



**Office of
Environment
& Heritage**

Our reference:
Contact:

DOC12/31814
Peter Ewin, 03 5021 8915

Mr Neville Osborne
Manager – Energy Product
Department of Planning and Infrastructure
GPO Box 39
SYDNEY NSW 2001

Dear Mr Osborne

**Re: Young to Wagga Wagga looping pipeline Stage 2 (Bethungra to Young) - Major Project
Application 10_0163**

I refer to the above Major Project Application and accompanying Environmental Assessment ("EA") received by the Office of Environment and Heritage (OEH) on 3 August 2012. OEH has also contacted the consultants that prepared the EA (AECOM Australia Pty Ltd (AECOM)) to discuss some of the issues identified in the EA.

We have reviewed the information provided and have determined that we are able to support stage 2 of the proposed pipeline from Bethungra to Young, subject to the Department of Planning and Infrastructure (DP&I) seeking amendments to the draft Statement of Commitments outlined in Attachment 'A'.

Attachment 'B' contains our assessment of the proposal, including justification for the amendments that DP&I may wish to consider in its overall assessment of the application.

It should be noted that these amendments are important for our ongoing support of the proposal. It is expected that OEH will be given an opportunity to review the draft Director-General's Environmental Assessment Report for this proposal. If the amendments to the draft Statement of Commitments are not included to our satisfaction, we will be recommending that they are included as Conditions of Approval, if approval is recommended by DP&I.

Should you wish to discuss these matters further, please contact Sandie Jones on (02) 6229 7066 or by email at sandie.jones@environment.nsw.gov.au

Yours sincerely

DR SANDIE JONES
A/Manager Landscape and Aboriginal Heritage Protection (South)
Conservation and Regulation Division

Enclosure: Attachment A and B

Attachment A

The following amendments to the draft Statement of Commitments (SoC) (Section 17.2 of the EA) are sought.

Flora and Fauna

We recommend that the following points should be added to the SoC under the heading of Biodiversity (after B17);

- Prior to any construction works the proponent shall develop an offset strategy in consultation with OEH, which considers all impacts on threatened species and endangered ecological communities. This offset strategy will need to include an area of remnant vegetation, to offset the impacts on all vegetation communities cleared, and hollow-bearing trees to mitigate for those lost in construction. Nest boxes and replanting may be used to supplement the values of the offset area.
- As part of all clearing operations, all remnant vegetation cleared must be recorded, including the identification to community (preferably as described in the NSW Vegetation Classification and Assessment database), vegetation condition and area. In addition all hollow-bearing trees, whether within remnant vegetation or as isolated trees, will be detailed with information on species, diameter at breast height and number and diameter of hollows recorded.
- Trees containing raptor nests must not be removed as part of the project. Further consultation with OEH must be undertaken if raptor nests will be disturbed or removed.
- Where required, the removal of trees for the construction of the pipeline shall occur outside of the known breeding periods of native fauna. Where this is not possible, trees containing hollows will be inspected by a suitably qualified ecologist for the presence of native fauna, particularly threatened species.

Aboriginal Cultural Heritage

We recommend that the Statement of Commitments AH1 and AH3 under the heading of Aboriginal Heritage be modified.

There is a need to prepare an Aboriginal Heritage Management Plan (as outlined in the EA in Appendix C, section 9.3.4, and 9.3.5) that details specific actions for monitoring, excavation, collection and salvage of Aboriginal cultural heritage.

Statement of Commitment AH1 should be modified to read:

An Aboriginal Heritage Management Plan will be developed in consultation with OEH, registered Aboriginal stakeholders, and DP&I. This plan will detail the methods to be used for avoidance of sites, monitoring of areas where potential Aboriginal sites exist, surface collection or salvage excavations, and management of previously unrecorded Aboriginal objects, in accordance with the measures indicated in Table 15.

There is a need for very clear management of previously unrecorded Aboriginal objects. Statement of Commitment AH3 should be modified to read:

The Aboriginal Heritage Management Plan will include details on the management of previously unidentified Aboriginal heritage items or sites. If such items or sites are encountered during works, the steps outlined in the Aboriginal Heritage Management Plan will be followed.

Attachment B

Flora, fauna and threatened species

OEH has reviewed the documents relating to flora and fauna for this proposal and has discussed some of the issues raised in regard to biodiversity with AECOM. We believe that there are a number of shortcomings within the EA, though note that if the mitigation methods included within the Statement of Commitments (including those listed in Attachment 'A') are implemented, then the impacts on biodiversity will be minimised. The key points for consideration are:

- It is difficult to determine from the EA the overall area of vegetation to be cleared as part of the proposal. The Fauna and Flora Assessment identifies 4.12 hectares of Box-Gum Woodland whereas Table 6 in Appendix A-A identifies 6.96 hectares of remnant vegetation. The location of the additional 2.84 hectares is not identified, as are the communities to be cleared. Additionally, no discussion of the potential existence of grassland derived from Box-Gum Woodland that meet the definition of White Box Yellow Box Blakely's Red Gum Woodland as listed under Schedule 1 of the *Threatened Species Conservation Act 1995* is made in the EA. Subsequent discussion with AECOM have confirmed that the additional area has neither been mapped or identified, though at least some of the areas are likely to be Red Gum Woodland within creek crossings.
- It is very unclear whether the 36 hollow-bearing trees (HBT) are part of the 296 trees within the EEC areas or whether they are separate isolated paddock trees – discussion with AECOM indicates that all HBT have been included in the assessment. Given that the HBTs identified have an average of six hollows per tree these are likely to be large important habitat trees that provide a resource for a number of threatened species and their loss will need to be mitigated.
- The fauna survey undertaken is relatively “low” (what does ‘low’ mean) and it is not surprising that a number of species that would be expected to be present were not recorded. The main concerns are the lack of discussion of the ‘unidentified Glider’ which potentially could be Squirrel Glider (*Petaurus norfolcensis*) and the overall survey effort for woodland birds (no targeted surveys and wrong time of year) which are the group that is likely to be the most impacted. While it is acknowledged that the creation of a 20 metre ‘gap’ in remnant vegetation is unlikely to restrict the movement of these species, the loss of keystone habitat features, particularly hollows, may have an impact.
- The assessment does not appear to identify raptor nests as a significant habitat feature. However, this is the key feature for impacting on threatened raptors and there should be commitment included to ensure that trees with raptor nests are not to be removed. If this can not be undertaken, further discussion with OEH should be made before clearing to ensure breeding birds are not interrupted.
- OEH recognises that the EA assesses the ‘worst case scenario’ for the proposal, and that stage 1 of the project cleared considerably less vegetation than was identified in the assessment for the area between Bomen and Bethungra. However, as described in the EA, the project will result in the removal of seven hectares of native vegetation, plus the loss of 36 HBT. While these figures are relatively small given the length and area of the overall project, as also identified in the EA, the landscape within which the project is being undertaken is already highly cleared and the loss and fragmentation of the remaining vegetation is likely to have significant impacts on biodiversity.
- As these impacts can not be avoided, it is appropriate that an Offset Strategy be developed that meets the principle of maintaining or improving biodiversity as required by the OEH “Principles for the Use of Biodiversity Offsets in NSW”. We note that an offset strategy is proposed but identify that the EA does not provide information about whether a feasible offset exists (either along the project corridor or outside of it), what size and ecological values an offset site(s) might have, and what legal mechanism(s) to ensure its conservation in perpetuity are proposed. OEH would recommend that significant progress, including consultation with OEH and Lachlan and/or Murrumbidgee Catchment Management Authorities, be made in determining the offset package before consent is granted for the project.
- The offset should be used to offset impacts on all vegetation communities cleared as part of the project as well as containing an appropriate number of trees containing hollows to mitigate the

impacts of the clearing undertaken. Other management actions such as replanting and use of nest boxes (including salvaging of hollows from fallen trees) may be utilised but are additional to the identification and management in perpetuity of an offset area.

Aboriginal cultural heritage

The DGRs relating to Aboriginal heritage are as follows:

The EA must include sufficient information to demonstrate the likely impacts on Aboriginal heritage values/items and outline proposed mitigation measures in accordance with the Draft Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation (DEC 2005). The EA must demonstrate effective consultation with Aboriginal communities has been undertaken in determining and assessing impacts, developing options and selecting options and mitigation measures.

The EA was completed following the DECCW *Aboriginal cultural heritage consultation requirements for proponents 2010*, not the DEC 2005 draft guidelines, as required by the DGRs. OEH supports the use of the 2010 guidelines in all assessment processes. The EA has demonstrated effective consultation with Aboriginal communities, as required by the 2010 guidelines. Unfortunately the consultation has been one-sided, and the proponent did not receive feedback from registered Aboriginal stakeholders on the methodology for the survey or the draft report and recommendations. However the EA demonstrates detailed briefings were provided to registered stakeholders. The EA (Appendix C, Section 3.4) also states that there was positive feedback during the field survey for the proposed salvage, collection and monitoring of Aboriginal sites as subsequently recommended in the EA.

Appendix C, Section 9.3.4, recommends salvage excavations be guided by a research design that will be included in an Aboriginal Heritage Management Plan, developed in consultation with the registered Aboriginal stakeholders, DECCW (now OEH) and prepared to the satisfaction of the DoP. OEH supports this recommendation however it has not been included in the Statement of Commitments.

Appendix C, Section 9.3.5 concerns the monitoring of areas that are considered to be areas of Aboriginal cultural heritage sensitivity, where existing ground surface visibility is very limited. This section lacks details on the process of monitoring and recommends only that the 'Details of the monitoring process should be outlined in the HMP' (presumably Heritage Management Plan). OEH supports this recommendation however it has not been included in the Statement of Commitments.

The Statement of Commitments outlines 4 actions that consider Aboriginal heritage.

SoC AH1

Registered Aboriginal sites, identified artefact scatters and isolated artefacts with the potential to be directly impacted by construction activities will undergo surface collection or salvage excavations in accordance with the measures indicated in Table 15. The Table 15 referred to contains a series of proposed mitigation recommendations. These recommendations are inadequate for assessment and implementation purposes as they lack detailed actions and do not provide certainty for the proponent. More clarity in this regard should be developed in an Aboriginal Heritage Management Plan. An alternative wording for this Commitment is as follows: *An Aboriginal Heritage Management Plan will be developed in consultation with OEH, registered Aboriginal stakeholders, and DoP. This plan will detail the methods to be used for avoidance of sites, monitoring of areas where potential Aboriginal sites exist, surface collection or salvage excavations, and management of previously unrecorded Aboriginal objects, in accordance with the measures indicated in Table 15.*

Table 15 (and Appendix C, Section 9.3.3) recommends that scarred tree APA-ST5-11 be inspected by an arborist to determine cultural authenticity and potential for sub surface impacts. The implications of the findings of such a study are not specified, nor are the management options. If the tree proves to be culturally authentic and will be impacted by sub surface impacts, what are the implications of such a finding? Should the tree be removed, or should the pipeline be re-aligned? Is it possible to re-align the

pipeline in the vicinity of the tree? Would the registered Aboriginal stakeholders support removal of the tree and salvage of the scarred trunk?

SoC AH2 concerns training for personnel. OEH supports this Commitment.

SoC AH3 states *Previously unidentified Aboriginal heritage items or sites will be managed in accordance with measures appropriate to its significance and type.* This commitment very general and lacks specific details, options or direction for the proponent. OEH considers that very clear direction and steps must be provided in situations where previously unrecorded sites may be found in order to avoid unscheduled delays to works, e.g. what actions should be taken when unrecorded objects are encountered, when should works stop, what actions must take place when works stop, when should works recommence, reporting requirements, etc. An alternative wording for this Commitment is proposed as follows: *The Aboriginal Heritage Management Plan will include details on the management of previously unidentified Aboriginal heritage items or sites. If such items or sites are encountered during works, the steps outlined in the Aboriginal Heritage Management Plan will be followed.*

SoC AH4 concerns flagging and avoidance of known Aboriginal heritage sites. OEH supports this Commitment.

Other Comments

Appendix C lacks details on several reports in the References, e.g. Navin Officer 2002, Kelton 2006, Dearling & Grinbergs 2002.

Since the completion of this EA other studies have been conducted in the area that will provide excellent background context for the salvage works proposed in the EA. The proponent should review in detail the Cowangs Reservoir to Baulloora Reservoir Cultural Heritage assessment commissioned for the Goldenfields Water County Council (Navin Officer September 2011, and Navin Officer, August 2012 (report on AHIP No. 1131295, issued November 2011)). This development crosses and runs perpendicular to the proposed Young to Wagga Wagga gas pipeline, and a series of detailed archaeological investigations have been undertaken along the route of this water pipeline just northwest of Cootamundra. It is important to refer to this work in the development of a research program and archaeological salvage work in the region, as it will provide useful comparative information, especially concerning the characteristics of archaeological deposits in areas adjacent to creek and drainage lines.