



environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

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DEA Reference: 14/12/16/3/3/1/1745

Enquiries: Ms Thabile Sangweni

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Ms Jasandra Nyker
Biotherm Energy (Pty) Ltd
PO Box 69408
BRYANSTON
2021

Telephone Number: (011) 367 4600
E-mail Address: eiaadmin@biothermenergy.com

PER E-MAIL / MAIL

Dear Ms Nyker

APPLICATION FOR ENVIRONMENTAL AUTHORISATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998: GN R. 983/985 AS AMENDED FOR THE TLISITSENG PV1 132KV SUBSTATION, 132KV POWERLINE AND ITS ASSOCIATED INFRASTRUCTURE NEAR LICHTENBURG WITHIN THE DITSOBOTLA LOCAL MUNICIPALITY IN THE NORTH WEST PROVINCE

With reference to the above application, please be advised that the Department has decided to grant authorisation. The environmental authorisation (EA) and reasons for the decision are attached herewith.

In terms of Regulation 4(2) of the Environmental Impact Assessment Regulations, 2014, as amended (the Regulations), you are instructed to notify all registered interested and affected parties, in writing and within 14 (fourteen) days of the date of the EA, of the Department's decision in respect of your application as well as the provisions regarding the submission of appeals that are contained in the Regulations.

Your attention is drawn to Chapter 2 of Government Notice No. R.993, which prescribes the appeal procedure to be followed. Kindly include a copy of this document with the letter of notification to interested and affected parties.

Should any person wish to lodge an appeal against this decision, he/she must submit the appeal to the appeal administrator, and a copy of the appeal to the applicant, any registered interested and affected party, and any organ of state with interest in the matter within 20 days from the date that the notification of the decision was sent to the registered interested and affected parties by the applicant; or the date that the notification of the decision was sent to the applicant by the Department, whichever is applicable.

Appeals must be submitted in writing in the prescribed form to:

Mr Z Hassam, Director: Appeals and Legal Review of this Department at the below mentioned addresses.

By email: appealsdirector@environment.gov.za;

Ms

By hand: Environment House
473 Steve Biko,
Arcadia,
Pretoria,
0083; or

By post: Private Bag X447,
Pretoria,
0001;

Please note that in terms of section 43(7) of the National Environmental Management Act, 1998, the lodging of an appeal will suspend the environmental authorisation or any provision or condition attached thereto. In the instance where an appeal is lodged, you may not commence with the activity until such time that the appeal is finalised.

To obtain the prescribed appeal form and for guidance on the submission of appeals, please visit the Department's website at https://www.environment.gov.za/documents/forms#legal_authorisations or request a copy of the documents at appealsdirector@environment.gov.za.

Yours faithfully


Mr Sabelo Malaza
Chief Director: Integrated Environmental Authorisations
Department of Environmental Affairs
Date: 02/08/2017

cc:	A Gibb	Sivest SA (Pty) Ltd	Email: andreag@sivest.co.za
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environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

Environmental Authorisation

In terms of Regulation 25 of the Environmental Impact Assessment Regulations, 2014, as amended

The Tlisitseng PV1 132 kV substation, 132kV overhead powerline and its associated infrastructure
near Lichtenburg within the Ditsobotla Local Municipality in the North West Province

Ngaka Modiri Molema District Municipality

Authorisation register number:	14/12/16/3/3/1/1745
Last amended:	First issue
Holder of authorisation:	Biotherm Energy (Pty) Ltd
Location of activity:	Portion 25 of the Farm Houthaalboomen No. 31; Portion 10 of the Farm Lichtenburg Town and Townlands No. 27; The Remainder of Portion 1 of the Farm Lichtenburg Town and Townlands No. 27; Ditsobotla Local Municipality; Ngaka Modiri Molema District Municipality; North West Province

This environmental authorisation does not negate the holder of the authorisation's responsibility to comply with any other statutory requirements that may be applicable to the undertaking of the activity.

M.S

Decision

The Department is satisfied, on the basis of information available to it and subject to compliance with the conditions of this environmental authorisation, that the applicant should be authorised to undertake the activities specified below.

Non-compliance with a condition of this environmental authorisation may result in criminal prosecution or other actions provided for in the National Environmental Management Act, 1998 and the EIA regulations.

Details regarding the basis on which the Department reached this decision are set out in Annexure 1.

Activities authorised

By virtue of the powers conferred on it by the National Environmental Management Act, 1998 (Act No. 107 of 1998) and the Environmental Impact Assessment Regulations, 2014 the Department hereby authorises –

BIOTHERM ENERGY (PTY) LTD

(hereafter referred to as the **holder of the authorisation**)

with the following contact details –

Ms Jasandra Nyker

PO Box 69408

BRYANSTON

2021

Telephone Number: (011) 367 4600

Fax Number: (011) 367 4601

Email Address: eiaadmin@biothermenergy.com

to undertake the following activities (hereafter referred to as "the activity") indicated in Listing Notice 1 (GN R. 983) and Listing Notice 3 (GN R. 985) as amended:

Activity number	Activity description
<p><u>GN R. 983 Item 11:</u></p> <p><i>"The development of facilities or infrastructure for the transmission and distribution of electricity –</i></p> <p><i>(i) Outside urban areas or industrial complexes with a capacity of more than 33 but less than 275 kV."</i></p>	<p>A powerline with a capacity of 132kV will be constructed.</p>
<p><u>GN R. 983 Item 27:</u></p> <p><i>"The clearance of an area of 1 hectare or more, but less than 20 hectares of indigenous vegetation."</i></p>	<p>The assessed substation site consists of an area of up to 2.25ha. All the vegetation will need to be cleared for the construction of the substation and associated infrastructure. This will amount to more than 1 hectare.</p>
<p><u>GN R. 985 Item 12:</u></p> <p><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>(h) In the North West Province;</i></p> <p><i>(iv) Critical biodiversity areas identified in systematic biodiversity plans adopted by the competent authority."</i></p>	<p>Vegetation will need to be cleared for the construction of the powerline and associated infrastructure. This will amount to more than 300 square metres. The powerline corridor traverses a critical biodiversity area identified in a bioregional plan.</p>

as described in the Basic Assessment Report (BAR) dated June 2017 at:

21 SG Codes:

T	0	I	P	0	0	0	0	0	0	0	0	0	3	1	0	0	0	2	5
T	0	I	P	0	0	0	0	0	0	0	0	0	2	7	0	0	0	1	0
T	0	I	P	0	0	0	0	0	0	0	0	0	2	7	0	0	0	0	1

Preferred Substation	Latitude	Longitude
	26° 05'18.336"S	26° 07'02.190"E

Tlitseng PV1 Preferred Powerline Corridor	Latitude	Longitude
Start point	26° 05'11.121"S	26° 07'02.493"E
Middle point	26° 05'13.734"S	26° 07'46.120"E
End point	26° 05'28.544"S	26° 08'36.397"E

- for the construction of the Tlitseng PV1 3.1km 132kV overhead powerline, a 132kV substation and its associated infrastructure near Lichtenburg within the Ditsobotla Local Municipality in the North West Province, hereafter referred to as "the property".

The development will entail the following infrastructure:

- 1 X 132kV substation; and,
- 1 X 132kV powerline from the proposed Tlitseng 1 Substation to the existing Eskom Watershed Substation.

Technical details of the proposed facility:

Component	Description/ Dimensions
Location of the site	Portion 25 of the Farm Houthaalboomen No. 31; Portion 10 of the Farm Lichtenburg Town and Townlands No. 27; and, the Remainder of Portion 1 of the Farm Lichtenburg and Townlands No. 27
SG Codes	T0IP00000000003100025 T0IP00000000002700010 T0IP00000000002700001
Length of Powerline	3.1km
Export capacity	132kV
Width of internal roads	~6m

Conditions of this Environmental Authorisation

Scope of authorisation

1. The Tlisitseng PV1 3.1km long 132kV overhead powerline, a 132kV substation and its associated infrastructure near Lichtenburg within the Ditsobotla Local Municipality in the North West Province, as described above is hereby approved.
2. Authorisation of the activity is subject to the conditions contained in this environmental authorisation, which form part of the environmental authorisation and are binding on the holder of the authorisation.
3. The holder of the authorisation is responsible for ensuring compliance with the conditions contained in this environmental authorisation. This includes any person acting on the holder's behalf, including but not limited to, an agent, servant, contractor, sub-contractor, employee, consultant or person rendering a service to the holder of the authorisation.
4. The activities authorised may only be carried out at the property as described above.
5. Any changes to, or deviations from, the project description set out in this environmental authorisation must be approved, in writing, by the Department before such changes or deviations may be effected. In assessing whether to grant such approval or not, the Department may request such information as it deems necessary to evaluate the significance and impacts of such changes or deviations and it may be necessary for the holder of the authorisation to apply for further environmental authorisation in terms of the regulations.
6. The holder of an environmental authorisation must apply for an amendment of the environmental authorisation with the competent authority for any alienation, transfer or change of ownership rights in the property on which the activity is to take place.
7. This activity must commence within a period of five (05) years from the date of issue of this environmental authorisation. If commencement of the activity does not occur within that period, the authorisation lapses and a new application for environmental authorisation must be made in order for the activity to be undertaken.
8. Commencement with one activity listed in terms of this environmental authorisation constitutes commencement of all authorised activities.

Notification of authorisation and right to appeal

9. The holder of the authorisation must notify every registered interested and affected party, in writing and within 14 (fourteen) calendar days of the date of this environmental authorisation, of the decision to authorise the activity.
10. The notification referred to must –
 - 10.1. specify the date on which the environmental authorisation was issued;
 - 10.2. inform the interested and affected party of the appeal procedure provided for in the National Appeal Regulations, 2014;
 - 10.3. advise the interested and affected party that a copy of the authorisation will be furnished on request; and
 - 10.4. provide the reasons of the competent authority for the decision.
11. The holder of the authorisation must publish a notice –
 - 11.1. informing interested and affected parties of the decision;
 - 11.2. informing interested and affected parties where the decision can be accessed; and
 - 11.3. drawing the attention of interested and affected parties to the fact that an appeal may be lodged against this decision in terms of the National Appeal Regulations, 2014.

Commencement of the activity

12. The authorised activity shall not commence until the period for the submission of appeals has lapsed as per the National Appeal Regulations, 2014. In terms of section 43(7), an appeal under section 43 of the National Environmental Management Act, 1998 will suspend the environmental authorisation or any provision or condition attached thereto. In the instance where an appeal is lodged you may not commence with the activity until such time that the appeal has been finalised.

Management of the activity

13. The preferred site layout entitled "Proposed Construction of a 132kv Power Line to Serve Proposed Photovoltaic (PV) Energy Facilities Preferred Alternative", Map Ref No 13303TPL/BA1_08 and dated 07/03/2017 is approved.
14. The Environmental Management Programme (EMPr) compiled by Sivest SA that was integrated as part of the BAR dated June 2017, is approved.

15. Changes to the approved EMPr must be submitted in accordance to the EIA Regulations applicable at the time.
16. The Department reserves the right to amend the approved EMPr should any impacts that were not anticipated or covered in the BAR be discovered.

Frequency and process of updating the EMPr

17. The EMPr must be updated where the findings of the environmental audit reports, contemplated in Condition 24 below, indicate insufficient mitigation of environmental impacts associated with the undertaking of the activity, or insufficient levels of compliance with the environmental authorisation or EMPr.
18. The updated EMPr must contain recommendations to rectify the shortcomings identified in the environmental audit report.
19. The updated EMPr must be submitted to the Department for approval together with the environmental audit report, as per Regulation 34 of GN R. 982. The updated EMPr must have been subjected to a public participation process, which process has been agreed to by the Department, prior to submission of the updated EMPr to the Department for approval.
20. In assessing whether to grant approval of an EMPr which has been updated as a result of an audit, the Department will consider the processes prescribed in Regulation 35 of GN R.982. Prior to approving an amended EMPr, the Department may request such amendments to the EMPr as it deems appropriate to ensure that the EMPr sufficiently provides for avoidance, management and mitigation of environmental impacts associated with the undertaking of the activity.
21. The holder of the authorisation may apply for an amendment of an EMPr, if such amendment is required before an audit is required. The holder must notify the Department of its intention to amend the EMPr at least 60 days prior to submitting such amendments to the EMPr to the Department for approval. In assessing whether to grant such approval or not, the Department will consider the processes and requirements prescribed in Regulation 37 of GN R. 982.

Monitoring

22. The holder of the authorisation must appoint an experienced independent Environmental Control Officer (ECO) for the construction phase of the development that will have the responsibility to ensure that the mitigation/rehabilitation measures and recommendations referred to in this environmental authorisation are implemented and to ensure compliance with the provisions of the approved EMPr.

- 22.1. The ECO must be appointed before commencement of any authorised activities.
- 22.2. Once appointed, the name and contact details of the ECO must be submitted to the *Director: Compliance Monitoring* of the Department.
- 22.3. The ECO must keep record of all activities on site, problems identified, transgressions noted and a task schedule of tasks undertaken by the ECO.
- 22.4. The ECO must remain employed until all rehabilitation measures, as required for implementation due to construction damage, are completed and the site is ready for operation.

Recording and reporting to the Department

- 23. All documentation e.g. audit/monitoring/compliance reports and notifications, required to be submitted to the Department in terms of this environmental authorisation, must be submitted to the *Director: Compliance Monitoring* of the Department.
- 24. The holder of the environmental authorisation must, for the period during which the environmental authorisation and EMPr remain valid, ensure that project compliance with the conditions of the environmental authorisation and the EMPr are audited, and that the audit reports are submitted to the *Director: Compliance Monitoring* of the Department.
- 25. The frequency of auditing and of submission of the environmental audit reports must be as per the frequency indicated in the EMPr, taking into account the processes for such auditing as prescribed in Regulation 34 of GN R. 982.
- 26. The holder of the authorisation must, in addition, submit environmental audit reports to the Department within 30 days of completion of the construction phase (i.e. within 30 days of site handover) and a final environmental audit report within 30 days of completion of rehabilitation activities.
- 27. The environmental audit reports must be compiled in accordance with Appendix 7 of the EIA Regulations, 2014 and must indicate the date of the audit, the name of the auditor and the outcome of the audit in terms of compliance with the environmental authorisation conditions as well as the requirements of the approved EMPr.
- 28. Records relating to monitoring and auditing must be kept on site and made available for inspection to any relevant and competent authority in respect of this development.

Notification to authorities

- 29. A written notification of commencement must be given to the Department no later than fourteen (14) days prior to the commencement of the activity. Commencement for the purposes of this condition

includes site preparation. The notice must include a date on which it is anticipated that the activity will commence, as well as a reference number.

Operation of the activity

30. A written notification of operation must be given to the Department no later than fourteen (14) days prior to the commencement of the activity operational phase.

Site closure and decommissioning

31. Should the activity ever cease or become redundant, the holder of the authorisation must undertake the required actions as prescribed by legislation at the time and comply with all relevant legal requirements administered by any relevant and competent authority at that time.

Specific conditions

32. The pivots located on Portion 25 of the Farm Houthaalboom No. 31 must be marked as no-go areas.
33. A rehabilitation plan which will minimise the impacts to agricultural land must be developed and implemented.
34. Anti-collision devices such as bird flappers must be installed where the powerline crosses avifaunal corridors. The input of an avifaunal specialist must be obtained for the fitting of the anti-collision devices onto specific sections of the line once the exact positions of the towers have been surveyed and pegged.
35. Liaison with land owners/farm managers must be done prior to construction in order to provide sufficient time for them to plan agricultural activities.
36. No exotic plants may be used for rehabilitation purposes. Only indigenous plants occurring within a ten (10) kilometre radius of the development site must be utilised.
37. Vegetation clearing must be kept to an absolute minimum. Mitigation measures must be implemented to reduce the risk of erosion and the invasion of alien species.
38. An integrated waste management approach must be implemented that is based on waste minimisation and must incorporate reduction, recycling, re-use and disposal where appropriate.
39. Any solid waste, which will not be recycled, must be disposed of at a landfill licensed in terms of section 20 (b) of the National Environment Management Waste Act, 2008 (Act No. 59 of 2008). No waste material may be left on site after construction.
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40. If any evidence of archaeological sites or remains (e.g., remnants of stone-made structures, indigenous ceramics, bones, stone artefacts, ostrich eggshell fragments, marine shell and charcoal/ash concentrations), unmarked human burials, fossils or other categories of heritage resources are found during construction, the South African Heritage Resources Agency (SAHRA) must be alerted immediately, and a professional archaeologist or palaeontologist, must be contacted to inspect the findings.
41. The recommendations of the EAP in the BAR dated June 2017 and the specialist studies attached must be adhered to. In the event of any conflicting mitigation measures and conditions of the Environmental Authorisation, the specific condition of this Environmental Authorisation will take preference.

General

42. A copy of this Environmental Authorisation, the audit and compliance monitoring reports, and the approved EMP, must be made available for inspection and copying-
- 42.1. at the site of the authorised activity;
 - 42.2. to anyone on request; and
 - 42.3. where the holder of the Environmental Authorisation has a website, on such publicly accessible website.
43. National government, provincial government, local authorities or committees appointed in terms of the conditions of this authorisation or any other public authority shall not be held responsible for any damages or losses suffered by the holder of the authorisation or his/her successor in title in any instance where construction or operation subsequent to construction be temporarily or permanently stopped for reasons of non-compliance by the holder of the authorisation with the conditions of authorisation as set out in this document or any other subsequent document emanating from these conditions of authorisation.

Date of environmental authorisation: 09/08/2019


Mr Sabelo Malaza

Chief Director: Integrated Environmental Authorisations
Department of Environmental Affairs

Annexure 1: Reasons for Decision

1. Information considered in making the decision

In reaching its decision, the Department took, *inter alia*, the following into consideration -

- a) The listed activities as applied for in the application form received on 27/03/2017.
- b) The information contained in the BAR dated June 2017.
- c) Mitigation measures as proposed in the BAR and the EMPr dated June 2017.
- d) The objectives and requirements of relevant legislation, policies and guidelines, including section 2 of the National Environmental Management Act, 1998 (Act 107 of 1998).
- e) The information contained in the specialist studies contained within the appendices of the BAR dated June 2017 and as appears below:

Title	Prepared by	Date
Geotechnical Study	Geopractica	July 2016
Traffic Impact Assessment and Management Study	Aurecon	March 2017
Social Impact Assessment	Urban-Econ Development Economists	March 2017
Agricultural Impact Assessment	ARC – Institute for Soil, Climate and Water	March 2017
Ecological Study	David Hoare Consulting	February 2017
Avifaunal Impact Assessment	Chris Van Rooyen Consulting	March 2017
Surface Water Impact Assessment	Sivest SA, peer reviewed by JG Afrika	February 2017 and May 2017
Heritage and Paleontological Impact Assessment	PGS Heritage	July 2017
Visual Impact Assessment	Sivest SA, peer reviewed by SRK Consulting	March 2017 and April 2017

2. Key factors considered in making the decision

All information presented to the Department was taken into account in the Department's consideration of the application. A summary of the issues which, in the Department's view, were of the most significance is set out below.

- a) The findings of all the specialist studies conducted and their recommended mitigation measures.
- b) The aim of the project is to connect the Tlisitseng PV1 Solar Energy Facility to the existing Eskom Watershed Substation.
- c) The BAR dated June 2017 identified all legislation and guidelines that have been considered in the preparation of the BAR dated June 2017.
- d) The methodology used in assessing the potential impacts identified in the BAR dated June 2017 and the specialist studies have been adequately indicated.
- e) A sufficient public participation process was undertaken and the applicant has satisfied the minimum requirements as prescribed in the EIA Regulations, 2014 for public involvement.

3. Findings

After consideration of the information and factors listed above, the Department made the following findings -

- a) The identification and assessment of impacts are detailed in the BAR dated June 2017 and sufficient assessment of the key identified issues and impacts have been completed.
- b) The procedure followed for impact assessment is adequate for the decision-making process.
- c) The proposed mitigation of impacts identified and assessed adequately curtails the identified impacts.
- d) The information contained in the BAR dated June 2017 is deemed to be accurate and credible.
- e) EMPr measures for the pre-construction, construction and rehabilitation phases of the development were proposed and included in the BAR and will be implemented to manage the identified environmental impacts during the construction phase.

In view of the above, the Department is satisfied that, subject to compliance with the conditions contained in the environmental authorisation, the authorised activities will not conflict with the general objectives of integrated environmental management laid down in Chapter 5 of the National Environmental Management Act, 1998 and that any potentially detrimental environmental impacts resulting from the authorised activities can be mitigated to acceptable levels. The environmental authorisation is accordingly granted.