

Amafa aKwazulu-Natali 195 Jabu Ndlovu Street Pietermaritzburg 3200 Telephone 033 3946 543 bernadetp@amafapmb.co.za 28 January 2015

### Attention Bernadet Pawandiwa

Dear Ms Pawandiwa

Application for Exemption from a Phase 1 Heritage Impact Assessment Proposed agricultural development by Senekal Boerdery near Mkuze, uMkhanyakude District Municipality, KwaZulu-Natal, South Africa

## **Project description**

Senekal Boerdery has appointed ACER (Africa) Environmental Management Consultants (ACER) to undertake an environmental authorisation process, via an Environmental Impact Assessment, in order to obtain Environmental Authorization (EA) from the relevant competent authority (KwaZulu-Natal Department of Economic Development, Tourism and Environmental Affairs (EDTEA)) for the proposed establishment of approximately 1,072 ha of sugarcane near the town of Mkuze, Northern KwaZulu-Natal.

Senekal Boerdery is planning to re-establish commercial agriculture (sugar cane) on a site previously planted to commercial cotton and sisal. The proposed project involves the planting of approximately 1,072 ha of irrigated sugar cane on four farms located approximately 1 to 5 km south of the town of Mkhuze, east and west of the N2, which bisects the farms (Figure 1). As part of the re-establishment process, the existing irrigation network on Senekal Boerdery's properties will be extended to supply water to the re-established sugar cane fields.

# **History of the Site**

Prior to 1999, the proposed sites for the new sugar cane fields were commercially farmed and planted to cotton and sisal. The cotton and sisal were then removed and, since then, no agriculture has taken place on these lands. In the intervening years, the old fields have been re-colonised with grass and acacia trees.

Please note that the proposed development falls marginally inside the iSimangaliso Wetland Park 10 km Buffer Zone, the Ubombo Mountain Reserve 5 km Buffer Zone and the Zululand Rhino Reserve 5 km Buffer Zone; therefore, listed activities in Listing Notice 3 (No R 546 of 2010) apply.



Figure 1 Proposed establishment of approximately 1,072 hectares of sugarcane by Senekal Boerdery to the south of Mkuze (Source: Google Earth 2014)

# **Environmental Requirements**

In terms of the amended EIA Regulations published under the National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA), as amended, the proposed establishment of approximately 1,072 ha of sugarcane triggers listed activities in Listing Notice 1 (No. R.544 of June 2010), Listing Notice 2 (No. R.545 of June 2010) and Listing Notice 3 (No. R.546 of June 2010), in terms of section 24(2) and 24D of NEMA, which requires environmental authorisation via the undertaking of an Environmental Impact Assessment.

The KwaZulu-Natal Department of Economic Development, Tourism and Environmental Affairs (EDTEA) is the competent authority for the issuing of environmental authorisation for this proposed development. ACER will fulfil the role and responsibilities of Environmental Assessment Practitioner (EAP) to undertake the Environmental Impact Assessment and the associated public participation process, and to submit the required application and supporting documentation to EDTEA for consideration and decision-making. Included in the supporting documentation will be the application for the relevant permits required from the KZN Heritage Resource Agency (Amafa).

A water use license will be required from the Department of Water and Sanitation while licenses/permits from the Department of Agriculture, Forestry and Fisheries (DAFF) and Ezemvelo KZN Wildlife (EKZNW) will be applied for once an Environmental Authorisation has been received by the applicant.

### **Site Assessment and Recommendations**

eThembeni staff inspected the properties on 22 January 2015 and have made the following observations:

Mkuze town has its origins as a railway siding on the Durban – Golela line estabilished after WW II with the local seat of government residing at Ubombo, some 17 km to the NE. A Magistracy has existed here since after the Zulu Civil War of 1887. The farms in question are located within a band of productive agricultural land known locally as Railway Valley.

The proposed areas of cultivation span the N2 to the east and west and have been unploughed for some fifteen years. As such it is considered "virgin veld". Previous cultivation included cotton and sisal. Much of the proposed sugar cane area had been extensively ploughed prior to ten years ago, with the exception of the eastern portion of land which constitutes a temporary wetland. The study area suffers a severe lack of perennial surface water, hence the previous sinking of boreholes and the installation of irrigation systems for the cultivation of sisal and cotton. A non-perennial stream, the Tonkane, runs north to south through the proposed area and is marked by uniform stands of Acacia tortillis, A. nilotica, A.nigrescens and A. xanthophloea growing along its tribuatary drainage lines and water courses. Their uniformity of growth is indicative of previous bush clearance. The area above this drainage, to the west, offers commanding views across Railway Valley.

During the early and middle 19<sup>th</sup> C Railway Valley would have comprised part of the Mandlakazi chieftancy under Ziphephu kaMpitha whose *ikhanda* was located at Banganoma some 15 km to the NW. However, like the Jobe, residing historically immediately to the east of the adjacent Lebombo Mountains, these communities eschewed the low lying areas at the base of the Lebombo's due to the endemic presence of malaria and Tsetse fly. *Nagana* was therefore a limitation to settlement by both Iron Age and colonial communities, who both chose to settle on the higher lying ridges where exposure to malaria was also diminished.<sup>2</sup> Settlement of the lowlands for livestock production was only made possible after the eradication of *nagana* by aerial spraying prior and post WWII.

*Nagana* is episodic. Tsteste fly require the shade of closed canopy woodland and thicket to survive. In the absence of such shade, fly populations diminish. Anthropogenic fire and bush clearance and periods of lower rainfall can create fly-free islands within which Late Iron Age (LIA) occupation and settlement could temporarily occur. <sup>4 5</sup>

Adiagnostic LIA pottery was observed in the plough windrows both to the east and west of the N2. West of the Highway residual slag and smelting debris and fragmentary red, burnished adiagnostic pottery were also observed. However, the extent of ploughing has removed all material from its primary context and rendered it a fragmentary smudge in the landscape.

Ubiquitous Middle Stone Age patinated flake and core debris (mostly on indurated shale) are also in secondary context. They are the consequence of down slope colluvial wash and re-exposure along ploughed contours and windrows.

<sup>&</sup>lt;sup>1</sup> Ken Gillings. 2010 (http://samilitaryhistory.org/lectures/zuluwar.html)

<sup>&</sup>lt;sup>2</sup> Reg Gush. 2000. Mkhuze – the Formative Years. http://www.africamera.co.za/Book/mkhuze.htm

<sup>&</sup>lt;sup>3</sup> John Laband. 1980 (http://www.natalia.org.za/Files/10/Natalia%20v10%20article%20p16-22%20C.pdf).

<sup>&</sup>lt;sup>4</sup> T. A. M.Nash. 1989. Africa's Bane: the Tsetse Fly. Collins, London.

<sup>&</sup>lt;sup>5</sup> Clive A. Spinage. 2012. The Tsetse Fly I: Africa's Bane and Benefice. In - African Ecology. Springer-Verlag Berlin Heidelberg.

No graves were observed and the current land manager (Mr. M. Senekal) was unaware of any such occurrences (pers.comm).

The PalaeoSensitivity Map indicates low to insignificant potential for fossil deposits. Re-ploughing and establishing the area back to crop production will have no further impact on basal strata. No palaeontology reporting is thus required.

Given the nature of the project as a re-establishment of crop production on previously disturbed ploughed lands, we believe that a Phase 1 HIA for this project is not justified. Accordingly, on behalf of the client, Acer (Africa), we are applying for exemption from an HIA for the project.

Please could you convey Amafa's decision on this matter to the appointed Environmental Management Practitioner, Mr Giles Churchill, of ACER (Africa) Environmental Management Consultants. giles.churchill@acerafrica.co.za

Yours sincerely

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Len van Schalkwyk.