

EIA REFERENCE: 16/3/3/1/E4/27/1020/21
NEAS REFERENCE: WCP/EIA/0000897/2021
DATE: 13 October 2021

The Managing Directors
Vyeboom Irrigation Board
P. O. Box 62
VILLIERSDORP
6848

Attention: Mr. Keith Bradley

Cell: 082 920 3888
E-mail: keith@bradpak.co.za

Dear Sir

APPLICATION FOR ENVIRONMENTAL AUTHORISATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT NO. 107 OF 1998) ("NEMA") AND THE ENVIRONMENTAL IMPACT ASSESSMENT ("EIA") REGULATIONS, 2014 (AS AMENDED): THE PROPOSED INSTALLATION OF A SOLAR FARM ON THE REMAINDER OF PORTION 1 OF FARM NO. 582, VILLIERSDORP

1. With reference to the above application, the Department hereby notifies you of its decision to **grant** Environmental Authorisation, attached herewith, together with the reasons for the decision.
2. In terms of Regulation 4 of the EIA Regulations, 2014 (as amended), you are hereby instructed to ensure, within fourteen (14) days of the date of the Environmental Authorisation, that all registered Interested and Affected Parties ("I&APs") are provided with access to and reasons for the decision, and that all registered I&APs are notified of their right to appeal.
3. Your attention is drawn to Chapter 2 of the Appeal Regulations, 2014 (as amended), which prescribes the appeal procedure to be followed. This procedure is summarized in the attached Environmental Authorisation.

Your interest in the future of the environment is greatly appreciated.

Yours faithfully

MR. ZAAHIR TOEFY
DIRECTOR: DEVELOPMENT MANAGEMENT – REGION 1
DEPARTMENT OF ENVIRONMENTAL AFFAIRS AND DEVELOPMENT PLANNING

CC: Ms. Mische Molife (GroenbergEnviro (Pty) Ltd)
Mr. Johan Viljoen (Theewaterskloof Local Municipality)
Mr. Charl Van Den Berg (Land Owner - Twaalfontein Landgoed (Pty) Ltd)

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EIA REFERENCE: 16/3/3/1/E4/27/1020/21
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ENVIRONMENTAL AUTHORISATION

APPLICATION FOR ENVIRONMENTAL AUTHORISATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT NO. 107 OF 1998) AND THE ENVIRONMENTAL IMPACT ASSESSMENT ("EIA") REGULATIONS, 2014 (AS AMENDED): THE PROPOSED INSTALLATION OF A SOLAR FARM ON THE REMAINDER OF PORTION 1 OF FARM NO. 582, VILLIERSDORP

With reference to your application for the abovementioned, find below the outcome with respect to this application.

DECISION

By virtue of the powers conferred on it by the National Environmental Management Act, 1998 (Act No. 107 of 1998) ("NEMA") and the Environmental Impact Assessment ("EIA") Regulations, 2014 (as amended), the Competent Authority herewith **grants Environmental Authorisation** to the applicant to undertake the Listed Activities specified in section B below with respect to the preferred Alternative that is described in the Basic Assessment Report ("BAR") received by the Department on 30 June 2021.

The applicant for this Environmental Authorisation is required to comply with the conditions set out in section E below.

A. DETAILS OF THE APPLICANT FOR THIS ENVIRONMENTAL AUTHORISATION

Vyeboom Irrigation Board
Mr. Keith Bradley
P. O. Box 62
VILLIERSDORP
6848

Cell: 082 920 3888
E-mail: keith@bradpak.co.za

The abovementioned applicant is the holder of this Environmental Authorisation and is hereinafter referred to as "**the holder**".

B. LISTED ACTIVITIES AUTHORISED

Listed Activities	Project Description
<p>Listing Notice 1</p> <p>Activity Number: 27 Activity Description: <i>"The clearance of an area of 1 hectares or more, but less than 20 hectares of indigenous vegetation, except where such clearance of indigenous vegetation is required for—</i> <i>(i) the undertaking of a linear activity; or</i> <i>(ii) maintenance purposes undertaken in accordance with a maintenance management plan."</i></p>	<p>The proposed development entails the clearance of more than 1ha of indigenous vegetation.</p>
<p>Listing Notice 3</p> <p>Activity Number: 12 Activity Description: <i>"The clearance of an area of 300 square metres or more of indigenous vegetation except where such clearance of indigenous vegetation is required for maintenance purposes undertaken in accordance with a maintenance management plan.</i></p> <p>i. Western Cape</p> <ol style="list-style-type: none"> i. <i>Within any critically endangered or endangered ecosystem listed in terms of section 52 of the NEMBA or prior to the publication of such a list, within an area that has been identified as critically endangered in the National Spatial Biodiversity Assessment 2004;</i> ii. <i>Within critical biodiversity areas identified in bioregional plans;</i> iii. <i>Within the littoral active zone or 100 metres inland from high water mark of the sea or an estuarine functional zone, whichever distance is the greater, excluding where such removal will occur behind the development setback line on erven in urban areas;</i> iv. <i>On land, where, at the time of the coming into effect of this Notice or thereafter such land was zoned open space, conservation or had an equivalent zoning; or</i> v. <i>On land designated for protection or conservation purposes in an Environmental Management Framework adopted in the prescribed manner, or a Spatial Development Framework adopted by the MEC or Minister."</i> 	<p>The proposed development entails the clearance of more than 300m² of Critically Endangered Elgin Shale Fynbos vegetation.</p>

The abovementioned Listed Activities are hereinafter referred to as "**the Listed Activities**".

The holder is herein authorised to undertake the following alternative that includes the Listed Activities relating to the development:

The proposed development will entail the clearance of approximately 1.5ha of indigenous vegetation for the establishment of a solar farm and associated infrastructure on the Remainder of Portion 1 of Farm No. 582, Villiersdorp. The solar farm will consist of ground-mounted fixed solar panels with an electricity output of 1 megawatt. The proposed solar farm will include the following:

- The development of a warehouse for inverters;
- The installation of underground cabling from the warehouse to the existing Vyeboom Irrigation Board ("VIB") electrical distribution warehouse;
- The erection of a security fence around the perimeter of the site; and
- Upgrading of the existing Eskom infrastructure to connect the solar inverter cables directly to the Eskom transformer point.

C. SITE DESCRIPTION AND LOCATION

The listed activities will be undertaken on the Remainder of Portion 1 of Farm No. 582, Villiersdorp.

The SG 21-digit codes are: C01300000000058200001

The co-ordinates of the site are given below:

Site	Latitude (S)	Longitude (E)
Remainder of Portion 1 of Farm No. 582, Villiersdorp	34° 1' 56.02" S	19° 12' 25.26" E

Refer to Annexure 1: Locality Map(s). Refer to Annexure 2: Site Development Plan(s).

The above property is hereinafter referred to as "**the site**".

D. DETAILS OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER

GroenbergEnviro (Pty)Ltd.
Ms. Mische Molife
P. O. Box 1058
WELLINGTON
7654

Telephone: 021 873 7228
Cell: 079 111 7378
E-mail: mische@groenbergenviro.co.za

E. CONDITIONS OF ENVIRONMENTAL AUTHORISATION

Scope of Authorisation

1. The holder is authorised to undertake the Listed Activities specified in Section B above in accordance with and restricted to the Preferred Alternative described in Section B above.
2. The holder must commence with the Listed Activities within the stipulated validity period which this Environmental Authorisation is granted for, or this Environmental Authorisation shall lapse and a new application for Environmental Authorisation must be submitted to the Competent Authority.
3. The holder must commence with the Listed Activities on site within a period of **five (5) years** from the date of issue of this Environmental Authorisation.
4. The development must be concluded within **ten (10) years** from the date of commencement of the listed activities.
5. The holder shall be responsible for ensuring compliance with the conditions by any person acting on his behalf, including an implementing agent, sub-contractor, employee or any person rendering a service to the holder.
6. Any changes to, or deviations from the scope of the alternative described in section B above must be approved in writing by the Competent Authority before such changes or deviations may be implemented. In assessing whether or not to grant such approval, the Competent Authority may request information in order to evaluate the significance and impacts of such changes or deviations, and it may be necessary for the holder to apply for further authorisation in terms of the applicable legislation.

Written Notice to the Competent Authority

7. A written notice of seven (7) calendar days must be given to the Competent Authority before construction work can be commenced with.
 - 7.1. The notice must make clear reference to the site details and EIA Reference number given above.
 - 7.2. The notice must include proof of compliance with the following conditions described herein:

Conditions: 8, 9, 13 and 22

Notification of Environmental Authorisation and Administration of Appeal

8. The holder must in writing, within fourteen (14) calendar days of the date of this decision–
 - 8.1. notify all registered Interested and Affected Parties ("I&APs") of –
 - 8.1.1. the decision reached on the application;
 - 8.1.2. the reasons for the decision as included in Annexure 3;
 - 8.1.3. the date of the decision; and
 - 8.1.4. the date when the decision was issued.
 - 8.2. draw the attention of all registered I&APs to the fact that an appeal may be lodged against the decision in terms of the National Appeal Regulations, 2014 (as amended) detailed in Section G below;
 - 8.3. draw the attention of all registered I&APs to the manner in which they may access the decision;
 - 8.4. provide the registered I&APs with the:
 - 8.4.1. name of the holder (entity) of this Environmental Authorisation,
 - 8.4.2. name of the responsible person for this Environmental Authorisation,
 - 8.4.3. postal address of the holder,
 - 8.4.4. telephonic and fax details of the holder,
 - 8.4.5. e-mail address, if any, of the holder,
 - 8.4.6. contact details (postal and/or physical address, contact number, facsimile and e-mail address) of the decision-maker and all registered I&APs in the event that an appeal is lodged in terms of the National Appeals Regulations, 2014 (as amended).

Commencement

9. The Listed Activities, including site preparation, must not be commenced with within (20) twenty calendar days from the date the applicant notifies the registered I&APs of this decision.
10. In the event that an appeal is lodged with the Appeal Authority, the effect of this Environmental Authorisation is suspended until the appeal is decided.

Management of Activities

11. The draft Environmental Management Programme ("EMPr") (submitted as part of the final BAR on 30 June 2021) is hereby approved and must be implemented.
12. The EMPr must be included in all contract documentation for all phases of implementation.

Monitoring

13. The holder must appoint a suitably experienced Environmental Control Officer ("ECO") before the Listed Activities can be commenced with, to ensure compliance with the EMPr and the conditions contained herein.
14. A copy of the Environmental Authorisation, EMPr, ECO reports, audit reports and compliance monitoring reports must be kept at the contractor's site office and must be made available to any authorised official of the Competent Authority on request.
15. Access to the site referred to in Section C must be granted, and the environmental reports mentioned above must be produced, to any authorised official representing the Competent Authority who requests to see the reports for the purposes of assessing and/or auditing compliance with the conditions contained herein.

Auditing

16. In terms of Regulation 34 of the EIA Regulations, 2014 (as amended), the holder must conduct environmental audits to determine compliance with the conditions of the Environmental Authorisation, the EMPr and the updated Rehabilitation Plan. Environmental audit reports must be compiled and be submitted to the Competent Authority. Environmental audit reports must be prepared by an independent person and must contain all the information required in Appendix 7 of the EIA Regulations, 2014 (as amended).
17. The audit reports must be compiled and subsequently submitted to the Department in the following manner:
 - 17.1. The first audit report must be submitted to the Competent Authority within three (3) months after construction commence. Thereafter, audit reports must be submitted once a year during the construction phase.
 - 17.2. A final audit report must be submitted within three (3) months after the development is completed.
18. The audit report must indicate compliance status with the conditions of this Environmental Authorisation, and the EMPr and make recommendations for improved environmental management;
19. The holder must, within seven (7) calendar days of the submission of the audit report to the Competent Authority, notify all registered I&APs of the submission and make the audit report available to any registered I&AP on request.

Specific Conditions

20. Should any heritage remains be exposed during excavations or any other actions on the site, this must immediately be reported to the Provincial Heritage Resources Authority of the Western Cape, Heritage Western Cape. Heritage remains uncovered or disturbed during earthworks must not be disturbed further until the necessary approval has been obtained from Heritage Western Cape.

Heritage remains include, *inter alia*, meteorites, archaeological and/or paleontological remains (including fossil shells and trace fossils); coins; indigenous and/or colonial ceramics; any articles of value or antiquity; marine shell heaps; stone artifacts and bone remains; structures and other built features with heritage significance; rock art and rock engravings; and/or graves or unmarked human burials including grave goods and/or associated burial material.

21. A qualified archaeologist and/or paleontologist must be contracted where necessary (at the expense of the holder) to remove any heritage remains. Heritage remains can only be disturbed

by a suitably qualified heritage specialist working under a directive from the relevant heritage resources authority.

22. The development area must be clearly demarcated and all areas outside the development area must be demarcated as “no-go” areas prior to the commencement of construction activities.

F. GENERAL MATTERS

1. Notwithstanding this Environmental Authorisation, the holder must comply with any other statutory requirements that may be applicable when undertaking the Listed Activities.
2. Non-compliance with any Condition of this Environmental Authorisation or EMPr may render the holder liable for criminal prosecution.
3. If the holder does not commence with the Listed Activities within the period referred to in Condition 3, this Environmental Authorisation shall lapse. If the holder wishes to extend the validity period of the Environmental Authorisation, an application for amendment in this regard must be lodged with the Competent Authority.
4. An application for amendment of the Environmental Authorisation must be submitted to the Competent Authority where any detail with respect to the Environmental Authorisation must be amended, added, substituted, corrected, removed or updated. If a new holder is proposed, an application for Amendment in terms of Part 1 of the EIA Regulations, 2014 (as amended) must be submitted.
5. Please note that an amendment of the Environmental Authorisation is not required for a change in the contact details of the holder. In such a case, the Competent Authority must only be notified of such changes.
6. The manner and frequency for updating the EMPr must be as follows:
 - 6.1. Amendments to the EMPr must be made in accordance with Regulations 35 to 37 of GN No. R.982 (as amended) or any relevant legislation that may be applicable at the time.

G. APPEALS

Appeals must comply with the provisions contained in the National Appeal Regulations, 2014 (as amended).

1. An appellant (if the holder of the decision) must, within twenty (20) calendar days from the date the notification of the decision was sent to the holder by the Competent Authority –
 - 1.1. Submit an appeal in accordance with Regulation 4 of the National Appeal Regulations, 2014 (as amended) to the Appeal Administrator; and
 - 1.2. Submit a copy of the appeal to any registered I&APs, any Organ of State with interest in the matter and the decision-maker, *i.e.*, the Competent Authority that issued the decision.
2. An appellant (if not the holder of the decision) must, within twenty (20) calendar days from the date the holder of the decision sent notification of the decision to the registered I&APs–
 - 2.1. Submit an appeal in accordance with Regulation 4 of the National Appeal Regulations, 2014 (as amended) to the Appeal Administrator; and
 - 2.2. Submit a copy of the appeal to the holder of the decision, any registered I&AP, any Organ of State with interest in the matter and the decision-maker, *i.e.*, the Competent Authority that issued the decision.

3. The holder of the decision (if not the appellant), the decision-maker that issued the decision, the registered I&AP and the Organ of State must submit their responding statements, if any, to the Appeal Authority and the appellant within twenty (20) calendar days from the date of receipt of the appeal submission.

4. The appeal and the responding statement must be submitted to the address listed below:

By post: Western Cape Ministry of Local Government, Environmental Affairs and
Development Planning
Private Bag X9186
CAPE TOWN
8000

By facsimile: (021) 483 4174; or

By hand: Attention: Mr Marius Venter (Tel.: 021 483 2659)
Room 809
8th Floor Utilitas Building, 1 Dorp Street, Cape Town, 8001

Note: For purposes of electronic database management, you are also requested to submit electronic copies (Microsoft Word format) of the appeal, responding statement and any supporting documents to the Appeal Authority at the address listed above and/or via e-mail to DEADP.Appeals@westerncape.gov.za.

5. A prescribed appeal form as well as assistance regarding the appeal processes is obtainable from the Appeal Authority at: Tel.: (021) 483 3721, E-mail: DEADP.Appeals@westerncape.gov.za or URL: <http://www.westerncape.gov.za/eadp>.

H. DISCLAIMER

The Western Cape Government, the Local Authority, committees or any other public authority or organisation appointed in terms of the conditions of this Environmental Authorisation shall not be responsible for any damages or losses suffered by the holder, developer or his successor in any instance where construction or operation subsequent to construction is temporarily or permanently stopped for reasons of non-compliance with the conditions as set out herein or any other subsequent document or legal action emanating from this decision.

Your interest in the future of our environment is greatly appreciated.

Yours faithfully

MR. ZAAHIR TOEFY

DIRECTOR: DEVELOPMENT MANAGEMENT – REGION 1

DEPARTMENT OF ENVIRONMENTAL AFFAIRS AND DEVELOPMENT PLANNING

DATE OF DECISION: 13 OCTOBER 2021

CC: Ms. Mische Molife (GroenbergEnviro (Pty) Ltd)
Mr. Johan Viljoen (Theewaterskloof Local Municipality)
Mr. Charl Van Den Berg (Land Owner - Twaalfontein Landgoed (Pty) Ltd)

E-mail: mische@groenbergenviro.co.za

E-mail: joanvi@twk.org.za

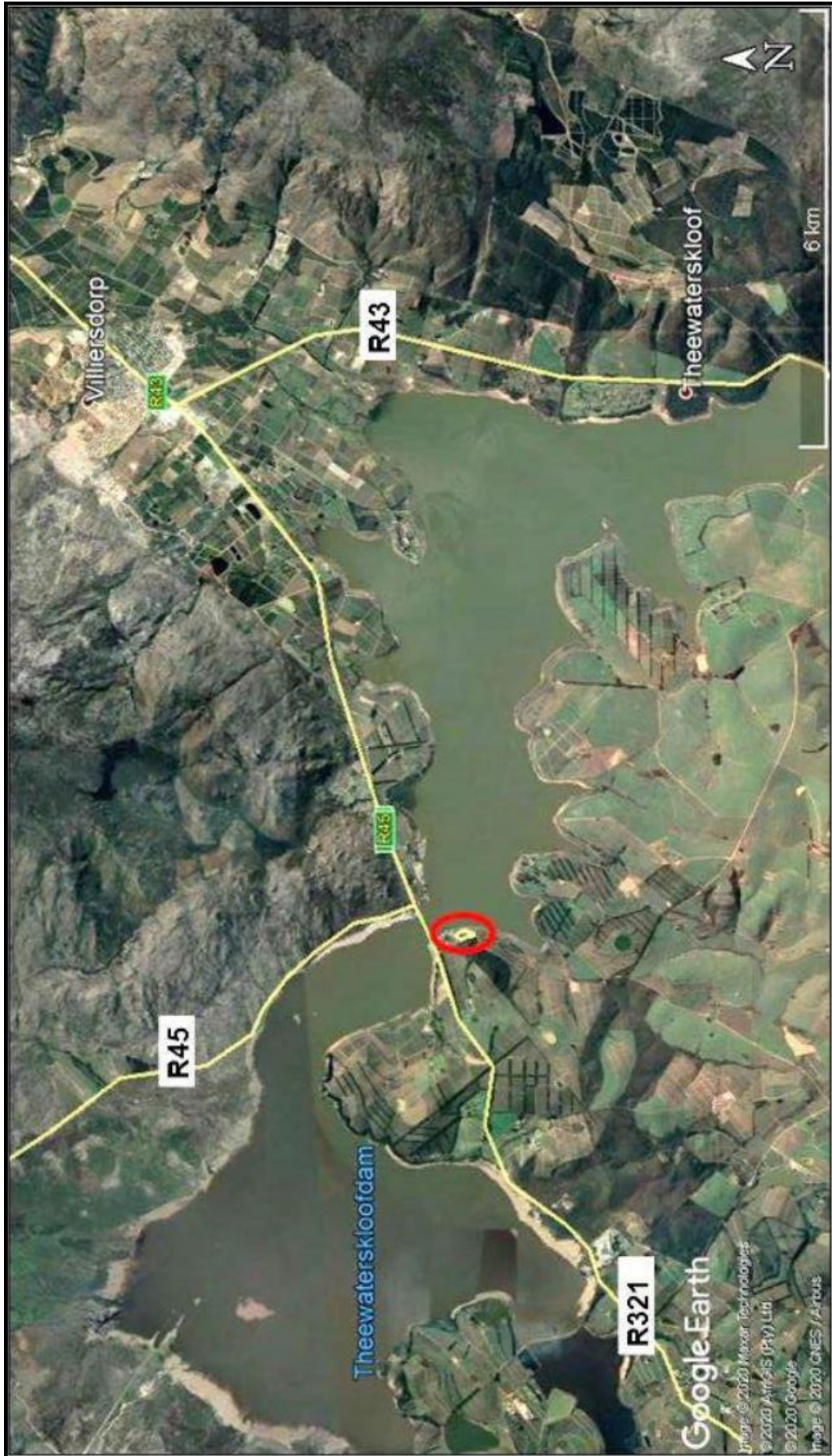
E-mail: vintage@vyebosch.co.za

FOR OFFICIAL USE ONLY:

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ANNEXURE 1: LOCALITY MAP(S)



ANNEXURE 2: SITE DEVELOPMENT PLAN(S)



ANNEXURE 3: REASONS FOR THE DECISION

In reaching its decision, the Competent Authority considered, *inter alia*, the following:

- a) The information contained in the Application Form received by the Department on 11 March 2021, and the EMPr submitted together with the final BAR for decision-making on 30 June 2021;
- b) Relevant information contained in the Departmental information base, including the Guidelines on Public Participation, Need and Desirability and Alternatives (dated March 2013);
- c) The objectives and requirements of relevant legislation, policies and guidelines, including section 2 of the NEMA;
- d) The comments received from I&APs and the responses thereto, included in the BAR;
- e) The balancing of negative and positive impacts and proposed mitigation measures; and
- f) No site visit was conducted. The Competent Authority had sufficient information before it to make an informed decision without conducting a site visit.

All information presented to the Competent Authority was taken into account in the consideration of the application for Environmental Authorisation. A summary of the issues that were considered to be the most significant for the decision is set out below.

1. Public Participation

- Identification of and engagement with I&APs;
- Fixing a site notice at a visible and accessible location to the site on 5 May 2021;
- Giving written notice to the owners of the land and owners and occupiers of land adjacent to the site where the Listed Activities are to be undertaken, the Municipality, Organs of State and State Departments having jurisdiction in respect of any aspect of the proposed development;
- The placing of a newspaper advertisement in the 'Hermanus Times' on 5 May 2021; and
- Making the draft BAR available to I&APs for comment from 7 May 2021 to 7 June 2021.

The Department is satisfied that the PPP that was followed met the minimum legal requirements and the comments raised and responses thereto were included in the comments and responses report.

Specific management and mitigation measures have been considered in this Environmental Authorisation and in the EMPr to adequately address significant concerns raised.

2. Alternatives

Alternative 1 (Preferred Alternative (Herewith Authorised))

This alternative entails the clearance of approximately 1.5ha of indigenous vegetation for the establishment of a solar farm and associated infrastructure on the Remainder of Portion 1 of Farm No. 582, Villiersdorp. The solar farm will consist of ground-mounted fixed solar panels with an electricity output of 1 megawatt. The proposed solar farm will include the following:

- The development of a warehouse for inverters;
- The installation of underground cabling from the warehouse to the existing VIB electrical distribution warehouse;
- The erection of a security fence around the perimeter of the site; and
- The upgrading the existing Eskom infrastructure to connect the solar inverter cables directly to the Eskom transformer point.

This alternative is preferred due to the following:

- The site is highly degraded and isolated from other natural areas;
- No watercourses or wetland areas are evident on site;
- No impacts are anticipated from a heritage and archaeological perspective;
- Employment and skills acquisition opportunities will be created; and
- Reduced reliance on Eskom electricity supply with the generation of electricity from a renewable resource.

Alternative 2

This alternative will comprise the cultivation of approximately 1.5ha to expand the holder's existing agricultural activities.

This alternative is not preferred due to the following:

- The development will not lessen the electricity pressure on account of unreliable electricity supply and load shedding from Eskom;
- The existing water supply issues will be further exacerbated by an additional 1.5ha cultivation expansion; and
- The site is too small for viable agriculture to contribute to the regional economy.

'No-Go' Alternative

The "No-Go" alternative of not proceeding with the establishment of a solar farm on the Remainder of Portion 1 of Farm No. 582, Villiersdorp was considered. However, it is not preferred, as the benefits associated with the proposed development will not be realised. The no-go alternative will maintain the electricity pressure on account of unreliable electricity supply and load shedding from Eskom. Further cultivation is not viable, and the site will remain fallow. The existing water supply issues will remain. No employment or skills acquisition opportunities will be provided.

3. Key Factors Affecting the Decision

3.1 Need and Desirability

The proposed development will be in line with the zoning of the site, which is zoned as 'Agriculture'. The development is in line with the Municipal Integrated Development Plan ("IDP"), as the development is required for agricultural purposes. A consent use is required in terms of the Theewaterskloof Municipal Zoning Scheme By-Law (Province of the Western Cape: Provincial Gazette Extraordinary 8312, dated 24 August 2020).

Load shedding has been identified as one of the major risks in the crop production cycle. Additionally, the cost of electricity, which is increasing at above inflation each year, places extreme pressure on the viability of crop production for the holder. The development is required to generate electricity in order for the holder to be less dependent on Eskom for electricity. The electricity generated will be used to pump water from the Theewaterskloof Dam, located 500m east of the proposed site, for the irrigation of agricultural land.

3.2 Heritage Resources

Heritage Western Cape confirmed in a correspondence dated 16 April 2021, that there is no reason to believe any heritage assessment is required, as the site is deemed to have no heritage significance.

Additionally, the applicant will comply with Conditions 20 and 21 of this Environmental Authorisation. This will help to ensure the protection of any heritage resources that may be encountered on the site.

3.3 Soil Impacts

According to the Agricultural/Soil Compliance Statement (dated March 2021 and compiled by Agrimotion), the soils observed at the site are suited for crop production, however, the soil exhibits noteworthy limitations to crop production and will require significant management inputs in the form of deep soil tillage, ridging and isolated subsurface drains. In addition, the variable nature of the soils across the site is considered a major limitation to commercial cultivation. The soils on the northern side of the site are sandstone derived and contain less than 10% clay with a coarser sand fraction throughout the profile depths. Towards the southern side

of the site (opposite the central trench) the soils profile contains more clay and a finer sand grade, typical of shale derived soils. This difference in parent materials and ensuing characteristics will require vastly different management approaches and will therefore have significant implications on irrigation valve sizing and practical orchard management.

The isolated nature of the site implies that no orchard infrastructure, specifically irrigation main- and sublines, are available and for such a small area, installation will not be cost-effective. The soil variability and implications for management, together with the size and isolated nature, decrease the viability of the site as an effective and practical farm management unit. The presence of the central trench, as a natural drainage route moving water from the steeper slopes in the east down to the Theewaterskloof Dam in the west, will also require specific drainage structures and actions to ensure effective surface water management across the site. The impact of the development on the soil profile is deemed to be of medium negative significance.

3.4 Botanical and Freshwater Impacts

According to the Terrestrial Biodiversity Impact Assessment Report (dated 7 December 2020 and compiled by Ms. Johlene Krige), the site is highly degraded and regarded to be of low biodiversity significance. The site is dominated by herbaceous weeds and grasses and large patches where a high density of black wattle (*Acacia mearnsii*) re-infested the site. Only one small semi-natural patch of approximately 300m² is currently remaining within the northernmost portion of the site. The report further indicates that the proposed development will not have an impact on species of conservation concern. No watercourses or wetland areas occur on the site. The specialist deemed the proposed development as acceptable from a terrestrial biodiversity perspective and regards the impacts associated with the loss of indigenous vegetation as low negative significance.

3.5 Avifaunal Impacts

According to the Avifaunal Compliance Statement (compiled by Dr. Dave Pepler), the proposed development will have insignificant impacts on avifauna, given the scale and location of the proposed development. Additionally, with the removal of invasive alien vegetation and subsequent recovery through succession, the area will be enhanced for avifaunal diversity, as avifauna is highly adaptable to stable structures assimilated in the landscape architecture.

Furthermore, the likelihood of the "lake effect" on the avifauna is insignificant, given the orientation angle and reflection profile of the solar array, mainly in the vertical dimension. Given the level of disturbance on the site and the daily activity at the pump station, bird activity is already impinged. The slope profile of the shore is steep at both full and summer levels, thereby excluding this site as a refugium or resting place for avifauna.

The development proposal will result in both negative and positive impacts.

Negative impacts include:

- Loss of natural vegetation; and
- Dust, noise and visual intrusion during the construction phase.

Positive impacts include:

- The creation of temporary employment opportunities during the construction phase;
- Reduced reliance on Eskom electricity supply with the generation of electricity from a renewable resource; and
- Ensuring water availability for irrigation purposes at all times.

4. **National Environmental Management Act, 1998 (Act No. 107 of 1998) Principles**

The National Environmental Management Principles (set out in section 2 of the NEMA, which apply to the actions of all Organs of State, serve as guidelines by reference to which any Organ of State must exercise any function when taking any decision, and which must guide the interpretation, administration and implementation of any other law concerned with the protection or management of the environment), *inter alia*, provides for:

- the effects of decisions on all aspects of the environment to be taken into account;
- the consideration, assessment and evaluation of the social, economic and environmental impacts of activity (disadvantages and benefits), and for decisions to be appropriate in the light of such consideration and assessment;
- the co-ordination and harmonisation of policies, legislation and actions relating to the environment;
- the resolving of actual or potential conflicts of interest between Organs of State through conflict resolution procedures; and
- the selection of the best practicable environmental option.

5. **Conclusion**

In view of the above, the NEMA principles, compliance with the conditions stipulated in this Environmental Authorisation, and compliance with the EMPr, the Competent Authority is satisfied that the authorised listed activities will not conflict with the general objectives of Integrated Environmental Management stipulated in Chapter 5 of the NEMA and that any potentially detrimental environmental impacts resulting from the undertaking of the listed activities can be mitigated to acceptable levels.

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