

Endeavor Sand Project

Preliminary Assessment

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PROJECT DESCRIPTION

Summary

Endeavor mine proposes to establish a sand extraction project adjacent to the mine on the Darling Downs Western Lands Lease. Sand will be extracted at a rate of 600 000 m^3/y for the first two years, followed by a rate of 300 000 m^3/y thereafter, for the life of mine. Assuming 10 year mine life remaining, total requirements will be 3 600 000 m^3 of sand. Sand will be trucked to the Endeavor mine for use in its mine back-fill program.

The purpose of this report is to provide an overview of the potential environmental issues associated with the sand project. The report will be submitted to the Department of Planning (DoP) as required under Part 3A of the Environmental Planning and Assessment Act (1979).

Background

The Endeavor zinc-lead-silver mine near Cobar has been in production since 1983, producing zinc and silver-rich lead concentrates for smelting in Australia and abroad (Figure 1). CBH Resources acquired the mine from Pasminco in 2003.

Underground mine voids must be back-filled to ensure the stability of the under-ground workings and to fully extract the resource. A pastefill plant was commissioned in early 2005 to back-fill voids with a mixture of dry tailings. This mixture did not produce the strength requirements that were indicated in early laboratory trials. Therefore an alternative source of backfill material is required.

The search for a more inert solid has led Endeavor to identify and test alluvial sand deposits. A substantial deposit of sand was found 10 km north-east of the mine, on Darling Downs Station. It has been identified as being able to provide a suitable and sustainable source of solids for paste fill.

Sand from the deposit will be trucked 10 km to the Endeavor mine pastefill plant on a new haul road.



Figure 1: Locality plan of Endeavor sand project.

Site Location

The proposed sand extraction would take place on the Darling Downs lease (378 000 mE 6 580 000 mN), 10 km north-east of Endeavor mine. Darling Downs is also known as Western Lands Lease 2444, Lot 680, DP 761726 held under the name of K Cain.

The Endeavor underground zinc-lead-silver mine lies 50 km north of Cobar, at 371 500 mE and 6 515 000 mN, in western New South Wales (Figure 2). It is covered by mining leases ML 158, 159, 160, 161 and 930, and the Western Lands Leases 13,839 and 13,840. Endeavor commenced operations as Elura in 1983 under Electrolytic Zinc, and later Pasminco.



Figure 2: Aerial view of the Endeavor mine from the south-west.

Road access to the Endeavor mine is via Louth Road and Morgan's Road. Primary access to Darling Downs is via the Bourke Road, but as the mine is adjacent to the property, at a four-way boundary, haul road access will be via the south-east corner of Poon Boon (Figure 3).

The surrounding land is used for low intensity sheep and goat grazing on Western Land Leases. Cobar has three active metal mines in the area and extensive areas of exploration.



Figure 3: Location of project area, Darling Downs. Grid squares = 1 km.

Overview of Proposed Operations

A sand resource has been identified with volumes of more than 3 600 000 m^3 . It is anticipated that sand will be excavated from the area for the life of Endeavor mine, which is currently estimated to be 10 years.

The sand is relatively friable and can be excavated by digger and loaded directly onto trucks for carting to the mine. Sand extraction and trucking will be undertaken under the supervision of Endeavor Operations Pty Ltd. Extraction in the first two years will be a 24 hours/day, 7 days/week operation.

There are two phases of extraction:

- Recovery plan: 600,000 m³ per year for first two years, to cover the backlog of mine filling necessary to stabilise the mine to get it back into full production.
- Future operations: 300,000 m³ per year for the remaining life of mine (8 years).

Prior to sand extraction, trees will be felled and stockpiled for use by the leaseholder. Other cleared vegetation, such as branches, small trees, shrubs and grasses, will be stockpiled for later respreading on the batters of the pits. Topsoil will be removed and stockpiled for later respreading on the batters and base of the pits. Significant habitat trees will be avoided where practical.

The project area will be fenced to ensure safety of stock, wildlife, lease holders and mine vehicles.

No more than a few hectares (2 to 4 Ha) will be exposed at any one time as mining is progressive in a series of pits, which are progressively rehabilitated as each pit is excavated. This ensures only a small area of land is disturbed at any one time.

A haul road will be constructed from the mine to the project area. Culverts will be installed in low lying areas to ensure natural drainage is maintained.

Sand will be hauled to the mine in road trains, or similar. Sand will be screened at the mine pastefill plant. Oversize material will be used either as unconsolidated backfill in the underground mine, as rehabilitation material or similar.

Geology and Resource Assessment

Sediment size distribution tests have been undertaken, and the size function of Darling Downs sand grades it as fine sand, with variable quantities of silt and mud. Tests on 16 samples from a variety of locations as well as field observations suggest that this profile is relatively consistent, with minor variations in fines (Figure 4).

Given the widespread uniformity of both particle size and sites meeting the 3 metre thickness criteria, a number of sites were deemed to be suitable. Additional criteria such as environmental and cultural sensitivity, especially with respect to the sensitive Yanda Creek area, and Darling Downs homestead, and access to the mine, a 2 km² area at sampling site 14 near the Darling Downs – Omrah Downs boundary fence was selected as optimal.

Darling Downs samples (wet screened)



Figure 4: Grain size distribution of selected Darling Downs sand sampled. Scale is logarithmic.

A 400 tonne bulk sample was taken from site 14 and trialled through the paste fill plant.

Grid sampling for the planning of pits and scheduling of extraction is incomplete at this stage. However, sufficient and sustainable volumes for paste-fill production are being proven up in detail.

Workforce

The sand project would employ 9-12 personnel, made up two shifts of a single operator for both the excavator and loader at the pit and 2 truck drivers. The Endeavor mine currently employs 270 people.

Capital Cost

The predicted capital cost of the project is \$260 000, covering exploration, road construction, and project management.

Endeavor is an important contributor to the local and state economy. In the financial year ending 30 June 2005, Endeavor mine's operating costs were \$65 million of which 80% is spent locally on the acquisition of goods and services. Endeavor also paid \$2.6 million in royalties to the NSW Government.

PLANNING

Environmental Planning and Assessment Act (1979)

The project falls under the classification of a "Major Project" in Part 3A of the Environmental Planning and Assessment Act, 1979 (EP&A Act) and the State Environmental Planning Policy (Major Projects) 2005.

The Department of Environment and Conservation (DEC) have specified that the "Draft Guidelines for Threatened Species Assessment (July 2005)" must be considered by proponents and consultants when assessing potential impacts on threatened species, populations, or ecological communities, or their habitats for development applications assessed under Part 3A.

The "Draft Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation (July 2005)" identify the important factors and/or heads of consideration that need to be considered by proponents and consultants when assessing potential impacts on Aboriginal cultural heritage for development applications assessed under Part 3A of the EP&A Act.

The "Aboriginal Cultural Heritage Standards and Guidelines Kit" contain standards and guidelines to help promote predictability, transparency and best practice in Aboriginal heritage management. Guidelines on consultation with Aboriginal people and communities are found in the document "Interim Aboriginal Community Consultation Guidelines". The above guidelines will be followed when carrying out the environmental assessment.

State Environmental Planning Policy (Major Projects) 2005

The project falls under the classification of a Major Project in this SEPP, as it intends to "(*a*) *extract more than 200,000 tonnes of extractive material per year, or (b) extracts from a total resource of more than 5 million tonnes*" (Schedule 1, Group 2 Mining, petroleum production, extractive industries and related industries, 7 Extractive Industries).

Threatened Species Conservation Act (1995)

The "Threatened Biodiversity Survey and Assessment: Guidelines for Development and Activities (Working Draft, November 2004)" guidelines have been primarily developed for use by decision makers when considering a development, activity or action pursuant to Parts 4 and 5 of the EP&A Act, and Part 6 of the Threatened Species and Conservation Act 1995 (TSC Act).

The guidelines may also provide information and assistance to any other individuals or organisations that may be required to consider the effect of a proposal on threatened biodiversity or critical habitat. While originally designed for Part 4 and 5 EP&A Act assessments, these guidelines remain useful for assessments being prepared under Part 3A and are referred to within the draft threatened species assessment guidelines for Part 3A noted above.

National Parks and Wildlife Act 1974

Department of Environment and Conservation (NSW) guidelines are being followed to ensure the survey and consultation are compliant with the requirements of the National Parks and Wildlife Act 1974. The specific DEC guidelines are: the "Interim Community Consultation Requirements for Applicants" December 2004, and the "Aboriginal Cultural Heritage Standards and Guidelines Kit".

Protection of the Environment Operations Act (1997)

The DEC has responsibilities under this Act, and as the proposal is to extract more than 30 000 cubic meters of material per annum, Endeavor's Environmental Protection Licence (1301) will need to be updated following approval. A licence variation will be submitted including a location description and an application will be made for the extractive industry to become an ancillary activity on Endeavor's Licence.

General requirements to be addressed in the environmental assessment include: water pollution, air pollution and noise pollution. These issues are discussed later in this document.

Western Lands Act (1901)

An application will be made to alter the land use specified on the Western Lands Lease, from grazing to grazing and sand extraction, as required by the Western Lands Act (1901).

Cobar Local Environment Plan (2001)

Darling Downs is within the General Rural Zone in the Cobar Local Government Area. The Cobar Local Environmental Plan (2001) specifies in Zone No 1 (a)—General Rural Zone, 1 Objectives of zone:

"(1) To promote the conservation of productive land for agricultural and grazing purposes.

(2) To permit the development of appropriate agricultural land uses and prevent development of inappropriate non-agricultural land uses such as small lot rural residential subdivision.

(3) To permit the development of mines, extractive, offensive and hazardous industries, but only in an environmentally and sustainable manner.

(4) To permit some non-agricultural land uses and agricultural support facilities, such as rural supply industries, tourist facilities, farm stay facilities, and the like which are in keeping with other zone objectives and which will not have an adverse effect on agricultural productivity."

Other Approvals

If a bore is to be used to access water for dust suppression, as bore licence will be sought.

STAKEHOLDER ENGAGEMENT

Identifying Stakeholders

Government agencies that have planning responsibilities have been identified as key stakeholders together with local Aboriginal groups and neighbouring leaseholders. Pubic Notices were placed in three local papers requesting interested people to register as stakeholders.

Government Agencies

A Pre-Focus Meeting was called by Endeavor on 13th December 2005 in Dubbo, and all major government stakeholders were invited. At that meeting the project area was identified as a location west of the mine (Wuttagoona), but since that meeting a closer deposit east of the mine has been identified (Darling Downs). Darling Downs is now the preferred project site, avoiding association with the Wuttagoona Aboriginal art sites and avoiding a long haul road with a main road crossing.

Government specifications, to date, are listed below.

Cobar Shire Council representatives have specified the need for a Development Application to be lodged.

The DEC has indicated Endeavor's current EPA license must be updated with sand extraction when approval is granted.

The DEC has also issued guidelines for the assessment of flora and fauna, and for community consultation (see section below).

The Department of Natural Resources has indicated that a bore license is required if ground water is to be sourced.

Neighbouring Leaseholders

The lease holders of Darling Downs (K & J Cain) have had a long working relationship with Endeavor mine and have been crucial in identifying the sand resource and providing access for exploration work and other surveys. The leaseholders of adjoining properties at Poon Boon (K & R Boal) and Omrah Downs (R. Anderson & K. Virgo) are also being consulted.

Aboriginal Stakeholders

The document "Interim Community Consultation Requirements for Applicants" (December 2004) must be followed for approvals under Part 6 of the National Parks and Wildlife Act (1974). These guidelines specify the consultation requirements as a series of steps, and the consultation to date is summarised in the following sections.

Step 1: Notification and registration of interests

An initial field visit to an alternative sand extraction site (Wuttagoona) was held on the 7th December 2005 with representatives from Endeavor mine, DEC archaeologist, DEC Sites Officer and traditional owners. During this site visit discussions were held regarding the type, size and reasons why the development was proposed. A discussion on the rehabilitation techniques and final landform was discussed. The main concerns voiced were:

- Volumes and depths of pits
- Archaeological survey
- Employment opportunities
- Proximity to Wuttagoona art sites
- Dust generation
- Habitat trees

A second site visit was held on 7th March 2006 and was attended by representatives from Endeavor mine and traditional owners. This meeting was held to discuss site issues relevant to the current sand extraction site (Darling Downs) and the reasons for not proceeding at

Wuttagoona. The sand extraction process was discussed again. The main concerns voiced were:

- Habitat trees should be preserved
- Progressive rehabilitation
- Employment opportunities
- Size and depth of pits
- Site visit during operation
- Bull Mallee tree where local tribes carried out trading location unknown

A public notice was placed in the Cobar Weekly, Cobar Age and the Western Herald requesting interested parties to register with Endeavor mine. A letter was sent to the Cobar Aboriginal Lands Council (CLALC), the Department of Aboriginal Affairs and the Native Title Services (Dubbo) on the 21st March 2006 notifying them of the proposal and the register. Two people responded to the public notice, both have sand extraction businesses in Cobar and were concerned about the impact of the proposal on their businesses. Traditional owners who had attended field visits were automatically added to the register.

A letter was sent to the CLALC on the 25th April 2006 requesting their assistance with the archaeological and cultural survey. The CLALC selected Norman Ohlsen and Peter Griffiths to carry out the work on their behalf.

The leaseholders of the two Western Lands Leases affected by the proposed project have close links with Endeavor mine and have been in regular contact regarding the project, surveys and impact minimisation.

Step 2: Preparation for the assessment (design)

Following discussions with NPWS Sites Officers, DEC Archaeologist and traditional owners it was agreed that an archaeological survey be carried out by (a) competent person(s) on foot to identify archaeological sites and/or tools.

Step 3: Drafting, review and finalisation of the Cultural Assessment and Heritage Report

The draft report will be sent to the CLALC, traditional owners on the register and leaseholders neighbouring the project site. Comments arising from the review of the draft report will be included in the final report.

ENVIRONMENTAL ISSUES

Overview

The Endeavor sand project site on Darling Downs has been selected over a separate site on Wuttagoona as it is further away from the Wuttagoona Aboriginal art sites, has a lower haulage distance and does not cross a public road.

The project site is located in low rainfall, low-intensity grazing country away from any defined drainage channels (Figure 5). Neighbouring leaseholders have homesteads located 3 km, 4 km and 4 km away respectively, from the project area and haul road.

While detailed assessments will be undertaken to address all potential impacts, the key issues for consideration are expected to relate to dust generation, erosion control and rehabilitation. An outline of key issues and results of the assessment process to date are included in the following section.



Figure 5: Site 14 (on Figure 5) within the project area.

Alternatives to the Project

A range of materials were assessed for their suitability as paste solids. Materials considered but found unsuitable included tailings from CSA mine and Peak gold mine, black sands (granulated slag), milled CSA siltstone (country rock on existing mining lease) and aeolian sands. Materials identified by Endeavor as potentially suitable as inert paste material were stockpiled subsoil (short-term) and alluvial sand (medium to long-term). Details of the assessment of alternatives follow.

(a) Endeavor Dry Tailings

There are significant issues with dry tailings due to acid generation and poor long-term strength. This is due to the chemical reactivity and the very high cost of binders. Tailings are still considered to be part of the mine-fill strategy but cannot provide a complete long-term solution.

(b) Endeavor Stockpiled Siltstone

Fresh and weathered siltstone occurs on the mine site however volumes and the need for crushing make it unsuitable as paste fill material. It would require excessive water and is chemically and physically unstable in stopes due to the presence of reactive clays. However, this material is being considered as unconsolidated mine-fill and as a substitute for subsoil in capping the rehabilitated tailings dam.

(c) Endeavor Stockpiled Subsoil

Subsoil stockpiles were created at Endeavor during the construction of the tailings dam and quarry. A trial at the paste fill plant has indicated that this material makes suitable paste. This material had been earmarked for use in rehabilitation of the tailings dam; however crushed siltstone may be a more suitable capping material.

There is at most 300,000 m3 of subsoil which may be used as paste fill, which would only supply about 4 to 6 months of paste.

(d) Off-Site Tailings

Tailings from CSA mine are not considered suitable because they contain large quantities of pyrite, which is acid generating, and would have no advantage over Endeavor's own tailings. Excavation and trucking costs are also negative factors.

Tailings from the Peak gold mine contain residual cyanide, and soluble heavy metal-cyanide complexes which could create health and safety issues at Endeavor, and along the transportation route. Excavation and trucking costs are also negative.

(e) Granulated Smelter Slag

Black sands (granulated slag) from the Cockle Creek smelter have been used as unconsolidated mine fill at Endeavor mine in the past. It has been tested and found not to be suitable for paste fill. The supply of this material to the mine has now ceased.

(f) Off-Site Aeolian Sand

Deposits of aeolian sands have been located within an acceptable distance from the mine. Although these consist of quartz particles which are inert, they tend to be very low in fines and are not considered capable of being turned into an effective paste.

(g) Off-Site Alluvial Sands

Alluvial sand consists of predominantly fine quartz particles with small amounts of clay and forms suitable paste. However, deposits are not well documented due to limited demand according to the Geological Survey of NSW (lain Paterson, Senior Geologist – Land Use). Various deposits were identified and investigated by the Endeavor team with a survey of an area within a 25-30 km radius of the mine. Most were found to be inaccessible, too thin, or insufficient volumes. Some did not have sufficient fines or too much coarse material.

The team identified two locations containing suitable deposits in terms of thickness, particle size distribution and volumes. These are located in Wuttagoona Station and Darling Downs Station, which are both Western Lands Leases. Preliminary tests have shown that the Wuttagoona sand deposit is the better of the two but due to its environmental and cultural sensitivity, as well as considerations with respect to truck access, it has been declined in favour of Darling Downs.

Pit Design and Rehabilitation

Conceptual designs for the sand pits on Darling Downs are attached using environmental bestpractice principles. The main considerations used when developing these plans are water management, erosion control, land disturbance and rehabilitation.

The basic design is for a series of long pits located across the slope, instead of a single, large pit. This design allows for flexibility to avoid significant habitat trees and to reduce slope length and subsequent water erosion risk. Water diversion on the upslope of the pits may be directed one way, rather than splitting the diversion both ways, as shown on the design. However, this would result in increased stormwater flow and is not ideal.

The pits will be rehabilitated after sand extraction to grazing land, where water will be held for longer than on the natural slope, allowing for an increase in pasture growth. Discussions have been held with Ken Cain (leaseholder Darling Downs), who is a farmer, earth-moving contractor with local rehabilitation experience. His local knowledge on sand extraction and rehabilitation have been incorporated into these designs.

The pit design incorporates the following environmental elements:

- Vegetation salvage: cleared vegetation is stockpiled in low bunds downslope of each pit, for later respreading on pit batters;
- Topsoil salvage: topsoil is stockpiled in low bunds upslope of each pit, for later respreading on pit floor;
- Erosion control: pits placed on the contour, topsoil stockpiles act as water diversion bunds, to keep water out of the pit and away from pit batters. Bunds may have to be extended over access ramps to ensure water does not flow down ramp;
- Preservation of habitat/seed plants: the series of pits, separated by strips of undisturbed/non-cleared land will protect significant habitat trees and seed plants;
- Water erosion: each pit has a small catchment, and short slope length to reduce the risk of erosion;
- Pit access: access ramps are located at each end of the pit to allow for "drive-through" truck access. Main access tracks are utilised for all pits ensuring minimal land disturbance;
- Rehabilitation: each pit is rehabilitated (batters recontoured 7:1, topsoil and vegetation respread) progressively as sand extraction is completed. Undisturbed land between the pits will act as a seed source and help stabilise the area. Rehabilitated pits will hold water for a short time, increasing the growth of pasture plants.

Haul Road

A haul road is required from the sand extraction site to the mine. This will follow the boundary fence (Figure 6), within Darling Downs (6 km) and Endeavor mine (4 km). The road will be single lane with lay-by areas. It will be constructed with gravel similar to that shown on Figure 7, and fenced on both sides to keep stock, feral goats and other wildlife off the road.



Figure 6: Darling Downs - Omrah Downs boundary fence, looking west near site 14.



Figure 7: The old mine access road on Bundella station was built over 20 years ago. A similar road will be built to access the Darling Downs sand extraction project.

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Access from Darling Downs to the Endeavor lease requires a one hectare crossing point on Poon Boon.

At the end of the project life, the access road in Darling Downs will be left in place as a boundary track for the leaseholder, and as a fire break. The inner fence will be removed. The haul road on the Endeavor lease will be ripped up but left as a fire break. The cross-over on Poon Boon will be ripped and reseeded.

Borrow pits will be established to source road construction material. The location of these pits has not been finalised, but may be located on the existing mine lease, along the haul road corridor, within the project area, or a combination of all three locations.

Water resources

Water will be required for dust suppression on haul roads and there is only limited capacity at Endeavor to provide for this need. Application will be made to put down a water bore on Darling Downs for the project. Water sharing with the leaseholder is envisaged but this will depend on bore capacity.

Noise and Vibration

The project will operate 24 hours per day, 7 days per week. It is proposed that an excavator will work at the sand pit, and two road-trains, or equivalent, will continually haul sand from the pit to the mine.

There are three homesteads located in the area, these being Omrah Downs homestead (3 km south of the project area and haul road), Darling Downs homestead (4 km east of the project area) and Poon Boon homestead (4 km north of the mine).

Noise impact assessment procedures would be guided by the requirements of the Department of Planning (DoP), Coal Mine and Associated Infrastructure EIS Guidelines, Section 6.5 - Noise, Vibration and Blasting Issues, as well as the Department of Environment and Conservation's (DEC's) Environmental Noise Control Manual (ENCM and Environmental Criteria for Road Traffic Noise (ECRTN) together and the NSW Industrial Noise Policy, 2000 (INP).

Air Quality

Air quality goals for dust and particulate matter emissions will be established in accordance with the NSW EPA "Approved Methods and Guidance for the modelling and Assessment of Air Pollutants in New South Wales", and other relevant legislation.

Water

There are no defined drainage lines in the project area and all rainfall runoff moves from the area as sheet flow. There will be no chemicals used in the sand excavation process.

Clean water will be diverted around the sand excavation pits during operations. Water falling in the pits will be held there, until it either evaporates, infiltrates into the ground or will be pumped to a two-stage settling pond. The two-stage settling pond will ensure any solids are removed from the water prior to disposal downslope.

Diversion bunds will be regularly used along the edges of the haul road to ensure water does not concentrate, causing erosion.

Ecology

The Johnstone Centre – Environmental Consulting, at Charles Sturt University, have been engaged to provide an assessment of the study area for the presence of threatened species, populations and ecological communities.

The specific aims of the flora and fauna assessment are to:

- identify and describe all flora species (including rare and threatened flora), and vegetation communities present within the subject site and assess their conservation significance with regard to relevant Federal, State and Local Government environmental legislation;
- identify and describe all fauna species (including rare and threatened fauna), and their habitats which are present, or which may occur within the subject site and surrounds, and assess their conservation significance with regard to relevant Federal, State and Local Government environmental legislation; and to
- provide recommendations based on these findings, which will mitigate the effects of the proposed work on any native flora and fauna, particularly threatened species and their habitats, and the general environment.

Visual Amenity

The sand project area and haul road will not be visible from any of the homesteads in the area, or from major access tracks leading to the homesteads, or public roads. Therefore the risk of impact on visual amenity is classified as negligible.

Socio-Economics

The sand project, while directly employing 9-12 new personnel, will enable the Endeavor mine to continue production at current rates, and will ensure the long-term viability of the mine.

A commitment has been made to the Traditional Owners to provide training and work opportunities for local indigenous people.

Archaeology

There are a number of significant Aboriginal areas on the Cobar Peneplain, including Mt Grenfell Nature Reserve located to the west of Cobar. Mt Grenfell consists of a rocky landscape where permanent water may be found and there are a number of significant examples of rock art here. Further to the north-east is Wuttagoona, to the west of Endeavor mine, and Mt Drysdale to the east of the mine. Further north is Gunderbooka National Park. All of these areas are significant Aboriginal places with cultural heritage values.

Running through the area from the south-east to the Darling River, west of Bourke, is Yanda Creek. Yanda Creek is an intermittently flowing creek that allowed Aboriginal people to move through the landscape. There are numerous scar trees to be found along the length of Yanda Creek. The location of Yanda Creek can be seen in the upper right corner of Figure 1, approximately 7 km to the north-east of the project area.

The original Environmental Impact Study for Endeavor mine included an archaeological survey carried out in 1979. During that survey there was a small number of artifact scatters found in the area often associated with gilgais. There is also a small outcrop of chert near the mine tailings dam which is protected by fencing. One chip was found near this outcrop.

The "Draft Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation (July 2005)" identify the important factors and/or heads of consideration that need to be considered by proponents and consultants when assessing potential impacts on Aboriginal cultural heritage for development applications assessed under Part 3A of the EP&A Act.

The "Aboriginal Cultural Heritage Standards and Guidelines Kit" contain standards and guidelines to help promote predictability, transparency and best practice in Aboriginal heritage management. Guidelines on consultation with Aboriginal people and communities are found in the document "Interim Aboriginal Community Consultation Guidelines".

The guidelines listed above will be used as the basis for an archaeological and cultural survey to be carried out by a nominee from the Cobar Local Area Land Council.

CONCLUSION

This preliminary Assessment has been prepared to outline Endeavor mine sand extraction project proposal and to provide an overview of the potential environmental issues associated with the project. The report will be submitted to the DoP to accompany a project application under Part 3A of the EP&A Act and will assist the Director General to specify requirements for the completion of an environmental assessment for the proposal.

An environmental assessment will be undertaken based upon the integrated Director General requirements developed by the DoP in conjunction with other relevant government agencies.