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Established 1952

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Division: Environmental Consulting
Your Reference: 3944 Paulputs WEF Amendments
Our Reference: 16359
Date: 16 July 2020

ATTENTION: MRS ASHLEIGH VON DER HEYDEN

Dear Mrs von der Heyden

VISUAL SPECIALIST COMMENT IN RESPECT OF THE PROPOSED CONSTRUCTION OF THE GRID CONNECTION AND ELECTRICAL INFRASTRUCTURE FOR THE AUTHORISED PAULPUTS WIND ENERGY FACILITY NEAR POFADDER IN THE NORTHERN CAPE PROVINCE.

1 BACKGROUND

WKN-WindCurrent (hereafter referred to as "WKN"), under the SPV Paulputs WEF (RF) (Pty) Ltd received Environmental Authorisation (EA) for the proposed construction of the 300MW Paulputs Wind Energy Facility (WEF), near Pofadder in the Northern Cape Province. Authorisation was granted on 11th December 2019 by way of EA Reference No 14/12/16/3/3/2/1160.

This authorisation made provision for the construction of a total number of 75 wind turbines, each with a maximum hub height of 140m (maximum blade tip height 230 m), one on-site substation (location A) and a 132kV overhead power line (OHPL) (Option C). WKN are however now proposing to amend and split the authorised Paulputs WEF and its associated grid connection into Paulputs North WEF and associated infrastructure and Paulputs South WEF. The approved Over Head Power Line (OHPL) and on-site substation options (C and A respectively as shown in **Figure 1**) will serve the proposed Paulputs North WEF and as such will be absorbed into the Paulputs North WEF and the Applicant in respect of this project is Paulputs Wind Energy Facility North (RF) (Pty) Ltd.

As the proposed amendments require Environmental Authorisation (EA) from the Competent Authority (CA), Paulputs has appointed Arcus Consultancy Services South Africa (Pty) Ltd ('Arcus') as the project manager and Ashleigh von der Heyden as independent Environmental Assessment Practitioner ('EAP') to undertake the necessary Part II EA Amendment Applications.

Part of the SIVEST Group SIVEST SA (Pty) Ltd Registration No. 2000/006717/07 t/a SIVEST

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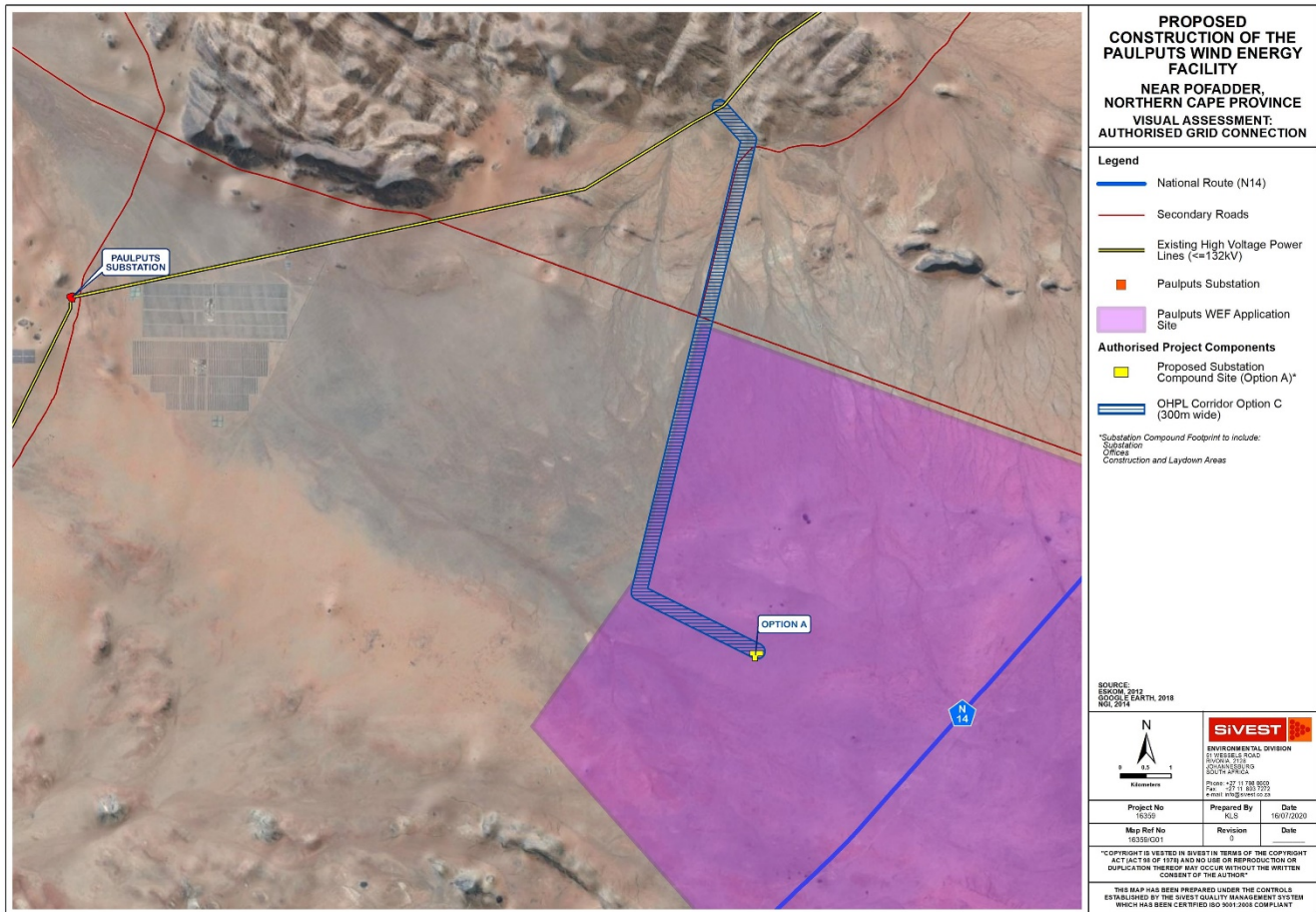


Figure 1: Authorised Grid Connection Components

In addition, a separate environmental authorisation application will be undertaken in respect of the OHPL (Option A) and on-site substation (Option C) (**Figure 2**) to serve the proposed Paulputs South WEF. The Applicant in respect of this project is Paulputs Wind Energy Facility South (RF) (Pty) Ltd. Although OHPL Option A and substation Option C were assessed under the Environmental Impact Assessment (EIA) undertaken in respect of the Paulputs WEF, these options were not authorised as part of the approved EA (DFFE Reference No. 14/12/16/3/3/2/1160).

Following on from the Environmental Impact Assessment (EIA) level Visual Impact Assessment (VIA) conducted for the Paulputs WEF, SiVEST has been requested to provide visual specialist comment in respect of Basic Assessment (BA) process being undertaken in respect of the proposed grid connection infrastructure for Paulputs South WEF.

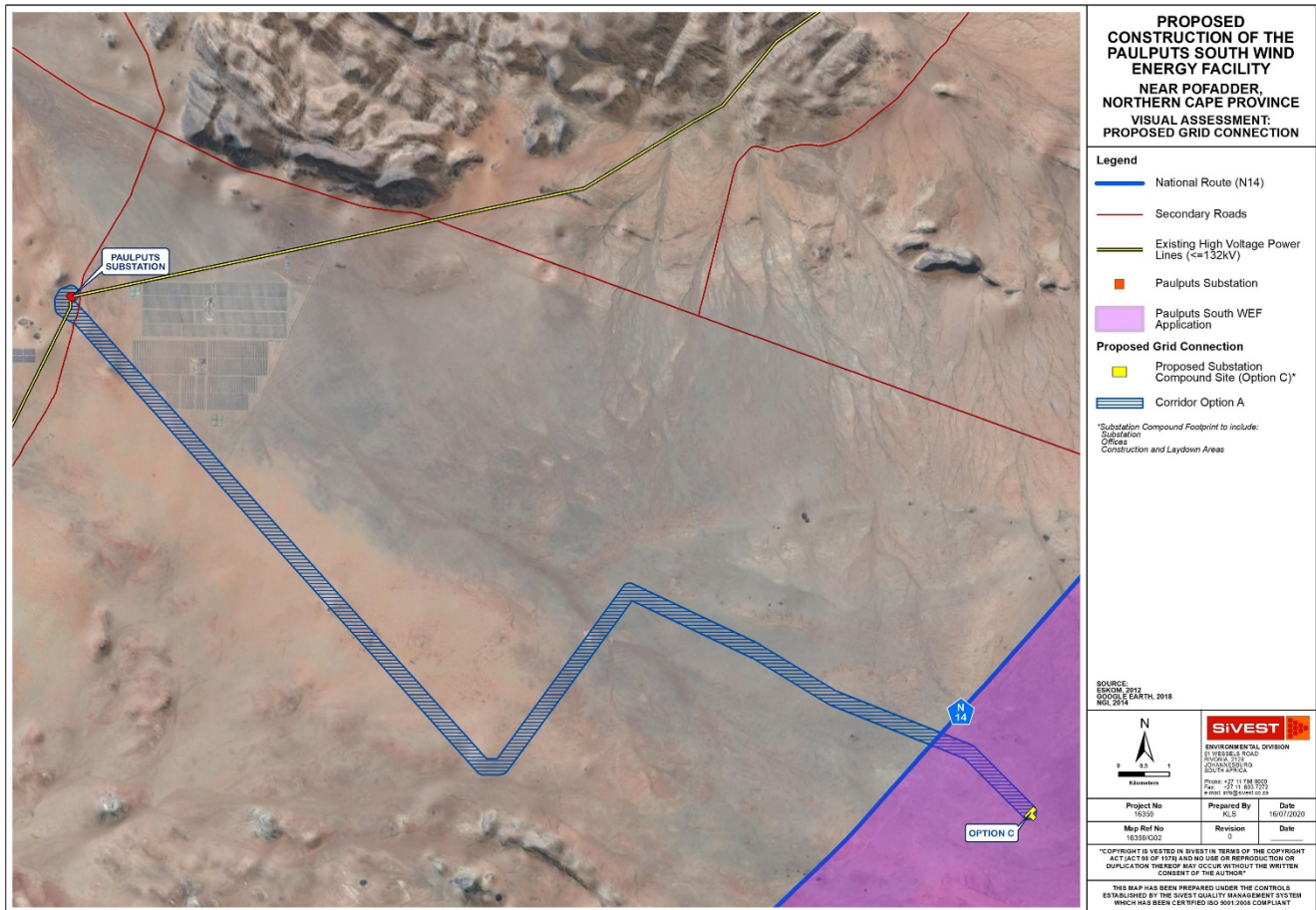


Figure 2: Proposed Grid Connection to serve Paulputs South WEF

2 SPECIALIST COMMENT

The EIA phase VIA for the Paulputs WEF, completed by SiVEST in July 2019, assessed the potential visual impacts of the proposed WEF in conjunction with the associated grid connection, comprising four (4) OHPL route assessment corridors and three Substation Compound sites as shown in **Figure 3**. As previously stated, only one (1) corridor option and one substation site was authorised by way of EA Reference No 14/12/16/3/3/2/1160, namely corridor Option C and Substation Option A.

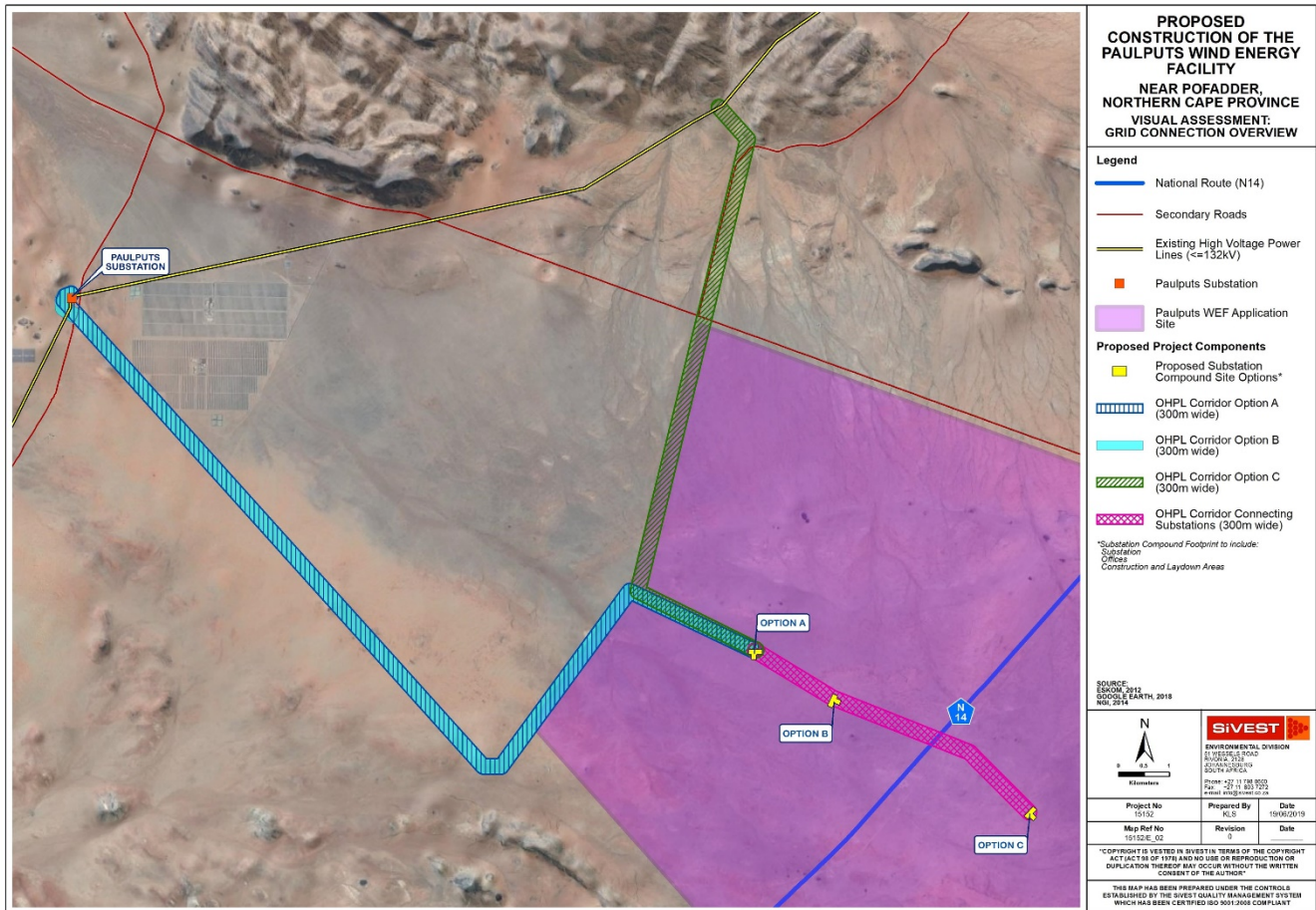


Figure 3: Grid Connection Components previously assessed.

New grid connection proposals to serve Paulputs South WEF link Substation Option C to the existing Paulputs Substation via corridor Option A which is an amalgamation of the previously assessed Corridor Options A and B and also the “OHPL Corridor connecting substations”. Accordingly no further visual assessment is considered necessary and a summary of the key findings of the VIA are provided below.

2.1 Visual Character

The VIA for Paulputs WEF identified the visual character of the broader study area as being largely natural with pastoral elements and low densities of human settlement. As such, the establishment of overhead power lines and a substations in this largely natural setting would alter the visual character and contrast significantly with the typical land use and/or pattern and form of human elements present across the broader study area.

In this instance however, the proposed grid connection infrastructure is intended to serve the proposed Paulputs South WEF and as such, will only be built if the WEF project goes ahead. The power line and substation infrastructure are

therefore likely to be perceived as part of the greater WEF development and the visual impact will be relatively minor when compared to the visual impact associated with WEF as a whole.

2.2 Cultural Landscapes

The VIA determined that much of the study area represents a typical Karoo cultural landscape. This is important in the context of potential visual impacts associated with the development of power lines, substations and associated infrastructure as introducing this type of development could be considered to be a degrading factor in the context of the natural Karoo character of the study area.

In this instance visual impacts on the cultural landscape would be reduced by the fact that the area is relatively remote and there are very few tourism or nature-based facilities in the study area. In addition, although the proposed development will be visible from the N14 national route, the section of this route that traverses the study area does not form part of a designated tourism route.

In light of the fact that the grid connection proposals for Paulputs South WEF involve OHPL corridors and a substation site which have already been assessed, the proposed development will not result in any changes in the impacts on the cultural landscape.

2.3 Visual Sensitivity

Due to the largely natural character of the area, visual sensitivity of the broader study area is rated as low to moderate. An important factor contributing to the visual sensitivity of an area however is the presence or absence of visual receptors that may value the aesthetic quality of the landscape and depend on it to produce revenue and create jobs. No formal protected areas, leisure-based tourism activities or sensitive receptor locations were identified in the study area and relatively few potentially sensitive receptors were found to be present.

In compliance with the Terms of Reference (TOR) provided by Arcus, the proposed grid connection was evaluated in relation to DFFE's National Environmental Screening Tool, specifically in relation to the tool's Landscape Theme. The tool does not however identify any landscape sensitivities in respect of power line or substation development.

In light of the above and the fact that the grid connection proposals for Paulputs South WEF are located within the broader study area assessed in the original VIA, the visual sensitivity rating remains as low to moderate.

2.4 Potentially Sensitive receptors

It is important to note that visual impacts are only experienced when there are receptors present to experience this impact. The original VIA for this development found that the broader study area is not typically valued for its tourism significance and there is limited human habitation resulting in relatively few potentially sensitive receptors in the area.

A total number of eleven (11) potentially sensitive receptor locations were identified within 5kms of the proposed grid connection infrastructure for Paulputs WEF. All of these receptors are farmsteads which are regarded as potentially

sensitive visual receptors as they are located within a mostly rural setting and the proposed development will likely alter natural vistas experienced from these locations.

Only three (3) of these receptors are within 5kms of OHPL (Option A) and substation (Option C). According to the receptor impact rating matrix, all of these would experience moderate levels of visual impact from the grid connection infrastructure. As previously stated, the power line and substation infrastructure will only be built if the WEF project goes ahead and are therefore likely to be perceived as part of the greater WEF development. This factor, in conjunction with the presence of existing electrical infrastructure and solar energy facilities (SEFs) in the study area will reduce the level of visual impact experienced by these receptors.

The N14 national route was identified in the VIA as a potentially sensitive receptor road as sections of the proposed 132kV power line and the substation would be highly visible to motorists travelling along this route. This section of the N14 however does not form part of a designated tourism route and as such, visual impacts affecting the N14 are rated as moderate.

In light of the fact that the grid connection proposals for Paulputs South WEF involve OHPL corridors and a substation site which have already been assessed, impacts on the identified receptors will remain unchanged.

2.1 Cumulative Impacts

Although several renewable energy developments and infrastructure projects, either proposed or in operation, were identified within a 35km radius of the Paulputs WEF application site, it was determined in the VIA that only seven (7) of these would have any significant impact on the landscape within the visual assessment zone. All seven projects are Solar Energy Facilities (SEFs) and three are already in operation. These projects are concentrated in close proximity to Paulputs substation and the surrounding landscape has already undergone noticeable change. The VIA further determined that the concentration of facilities will alter the inherent sense of place and introduce an increasingly industrial character into a largely rural area. This will result in significant cumulative impacts, rated as medium during both construction and operation phases of the project. It is however anticipated that these impacts could be mitigated to acceptable levels with the implementation of the recommendations and mitigation measures stipulated for each of these developments by the visual specialists.

2.2 Overall Visual Impact Rating

The overall impact rating conducted for the proposed grid connection infrastructure to serve the Paulputs WEF revealed that impacts associated with the proposed grid connection infrastructure will be of moderate significance during construction. This could however be reduced to low with the implementation of mitigation measures. During operation, visual impacts associated with the grid connection infrastructure would be of low significance.

In light of the fact that the grid connection proposals for Paulputs South WEF involve OHPL corridors and a substation site which have already been assessed, the proposed grid connection infrastructure will not change this impact rating. Furthermore, no additional recommendations or mitigation measures will be required and all of the mitigation measures set out in the VIA remain valid.

2.3 Assessment of Alternatives

Three (3) substation site options and four (4) power lines route options were assessed from a visual perspective in the original VIA and no fatal flaws were identified for any of the substation sites or power line route options. Accordingly, as the grid infrastructure proposals for Paulputs South WEF align with a previously assessed substation site and power line route, there are no fatal flaws associated with the new grid connection proposals.

3 IMPACT STATEMENT

It is SiVEST's opinion that the proposed OHPL (Option A) and on-site substation (Option C) will not give rise to additional visual impacts or exacerbate the impacts previously identified in the VIA for the Paulputs WEF grid connection. Given the low level of human habitation and the absence of sensitive receptors in the area, the project is deemed acceptable from a visual perspective and the EA should be granted. SiVEST is of the opinion that the impacts associated with the construction, operation and decommissioning phases of the project can be mitigated to acceptable levels provided the recommended mitigation measures are implemented.

Yours sincerely

Kerry Schwartz
Visual Specialist
SiVEST



environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

DETAILS OF THE SPECIALIST, DECLARATION OF INTEREST AND UNDERTAKING UNDER OATH

	(For official use only)
File Reference Number:	
NEAS Reference Number:	DEA/EIA/
Date Received:	

Application for authorisation in terms of the National Environmental Management Act, Act No. 107 of 1998, as amended and the Environmental Impact Assessment (EIA) Regulations, 2014, as amended (the Regulations)

PROJECT TITLE

Proposed Amendment to the Authorised Paulputs Wind Energy Facility near Pofadder, Northern Cape Province.

Kindly note the following:

1. This form must always be used for applications that must be subjected to Basic Assessment or Scoping & Environmental Impact Reporting where this Department is the Competent Authority.
2. This form is current as of 01 September 2018. It is the responsibility of the Applicant / Environmental Assessment Practitioner (EAP) to ascertain whether subsequent versions of the form have been published or produced by the Competent Authority. The latest available Departmental templates are available at <https://www.environment.gov.za/documents/forms>.
3. A copy of this form containing original signatures must be appended to all Draft and Final Reports submitted to the department for consideration.
4. All documentation delivered to the physical address contained in this form must be delivered during the official Departmental Officer Hours which is visible on the Departmental gate.
5. All EIA related documents (includes application forms, reports or any EIA related submissions) that are faxed; emailed; delivered to Security or placed in the Departmental Tender Box will not be accepted, only hardcopy submissions are accepted.

Departmental Details

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Department of Environmental Affairs
Attention: Chief Director: Integrated Environmental Authorisations
Private Bag X447
Pretoria
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Physical address:

Department of Environmental Affairs
Attention: Chief Director: Integrated Environmental Authorisations
Environment House
473 Steve Biko Road
Arcadia

Queries must be directed to the Directorate: Coordination, Strategic Planning and Support at:
Email: EIAAdmin@environment.gov.za

1. SPECIALIST INFORMATION

Specialist Company Name:	SiVEST SA (Pty) Ltd			
B-BBEE	Contribution level (indicate 1 to 8 or non-compliant)	2	Percentage Procurement recognition	110
Specialist name:	Kerry Schwartz			
Specialist Qualifications:	BA			
Professional affiliation/registration:	SAGC (GISc Technician)			
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Telephone:	011 798 0632	Fax:	011 803 7272	
E-mail:	kerrys@sivest.co.za			

2. DECLARATION BY THE SPECIALIST

I, Kerry Schwartz, declare that –

- I act as the independent specialist in this application;
- I will perform the work relating to the application in an objective manner, even if this results in views and findings that are not favourable to the applicant;
- I declare that there are no circumstances that may compromise my objectivity in performing such work;
- I have expertise in conducting the specialist report relevant to this application, including knowledge of the Act, Regulations and any guidelines that have relevance to the proposed activity;
- I will comply with the Act, Regulations and all other applicable legislation;
- I have no, and will not engage in, conflicting interests in the undertaking of the activity;
- I undertake to disclose to the applicant and the competent authority all material information in my possession that reasonably has or may have the potential of influencing - any decision to be taken with respect to the application by the competent authority; and - the objectivity of any report, plan or document to be prepared by myself for submission to the competent authority;
- all the particulars furnished by me in this form are true and correct; and
- I realise that a false declaration is an offence in terms of regulation 48 and is punishable in terms of section 24F of the Act.

K Schwartz

Signature of the Specialist

SiVEST SA (PTY) Ltd

Name of Company:

22 July 2021

Date

Details of Specialist, Declaration and Undertaking Under Oath

3. UNDERTAKING UNDER OATH/ AFFIRMATION

I, Kerry Schwartz, swear under oath / affirm that all the information submitted or to be submitted for the purposes of this application is true and correct.

Kschwartz

Signature of the Specialist

SIVEST SA (PTY) Ltd

Name of Company

22 July 2021

Date

Jacqueline Chantel Jackson

Signature of the Commissioner of Oaths
COMMISSIONER OF OATHS

Signature: J. Jackson

Date

Divisional Controller
Ref. 9/1/8/2 (R/O) KZN PMB - 08/02/2019

Date: 22/07/2021 Place: PMB
Business Address: VCC Estate, 170 Peter Brown Drive, PMB