

MOTIVATION

RELATING TO THE LOGICALITY OF NOT HAVING TO UNDERTAKE A PROVINCIAL ROAD WETLAND SURVEY AND THE IRRELEVANCE OF A WETLAND OFFSET REQUIREMENT GIVEN THE SPECIFIC CIRCUMSTANCES OF THE YZERMYN UNDERGROUND MINING PROJECT

BACKGROUND

As indicated in point 1.12 of the letter received from DWS, dated 22nd April 2015, the department required a wetland offset proposal as per SANBI Guidelines and further discussions during the site visit on 12 May 2015, it was emphasised by DWS officials that the Wetland offset will be required as per guidelines, which includes wetlands being impacted on by surface infrastructure activity and the net loss of wetlands during the life of mine, even if the wetlands will rehabilitated at the end of life of mine. There was also a discussion during the 12 May'2015 site visit about the provincial road being used for access, during which the DWS officials indicated that a wetland assessment in a 500 m radius on either side of the Provincial road from Dirkiesdorp to project site needs to be included in the water use license application.

MOTIVATION

1. WETLAND OFFSET:

- 1.1. The assessing official's attention is drawn to Section 1.2 of the document titled: *"Wetland Offsets, A best practice guideline for South Africa (Macfarlane, D., Holness, S.D., von Hase, A., Brownlie, S. & Dini, J., 2014, Wetland offsets: a best-practice guideline for South Africa. South African National Biodiversity Institute and the Department of Water Affairs. Pretoria.)"*, which describes wetland off sets and its place in the mitigation hierarchy.
- 1.2. Based on the abovementioned highly respected scientific views relating to the interpretation of where wetland off sets fits into the mitigation hierarchy, it is clear that an offset should be the last resort for significant residual impacts on wetlands, after project completion' i.e. for significant, irreversible disturbance of wetlands reducing the total wetland function at catchment level that would lead to the non-achieving of water resource objectives.
- 1.3. Based on scientific assessment, the calculated functional area of seep wetland being affected are given below:

Functional area equivalents calculated for the seep wetlands to be affected.

Wetland Functionality Targets			
Impact Assessment	Prior to development	Wetland size (ha)	3
		Functional value (%)	40
	Post development	Functional value (%)	50
		Change in functional value (%)	10
	Key Regulating and supporting Services Identified		sediment trapping, assimilation, erosion control, biodiversity
Development Impact (Functional hectare equivalents)			0.3
Offset calculation	Offset ratios	Triggers for potential adjustment in exceptional circumstances	None
		Functional Importance Ratio	1.0
	Functional Offset Target (functional hectare equivalents)		



The wetland offset calculator (Wetland Offsets, A best Practice Guideline for South Africa - Macfarlane, D., Holness, S.D., von Hase, A., Brownlie, S. & Dini, J., 2014) ("Wetland Offset Calculation Tool") was used to calculate the functional hectare equivalents as well as the habitat hectare equivalents for the themes ecosystem services and ecosystem conservation, respectively.

The estimated overall area of wetland that will be impacted by the proposed surface infrastructure is 3 ha, including taking some edge effects into consideration. The functional value determined (refer to section 5.4 of the Wetland Offset Calculation Tool) is also directly related to agriculture and overgrazing that has increased importance in terms of sediment trapping and nitrate assimilation.

1.4. Having taken into account the above requirements in consideration of the necessity of a potential wetland offset, it is the opinion of Atha Africa Ventures that the Yzermyn Underground Coal Mine project does not require a wetland offset, based on the following:

1.4.1. The residual biodiversity impacts are considered to be of low significance and no residual impact will remain on the wetland after mine closure. The disturbed wetlands will be rehabilitated.

1.4.2. In the total area of the proposed surface infrastructure foot print of 22.40 ha, a total area of slope seep wetlands of about 12.10 ha occurs consisting of areas disturbed by previous cultivation (ploughing and contour bund construction). Out of 12.10 ha, only around 3 ha of seep wetland will be directly impacted by the Surface infrastructure activities. Thus the surface infrastructure layout has been placed out of seep wetland areas and the wash plant and discard facility has been removed to minimise the impact on wetlands.

1.4.3. The seep wetlands impacted by YUCM surface footprint are highly marginal (SAS, 2014) and can all be rehabilitated at the end of life of mine. The previously disturbed seep wetland that falls outside of the infrastructure footprint will be left intact and can be rehabilitated during the operational phase of the mine.

1.4.4. On a catchment level, the proposed activities have an insignificant impact on the water resource objectives.

1.4.5. Taking into account that the entire mining area will be rehabilitated at the end of the project, no net loss will occur and as a result will have no measurable impact on the catchment water resource objectives.



2. PROVINCIAL ROAD FROM DIRKIESDORP:

- 2.1. During the field visit by DWS officials on 12th May'2015, the relevant official expressed a requirement that AAV needs to undertake a Wetland assessment in 500m radius on either side in respect of the existing road from Dirkiesdorp to the proposed mine site. Since the road is a historic Provincial Road and currently still in use, AAV's intention is to continue utilising the road for its YUCM project during the Start-up Phase and will therefore not require a new access road or any upgrade or expansion of the current Provincial Road. However, AAV will consider contributing to the general maintenance of the road, which will not include an upgrade or expansion of the road as provided for in the EIA Regulations.
- 2.2. Should it be determined that the current road requires an upgrade, AAV would as a minimum, but without limiting to it, only consider plans to upgrade this road after the first three years of production.
- 2.3. AAV has made provisional calculations as part of the intended capital costs, relating to the future costs for a potential upgrading of the existing 13km, unpaved gravel road to be widened up to 8m, and at that stage all relevant legislative requirements will be adhered to, including undertaking the appropriate Wetland Assessment studies in respect of the total area of disturbance. The upgrade will entail capping the wearing course with a tarred surface and will have long term benefits to the surrounding area in terms of better access and reduced dust emissions.

The above has been summarised and consolidated after discussions and inputs from various specialists in the Atha Africa Team.



M Munsamy
Director