



**Enquiries:** Felicity Elliott

**Your Ref:** 12/12/20/220/1

Director: Mr. Dumisane Mthembu  
Directorate Environment Impact Assessment  
Department of Environment Affairs and Tourism  
Private Bag X447  
Pretoria  
0001

21 October 2008

Dear Sir

**PROPOSED MOOI-MGENI TRANSFER SCHEME PHASE 2**  
**uMgungundlovu District Municipality**

The Environmental Impact Assessment Report (EIA) for the abovementioned application has been reviewed by the Ezemvelo KZN Wildlife's (EKZNW) IEM Planning Committee. Please find below EKZNW's comments and recommendations on this project.

1. Transfer pipeline from Spring Grove Dam to Mpofana river

A portion of the transfer pipeline will be transecting a property which is currently being proclaimed as a Nature Reserve within EKZNW's Stewardship programme. This property is the Bill Barnes Crane and Oripi Nature Reserve, which is owned by the KZN Crane Foundation (Refer to attached Map 1). A detailed rehabilitation and management plan would be required and would need to be strictly enforced to ensure minimal impact on the area.

A portion of the pipeline will also traverse wetland areas and although it is noted that these wetland areas are already impacted upon by various activities it is still required that this loss is included in a rehabilitation program and mitigated in the wetland offset plan.

2. Quarry site

It is recommended that the quarry closure plan be the rehabilitated of the quarry back to grassland and that continued use of the quarry is not mooted as a closure plan.

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### 3. Inundation of Inchbrackie Falls

In light of the fact that the falls will be inundated by the proposed dam, the relocation of species from the Inchbrakie Falls to the Reekie Lyn Falls as outlined in the specialist report “Bridging study no 1: Ecological impact Study of Submerging the Inchbrakie Falls on the Plant Species at the Falls” is supported. The management of this land to ensure the continued conservation of these relocated species is vital for the long term success of this relocation program. The relocation plan thus needs to include the relevant legal mechanisms to ensure the long term management of this site.

### 4. Fish Barrier Weir

The need for the proposed fish barrier is noted, namely the necessity to replace the barrier provided by Inchbrakie Falls which currently prevents the movement of smallmouth bass into the upper reaches of the river system and which would impact on the brown trout and thus the local trout fishing industry. The proposed weir will have a local negative impact due to the reduction of habitat diversity in this section of the watercourse and although the need for the weir is noted it is recommended that an education program around the smallmouth bass is included as part of the exercise to ensure the continued value of the weir.

### 5. Proposed rescue program – “Operation Noah”

The proposed plan to sweep the dam site prior to flooding of the area as well as to rescue fauna once flooding is occurring is supported. EKZNW, as the biodiversity authority in KZN Province, requests that the detailed plans for the proposed sweeps and the rescue program, including the species list (flora and fauna), timeframes, the release areas, and acquisition plans for the release areas, are compiled for review and approval by EKZNW prior to commencement of the dam construction.

Strathern farm is mooted in the report as a possible area for release of species however this farm is also identified in the report as been disturbed by farming practices and thus a rehabilitation plan would need to be included for this land.

### 6. Off site mitigation proposals

The report indicates that 397 hectares of wetland habitat will be inundated by the dam and the biodiversity and ecosystem services resulting from these wetlands lost. The report proposes that an offset is provided to mitigate this loss and while EKZNW is in full support of the principal of an offset, significant concerns with regards to the EIA proposal have been noted and are outlined below:

- a) The report was undertaken in 2003/2004 and it is suggested that change in landowners and the availability of updated international and South African information on defining and managing of offsets necessitates the revision of the report.
- b) EKZNW supports the principal of no net loss of wetland systems and is of the view that the 1:1 and 1:1.5 ratio of offset proposed in the report does not comply with this principal. It is recommended that a ratio of at least 1:5 must be implemented to ensure no net loss of wetlands in the area.
- c) The wetlands chosen for rehabilitation were chosen via the system of willing landowner and not based on a classification of wetlands in the area in terms of wetland type, biodiversity and provision



of ecosystem service importance. It is strongly recommended that the offset sites are re-evaluated in terms of the above and that the required sites and system of choosing sites is negotiated with and approved by EKZNW.

- d) The dam and associated infrastructure will result in a permanent loss of the wetlands within the dam basin and thus the offset sites once rehabilitated needs to be managed to ensure the continued value of the wetlands in perpetuity. These wetland sites thus need to be monitored and relevant legal mechanism which ensure that management requirements are attached to the property and not the current land owners is needed. Such a mechanism will ensure that government money utilised in the rehabilitation of the site would be wisely spent, as required by the PFMA, and will show accrued benefits to the environment.
- e) It is not stated in the report which zones of the wetlands were considered for rehabilitation and thus the following is reiterated as being a requirement for the offset sites. The wetland site needs to include the permanent, seasonal and temporary zones as well as a suitable buffer to ensure that edge affects resulting from surrounding land uses are mitigated. In this regard it is recommended that a *minimum* ecological buffer of 30m from the edge of the temporary wet hydromorphic zone is implemented and where spraying of fertilizer or chemicals is to occur that a minimum ecological buffer of 50m is implemented.
- f) The review of the wetland areas fell short of the wetland offset even on the unsupported low 1:1 ratio and this is of concern. It is strongly recommended that the exact nature of the offsets is defined and the details, of how the offset is to be obtained, the budget to be set aside for implementation and the legal and institutional arrangements, are established and documented prior to any authorisation being issued for the project.

EKZNW as stated above is in support of an offset to mitigate the loss of the wetlands, however significant more work would have to be undertaken prior to EKZNW being in a position to assess and provide a defensible decision regarding the viability of the wetland offset proposal.

The offset proposal included in the EIA is largely for the wetlands and does not include the loss of grassland areas and habitat for various red list and endemic species, including Wattle crane and Oribi<sup>1</sup>. A proposal to purchase Strathern Farm is mooted in the report as part of the wetland offset and a potential area for “Operation Noah” release sites, however this is not considered adequate mitigation to offset the loss of the habitat that will result from both the dam and to a lesser extend the quarry. Such an offset would need to as a minimum comply with the following criteria

- Provide an adequate ratio for the offset
- Provide sufficient habitat for crane and oribi species of such a size that allows for and mitigates edge affects.
- Needs to be representative of grassland type, slope and area.
- The land should preferably be linked to existing protected areas or areas proposed for the National Protected Areas Expansion Plan

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<sup>1</sup> Oribi is scheduled as 'Protected game' in KwaZulu-Natal and listed as 'endangered' in the 23 February 2007 NEMBA list



An example of land that complies with the above criteria is attached as Map 2. This is included as an example only and it is noted that further work would have to be undertaken to assess the best means of complying with the above and other offset requirements. EKZNW, as biodiversity authority in KZN requires that this offset proposal is negotiated with and approved by EKZNW.

7. Environmental management plan (EMP)

It is requested that the “Environmental Site Management and Rehabilitation Plan” which is to be included in appendix 2 of the EMP is submitted to EKZNW for comment and approval.

In conclusion, the proposed Spring Grove Dam and pipeline and the associated quarry and realignment of roads will result in the significant loss of grassland and wetlands areas as well as habitat for a number of endemic and red list species. It is, however, acknowledged that this project is of both provincial and national importance and thus based on this need, EKZNW does not object to the project proposal on the condition that adequate offsets as discussed above will be provided to mitigate the loss of these habitats and ecosystems.

It is requested that EKZNW is provided with any further documentation related to biodiversity issues, that is developed for this project and that the above comments and requirements are taken into account if it is determined that a positive authorisation can be provided for this project.

Yours sincerely



Head IEM  
**for CHIEF EXECUTIVE OFFICER**

cc:  
Cymbian Enviro-Social Consulting Services (Pty) Ltd  
KZN Department of Agriculture and Environment Affairs

