



ENVIRONMENT PROTECTION AUTHORITY

Your reference:
Our reference: DOC12/1843; LIC08/1532-02;
NSR09/110-03
Contact: Michael Howat (02) 4908 6833

Howard Reed
A/Director – Mining & Industry Projects
Department of Planning and Infrastructure
GPO Box 39
SYDNEY NSW 2001

Dear Mr Reed

**MACKAS SAND PROJECT
ACCESS ROAD MODIFICATION: 08_0142 MOD1**

Reference is made to your letter to the Environment Protection Authority (EPA), dated 13 February 2012, requesting submissions and recommended conditions of approval in relation to the proposed Mackas Sand Pty Ltd project approval modification (08_0142 MOD 1). This project approval modification relates to an alternative access road to the Mackas Sand quarry, Salt Ash.

The EPA has reviewed and assessed the Environmental Assessment (EA) and proposed modifications. While the EPA believes there are aspects of the proposal that need to be clarified, in general the EPA supports the implementation of the 'Route A' access road, as detailed in the EA, over the potential 'Route B'. The EPA's comments and recommended conditions of approval are provided in **Attachment A**. If the Department of Planning and Infrastructure (Planning) grants approval to the modification these conditions should be incorporated into the consent.

If you require any further information regarding this matter please contact Michael Howat on (02) 4908 6833.

Yours sincerely

A handwritten signature in blue ink that reads 'P. Jamieson' followed by the date '17-2-12'.

PETER JAMIESON
Head Regional Operations Unit – Hunter
Environment Protection Authority

Encl: Attachment A – EPA submission, Mackas Sand Access Road Modification (08_0142 MOD 1)

Parts of the Office of Environment and Heritage are now known as the Environment Protection Authority (EPA)

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ATTACHMENT A

OFFICE OF ENVIRONMENT AND HERITAGE AND EPA SUBMISSION – MACKAS SAND ACCESS ROAD MODIFICATION (08_0142 MOD 1)

Threatened Species Assessment

The EPA has completed a detailed review of the threatened species assessment section of the EA, and is of the opinion that Route A, which represents the preferred alignment, is the better route as it has a lesser impact on threatened species and ecological communities. The EPA notes that Route A will disturb an area of approximately 2.26 hectares, of which 1.25 ha is unvegetated, 0.5 ha is derived grassland, 0.42 ha is Coastal Sand – Blackbutt Forest and 0.09 ha is Swamp Mahogany – Paperbark Forest. The latter being consistent with ‘Swamp Sclerophyll Forest on Coastal Floodplains’ endangered ecological community.

The EA indicates that the above affected vegetation represents suitable habitat for a number of threatened species. The EPA believes all likely affected species have been appropriately assessed and generally concurs with the assessment conclusions, in that the proposal is unlikely to significantly impact on threatened species.

The EPA notes that two species of orchid *Diuris arenaria* and *D. praecox* were recorded in the vicinity and/or on the development footprints of both proposed alternate routes (A and B). These represent significant finds, given that one species is endemic to the Tomaree Peninsula. However, we concur that the proposal is unlikely to adversely impact on these species life cycles. The EPA notes that Route A will result in a lesser impact on these orchids, in that only 8-10 individuals of *D. praecox* will be removed (as opposed to 20-40 plants along the Route B option) and no *D. arenaria* will be removed.

In general the EPA concurs with the EA that the dedication of the Worimi Conservation Lands was conditional to some parts of the Stockton sand dune system being allowed to be developed. In general however the Worimi Conservation Lands represent forested habitats and may not contain derived / native grassland communities that are considered suitable habitat to the *Diuris* orchids. Both *D. arenaria* and *D. praecox* prefer open grassland habitats and generally do not occur (or do not occur at similar densities) in heavily forested communities. As such, as *Diuris* orchids will now be impacted by the proposal, the EPA is of the opinion the EA has not adequately justified that the Worimi Conservation Lands represent a suitable offset for these species.

The EPA recommends to Planning that the proponent provide adequate justification that the Worimi Conservation Lands represent suitable habitat for *D. arenaria* and *D. praecox*. This justification must be in accordance with the EPA’s ‘offset principles’ (as outlined in Appendix 2 – Principles for the use of biodiversity offsets in NSW *Draft Guidelines for Biodiversity Certification of Environmental Planning Instruments* (DECC 2007) and / or the *BioBanking Assessment Methodology*’ (DECC 2008) as defined under Section 127B of the *Threatened Species Conservation Act (TSC) 1995* and the *BioBanking Assessment Methodology and Credit Calculator Operational Manual*’ (DECC 2009).

If the proponent can not adequately demonstrate that the Worimi Conservation Lands represent a suitable offset for the *Diuris* orchids then the EPA recommends that a suitable alternate offset for these species could be the conservation and management in perpetuity of the remaining non-impacted orchids and their habitat on site. Under this scenario the EPA would expect these areas to be conserved and managed under an appropriate conservation mechanism, such as:

- The establishment of biobanking sites with biobanking agreements under the *Threatened Species Conservation Act 1995* (TSC Act)
- The dedication of land under the *National Parks and Wildlife Act 1974* (NPW Act).
- A Conservation Agreement under the NPW Act;
- A Trust Agreement under the *Nature Conservation Trust Act 2001*;
- A Planning Agreement under s 93F (soon to be s116T) of the EP&A Act.

Additionally the EPA would expect that an appropriate Management Plan (such as vegetation or habitat) be developed and implemented in perpetuity as a key measure managing any conservation area proposed.

References:

DECC (2007a) *Biodiversity Certification of Environmental Planning Instruments: Working Draft*. April 2007. Department of Environment and Climate Change (NSW).

DECC (2008) *BioBanking Assessment Methodology*. Department of Environment and Climate Change NSW.

DECC (2009) [BioBanking Assessment Methodology and Credit Calculator Operational Manual](#). Department of Environment and Climate Change NSW, Sydney.

Aboriginal Cultural Heritage Assessment

Aboriginal cultural heritage values

The Office of Environment and Heritage (OEH) acknowledges the significance of the area to the local Aboriginal community. OEH also notes the existence of numerous registered Aboriginal sites in the immediate locality and acknowledges that the project area contains landforms which have yielded a significant volume of evidence of Aboriginal occupation. These include middens, artefact scatters, isolated finds, burials, culturally modified trees, ceremonial and spiritual sites, camp sites and Potential Archaeological Deposits (PADs). OEH also notes the identification of six (6) Aboriginal sites within the project area. One previously recorded midden and associated PAD ('A3') and five (5) newly identified sites, including a midden, three (3) artefact scatters, and a separate PAD identified along the alignment of Route A between Lot 122 and the extraction area on Lot 218 ('Transect 9').

A search of the Aboriginal Heritage Information Management System (AHIMS) revealed that these Aboriginal sites have not been registered with the AHIMS Registrar. The proponent is advised to promptly complete Aboriginal Site Recording Forms for each site and submit to OEH for registration in AHIMS, as per the requirements of section 89A of the NPW Act. Any management outcomes for these sites must be included in the information provided to AHIMS. Please also note that penalties now apply to corporations for failing to fulfil these requirements.

AHIMS contact details: Phone: (02) 9585 6470, address: Lvl 6, 43 Bridge Street, Hurstville, NSW, 2220, e-mail: ahims@environment.nsw.gov.au.

Impact on Aboriginal cultural heritage

OEH understands that all six (6) Aboriginal sites are likely to be impacted by the proposed development of the haul road. OEH's preference is to avoid impacting Aboriginal sites and focus on conservation and protection measures. However, where impacts are unavoidable, OEH would expect the proponent to develop appropriate management strategies in consultation with the Registered Aboriginal Parties (RAPs) to manage these likely impacts.

Management of Aboriginal cultural heritage values

OEH acknowledges that there is a likelihood of finding further evidence of Aboriginal occupation within the haul road project area if the development proceeds. It is also noted that the proponent's archaeological consultant supports this potential. Accordingly, the proponent's proposal to provide an opportunity for the RAPs to initially salvage surface objects present at each site is supported.

It is also strongly recommended that in light of the likelihood of sub-surface material being located at each site an additional monitoring program be undertaken. This program should focus on monitoring by the RAPs of all initial ground disturbance works (e.g. vegetation clearing, cutting and filling activities) surrounding each Aboriginal site associated with the construction of the haul road and to recover any additional cultural material present. OEH also acknowledges the proponent's commitment to AHMG inspection programs. It is also strongly recommended that the Aboriginal Heritage Statement of

Commitments is amended to include a commitment to implement the proposed monitoring program. OEH has included below, recommended conditions of approval to target these matters.

It is also recommended that if the modification is approved, the Aboriginal Cultural Heritage Management Plan is amended to detail the specifics of the haul road monitoring program and associated collection and recording protocols. This should include details of the timing of the monitoring program/construction program, a map illustrating the areas to be monitored, reporting protocols, long term management of any objects recovered, etc.

If new Aboriginal object(s) are uncovered due to the proposed development and/or recommended monitoring activities, the object(s) identified must be recorded and registered with OEH as part of the assessment process in accordance with the requirements of Section 89A of the NPW Act. The management of any new sites or existing sites impacted by the development should be included in the information provided to OEH. This includes completing an Aboriginal Site Impact Recording Form, for all sites which are partially or wholly impacted by the works following approval. Please also note that penalties now apply to corporations for failing to fulfil these requirements.

Legislative Requirements

The importance of protecting Aboriginal cultural heritage is reflected in the provisions of the NPW Act. OEH advises that the requirements of the NPW Act have recently been amended. It is strongly recommended that the proponent familiarises itself with the new requirements during the development and any subsequent assessment/development works processes.

Recommended Conditions of Approval for Aboriginal Cultural Heritage

1. The proponent must continue to consult with and involve all the registered local Aboriginal representatives for the project, in the ongoing management of the Aboriginal cultural heritage values. Evidence of this consultation must be collated and provided to the consent authority upon request.
2. The proponent must provide fair and reasonable opportunities for the registered Aboriginal stakeholders to monitor any initial ground disturbance activities associated with Aboriginal cultural heritage values associated with the project area. In the event that additional Aboriginal objects are uncovered during the monitoring program, the objects must be recorded and managed in accordance with the requirements of sections 85A and 89A of the *National Parks and Wildlife Act 1974*.
3. In the event that surface disturbance identifies a new Aboriginal object, all works must halt in the immediate area to prevent any further impacts to the object(s). A suitably qualified archaeologist and the registered Aboriginal representatives must be contacted to determine the significance of the object(s). The site is to be registered in the Aboriginal Heritage Information Management System (AHIMS) (managed by OEH) and the management outcome for the site included in the information provided to the AHIMS. The proponent must consult with the Aboriginal community representatives, the archaeologist and OEH to develop and implement management strategies for all objects/sites.
4. If human remains are located in the event that surface disturbance occurs, all works must halt in the immediate area to prevent any further impacts to the remains. The NSW Police must be contacted immediately. No action is to be undertaken until police provide written notification to the proponent. If the skeletal remains are identified as Aboriginal, the proponent must contact OEH's Environment Line on 131555 and representatives of the local Aboriginal community. No works are to continue until OEH provide written notification to the proponent.
5. All reasonable efforts must be made to avoid impacts to Aboriginal cultural heritage at all stages of the development works. If impacts are unavoidable, mitigation measures are to be negotiated with the local Aboriginal community and undertaken in accordance with the Aboriginal Cultural Heritage Management Plan. All sites impacted must have an Aboriginal Site Impact Recording (ASIR) form completed and be submitted to the AHIMS Registrar within 3 months of completion of these works.