



Office of
Environment
& Heritage

Your reference: MP 08_0173
Our reference: DOC13/8034; FIL12/6884-03
Contact: Robert Gibson; 4908 6851

Ms Ruth Murphy
Planner
Mining and Industry Projects
NSW Department of Planning & Infrastructure
GPO Box 39
SYDNEY NSW 2001

Dear Ms Murphy,

**RE: CENTRAL COAST SAND PROJECT (MP 08_0173) - ENVIRONMENTAL ASSESSMENT REVIEW
AND RECOMMENDED CONDITIONS OF APPROVAL**

Reference is made to your emailed letter dated 6 March 2013, requesting comments and recommended conditions of approval from the Office of Environment and Heritage (OEH) on the exhibited Environmental Assessment (EA) for the Central Coast Sand Project at Somersby submitted by Hanson Construction Materials Pty Ltd. OEH has reviewed the EA for both Aboriginal cultural heritage and threatened biodiversity matters.

OEH understands that the proposed development would cover the existing quarry and rehabilitation operations on Lots 33 in Deposited Plan (DP) 755246 and Part Lot 118 DP 755246, and allow for the quarry to expand to the east into Part Lot 10 DP 1090880. The quarry expansion would occur through a 25 metre wide strip of woody vegetation on the eastern side of Lot 33. If approved this project would add up to 35 years to the life of the quarry.

OEH notes that there were no specific biodiversity issues identified in the in Director-General's Requirements (dated 22 October 2008). However, OEH provided recommended conditions of approval to the Department of Planning and Infrastructure in September 2008 for the following aspects that lie within the jurisdiction of the OEH including:

- The impacts on threatened species and their habitat;
- The impacts on Aboriginal cultural heritage values;
- Any impacts on any adjoining National Parks estate; and
- The design and layout of facilities to minimise potential impacts and the actions that will be taken to avoid or mitigate environmental impacts or compensatory measures to minimise unavoidable impacts.

OEH has undertaken a review of the EA (including appendices 12 and 13) for this project. In summary OEH has found that the EA has still not assessed the presence, or other wise of two threatened species (the Red-crowned Toadlet *Pseudophryne australis* or Spreading Guinea Flower (*Hibbertia procumbens*)) from the project site. Unless their absence is confirmed, the proponent will be required to provide an appropriate biodiversity offset. In terms of Aboriginal cultural heritage issues the proponent must reengage with the local Aboriginal community, and prepare appropriate actions for any Aboriginal

objects or remains found on site and also develop an Aboriginal Cultural Heritage Education Induction Program.

Detailed comments and recommended conditions of approval are provided in **Attachment 1**.

If you require any further information regarding this matter please contact Robert Gibson, Regional Biodiversity Conservation Officer, on 4908 6851.

Yours sincerely

 15/4/13

DIANE CROSDALE
Manager – Planning & Aboriginal Heritage
Regional Operations

Enclosure: Attachment 1

ATTACHMENT 1

REVIEW OF PROPOSED EXPANSION OF THE CENTRAL COAST SANDS PROJECT (MP 08_0173)

The Office of Environment and Heritage (OEH) has reviewed the Environmental Assessment (EA) for the proposed Central Coast Sands Project, including Appendices 12 and 13, for potential impacts on Aboriginal cultural heritage and threatened biodiversity. OEH provides the following comments and recommended conditions of approval for this project.

BIODIVERSITY VALUES ASSESSMENT

The proposed development would clear about 8 ha of land to the east of current quarrying operations. Most of the land is currently used for agriculture. However there is an area of about 0.5 ha of woody vegetation along the western edge of the proposed expansion area, adjacent to the existing quarrying operations that OEH considers could contain habitat for threatened species.

OEH acknowledges that the proponent has conducted the biodiversity assessment by using the current guidelines and conditions with respect to this project. These include the:

- *Threatened Species Assessment Guidelines: The Assessment of Significance* (DECC – August 2007);
- *Threatened Biodiversity Survey and Assessment: Guidelines for Developments and Activities - Working Draft* (DEC, 2004);
- *Threatened Species Survey and Assessment Guidelines: Field Survey Methods for Fauna - Amphibians* (DECCW, 2009a);
- *BioBanking Assessment Methodology and Credit Calculator Operational Manual* (DECC 2009b)

The results of the surveys and assessments are acknowledged. However, OEH has considered the details of the proposal and is not satisfied that the survey methodologies undertaken were adequate and consistent with the guidelines listed above due to a lack of detail regarding time and effort undertaken, particularly with respect to targeted survey of amphibians, particularly for the Red-crowned Toadlet *Pseudophryne australis*.

Survey adequacy

OEH is of the opinion that there remains an unresolved issue, that is, the possible presence of the Red-crowned Toadlet on the project site. According to Appendix 22 of the Ecological Assessment (RPS December 2010: pg. 24):

'...one unidentified amphibian species, *Pseudophryne* sp., heard calling on the edge of the vegetated area adjacent to the quarry extension...The threatened frog *Pseudophryne australis* (Red-crowned Toadlet) has been recorded within 1 km of the site, it is likely that the individual heard calling may have been this species or the closely related species more common species *Pseudophryne bibronii*.'

OEH notes that the threatened species *Pseudophryne australis* has been recorded at 47 locations with 10 km of the site and that habitats in the Somersby area are suited to this species. The closest record is 800 m from the record made, though no exact location was given in the Ecological Assessment report other than a statement from Table 3: '...given the limited amount of potential foraging habitat being removed as a result of the quarry extension and the location of the proposed access road such (sic) it avoids potential breeding areas ...' and further in Chapter 4: 'Placement of access road to the south west of the quarry extension will avoid any incursion into lands protected under the Water Management Act 2000 and potential breeding habitat for *Pseudophryne australis* and will follow a strategy of minimal tree removal accompanied by some under-scrubbing'.

While the EA is unclear about the extent of impact, under-scrubbing is precisely the type of impact that will have a direct impact on this species. In terms of habitat selection by this species, reference is made to Thumm and Mahony (1999):

'There is a considerable amount of evidence that shows the Red-crowned Toadlet is a habitat specialist, relying on a combination of substrate and landform. All 56 extant breeding sites studied were ephemeral, with no breeding taking place in perennial creeks. Ephemeral ponds were small and were often found in depressions in rock shelves, worn by water pouring down the slope. Other ponds were below drops in the watercourse, with accumulations of leaf litter banked around the edges. Breeding areas were also on slopes, with the eggs being laid above the ponds, in the path of intermittent water flows.'

It is the opinion of OEH that the areas marked for vegetation removal may offer suitable breeding habitat for this threatened frog species. The studies undertaken have not clarified this issue, and as such further investigations into whether or not the species is present and details on the population structure /size (if identified at site) are required to enable OEH to conduct an appropriate assessment. If such surveys are not done OEH will assume the species is present on the site and that it must be offset accordingly.

Additionally, OEH notes that an unidentified species of *Hibbertia* was observed in Quadrat 1 as part of the vegetation assessment for the site (RPS December 2012: Appendix 2). No other details are provided and so OEH considers that it could be a plant of Spreading Guinea Flower *Hibbertia procumbens*. As discussed in section 2.2.2 of Appendix 22 in the EA Spreading Guinea Flower is an endangered plant that is restricted to the Somersby Plateau where it can be locally common. OEH acknowledges that the EA refers to a targeted survey for this species in the project area conducted in late October 2010 in which this species was not found. The main vegetation survey for the project was conducted on 23rd and 24th of June 2009 (RPS December 2012: Table 2), when there is less chance that plants of Spreading Guinea Flower are flowering (The Royal Botanic Gardens and Domain Trust, 2013). OEH acknowledges that there are several species of *Hibbertia* native to the Somersby area; however leaf morphology and habitat may be used to greatly narrow down the likely identity of unidentified plants. In addition, a voucher sample may be collected and submitted to the NSW National Herbarium for study by specialists in plant taxonomy. In this context uses the precautionary principle and has come to the conclusion that the presence of Spreading Guinea Flower on the site of the proposed development has not yet been ruled out.

Offset Requirement

OEH notes that there are no biodiversity offsets provided for this proposed development. The proposal will entail the removal of 0.25 ha of native vegetation identified as Somersby Plateau Open Forest and another 0.25 ha of 'Pine-Lantana Open Forest' to allow access to the proposed quarry site. The removal of the area of Somersby Plateau Open Forest is regarded as the removal of potential habitat for a range of threatened species. As discussed above, the EA has yet to disprove the presence of Red-crowned Toadlet or Spreading Guinea Flower from the development footprint. Therefore OEH implements the 'precautionary principle' and assumes that both of those species are present on the development site, unless and until proven otherwise (by further targeted survey done in accordance with OEH survey guidelines), and that the loss of habitat for these species must therefore be offset.

In addition, OEH is aware that the Somersby area has a large resource of groundwater which supports numerous groundwater dependent ecosystems. These wetland communities include the recently listed 'Coastal Upland Swamp in the Sydney Basin Bioregion Endangered Ecological Community'. In addition these wetlands also provide habitat for a range of threatened plants and animals. Alteration of local groundwater has been identified as a Key Threatening Process in Schedule 3 of the *Threatened Species Conservation Act 1995*. OEH notes that the environmental assessment does not predict that the project will cause any harm by altering local aquifers. However, OEH adopts a precautionary approach and recommends that in the event that unexpected harm to threatened biodiversity occurs from changes to the local hydrology that it is offset in accordance with OEH policy.

Any offset proposal needs to be consistent with one of two approaches; (a) the Biobanking methodology, taking into account the *NSW OEH interim policy on assessing and offsetting biodiversity impacts*; State

significant development (SSD) and State significant infrastructure (SSI) projects and (b) OEH 'offsetting principles', as outlined on the website: 'Principles for the use of biodiversity offsets in NSW' can be used as general guide for offsetting and compensatory habitat requirements (www.environment.nsw.gov.au/biocertification/offsets.htm)

The BioBanking Assessment Methodology can be used to assess impacts of a proposal and to determine required offsets without obtaining a statement. If the required credits are not available for offsetting, appropriate alternative options may be developed in consultation with the OEH and in accordance with OEH policy. OEH supports the voluntary use of the BioBanking Assessment Methodology (BBAM) as defined under Section 127B of the *Threatened Species Conservation Act 1995* (TSC Act) and the 'BioBanking Assessment Methodology and Credit Calculator Operational Manual' (OEH 2011a). OEH considers this approach consistent with how threatened species impacts can be formally assessed under other parts of the *Environmental Planning and Assessment Act 1979*.

The BioBanking assessment should be undertaken by an accredited BioBanking assessor and done in accordance with the *BioBanking Assessment Methodology and Credit Calculator Operational Manual* (DECCW 2009b). To qualify for a BioBanking Statement a proposal must meet the 'improve or maintain' standard. Undertaking and submitting the BioBanking Assessment must take into consideration a number of matters outlined in **Appendix 1**.

Where the BioBanking Assessment Methodology is being used to assess impacts of a proposal and to determine required offsets, and a BioBanking Statement is not being obtained, the proponent must provide a detailed biodiversity assessment to OEH and all components of the assessment must be undertaken in accordance with the *BioBanking Assessment Methodology and Credit Calculator Operational Manual*.

Where BioBanking has been used, any resulting consent should include a specific Statement of Commitments that reflects all requirements of the BioBanking Statement including the number of credits required and any Director-General approved variations to impact on Red Flags. The Statement of Commitments should also make reference to, and follow the requirements for the full implementation of BioBanking as set out in Appendix 1.

Recommended conditions of approval

1. That prior to commencement of this development the proponent undertakes appropriate surveying in accordance with OEH threatened biodiversity guidelines (in particular DECCW 2009a) in order to test the presence or absence of the Red-crowned Toadlet *Pseudophryne australis* and Spreading Guinea Flower (*Hibbertia procumbens*) within the study area;
2. That unless proven otherwise, by targeted survey described in Condition 1 (above), that the proponent must provide a biodiversity offset that is developed in accordance with OEH's offsetting policies prior to the commencement of this development. That is either: (a) Biobanking methodology, taking into account the *NSW OEH interim policy on assessing and offsetting biodiversity impacts, State significant development (SSD) and State significant infrastructure (SSI) projects* (OEH 2011), or (b) OEH's 'offsetting principles', as outlined in the 'Principles for the use of biodiversity offsets in NSW' (www.environment.nsw.gov.au/biocertification/offsets.htm); and
3. That any harm caused to threatened biodiversity due to adverse indirect impacts due to changes to local groundwater or sedimentation must be offset in accordance with OEH offsetting policies.

References

DEC (2004) 'Threatened Biodiversity Survey and Assessment: Guidelines for Developments and Activities - Working Draft'. NSW Department of Environment and Conservation, Sydney
<http://www.environment.nsw.gov.au/resources/nature/TBSAGuidelinesDraft.pdf>

- DECC (2007) 'Threatened Species Assessment Guidelines: The Assessment of Significance'. August 2007. NSW Department of Environment and Climate Change, Sydney.
<http://www.environment.nsw.gov.au/resources/threatenedspecies/tsaguide07393.pdf>
- DECCW (2009a) 'Threatened Species Survey and Assessment Guidelines: Field Survey Methods for Fauna – Amphibians' April 2009. NSW Department of Environment, Climate Change and Water, Sydney
<http://www.environment.nsw.gov.au/resources/threatenedspecies/09213amphibians.pdf>
- DECCW (2009b) 'BioBanking Assessment Methodology and Credit Calculator Operational Manual'. March 2009 NSW Department of Environment, Climate Change and Water, Sydney.
<http://www.environment.nsw.gov.au/resources/biobanking/09181bioopsman.pdf>
- RPS (2010) Ecological Assessment. Report to Hansen Construction Materials, December 2010.
- OEH (2011) 'NSW OEH interim policy on assessing and offsetting biodiversity impacts, State significant development (SSD) and State significant infrastructure (SSI) projects' NSW Office of Environment and Heritage, Sydney.
- OEH (2012) 'Assessors' guide to using the BioBanking Credit Calculator v.2' April 2012. NSW Office of Environment and Heritage, Sydney. <http://www.environment.nsw.gov.au/resources/biobanking/120182AssessGdeBBCC.pdf>
- The Royal Botanic gardens and Domain Trust (2013) Spreading Guinea Flower *Hibbertia procumbens* (Labil.) DC. PlantNet – The Plant Information Network System of The Royal Botanic Gardens and Domain Trust, Sydney, Australia.
<http://plantnet.rbgsyd.nsw.gov.au> [viewed 15 April 2013]
- Thumm, K. and Mahony, M. (1999). Loss and Degradation of Red-Crowned Toadlet Habitat in the Sydney Region. Pp. 99-108 in *Disappearance and Decline of Australian Frogs* (ed). A. Campbell. Environment Australia.

ABORIGINAL CULTURAL HERITAGE ASSESSMENT

Aboriginal cultural heritage values

OEH acknowledges the cultural significance of the local environment to the local Aboriginal community. OEH notes the existence of numerous registered Aboriginal sites in the locality and acknowledges that the proposed quarry extension area contains landforms which have yielded a significant volume of evidence of Aboriginal occupation. These sites include grinding grooves, artefact scatters, camp sites, potential artefact deposits (PADs) and stone engraving sites.

OEH acknowledges that the Aboriginal cultural heritage assessment of the proposed quarry extension has been undertaken in accordance with the OEH's assessment guidelines. The results of the Aboriginal cultural heritage assessment undertaken for the project area are also acknowledged and it is noted that no Aboriginal cultural heritage values were identified within the project area. However, there is also a possibility that currently undetected cultural material may be present within the project area in those areas where Aboriginal objects have not been previously identified. It is therefore recommended that an Aboriginal Cultural Heritage Education Induction Program is developed and implemented by the proponent for the induction of all personnel and contractors involved in the construction activities on site. Records should be kept of which staff/contractors were inducted and when for the duration of the project. It is also recommended that this program be developed and implemented in collaboration with the registered Aboriginal parties.

Consultation with local Aboriginal communities

Effective heritage management requires knowledge of values or cultural significance. An understanding of what makes a place culturally significant and why, enables appropriate decisions to be made about the management of that place. OEH recognises and acknowledges that Aboriginal people are the primary source of information about the value of their heritage and how this is best protected and conserved and must have an active role in any Aboriginal cultural heritage planning process.

OEH also encourages the proponent to maintain continuous consultation processes with the Aboriginal community for the entire life of the project and for all Aboriginal cultural heritage matters associated with the project area. As a general rule, gaps in the consultation process of 6 months or more will not constitute a continuous consultation process. Where a proponent envisages a gap of more than 6 months it is recommended that representatives of the local Aboriginal community are regularly informed of any progress.

OEH refers to Appendix 2 of the Cultural Heritage Assessment (CHA). It is noted that the most recent evident of consultation provided by the proponent is from 14 September 2009. The consultation process is therefore incomplete. Under these circumstances, OEH recommends that additional consultation is undertaken with the registered Aboriginal parties to ensure each party is appropriately informed and updated regarding the nature of the project application and any revised proposals and/or management strategies.

OEH also encourages the proponent to continue to engage with the registered Aboriginal parties in developing and maintaining appropriate cultural heritage outcomes for the life of the proposed development.

Management of Aboriginal cultural heritage

OEH acknowledges that the proponent has developed management strategies to address the possibility that any Aboriginal objects located within the project area may be impacted by the development proposal. OEH accordingly supports the management recommendations for Aboriginal cultural heritage provided in Sections 8.2.10 and 10.4 of the EA and Section 9.0 of the CHA.

OEH has accordingly included recommended conditions of approval below to target the above matters.

Recommended conditions of approval

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. In the event that ground disturbance identifies any Aboriginal object/s within the project area, all works must halt in the immediate area to prevent any further impacts to the object(s). A suitably qualified cultural heritage specialist and representatives of the local Aboriginal community must be contacted to determine the nature, extent and significance of the finds. The site is to be registered in the Aboriginal Heritage Information Management System (AHIMS) (managed by the OEH) and the management outcome for the site included in the information provided to the AHIMS. The proponent will consult with representatives of the local Aboriginal community, and the cultural specialist to develop and implement appropriate management strategies for all objects/sites. Any management strategy development must also comply with the appropriate legislative provisions.
3. 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 are contacted immediately. No action is to be undertaken until the NSW Police provide written notification to the proponent. If the skeletal remains are identified as Aboriginal, the proponent must contact the OEH's Environment Line on 131 555 and representatives of the local Aboriginal community. No works are to continue until the OEH provides written notification to the proponent.
4. An Aboriginal Cultural Heritage Education Induction Program must be developed for the induction of all personnel and contractors involved in the construction activities on site. Records are to be kept of which staff/contractors were inducted and when for the duration of the project. The program should be developed and implemented in collaboration with the registered Aboriginal parties.

APPENDIX 1

CHECKLIST OF INFORMATION REQUIRED WHEN UTILISING THE BIOBANKING ASSESSMENT METHODOLOGY & SUBMITTING THE BIOBANKING ASSESSMENT TO OFFICE OF ENVIRONMENT AND HERITAGE (OEH) USING THE BIOBANKING CREDIT CALCULATOR VERSION 2.0

The *Assessors' Guide to Using the BioBanking Credit Calculator v.2* has been finalised and it is now available for download from the Office of Environment and Heritage website. The guide provides information on the operation and use of the web-based BioBanking Credit Calculator v2.0.

To submit your assessment to OEH open your assessment in *Edit* mode. Navigate to the *Assessment details* page and select the *Submit* button in the top right hand corner. A *Submit the assessment for approval* box will appear (Figure 1), where you can confirm submission (*OK* button) or cancel submission (*Cancel* button). Once a case has been submitted to OEH, the status of the case will change in your *My work* tab from *Work in progress (WIP)* to *submitted*. Please note that you cannot make any edits to an assessment that has been submitted, although you will be able to view the assessment.

Submit the assessment for approval



Are you sure you want to submit this assessment for approval?



Figure 1: Menu box in the BioBanking Credit calculator v. 2 that enables an assessment to be submitted to OEH.

The following documentation must be submitted with your Environmental Impact Statement or Environmental Assessment report (in hard copy and soft copy):

- BioBanking Assessment Report including a list of dominant indigenous species for overstorey, mid-storey and ground cover for each vegetation type and, where required:
 - local benchmark data;
 - request for increase in gain of site value;
 - a description of the proposed development;
 - measures to avoid and mitigate the impacts of development;
 - an assessment of indirect impacts;
 - a statement of on-site measures;
 - a description of the application of the BioBanking Assessment Methodology, including details of and assumptions made in utilising the methodology, such as (but not limited to) placement of assessment circles, remnant value, connectivity and reasoning behind selection of vegetation types in the Biometric Vegetation Type database;
 - plot and transect values including a list of the indigenous plant species identified in each of the plots; and
 - a description of targeted threatened flora and fauna surveys, and any general baseline surveys (incl. vegetation specific surveys). These should be also be provided schematically.

and

Where required, the BioBanking Assessment Report should also include:

- expert reports;
 - an application for a determination on red flag areas;
 - more appropriate use of local data for vegetation types, benchmarks or threatened species;
 - environmental contributions accompanied by a BioBanking Agreement Credit Report (if applicable); and
 - an application for deferred retirement arrangements (if applicable).
- Copies of completed field data sheets, and updated with correct plant taxonomy in instances where field names have been used.

- Maps (soft copy as A4 jpgs) of:
 - offset site / BioBanking Agreement boundary or development footprint;
 - vegetation zones;
 - management zones;
 - and where required:
 - existing waste;
 - existing erosion; and
 - existing structures (in waterways)
- Separate shape files should be supplied for all the maps mentioned above plus:
 - plots and transects;
 - assessment circles;
 - species polygons;
 - polygons for adjacent remnant area; and
 - the location or habitat area of sensitive species, and the management area related to that sensitive species (as this information cannot be displayed publicly).

All maps must include:

- a title (as per the names above);
- the site's name, location and lot/Deposited Plan (DP) numbers;
- the scale;
- the date it was prepared; and
- a legend.

Boundaries and zones must be confirmed on the site using a GPS. This information should be digitised onto an ortho-rectified aerial photo or SPOT-5 image. Maps must be easily readable and submitted to OEH as a Geographic Information System (GIS) file that is ESRI compatible. Shape files must use GDA94 datum. Name each shape file as: 'biobank site name_descriptor'. For example, 'Hill Farm_photo points' or 'Hill Farm_management zones'.

Photo points should be named A, B, C, D, E, F, G, etc. Photo points should be located in areas where change is expected, i.e. where replanting, natural regeneration, intensive weeding or other active management actions are to be carried out. As a rough guide, include at least one photo point in each management zone where active management actions will be undertaken. Boundaries and zones must be confirmed on the site using a GPS. This information should be digitised onto an ortho-rectified aerial photo or SPOT-5 image. Maps must be easily readable and submitted to OEH as a Geographic Information System (GIS) file that is ESRI compatible.

Shape files must use GDA94 datum. Name each shape file as: 'biobank/development site name_descriptor'. For example, 'Hill Farm_photo points' or 'Hill Farm_management zones'.

Additional requirements for offset sites that may be required (based on liaison with OEH):

- completed biobanking agreement management action template (provided in Word format), and
- Biodiversity Credits Pricing Spreadsheet.

Once the case has been received OEH will review the data entered, and any supporting documentation. For State Significant Development (SSD), State Significant Infrastructure and residual Part 3A (under the *Environmental Planning and Assessment Act 1979*) this review will take place during the assessment of the Environmental Impact Statement or Environmental Assessment report (for Part 3A matters).

