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Port Augusta
CITY COUNCIL

PH:PH:2166
LEAA20004

27th January 2010

Mr Jason Irving
Manager – Policy & Planning
Department for Environment and Heritage
GPO Box 1047
ADELAIDE SA 5001

Email: Jason.irving@sa.gov.au

Dear Mr Irving

The Government of South Australia, through the Department of Environment and Planning have sought comments on the management policies and zones contained with the *Seeking a Balance - Conservation and resource use in the Northern Flinders Ranges*.

In relation to the above request, the Port Augusta City Council considered a Report, compiled by Council's Tourism Facility Manager, Mrs Pauline Hedger.

Council at its meeting held on 25 January 2010 resolved to endorse the Report (REPA5032) and has now approved forwarding the following submission that outlines the issues and recommendations identified in relation to *Seeking a Balance*, for your consideration.

1) Environmental Class A Zone, New Proposal Management Access Zones and current activities

Development controls within the northern Flinders Ranges are currently addressed by the State Government's Development Plan *Land Not Within a Council Area (Flinders Ranges)*. This Development Plan shows Arkaroola entirely within an Environmental Class A Zone. The objective of the Environmental Class A Zone is: *to maintain the conservation of the natural character and environment of the area and the protection of the landscape from damage by mining operations and exploring for new resources. This zone objective provides that mining operations should not take place in the Environment Class A Zone, unless the deposits are of such paramount importance and their exploitation is in the highest national or State interest that all other environment, heritage or conservation considerations maybe overridden.*

It is felt that the *Seeking a Balance* document does not provide enough information to enable the reader to clearly understand the full implications of these new access zones and the impact that they will have on the environment should mining and mineral exploration be expanded in this region.

Currently, all of the Arkaroola Wilderness Sanctuary is protected by the *Environmental Class A Zone* classification, however mineral exploration has recently taken place within the Mount Gee protected area. Marathon Resources Pty Ltd., holds a mineral exploration lease over some of the most pristine, fragile, spectacular mountainous parts of the Sanctuary and it is all within the Environmental Class A Zone area.

Mount Gee was entered on the Register of the National Estate in 1982 due to its *spectacular mass of quartz crystal and vugular, lining the cavities of crush breccias*, however on 27 October 2009, a new 12 month exploration licence was granted to Marathon Resources to continue the exploration.

Australia is host to 40% of the world's known uranium resources (Geoscience Australia 2009 report). Most (77%) of the Australian resource occurs within South Australia. The world's largest uranium deposit is at Olympic Dam, with reserves of 2,450,000 tonnes (BHP Billiton 2009 Annual Report). In its 2009 Annual Report, explorer Marathon Resources identifies only 31,300 tonnes at Arkaroola. This is not a *deposit of paramount importance*.

Explorer Marathon Resources also estimates that its Arkaroola deposit (which lies beneath Mount Gee, a mountain listed in the Register of the National Estate) will support mining for only nine years. *Tourism lasts forever, scars from mining last an eternity.*

Seeking a Balance proposes a complete new array of Management Access Zones. If endorsed, mining will be permitted throughout most of Arkaroola's land which is classified Environmental Class A Zone.

Only some of the Geological Monuments and heritage areas, listed on the National Register of Heritage, are not offered any protection within the new proposed Zones.

Immediately adjacent to Mount Gee, stands Mount Painter, of great significance to local Aboriginal people yet is subject to exploration activities. The Mount Painter heartland and associated elevated country is most at risk. This area is subjected to fragmented zoning under the *Seeking a Balance* proposal with half the Mount protected but the other half afforded no protection it seems.

The Iconic Sillers Lookout is an image that has been used by major tourism agencies around the world. The Sillers Lookout and surrounding mountainous countryside has attracted hundreds and thousands of tourists, who have travelled thousands of km through many regions in South Australia, to experience Arkaroola's Ridgetop Tour.

This area will be rezoned to Access 3 and therefore could be lost to tourism. *Seeking a Balance* has diminished protection of some spectacular areas on Arkaroola.

Seeking a Balance places Split Rock in Access Zone 1, with the highest level of protection. However the iconic Sillers Lookout, located very close to Split Rock, has been placed in Access Zone 3, where standard exploration and mining conditions apply.

Given the significant ecological values and iconic beauty of Arkaroola, it would have been anticipated that a much higher level of protection should have been afforded to the Arkaroola area than that proposed in *Seeking a Balance*.

It is considered that *mining and mineral exploration will permanently and seriously degrade and possibly completely destroy the exceptional mountainous wilderness values of the Arkaroola Wilderness Sanctuary.*

The new Management Access Zones are totally fragmented and the conditions and restrictions of the various zones are open to interpretation by the Government.

Controlling mining or mineral exploration activities of any future claims would be extremely difficult because of the complexity of any amendments to the existing Development Act (Flinders Ranges)- furthermore, as it currently stands, this Act contains no provisions for offences or associated penalties.

Mount Gee's proposed Access Zone 2a: Mount Gee can still be mined via access from Access Zone 3, albeit underground. Half one side of Mount Painter is in Access Zone 2a and, rather strangely, the other in Assess Zone 2b.

Some of the most significant areas and Monuments are conveniently positioned near the boundary of Access Zone 3, which will give mining operators access to these pristine areas from underground and mining infrastructure and tracks can be placed on their surface. Additionally, there are no provisions under the proposals for buffer zones or wildlife corridors, situations that are totally unacceptable. Mining would produce vast amounts of mine spoil, or waste which would need to be stored for the life of the mine which is envisaged to be around nine years. It is believed that the appearance of haulage and other tracks, and vast amounts of rubble would negatively impact upon tourism and environmental values.

Recommendation

1. Strengthen existing *Environmental Class A Zoning* to provide a high level of protection for Arkaroola's core environmental landscape and tourism assets.

To enforce and legislate the current classification, which is adequate, however strict guidelines need to be enforceable and should have consequences for exploration or mining companies that do not comply with the Zone regulations.

There is a need to develop legally binding penalties, fines or cancellation of their licence if any breaches occur, which are proven to be intentional or ongoing.

2. Revise *Seeking a Balance* to increase protection for the spectacular areas, including Sillers Lookout, Mount Gee and Mount Painter and eliminate fragmented zoning in the *Plan*, such that all of the Sanctuary became Zone 1: no mining access.
3. Until mining of any description can be achieved sensitively, without any surface impacts, it is believed mining has absolutely no place in the Arkaroola mountain landscape.
4. Identify all Geological Monuments, culturally significant, heritage, and tourism asset areas, including those areas now mentioned in the National Register of Heritage, and ensure they are all given full protection, including buffer zones, from any type of mining within the *Plan*.
5. Provide more detailed and precise topographical maps that easily identify the Geological Monuments, culturally significant, heritage and tourism asset areas within the clearly marked Zones.
6. The proposed Zones provide no real protection for the very heart of the Arkaroola Wilderness Sanctuary. The Zones should be streamlined to either grant permission to mine or not. Eliminate the proposed varying levels of mining or exploration. All types of mining within such an area is disturbing.

2) **Water Supplies**

Much of Arkaroola is known for its outstanding pristine waterholes. Such waterholes sustain all forms migratory species, local wildlife, plant species, insects and organisms that must live within commuting distances of a place to drink.

Arkaroola's successful tourism industry relies on its own underground fossil water supplies to sustain tourism visitations and life at the Village. In times of drought the current resources have been stretched to their limits.

Little is known about the hydrology of the Flinders Ranges. The process of aquifers is poorly understood. The recharge rates require investigation and considerable research so the aquifers are not put at risk.

In a 2007 submission to the Government, Marathon Resources advised that it would require 5.5 million litres a day for processing activities, should their mining application be approved in the future.

Any approval to extract this huge amount of water from the region would contravene the Government's own targets and prescriptions around the sustainable use of water from existing nearby resources.

It is critical that ecosystems under stress, which has been the case throughout the recent 10 year drought, retain their water resources to sustain existing life. Mining cannot be sustained by the existing local water resources.

Any interference at all with the scant fossil-water aquifers could spell the end for the waterholes and be disastrous for the wildlife that wholly depends on this precious resource.

Recommendation

1. PIRSA or DEH to identify Arkaroola's permanent surface waters. Map and provide the highest level of protection to maintain the current levels of water sources, inside the Sanctuary and from the nearby Artesian Basin.
2. PIRSA or DEH investigate the process of aquifers, identify the recharge rates. As little is known about the hydrology of the Flinders Ranges, it is recommended that a detailed study be actioned to identify the process of the Arkaroola water resources. Until such a study has been completed it is recommended that no application or permit to extract additional water from the existing supplies be granted.
3. Existing water resources need to be given the highest level of protection.

3) Rare And Threatened Species - Animals, Plants, Birds And Fish.

Arkaroola the "Corridor"

The State Government's *No Species Loss* framework, its *NatureLinks* and *Bounceback* programs have been developed with the view of landscape scale conservation (e.g. instead of managing individual species in isolation from the ecosystems they are a part of the a whole-of-landscape approach). Resilient, healthy, ecosystems are more likely to support threatened, endemic and relict species, than are fragmented systems.

Connectivity is the keystone of landscape scale conservation. Biodiversity corridors connect habitat and make it possible for movement between areas.

Five properties, all de-stocked and managed for conservation, create a corridor of connectivity for movement that stretches from Lake Frome to Warraweena on the edge of the western plains.

Arkaroola Wilderness Sanctuary, Vulkathunha Gammon Ranges National Park (VGRNP), Nantawarrina Indigenous Protected Area, Pinda Springs and Warraweena Private Conservation Park, demonstrate the "NatureLinks" model. These neighbouring lands provide refuge for remnant, endemic, rare and threatened species, some of which are found nowhere else in the world.

Due to its unique geology and mountainous land formations, lack of weediness, intact plant communities and subsequent position, and as the northern most protected area in the Flinders Ranges, Arkaroola Wilderness Sanctuary is a critical part of a greater Northern Flinders corridor.

In 1981, Dr Reg Sprigg placed 70 square km of prime wallaby habitat on the National Estate Register to assist in the protection of the 35 colonies of Yellow-footed Rock-wallabies.

It is considered that mining will endanger the Yellow-footed Rock-wallaby colonies.

The *Seeking a Balance* framework does not recognise the necessity of bio-corridors linking the Yellow-footed Rock-wallaby colonies in the central region around Mount Painter or the East Painter Gorge, or those of the more northerly Mawson Plateau and the Arkaroola Creek to the south.

Identified as one of eight conservation priority plants species in the SA Arid Lands NRM Region, the Spidery Wattle, (or Balcanoona Wattle – *acacia araneosa*, which is found nowhere else in the world, is widespread in less than ten square kilometres, but only along the Arkaroola/Gammon Ranges National Park boundary, and is struggling to survive.

The Department for Environment & Heritage (DEH) supports the proposal currently before the Native Vegetation Council to fund a conservation program for the long-term protection of the 5 square kilo-metre Spidery Wattle Arkaroola community.

Under the proposed new management framework most of the population of the Spidery Wattle occurs in Access Zone 3 where standard exploration and mining conditions will apply. This rare tree requires full protection in the new Management framework.

The endangered Slender Bell-fruit Tree, a group of trees growing in the proposed Access Zone 2b, will be further endangered by ground disturbing activities and access tracks that will be permitted to be developed under new zoning arrangements.

The Slender Bell-fruit Tree must be protected from any form of ground disturbing activities.

Seeking a Balance framework has *failed* to deliver appropriate levels of protection for individual species and ignores DEH's own policies that advocate landscape scale conservation, *regardless of tenure*.

As mentioned above, there are a number of endemic species to the area, and if disturbed by mining activities, or if invasive species are introduced from an increase in traffic into previously untouched areas, such activity could destroy plants and animals not found anywhere else in the world.

It is also not beyond being impossible that there are also as yet to be discovered species in this relatively untouched mountainous area – the opportunity to discover and protect such species could be threatened by mining activities.

Recommendation

1. The new Management Plan must provide full protection for the Spidery Wattle, the Slender Bell-fruit tree and any other identified endangered and significant flora and fauna, especially those that are endemic to the area. A suitable no mining zone must be applied to these areas.
2. Provide connectivity between areas of known Yellow-footed Rock-wallaby habitat within the northern Flinders Ranges including all corridors joining conservation areas.

4) Threat To Conservation – Weeds

Weeds are a major threat to South Australia's arid areas. In many areas the Onion Weed, Ward's Weed, Salvation Jane and Horehound have dramatically changed the landscape and its ecosystem health.

The Arkaroola area is currently relatively weed free, with weeds mostly restricted to day visitor areas and watercourses in the southern and south-eastern sections of the property.

The Arkaroola Pastoral Lease Assessment report states: *the limited track network into the interior of Arkaroola was a conservation strategy by Reg Sprigg to protect the central area of the lease from tourism impacts.*

Whilst developing tourism at Arkaroola, Dr Reg Sprigg only provided vehicle access to the periphery of the property. The spectacular central highland region, bounded by Arkaroola Creek in the south and Yudanamutana Gorge to the north, is not accessible by private vehicles.

Weeds from other regions are easily transported by vehicles, especially the heavily-treaded tyres that are standard issue on mining industry vehicles. These can easily host the transportation of seeds in and around the proposed vehicle mining networks that will be built within the current restricted access areas and the new proposed Zones.

The proposed fragmented zoning arrangements for sections of Arkaroola does not provide any protection against the *spread* of weeds into existing restricted areas.

Recommendation

1. The current vehicle restricted areas should be maintained to ensure the current condition of the land can be maintained into the future. - No access No mining.

5) Bio-Prospectivity

Much of Arkaroola's heartland has never carried live stock, therefore the plant communities are intact. It has been reported that there is great potential for remnant populations of small mammals to have survived on Arkaroola.

In 1993, bones of five native rodent species were found in a cave above a waterhole on Arkaroola.

They included the believed to be extinct short-tailed Hopping Mouse, and the long tailed Hopping Mouse; vulnerable species, the Dusky Hopping Mouse, a rare species found further north, and the Long-haired Rat that persists in scattered refuges.

Evidence of the extinct Stick-nest rat middens, has also been found in caves and caverns across the Sanctuary.

Mining will destroy many areas of Arkaroola that may expose or host, thought to be extinct mammal communities. *The unknown will never be known if mining is permitted.*

Recommendation

1. No mining should be permitted where there is the possibility of finding any trace of endangered or barely surviving species that are on the edge of extinction.

6) Cultural Values

Seeking a Balance does not appear to address any of the cultural heritage issues of the Adnyamathanha People in any detail whatsoever, and takes into no real account of any Aboriginal significant or sensitive sites on Arkaroola.

The Mount Painter area is a site of great sacred significance to the local Adnyamathanha People, traditional owners of the region. Initial prospecting and trial mining has never recognised their rights to the land and the protection of sacred sites, and today they are still not being given proper recognition and protection.

The majority of the Arkaroola Wilderness Sanctuary is culturally significant to the Adnyamathanha People.

Recommendations

- 1) Officially recognise within the *Plan* all sites that are significant to the Adnyamathanha People within the Arkaroola Wilderness Sanctuary and ensure they are protected from any form of mining or exploration within the "Access Management Zones".
- 2) Enquire as to what process was used to consult with the Traditional Owners in relation to this *Plan*.

7) **Landscape Values**

In order to attribute *ratings* for the *value* of the Landscape Quality of Arkaroola, the DEH, as *part of a program of assessing the natural attributes of the Arkaroola region*, appointed Consultants who invited hundreds of South Australians to take part in an online survey.

They were required to evaluate the photos to identify *scenic significance* and *quality* of the landscape allowing determination of the importance of the area for the *Plan*.

Thirty percent of all respondents who started the survey failed to complete it, (1191 of 3549). However, ratings by anyone who looked at 110 or more of the 127 images, plus an additional 20 photos from elsewhere in South Australia, were used to define Landscape Quality and, by inference, Arkaroola's tourism values.

The integrity and appropriateness of this assessment methodology is questionable.

The Landscape Quality Assessment completely ignored other elements that are essential to understand how visitors experience and view the landscape (e.g. the time of day, the season, the light, the space, the solitude, the places that one walks or climbs to, being alone with nature, familiarity with place, revelation through new knowledge provided by tour guides - these are all part of the experience of the landscape).

It is believed that the mood and poor quality of the photos used in the Survey may have encouraged negativity amongst the participants.

Recommendation

- 1) A more holistic and consultative process is required to capture the elements in a new evaluation of the Landscape Quality and to include and promote the tourism values of the area.
- 2) Recommend a new survey includes an appropriate proportion of the existing Arkaroola tourism market segments to assess the photos. Arkaroola has a high level of interstate and international visitors than the intrastate market yet the survey was only offered to South Australians, but was later opened up to include parts of the State Government Public Service sector.
- 3) Provide professional quality photos that represent the seasonal changes to the visual landscape. The photos need to depict the views that would be experienced by the participants and at varying times during the day. Photos need to emulate the experience.
- 4) Until mining of any description can be achieved sensitively, without any surface impact, or have an impact on the existing water supply, mining in any form has no place in the Arkaroola mountain Landscape.

Reason: Marathon' Resources five year mineral exploration lease over 9000 hectares of the Arkaroola Wilderness Sanctuary has been disastrous. Company employees illegally buried in excess of 20 tonnes of low level radioactive waste at Mount Gee and similar amounts in the Yudanamutana Gorge only a few kilometres away.

This is a sad example of what is possible when mining is permitted in remote areas. Currently and within the new *Seeking a Balance* proposal there is no way of controlling their activities.

8) **Tourism**

Currently, tourism provides \$4.6 billion dollars to the South Australian economy, yet *Seeking a Balance* does not portray nor does it highlight any evidence that Arkaroola's tourism assets were adequately valued or considered.

The negative impact of mining this unique environment on our regional tourism industry was not considered in its own right within the Proposal. Arkaroola has already had comments from a number of international visitors that they would not visit the Flinders Ranges Region if there was uranium mining there. A lot of overseas visitors perceive Arkaroola as the Flinders Ranges so the impacts could be far reaching for the region.

Any mining or exploration in the Flinders Ranges and within the Arkaroola Wilderness Sanctuary will affect the long term viability of our whole tourism industry.

The Flinders Ranges attracts nearly 780,000 visitors annually, spending an average 1.1 million bed nights and over \$133 million dollars every year. Tourism dollars are spent throughout every sector of the community. It impacts on everyone and everything.

The Flinders Ranges has been recently nominated as a *National Landscape* by Tourism Australia. It is a landscape that captures the essence of Australian and offers distinctive natural and cultural experiences.

The Brand Essence - *Peace and Tranquillity.*

The Brand Proposition - *The Flinders Ranges, where ancient landscapes inspire its peoples and reveal the story of life on earth.*

Key Objectives of the Brand Strategy, as adopted and supported by the tourism industry:

- a) To position the Flinders Ranges destination in a way that maximises its potential as one of Australia's National Landscapes
- b) To increase the length of stay of visitors
- c) To increase the length of the visitor season
- d) To maximise the dispersal of consumers/visitors
- e) To increase the spend of consumers/visitors

The following is the official vision for Brand Strategy.

The Flinders Ranges will be a National Landscape through the creation of an inspiring, united regional brand. As a National Landscape, the Flinders Ranges will be an Australian Iconic destination for visitors by 2012.

By embracing the geo-tourism strategy, the global Experience Seeker will be attracted to the Flinders Ranges as a must do destination. Through the development of a total visitor experience, enriched by the personality of its people, its unique landscape and geology, the Flinders Ranges will become a vibrant business environment that supports and celebrates the land that sustains it.

The Arkaroola Wilderness Sanctuary exemplifies the *Brand* of the Flinders Ranges.

Tourism, it is the *National Landscape* in the northern Flinders Ranges and it is reliant on visitors wishing to experience the Brand Essence and Proposition of the National Landscape Brand.

The natural ancient Arkaroola landscapes and its known and unknown treasures, the tranquillity and the peace of this beautiful priceless part of the world, will be destroyed if mining or its associated exploration is permitted within the Sanctuary.

Mining is noisy, dirty and will have a negative impact on air and noise quality. This will negatively impact of the tranquillity and the peace of the area, therefore reducing its appeal to tourists, the professional researchers, scientists, bushwalkers, astronomers etc, of course, the existing species that live there.

Mining will destroy this vision and will dramatically reduce visitations to Arkaroola. The financial and subsequent impact on employment within the tourism industry will be felt across the broader region as all areas en-route to a destination will have reduced visitations.

Arkaroola attracts the domestic and international tourism market who specifically go there for a holiday to experience the;

- Ridgetop Tour
- Bush walking through the unspoilt landscape and natural attractions
- Take a guided walk to the Arkaroola Waterhole to see the Yellow-footed Rock- wallaby
- The Cultural Guide Walk
- The Bats & Bubbly evening drive or walk.
- Drive yourself to the Bararranna Gorge on the Paralana Hot Springs road etc.
- Take a guided 4 w/d tour
- Bird Watching – 160- recorded species
- Visit the Interpretive Centre, Ningana.
- Mountain Biking
- Scenic Flights

- Astronomy Tour and Star Chairs (one of Australia's largest privately owned observatories) - star gazing
- Geology – Visit the Puddingstone or plum pudding rock, belonging to a group of rocks from the glacial origin, called tillites and much more.

Arkaroola is unique and unusual because it is so un-spoilt, it is in pristine condition, which is a result of only minor pastoral grazing in the early days, it is a Mecca for research and education. Many universities and schools, biologists, scientists and research organisations take advantage of this unique and pristine area to research the geology, minerals, the unique flora and fauna.

They search for what is there now, what there may have been or what still may be found in any of the many gorges, caverns, caves and rocky escarpments.

Every year the South Australian Museum delivers its *Out of the Glass Case* outreach program. This year it will be held at Arkaroola to provide free talks and walks with specialists in palaeontology, geology, wildlife and history.

The Scientific Expedition Group undertook a comprehensive bio-survey of Arkaroola in September 2009.

The Mars Society (Australia), with the assistance of NASA, have established a working relationship with Arkaroola and plan to erect a Mars Analogue station on the Arkaroola property for research associated with future visits to the planet Mars. The scientific research and educational possibilities associated with this are immense, but could be easily foiled by mining in Arkaroola.

The Australian Arid Lands Botanic Garden has also legally sourced unique and rare plant species from Arkaroola for its Garden and Arkaroola purchases stock from the garden in return for use at the Village and the Caravan Park.

The Sprigg family, past and present, need to be supported and congratulated for the commitment they have made in preserving this beautiful natural environment so we can all learn and experience our heritage.

We cannot loose it to mining.

RECOMMENDATION

- 1) Unless mining can be development as to leave no footprint then there is no place for it in this unique part of the world.
- 2) The Tourism Industry considers that any mining and exploration within the Arkaroola Wilderness Sanctuary will have a direct negative impact on Port Augusta, the Flinders Ranges and Outback of South Australia, and the growing tourism and associated industries that operate through this vast area.

If you have any queries in relation to the above or would like any further information please contact me on 08 86419193 or 0418810028.

With kind regards,

Yours faithfully

MRS PAULINE HEDGER
TOURISM FACILITIES MANAGER