



## water affairs

Department:  
Water Affairs  
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Water Affairs

Department of Water Affairs and Forestry

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Attention: Mr M. C. Montsha

**CONSULTATION IN TERMS OF SECTION 40 OF THE MINERAL AND RESOURCES DEVELOPMENT ACT 2002, (ACT 28 OF 2002) WITH REGARD TO THE ENVIRONMENTAL MANAGEMENT PROGRAMME FOR ATHA AFRICA VENTURES (PTY) LTD IN RESPECT OF FARMS BLOEMHOEF 92 HT, GOEDGEVONDEN 95 HT, KROMHOEK 93 HT, PORTION 1 OF FARM NAUWGEVONDEN 110 HT, FARM PAARDEKOP 109 HT, REMAINING EXTENT OF FARM VAN DER WAKSPOORT 81 HT, FARM VIRGINIA 91 HT, PORTION OF THE FARM YZERMYN 96 HT, REMAINING EXTENT OF THE FARM YZERMYN 96 HT AND FARM ZOETFONTEIN 94 HT, SITUATED IN THE MAGISTERIAL DISTRICT OF WAKKERSTROOM: MPUMALANGA REGION**

Reference is made to the above mentioned document received by this office on the 31<sup>st</sup> October 2013, dated 21<sup>st</sup> October 2013, your reference: MP/30/5/1/2/3/2/1 (10088) EM. This Department has the following comments concerns to highlight:

- 1) Background and Introduction states that "The applicant had acquired prospecting right to an area of 8360 hectares ... Following detailed exploration, a feasible target area was identified which comprised approximately 2,500 hectares." Paragraph 3 states that "It is anticipated that the mine will have a potential to produce 2,25 million tons of coal per annum, with an estimated life span of 15

years, with additional resources potentially available adjacent to the target area." It is thus not clear to this department if the adjacent area refers to the remainder of the prospected area or a new prospecting right shall be acquired outside of the already prospected area.

- 2) Findings and Recommendations on page 24 and Section 1.3 on page 29 states that the proposed Yzerwyn Underground coal mine is located within known sensitive habitats and environments as well as adjacent to an existing protected environment, KwaMandlangampisi Protected Environment (KPE). The report further refers to the area being located within a threatened ecosystem (Wakkeestroom/ Lunsburg) which is considered endangered. The site itself comprises a number of farms that are proposed to be included in a separate protected environment (Mahola). This Department notes the site location with great concern.
- 3) Summary records that "Alternatively it is recommended that an additional site layout be identified prior to making a decision and assess whether the proposed mine can coexist." It is not clear to this department if this alternative site had been identified. If yes, maps attached to the submission do not reflect the site. If not, the site should have been identified and assessed so that a decision on the EMP is concluded based on the comparison of the sites and on the exact site that will have posed minimal risks to the environment.
- 4) Section 3.1.22.13 states that the target area is located approximately 800m from KwaMandlangampisi Protected Area (KPE). This department notes the location of the target area with great concern
- 5) Section 4.22.2 states that "the preferred adit location will have an impact on the wetlands in the immediate area." The extent of the impacts on the wetland is not quantified. Furthermore the impacts raise concerns to this Department.
- 6) Section 4.3.1 which states that "Due to this rational, the surface layout was confined to a preferred area covering an estimated 30 ha" is confusing and raising concerns when compared to the box on page 26 which states "please note that the ESIA is being undertaken for this area only. Within the target area, a surface infrastructure layout of approximately 80 ha will be required". Page 90 Section 5.1 repeats to say that the surface infrastructure area shall be more than 80 ha. What

had caused such a vast change in the surface area needed? What is therefore the exact surface area that is needed for the surface infrastructure?

- 7) The distance of the preferred site to the wetland is not specified.
- 8) This department is concerned that page 72 states that "it is further noted that the area on which the preferred surface layout is proposed is dominated by wetlands.
- 9) This section further reflects potential impacts on the Assegai River, noting that Assegai River is the headwater of the Heyshope Dam, which has its own sensitivities.
- 10) Section 4.5.1 reflects that a discard dump will impact on a wetland. This is a risk and a fetal flaw. Figure 4-10 further shows that all the considered alternative sites were within wetlands, and would thus impact negatively. The figure further shows that the preferred site of the discard dump is outside the vicinity of the prospecting area. Does the applicant have the property owner's consent to use this land? A similar question is imposed in relation to all the water uses in the prospecting area.
- 11) Section 4.6 does not quantify the transport requirements of the mine and the pressure it will exert on the roads. This is alarming particularly that there are wetlands and rivers traversed. Management of potential pollution from hauling trucks is not discussed.
- 12) Section 4.9 reflects that the wetlands maybe affected not only by pollution, but may also run a risk of being dried up due to the abstraction of water from the two identified boreholes.
- 13) Water Quality Assessment in section 8.6.2.3 is lacking. Given that the site is not yet operational one would expect that the average constituents of concerns are discussed and their expected impacts thereof.
- 14) Is there any expected decant of mine water post closure? If yes what are the anticipated quantities and impacts on the water resources?
- 15) Wetlands and Aquatic Ecology, page 282 reflects that a cut off berm will be installed around the plant area. The Department believes that this measure shall only prevent surface runoff to the wetlands and will exclude seepage.
- 16) Section 8.6.4.2 is concerning when stating that a decline in water inputs and resultant deterioration in PES and functionality "will be due to the dewatering

- activities and will occur during the operational phase and a post closure (20-50 years after mining ceases and the groundwater levels recover).
- 17) It is perturbing to learn that the surface water quality baseline and Impact Assessment were not available during the time of compiling the IA, as reflected on 8.8.4.3. This has an implication that there could be some impacts that would have been revealed by the report.
  - 18) A number of critical environments and impacts as tabulated on Tables 10-2 to Table 10-4 are still alarming even after mitigation.
  - 19) Page 490 section 16.2.3.1 Long Term Impact on Groundwater Quality states that "Available information suggests that sulphates concentrations in the base flow of Mawandlane River may rise to above 2000 mg/l in the long term unless proper mitigatory design is implemented". The report does not suggest what the proper mitigatory measures could be, moreover the report does not reflect what the concentration levels would be in the presence of mitigation.
  - 20) The report further reflects that "In the vicinity of the underground workings, sulphates concentrations will exceed 2,500 mg/l, based on the information used. The plume may extend more than 2km down gradient of the mining operations, depending on the permeability of any preferential flow pathways". This is a concern to the department as this implies deterioration in water qualities of the water resources.
  - 21) In light of the fact that this is a category A Mine, the statement on Page 159 of Section C: Faunal Assessment is not taken lightly by this department. The statement reads thus "As such, water quality will be an important component, especially considering the downstream NFEF, in the management of impacts relation to the proposed development.
  - 22) The study limitation stating that "No detailed wetland assessment was undertaken in the greater area to be impacted upon by the underground mining and associated cone of depression from the dewatering activities or groundwater contamination plume" on Page 185 section 2.3 Section E: Wetland Assessment is a concern. This implies that the overall impacts on the site as a whole have not been predicted.
  - 23) The above statement read in conjunction with the last paragraph on 3.2 page 191 of the section E: Wetland Assessment states that "The wetland extent within the

study area is approximately 180 ha, which equates to approximately 42% of the study area being wetland. The extent of wetlands within the greater underground mining area were delineated from a desktop perspective only, within the overall wetland extent (underground mining area and surface infrastructure footprint) being approximately 668 ha in extent, 40% of the area is further disturbing and confusing. There is an implication that there is still a greater area of wetlands whose impacts have not been studied or predicted.

- 24) The applicant convincingly argues the need for job employment and economic development in the area. This department wishes to put in light that Section 4.6.1.3 states that "It is further understood that a high concentration of tourists (local, national and international) visit the area for the scenery, fishing, mountain hiking, off-road trails ... and heritage aspects and , most importantly birding. These tourist attractions are undertaken in a sustainable manner and have buy in from surrounding farmers, residents of Wakkeestroom as well as other NGO's".
- 25) This department wishes that the above statement be read in conjunction with Section 4.11.7 Impact on Tourism, page 89 which states that "It has been noted that approximately 400 jobs have been created as a result of eco-tourism in the Wakkeestroom area".
- 26) Table 7 of section 4.3 of the said Specialist Study reflects that the number of semiskilled and discretionary decision making mine employee summary ranges from 200 to 417 within a three year period.
- 27) To bring emphasis to the above statements, the applicant's attention is further brought to Section 4.3 page 26 of the Specialist study Socio Economic which states that "It was noted however that the majority of the labour and employees are likely to come from outside the Area of Direct Influence due to lack of skills locally. Section 5.2.1 page 30 further reflects that "a number of opportunities may be sourced from the immediate area; however these are likely to be mainly unskilled, such as security and cleaning staff. And next paragraph states that "Due to the limited number of unskilled, semiskilled and skilled employment opportunities, the proposed mine will offer little or no economic benefit for the local area without skills development".

The greatest fatal flaw of this site is that it is situated within the National Freshwater Ecosystem Priority Area. As page 209 section 2.4 Freshwater Ecosystem Priority Areas

Section F: Sensitivity Assessment states "The greatest concern regarding the FEPAs is the potential impact of the mine on the water resources as a result of underground water reduction due to de-watering activities and groundwater contamination due to sulphate seepages from the mine workings and discard facility. Both the cone of depression and the groundwater contamination plume, extend to wetland FEPA's in the near vicinity"

A number of threatened, vulnerable and endangered flora and fauna had proved to be solely dependent on the existence of the wetlands that seem to be threatened by the proposed mining activity.

Slightest changes in water quality and quantity are detrimental to the health of the aquatic biota. Some species have been reported to only being able to survive within a very narrow range of environmental conditions.

In light of the concerns raised above, this department **does not support** the proposed mining development.

The Department wishes to make it clear that the opinions contained in this letter are made in the interest of responsible water resource management.

Should there are any queries please do not hesitate to contact this office.

Yours faithfully,



09/01/2014

MAKWABASA N (ENVIRONMENTAL OFFICER: CONTROL)

NM/nm 11537

On behalf of

The Regional Head - KWAZULU-NATAL