



Agriculture and Environmental Management Departmen

Environmental Management Division

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8/1/1/1 Rietvlei Substation DEAT Ref No 12/12/20/1470

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Open Space Management Section

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Date: 08 September 2009

Savannah Environmental (Pty) Ltd P.O. Box 148 Sunninghill 2157

Attention: Zama Dlamini

Fax: 086 684 0547

Dear Sir

DRAFT SCOPING REPORT: PROPOSED TSHWANE STRENGTHENING PROJECT: PROPOSED ESTABLISHMENT OF VERWOERDBURG 400/132KV SUBSTATION AND VERWOERDBRG-APOLLO 2 X 400KV LOOP IN AND OUT OF THE EXISTING APOLLO-PLUTO 400KV LINE AT VERVOERDBURG, GAUTENG PROVINCE

Your application dated July 2009, refers.

1. INTRODUCTION

The Agriculture and Environmental Management Department (the Department) has considered the Draft Scoping Report dated July 2009 in respect of the abovementioned application. The Report is submitted to the Environmental Management Division of the City of Tshwane, hereafter referred to as 'the City', as a commenting authority as requirement in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998) and the Environmental Impact Assessment Regulations, 2006.

2. PROJECT LOCATION AND DESCRIPTION

Eskom has appointed Savannah Environmental as independent consultants, to undertake a Scoping and Environmental Impact Assessment of the proposed Apollo-Verwoerdburg project. The proposed Apollo-Verwoerdburg project is located on the Witkoppies 392 JR and Doornkloof 391 approximately 16km south-east of Pretoria (Tshwane). The Kwagga – Phoebus project is located on Wentzelrust 223 JR about 30km north-east of Pretoria (Tshwane). The Tshwane Strengthening Project Phase 1 is proposed to include the following:

- Extension/upgrade of the existing Verwoerdburg (Rietvlei) Substation.
- Construction of 2x 400kV loop-in lines from Apollo Pluto transmission lines to feed into the Verwoerdburg (Rietvlei) Substation, a distance of approximately 4 km.
- Construction of 400kV loop-in lines to feed into the Phoebus Substation from the existing Apollo-Dinaledi transmission power line, a distance of approximately 1 km.
- Construction of a new 400kV transmission power line between the Phoebus Substation and the Kwagga Substation, a distance of ~30 km.

- Extension of the existing Kwagga Substation.
- Establishment of the new Phoebus substation adjacent to existing Hangklip substation.

In total, approximately 46 km of new power line is proposed a part of this proposed project.

The activity entails undertaking the following listed activity in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998) and the Environmental Impact Assessment Regulations, 2006:

R 387 Activity 1(I): The construction of facilities or infrastructure, including associated structures or infrastructure, for-

The transmission and distribution of above ground electricity with a capacity of 120 kilovolts or more;

R 386 Activity 1(m):the construction of facilities or infrastructure, including associated structures or infrastructure, for any purpose in the one in ten year flood line of a river or stream, or within 32 metres from the bank of a river or stream where the flood line is unknown, excluding purposes associated with existing residential use, but including -(i)

- Canals;
- (ii) Channels:
- (iii) Bridges;
- (iv) Dams; and
- (V) Weirs;

R 386 Activity 1(c): The above ground storage of a dangerous good, including prtrol, diesel, liquid petroleum gas or paraffin, in containers with a combined capacity of 1000 cubic metres or more at any other location or site including the storage of one or more dangerous goods, in a tank farm.

R 386 Activity 12: The transformation or removal of indigenous vegetation of 3 hectares or more or of any size where the transformation or removal would occur within a critically endangered or an endangered ecosystem listed in terms of section 52 of the National Environmental Management: Biodiversity Act, 2004 (Act No 10 of 2004).

R 386 Activity 14: The construction of masts of any material or type and of any height, including those used for telecommunication broadcasting and radio transmission, but excluding -

- masts of 15 metres and lower exclusively used
 - by radio amateurs; or
 - for lighting purposes
- (b) flag poles; and
- (C) lightning conductor poles.

R 386 Activity 15: The construction of a road that is wider than 4 metres or that has a reserve wider than 6 metres, excluding roads that fall within the ambit of another listed activity or which are access roads of less than 30 metres long.

R 386 Activity 20: The transformation of an area zoned for use as public open space or for a conservation purpose to another use.

3. KEY FACTORS INFORMING THE COMMENTS

In making its comments in respect of the proposed activity the Department has taken, inter alia, the following into consideration:

- a) The information contained in the Draft Scoping Report submitted by Savannah (Pty) Ltd dated July 2009.
- b) Information obtained from the Department's information base including inter alia:
 - Geographic Information System (GIS); and
 - Gauteng Open Space Plan (GOSP).
- c) Compliance with applicable municipal, provincial and national policies and guidelines including:
 - The National Environmental Management Act 1998 (Act 107 of 1998) (NEMA): its decision-making principles and Environmental Impact Assessment Regulations;
 - The Tshwane Integrated Environmental Policy (TIEP);
 - The Tshwane Open Space Framework (TOSF) Policy Statements and Typologies;
 - Town Planning and Townships Ordinance 15 of 1986;
 - The Tshwane Spatial Development Framework; and
 - The Tshwane's City Strategy.

4. DISCUSSION

In reviewing the application the Department made the following findings:

- According to the Tshwane Open Space Framework the proposed development forms part of the following Open Space Typologies:
 - A Blue Way, namely the Olifantspruit which is (Linear Ecological Open Space system associated with water) of Metropolitan significance.
 - A Green Way, namely the Witwatersburg Ridge which is (Linear Ecological Open Space associated with ridge systems, ecological processes and connectivity) of Metropolitan significance. Green Ways are essential in the provisioning of environmental goods and services, the protection of biodiversity, endangered species and ecological systems, as well as eco-based activity.
- b) Three Alternatives for the Apollo Verwoerdburg Transmission Line were considered
 - Alternative Route 1 (Apollo Verwoerdburg 1) leaves the Verwoerdburg substation in a
 westerly direction south east of Pretoria. It crosses the Witwatersburg ridge and the
 Olifantspruit, before it loops into the existing Apollo-Plato 400kV transmission line near
 Irene. The total length of this alternative route is 3.5 km.
 - Alternative Route 2 (Apollo Verwoerdburg 2) originates at the Verwoerdburg substation and proceeds in a westerly direction for apparently 3km before looping into the existing Apollo –Pluto 400kV transmission power line. This option traverses what could be a potentially environmentally sensitive Witwatersburg ridge, before looping into the existing

Apollo-Pluto transmission power line. The total length of the transmission line is approximately 3km.

Alternative Route 3 (Apollo – Verwoerdburg 3) Originates from the Verwoerdburg substation and follows the existing Apollo transmission power line in a south-westerly direction for a distance of about 3.4km. This option follows the existing power line route which is already transformed. This route does not pass on any streams or koppies and thus is the most highly preferred from an avifauna perspective.

In view of the above the Department supports Alternative Route 3 for the proposed development as it will have less negative impacts on the natural and resources as compared to other options. The report states that the disturbance and habitat degradation will also be lower as the new line is adjacent to an existing line with an existing servitude.

- c) The report states that impacts on geology and soils (in terms of the risk of soil erosion) are expected to be localised and restricted to the tower positions and are likely to be similar for all identified alternative transmission line corridors. The impacts on geology and soils associated with establishment of the proposed substation and turn-in lines at any of the identified alternative sites are expected to be of low significance.
- d) An analysis of the topography and landform revealed that the proposed corridors would cross landform types ranging from plains in the east and ridges in the west. The EIA must address possible impacts of the proposed development on these ecological features.
- e) The report states that no specific heritage sites have as yet been identified in the study area, no preferred transmission line corridor alternatives exist at this stage from a heritage perspective.

5. RECOMMENDATIONS

The Department suggests that the following recommendations should be considered and included on the final EIA report to be submitted:

- a) A detailed ecological survey of the transmission power line alternatives in order to establish the likelihood of any flora and/or fauna species of concern occurring in the study area must be done.
- b) A heritage study should be done and included in the final EIA and if any sites are identified in this regard, South Africa Heritage Resources Agency SAHRA must be consulted.
- c) Environmental Management Plan (EMP) for the proposed development should also be included in the EIA.
- d) All specialist studies and their recommendations must be clearly outlined and included in the final EIA report.
- e) Cutting of trees, indigenous vegetation /shrubs should be avoided. This Department must be informed if such act will be performed. Should that be unavoidable the EIA report must detail how this will be done and the rehabilitation thereof.
- f) No construction camps should be built on conservation areas. The EMP must indicate where the construction camps will be allocated.

- g) Rehabilitation plan for the construction of sites especially on ridges should be compiled and be
- h) Given the fact the proposed development will encroach through a sensitive area which is the Witwatersburg Ridge, it is recommended that the applicant use the existing roads for access since the construction of new roads will have severe impacts on the ridges where the power lines passes through. The information on issues related to roads and other infrastructures must be included in the EIA report and the EMP must cover the management plan for this.

6. CONCLUSION

The Department suggest that the recommendations outlined above be considered. Final input will therefore be provided on receipt of the final EIA report.

Yours faithfully

Mr Livhuwani Siphuma

EXECUTIVE DIRECTOR: ENVIRONMENTAL MANAGEMENT CC

Gauteng Department of Agriculture and Rural Development

Attn: Mr. Teboho Leku

Tel: (011) 355 1819

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Private Bag X447, Pretoria, 0001 • Fedsure Building, 315 Pretorius Street, Pretoria, 0002. Tel: (+27 12) 310 3911 Fax: (+27 12) 322 2682

Ref: 12/12/20/1524 Enquiries: Mr. Mogole Mphahlele

Tel: 012 310 3004 Fax: 012 320 7539 E-mail: mlmphahlele@deat.gov.za

Mr. Zama Dlamini Savannah Environmental (Pty) Ltd P. O Box 148 Sunninghill Johannesburg 2157

Tel No: 011 234 6621 Fax No: 086 684 0547

Dear Mr. Dlamini

ACKNOWLEDGEMENT OF RECEIPT OF THE APPLICATION FORM FOR THE PROPOSED ESTABLISHMENT OF PHOEBUS 400/275/132KV SUBSTATION, EXTENSION OF KWAGGA SUBSTATION AND 2 X 400KV LOOP IN AND OUT APPOLLO-DINALEDI 400KV INTO PHOEBUS, GAUTENG PROVINCE

The Department confirms having received the application form for environmental authorisation of the abovementioned project on 18 May 2009. You may proceed with the scoping process required in terms of the Environmental Impact Assessment Regulations, 2006.

The application has been assigned the reference number 12/12/20/1524. Kindly quote this reference number in any future correspondence in respect of the application.

The Applicant must ensure that all requirements of Chapter II, Section 38 of the National Heritage Resources Act, Act 25 of 1999, are complied with in this EIA process, and that the comments and /or recommendations of the relevant heritage resources authority responsible for the area in which the development is proposed, is considered.

You are hereby reminded that the activity may not commence prior to an environmental authorisation being granted by the Department.

Yours sincerely

Ms Lize McCourt Chief - Director

Department of Environmental Affairs and Tourism

Letter signed by: Mr Mogole Mphahlele

Designation: SID Officer: Environmental Impact Evaluation (National and Parastatals)

Date: 29.05.2009

Cc: Ms. Mamoloko Seabe

ESKOM Holdings Limited

Fax: 011 800 3911



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Ref: 12/12/20/1471
Enquiries: Mr. Mogole Mphahlele

Tel: 012 310 3004 Fax: 012 320 7539 Email: mlmphahlele@deat.gov.za

Mr. Zama Dlamini Savannah Environmental (Pty) Ltd P O Box 148 Sunninghill 2157

Fax No: (086) 684 0547

Dear Mr. Dlamini

ACKNOWLEDGEMENT OF RECEIPT OF THE APPLICATION FORM FOR THE PROPOSED PROPOSED TSHWANE STRENGTHENING PROJECT: PROPOSED KWAGGA-PHOEBUS 400KV TRANSMISSION POWERLINE, GAUTENG

The Department confirms having received the above document for the abovementioned project on 18 May 2009. You may proceed with the scoping process required in terms of the Environmental Impact Assessment Regulations, 2006.

The application has been assigned the reference number 12/12/20/1471. Kindly quote this reference number in any future correspondence in respect of the application.

The Applicant must ensure that all requirements of Chapter II, Section 38 of the National Heritage Resources Act, Act 25 of 1999, are complied with in this EIA process, and that the comments and /or recommendations of the relevant heritage resources authority responsible for the area in which the development is proposed, is considered.

You are hereby reminded that the activity may not commence prior to an environmental authorisation being granted by the Department.

Yours sincerely

Ms Nosipho Ngcaba Director – General

Department of Environmental Affairs and Tourism

Letter signed by: Mr. Mogole Mphahlele

Designation: SID's Officer: Environmental Impact Evaluation

Date: 29. 05. 2009

Cc:

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Ref: 12/12/20/1470 Enquiries: Mr. Mogole Mphahlele

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Mr. Zama Dlamini Savannah Environmental (Pty) Ltd P. O Box 148 Sunninghill Johannesburg 2157

Fax No: 086 684 0547

Dear Mr. Dlamini

ACKNOWLEDGEMENT OF RECEIPT OF THE APPLICATION FORM FOR THE PROPOSED CONSTRUCTION OF TSHWANE STRENGTHENING PROJECT: PROPOSED ESTABLISHMENT OF VERWOERDBURG 400/132KV SUBSTATION AND VERWOERDBURG-APOLLO 2 X 400KV LOOP IN AND OUT OF THE EXISTING APOLLO-PLUTO 400KV LINE AT VERWOERDBURG, GAUTENG PROVINCE

The Department confirms having received the application form for environmental authorisation of the abovementioned project on 18 May 2009. You may proceed with the scoping process required in terms of the Environmental Impact Assessment Regulations, 2006.

The application has been assigned the reference number 12/12/20/1470. Kindly quote this reference number in any future correspondence in respect of the application.

The Applicant must ensure that all requirements of Chapter II, Section 38 of the National Heritage Resources Act, Act 25 of 1999, are complied with in this EIA process, and that the comments and /or recommendations of the relevant heritage resources authority responsible for the area in which the development is proposed, is considered.

You are hereby reminded that the activity may not commence prior to an environmental authorisation being granted by the Department.

Yours sincerely

Ms Nosipho Ngcaba Director – General

Department of Environmental Affairs and Tourism

Letter signed by: Mr Mogole Mphahlele

Designation: SID Officer: Environmental Impact Evaluation (National and Parastatals)

Date: 29.05. 2009

Cc: Ms. Mamoloko Seabe

ESKOM Holdings Limited

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Private Bag X 447: PRETORIA - 0001: Fedsure Building - 315 Pretorius Street - PRETORIA Tel (+ 27 12) 310 3911 - Fax (+ 2712) 322 2682

Ref: 12/12/20/1470 Enquiries: Mr. Mogole Mphahlele

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Mr. Zama Dlamini Savannah Environmental (Pty) Ltd P.O. Box 148 Sunninghill Johannesburg 2157

Fax: 086 684 0547

Dear Mr. Dlamini

ACCEPTANCE OF THE FINAL SCOPING REPORT AND PLAN OF STUDY FOR EIA: PROPOSED EXTENSION/UPGRADE OF THE VERWOERDBURG 400/132kV SUBSTATION AND CONSTRUCTION OF 2 x 400kV NEW LOOP IN LINES FROM THE APOLLO-PLUTO TRANSMISSION LINES TO FEED INTO THE VERWOERDBURG SUBSTATION, GAUTENG

The above document dated September 2009 and received by the Department on 23 September 2009 refers.

The Department has evaluated the submitted Final Scoping Report (FSR) dated September 2009 and is satisfied that the FSR complies with the minimum requirements of the Environmental Impact Assessment (EIA) Regulations, 2006. The FSR is hereby accepted by the Department in terms of GN R.385 (31) (1) (a) of the EIA Regulations, 2006.

The following comments and recommendations on the FSR submitted by the departmental Bio-diversity section must also be noted:

- TOPS listed species have to be identified and their possible occurrence verified; and
- b) SANBI is making species databases and biodiversity planning tools available to consultants free of charge, on condition that there is an exchange of information once the site visits have confirmed data. This is part of the programme to make information available through GBIF as part of South Africa's responsibility to this convention and the CBD. The exchange of data between SANBI and the ecological consultant, once site visits have occurred and point data for species have been collected is therefore recommended.

You may proceed with the environmental impact assessment process in accordance with the tasks contemplated in the plan of study for environmental impact assessment as required in terms of the EIA Regulations, 2006.

Please ensure that comments from all relevant authorities are submitted to the Department with the Final Environmental Impact Report. This includes but is not limited to *inter alia* input from the Gauteng Department of Agriculture and Rural Development (GDA&RD).

.(gg-sg) (3g-3g). submitted to the competent authority for decision-making. The reports referred to are listed in GN R. (59) with regard to the allowance of a comment period for interested and affected parties on all reports time period allowed for complying with the requirements of the Regulations, and GN R. 385 (58) and The applicant is hereby reminded to comply with the requirements of GN R.385 (77) with regard to the

Chapter II, Section 38 (8) of the National Heritage Resources Act, Act 25 of 1999. that the application fulfils the requirements of the relevant heritage resources authority as described in Environmental Authorisation pending a letter from the pertinent heritage authority categorically stating this Department will not be able to make nor issue a decision in terms of your application for the provisions of Chapter II, Section 38 of the National Heritage Resources Act, Act 25 of 1999, then Further, it must be reiterated that, should an application for Environmental Authorisation be subject to

being granted by the Department. You are hereby reminded that the activity may not commence prior to an environmental authorisation

Yours Sincerely

Ms Lize McCourt

Department of Environmental Affaira Chief Director: Environmental impact Management

Letter signed by: Mr Dumisane Mthembu

Designation: Director: EIE



DEPARTMENT OF AGRICULTURE AND RURAL DEVELOPMENT

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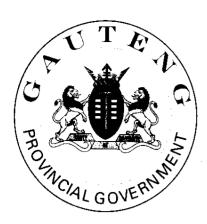
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FAX COVER SHEET

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Re:	GAUT:004/09-10/0017 COMMENTS ON THE SCOPING REPORT AND I STRENGTHENING PROJECT PHASE 1, GAUTEN kV LOOP IN POWER LINES AND UPGRAD (RIETVLEI) SUBSTATION	G PROVINCE:	APOLLO-VERWOERDBURG, 2 X 400		

СС	Savannah Environmental (Pty) Ltd	Attn: Tel: Fax:	Zama Dlamini (011) 234 6621 (086) 684 0547
	CTMM: Open Space Management Section	Attn: Tel: Fax:	Rudzani Mukheli (012) 358 8731 (012) 358 8934
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The Director General

Department of Environmental Affairs Environmental Impact Management Private Bag X 447 Pretoria 0001

Attn: Portia Mashego Tel: (012) 310 3249 Fax: (012) 320 7539

Dear Madam

COMMENTS ON THE SCOPING REPORT AND PLAN OF STUDY FOR THE PROPOSED TSHWANE STRENGTHENING PROJECT PHASE 1, GAUTENG PROVINCE: APOLLO-VERWOERDBURG, 2 X 400kV LOOP IN POWER LINES AND UPGRADE OF VERWOERDBURG (RIETVLEI) SUBSTATION

The abovementioned matter refers.

A. Background

The Department received a copy of the scoping report and plan of study dated September 2009, for the proposed construction of the Tshwane Strengthening Project Phase 1. The proposed activity entails the following:

- The extension and upgrade of the existing Verwoerdburg Substation.
- Construction of 2 x 400kV loop in-lines from the existing Apollo-Pluto transmission line which will feed into the Verwoerburg Substation covering a distance of approximately 4km.
- Construction of the new Phoebus transmission Substation adjacent to Hangklip Substation.
- Construction of 400kV loop in lines to feed the proposed new Phoebus Substation from the existing Apollo-Dinaledi transmission power line covering a distance of approximately 1 km.
- Construction of a new 400kV transmission power line between the Phoebus Substation and the Kwagga Substation, a distance of approximately 30 km.
- Associated infrastructure works to integrate the new transmission power lines and substation
 into the transmission grid (such as access roads, communication tower, etc) and accommodate
 the new lines at existing substations (such as the construction of new feeder bays within the
 existing substations sites).

The total distance for the new transmission power line proposed as part of the project is approximately 36km.

This Department has reviewed the scoping report and plan of study for proposed project and herewith comments and recommendations.

SPECIFIC COMMENTS / RECOMMENDATIONS

- 1. The construction and maintenance of the proposed substations, transmission power lines and associated infrastructures could lead to localised impacts, mostly along the servitude and safety impacts on the surrounding communities. These impacts must be identified and addressed.
- 2. The suitability of the site for construction of a substation should be considered as the area is underlain by dolomite.
- 3. The proposed preferred alternative site locations described in the scoping report is supported by this Department on the basis of its limited impact on the environment.
- 4. Based on the Departmental data base and in the contents of the scoping report, the Department noted that the proposed project has a potential to impact on the rivers and ridges associated with the routes of the proposed power lines and this should be considered when mitigation measures are investigated.
- 5. A Visual Impact should be assessed and results submitted with the EIA report in order to determine the specific visual impact of the proposed activity.
- 6. In the Comments & Response Report the original list of I&APs indicating their signatures of attendance must be attached.

B. Conclusion

Based on the information submitted, the Department is of the opinion that the scoping report and plan of study for EIA for the proposed Project are adequate to proceed to EIAR phase.

If you have any queries concerning this issue please feel free to contact the relevant official at the number given above.

Dr. S. T. Cornelius

Head: Agriculture and Rural Development

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Date: 12102/2010