with the property owner. Provide details of the management measures to be implemented to mitigate impacts to the property owner.
- c. Figure 7-13 of the Groundwater Impact Assessment shows a sharp decline in groundwater level at GDE1 between April 2026 and April 2027. Identify and discuss the mining activity that causes this sharp decline.
- d. Section 7.4 of the Groundwater Impact Assessment describes the potential groundwater quality changes in the final void lakes. Further information is required including modelling of salinity in the final void lakes over time and a discussion of the results. A discussion of other potential contaminants that may accumulate in final void lakes and measures to mitigate potential impacts associated with these contaminants is also required.
- e. Table A-2 of the Groundwater Impact Assessment should include a comparison of the water quality results across the main groundwater bearing units against the ANZECC (2000) guidelines for other above-ground uses such as drinking water and aquatic ecosystems or otherwise justify why these uses should not be considered.
- f. Table A-2 of the Groundwater Impact Assessment shows elevated levels of a number of contaminants in interburden and spoil. Provide details on the management measures proposed to mitigate risks of impacts to water resources including details on how interburden/spoil with elevated levels of contaminants will be considered when identifying dumping areas.

- g. Provide further information about the source of the data used to provide the water quality summary in Table A-2 of the Groundwater Impact Assessment including the locations and frequency of monitoring used to determine the values in the table.
- h. Appendix E of the Groundwater Impact Assessment - Stygofauna Assessment states that drawdown for all sites that recorded stygofauna is expected to be negligible as they are outside of the area of predicted drawdown, therefore the stygofauna community is unlikely to be adversely affected by drawdown. However, stygofauna surveys were not undertaken in all areas expected to experience drawdown. In particular, monitoring of stygofauna did not occur in the area to the north of the Wambo Open Cut where drawdown in the Hunter River alluvium is predicted. Provide justification for excluding this area from the surveys or undertake further surveys that are representative of the predicted groundwater impacts.
- i. The groundwater management and mitigation measures should provide clear commitments, and avoid ambiguous or hypothetical language. For example, words such as 'would', 'should', 'where possible', 'may' or 'where necessary' are to be avoided or clearly defined.

6. Surface Water

- a. The Surface Water Assessment identifies that there are elevated levels of metals and metalloids in existing mine water dams. Provide details of how these metals/metalloids will be managed including the management and mitigation measures to ensure that there is no overtopping in the event of flooding. Please also discuss the management measures that have been introduced since the mine water dam collapse in January 2016.
- b. Clarify where the HRSTS discharge regime value of 550ML/year is derived from in Appendix 11 of the Surface Water Assessment.
- c. The EIS proposes a number of dams in the final landform. Provide information that demonstrates that United has sufficient water licences for the final landform catchment design.
- d. Provide an assessment of potential impacts to landholders downstream of the project that may access surface water for stock and domestic purposes under basic landholder rights, including discussion on how any identified impact will be managed.
- e. Provide information on how geomorphic changes to affected watercourses as a result of project activities will be managed. Also provide information on the rehabilitation measures proposed for affected watercourses.

7. Rehabilitation and Final Landform

- a. The conceptual mine plans in the Main EIS (Figures 3.11 to 3.16) show the areal extent of rehabilitation across the project. However the area proposed for disturbance is shown to be greater in Figure 1.11 of the Statement of Commitments. Clarify the extent and type of disturbance in the RTS.
- b. Provide information on how existing rehabilitation at United and Wambo Mines will be incorporated into rehabilitation planned for the project. Provide information on impacts to existing rehabilitation at Wambo and United Mines as a result of the project.
- c. Section 6.13 of the Main EIS provides information to justify the feasibility and achievability of ecological rehabilitation. It is stated that an assessment of the United and Wambo Mines rehabilitation areas identified that rehabilitated vegetation zones comply with EEC. Detail the assessment methodology used to determine compliance with EEC criteria.
- d. Section 6.13 of the Main EIS references Mt Owen Mine rehabilitation and the lessons that will be built into the rehabilitation strategy for the project to ensure recognisable and self-sustaining Plant Community Types are created. Discuss further what these lessons are and how they will inform the rehabilitation strategy for the project.
- e. Section 6.13 of the Main EIS states that the proposed rehabilitation strategy aligns with key commitments previously agreed through the approval of Wambo and United Mines. State what these commitments are and provide information on how these commitments are consistent with the Project's rehabilitation strategy. Identify commitments which are not consistent with the proposed rehabilitation strategy.

- f. Section 6.13 states that Wambo mine will undertake rehabilitation of the Wambo operations in accordance with its existing conditions. As the two Wambo approvals are subject to modification applications to extend the life of the approvals, the Department may update rehabilitation conditions to reflect current regulatory requirements.
- g. Section 6.13.4 states that the progressive rehabilitation schedule may change due to changes or delays in the mining schedule. Provide further information on what these changes or delays might be and how this will impact the progressive rehabilitation schedule.
- h. Discuss how the key principles of the *Strategic Framework For Mine Closure* have been considered in developing the proposed rehabilitation and mine closure strategies for the Project.
- i. A key issue raised in public submission received relates to the two voids proposed as part of the final landform. The Department considers that insufficient justification has been provided for the voids and requests the following information:
 - i. further information demonstrating that the voids are unavoidable in the final landform design;
 - ii. a clear description of the area and depth of the voids;
 - iii. cross-sectional plans of each void;
 - iv. a comparison of the void dimensions with the dimensions of the voids currently approved at Wambo Mine; and
 - v. a discussion on post-mining land use options for the voids in light of the assessed characteristics of the voids.
- j. Further information is required on the proposed United Open Cut final void highwall including:
 - i. justification for retaining the highwall in the final landform; and
 - ii. an assessment of the safety risk posed by the highwall post-mining.

8. Economic

- a. The Department commissioned a peer review of the Economic Assessment (Attachment C). This review identified a number of areas that require clarification and/or revision for the Economic Assessment to be considered adequate for the assessment of economic impacts. The Department requests that the RTS address and respond to each recommendation in the peer review.
- b. The Economic Assessment makes reference to an assessment undertaken by Pacific Environment – “*Economic cost of air quality impacts – United Wambo Open Cut Coal Mine Project*. A report prepared for Umwelt (Australia), 17 June 2016 of the likely costs relating to particulate matter emissions from the project” which has not been included in the EIS. Provide a copy of this report in the RTS.
- c. Provide a detailed analysis of the level and timing of projected activity and cost and revenue streams associated with the development. Whilst headline numbers (e.g. NPVs and 25 year totals) are presented, year-on-year numbers are not reported and are required for the Department’s review of the Economic Assessment.
- d. Further information in the discussion of supplier surpluses (pp. 14, 24 & 60) is required. The Economic Assessment discusses upstream ‘winners’ but does not identify if there are any ‘losers’ from the mine expansion.
- e. The local area effects analysis (LEA) lacks detail, and it is somewhat difficult to assess where the numbers come from. The analysis requires more discussion around the costs and benefits to the local area in accordance with the NSW Government’s (2015) *Guidelines for the economic assessment of mining and coal seam gas proposals*.
- f. Clarify the relationship between the employment generated under the two existing Wambo Mine development consents, Wambo Mine Modification 12 and the United Wambo project.

9. Agriculture

- a. Land to be acquired as a result of air quality and noise impacts will be subject committed to ongoing agricultural land use following purchases by United or Wambo Mines. Ensure that this commitment can be met where the lands purchased are subject to exploration tenements.

- b. Table 6.1 of EIS Main Report provides a table of the LSC Classes assessed across the project area and their presence and extent in the Project Area. Please provide in this table the predicted LSC Classes and extent (ha) for the project area post-disturbance.

10. Impacts on other land users

Section 6.2.6 provides a discussion on land uses outside the project area. The information provided in this section is insufficient to enable the Department to consider the compatibility of the development with other land uses. The Department received a submission from the Hunter Valley Gliding Club raising its concerns with the impacts of the project. Address the issues raised by the Hunter Valley Gliding Club and consider all other land uses surrounding the project area in the discussion of impacts to other land users.

11. Subsidence

Provide an assessment of the risk of subsidence impacts to any new structures proposed to be constructed in the project area.

12. Heritage

The Heritage Council of NSW has identified that the EIS's Heritage Impact Statement does not adequately address the significance and management of heritage items in the project area. The RTS must address the issues raised by the Council.

13. Visual amenity

Photomontages of all the viewsheds must be provided that also use a colour scheme that is easily distinguished from the natural landscape as well as considers the various key mine sequencing stages (see for example the Rocky Hill Coal Mine EIS currently on exhibition).

14. Peabody's Financial Status

The Department requests that the RTS provide an update on the current status of Peabody Energy Australia and discussion regarding any implications this may have for ongoing mine site management.

15. Agency and public submissions

The Department requests the RTS consider and respond to all agency and public submissions received, including advice presented and recommendations made therein.

