



Lourens du Plessis t/a LOGIS  
531A Witogie Street  
Die Wilgers, Pretoria  
PO Box 384, La Montagne, 0184  
M: 082 922 9019  
E: lourens@logis.co.za  
W: logis.co.za

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**Savannah Environmental (Pty) Ltd**  
Care of Karen Jodas

Per email: Karen@savannahsa.com

Dear Karen

## ADDENDUM

### ***Proposed Vaal River Solar 3 PV Facility near Orkney in the North West Province (***

#### **1. Background**

This motivation report serves as an addendum to the Proposed ***Vaal River Solar 3 PV Facility (DFFE Ref: 12/12/20/2513/3)*** Visual Impact Assessment (VIA) Report (MetroGIS (Pty) Ltd - March 2012).

***Vaal River Solar 3 PV Facility*** received Environmental Authorisation (EA) in 2012. The project originally 75MW. Since 2012, there has been a significant increase in the efficiency of the output of solar PV panels due to constant changes and advancements in technology. This means that more power can be generated per m<sup>2</sup> of panel using a PV module developed in 2022 than a PV module developed in 2012. This means that the total generation capacity of the facility will increase without increasing the development footprint.

#### **2. Purpose of the Amendment**

The Applicant is requesting the following Amendments for the PV facility:

- To amend the authorised solar PV capacity with no adjustment to the PV panel height and development footprint of the facility from that as authorised.
- Inclusion of BESS into the project description.
- An extension of the validity of the Environmental Authorisation.

#### **3. Conclusion and Recommendations**

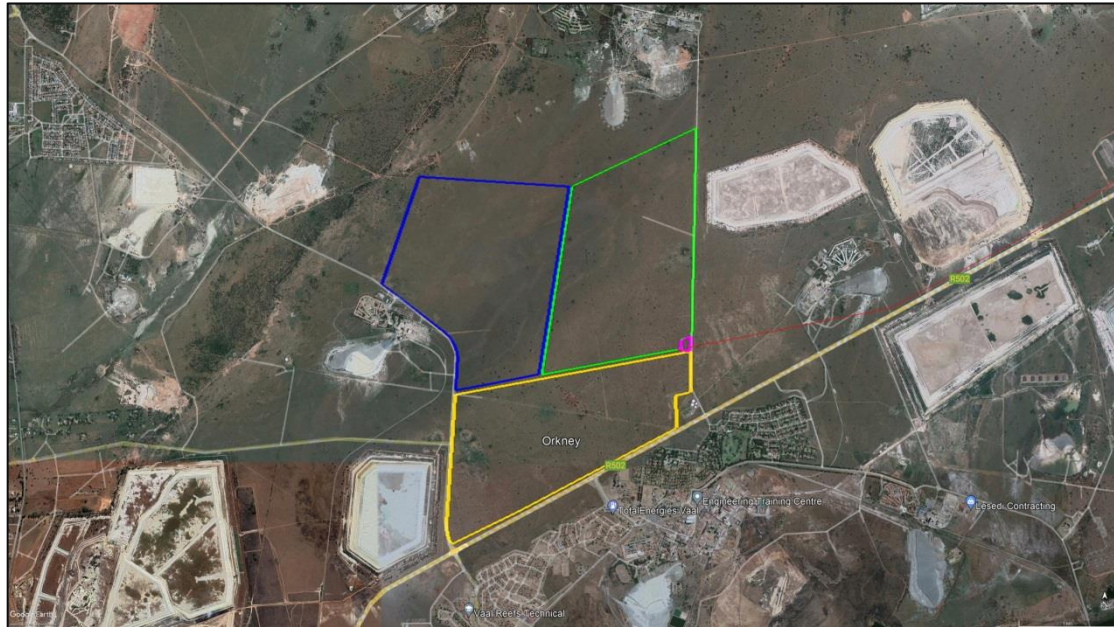
The visual specialist has assessed the proposed amendment to the project infrastructure and has drawn the following conclusions:

##### **The affected environment**

The description of the affected environment, as described in the original VIA report remains unchanged. There has been no change in land use for the proposed development site, no new developments have been constructed on or near the development site, and the land use zonation (mining) remains the same. This deduction is based on the visual interpretation

(change detection) of satellite images of the site during the initial VIA investigations (2012), compared to images of the site in 2022 (i.e. site verification). The only land use activity that became evident from the change detection exercise, is the gradual reclamation of the existing mine dumps in closer proximity to the site over a 10 year period.

The above conclusion was also verified through consultation with the project proponent and the current land/mining rights owner(s) i.e. Harmony Gold.



**Figure 1:** Site and surrounds 2012.



**Figure 2:** Site and surrounds 2022.

### **Terms of reference for the VIA**

The terms of reference for the original VIA report included:

- Determine the potential visual exposure of the proposed project infrastructure

- Determine the visual distance/observer proximity to the project infrastructure
- Identify potential sensitive visual receptors and areas of higher viewer incidence
- Determine the visual absorption capacity of the landscape
- Calculate a visual impact index to identify the magnitude of the visual impact on potentially affected areas/receptors
- Determine the significance of the potential visual impact
- Provide mitigation measures to alleviate the potential visual impacts

These activities, analyses and conclusions are still relevant in light of the proposed amendment to the project infrastructure.

### **Impact rating assessment and impact mitigation measures relating to the amendment application**

The proposed amendment to the project infrastructure is **not expected to significantly alter** the influence of the PV facility on *areas of higher viewer incidence* (observers traveling along the roads within the region) or *potential sensitive visual receptors* (residents of homesteads in closer proximity to the facility).

The proposed amendment to the project infrastructure is consequently **not expected to significantly influence** the anticipated visual impact, as stated in the original VIA report (i.e. the visual impact is expected to occur regardless of the amendment). This statement relates specifically to the assessment of the visual impact within a 3km radius of the proposed PV facility structures (potentially *moderate* negative significance), but also generally apply to potentially *low* negative visual impacts at distances of up to 6km from the structures.

There are no new assessment guidelines which are now relevant to the authorised development which were not undertaken as part of the initial visual impact assessment. Additional to this, and as stated above, there have been no changes to the environment of the proposed development site or the surrounding environment.

There are no (mutually) visually exposed solar energy facilities planned within the study area, besides the VRS 1, 2 and 3 PV facilities. The cumulative visual impact is expected to remain the same as stated in the original VIA report (i.e. a cumulative visual impact of *moderate* negative significance). This impact significance is considered to be acceptable from a visual impact perspective.

From a visual perspective, the proposed amendment to the project infrastructure will therefore require no (zero) changes to the significance rating within the original VIA report that was used to inform the approved Environmental Impact Assessment (EIA) Report. In addition to this, no new mitigation measures are required.

It is suggested that the amendment to the project infrastructure be supported, subject to the conditions and recommendations as stipulated in the original EA, and according to the Environmental Management Programme (EMPr) and suggested mitigation measures, as provided in the original VIA report.

Feel free to contact me at any time, should you have any queries.

Kind regards.

A handwritten signature in black ink, appearing to read 'L. du P.' with a flourish at the end.

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**Lourens du Plessis (PrGISc)**