



## environmental affairs

Department:  
Environmental Affairs  
REPUBLIC OF SOUTH AFRICA

### APPLICATION FORM FOR ENVIRONMENTAL AUTHORISATION

	(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, 1998 (Act No. 107 of 1998), (the Act) and the Environmental Impact Assessment Regulations, 2014 the Regulations

#### PROJECT TITLE

Basic Assessment for Proposed Eskom Battery Storage System at Paleisheuvel Substation, Paleisheuvel, West Coast, Western Cape

#### Kindly note that:

1. This application form is current as of 08 December 2014. It is the responsibility of the applicant to ascertain whether subsequent versions of the form have been published or produced by the competent authority.
2. The application must be typed within the spaces provided in the form. The sizes of the spaces provided are not necessarily indicative of the amount of information to be provided. Spaces are provided in tabular format and will extend automatically when each space is filled with typing.
3. Where applicable **black out** the boxes that are not applicable in the form.
4. The use of the phrase "not applicable" in the form must be done with circumspection. Should it be done in respect of material information required by the competent authority for assessing the application, it may result in the rejection of the application as provided for in the Regulations.
5. This application must be handed in at the offices of the relevant competent authority as determined by the Act and Regulations.
6. No faxed or e-mailed applications will be accepted. An electronic copy of the signed application form must be submitted together with two hardcopies (one of which must contain the original signatures).
7. Unless protected by law, all information filled in on this application form will become public information on receipt by the competent authority. Any interested and affected party should and shall be provided with the information contained in this application on request, during any stage of the application process.
8. Should a specialist report or report on a specialised process be submitted at any stage for any part of this application, the terms of reference for such report and declaration of interest of the specialist must also be submitted.

9. Proof of payment must accompany this application. The application will not be processed without proof of payment unless one of the exclusions provided for the Fee Regulations (Fees for consideration and processing of applications for environmental authorisations and amendments thereto Government Notice No.141, published on 28 February 2014) is applicable AND such information in section 1 of this application form has been confirmed by this Department.

**Departmental Details**

**The application must be addressed to the Chief Directorate: Integrated Environmental Authorisations at:**

<p><b>Postal address:</b> Department of Environmental Affairs Attention: Director: Integrated Environmental Authorisations Private Bag X447 Pretoria 0001</p> <p><b>Physical address:</b> Department of Environmental Affairs Attention: Director: Integrated Environmental Authorisations Environment House 473 Steve Biko Road Arcadia Pretoria</p> <p>Queries must be addressed to the contact below:</p> <p>Tel: 012 399 9372 E-mail: <a href="mailto:EIAAdmin@environment.gov.za">EIAAdmin@environment.gov.za</a></p> <p><b><i>Please note that this form <u>must</u> be copied to the relevant provincial environmental department/s.</i></b></p>
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View the Department's website at <http://www.environment.gov.za/> for the latest version of the documents.

1. **PROOF OF PAYMENT**

Applicants are required to tick the appropriate box below to indicate that either proof of payment is attached or that, in the applicant's view, an exclusion applies. Proof and a motivation for exclusions must be attached to this application form in **Appendix 1**.

Proof of payment attached as **Appendix 1**

Exclusion applies

An applicant is excluded from paying fees if:

The activity is a community based project funded by a government grant; or  
The applicant is an organ of state.

TYPE OF EXCLUSION	Tick where applicable. Proper motivation must be attached to the application
The activity is a community based project funded by a government grant	
The applicant is an organ of state	X

FEE AMOUNT	Fee
Application for an environmental authorisation for which basic assessment is required in terms of the Environmental Impact Assessment Regulations	R2 000
Application for an environmental authorisation, for which S&EIR is required in terms of the Environmental Impact Assessment Regulations	R10 000

Department of Environmental Affairs' details for the payment of application fees:

<p>Payment Enquiries: Tel: 012 399 9119 Email: <a href="mailto:eiafee@environment.gov.za">eiafee@environment.gov.za</a></p> <p>Banking details: ABSA Bank Branch code: 632005 Account number: 1044 2400 72 Current account Reference number : Reference number to be provided in the specific format indicating centre point coordinates of site in decimal degrees to 5 or 6 decimal places: latitude/longitude eg. -33.918861/18.423300</p> <p>Proof of payment must accompany the application form: Indicate reference number below.</p> <p>Tax exemption status: Status: Tax exempted</p> <p>Reference number: .....</p>
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## 2. PROJECT DESCRIPTION

Please provide a **detailed** description of the project.

Eskom Holdings SOC Limited (Eskom) proposes installing Battery Energy Storage Systems (BESSs) at various (existing) distribution substations throughout South Africa to:

- Strengthen the electricity distribution network and address current voltage and capacity constraints;
- Integrate a greater amount of renewable energy [in this case from the Paleisheuvel Solar Photovoltaic (PV) Plant] into the electricity grid; and
- Reduce the requirement for investment in new conventional generation capacity (i.e. gas, nuclear, coal) and new distribution substations and powerlines to strengthen networks.

The BESS will strengthen the electricity distribution network from the Paleisheuvel Solar PV Plant to the West Coast area, and make the electricity generated by renewable energy dispatchable .

SRK Consulting (South Africa) (Pty) Ltd (SRK) was appointed by Eskom to undertake the Basic Assessment (BA) processes for the proposed BESSs at the Paleisheuvel Substation and the Skaapvlei Substation along the West Coast in the Western Cape.

The subject of this Basic Assessment Report (BAR) is the proposed installation of a new BESS at the Paleisheuvel Substation (“the project”, refer to Appendix 6). A separate BAR and EA application has been compiled for the proposed BESS at the Skaapvlei Substation.

The following criteria were considered in the selection of suitable sites for the BESS:

The following criteria were considered in the selection of suitable sites for the BESS:

- Proximity of BESS to existing or confirmed future renewable energy generators<sup>1</sup>. The following renewable energy sources were identified in the West Coast area:
  - Electra 75 MW Photovoltaic (PV) facility (Paleisheuvel);
  - Aurora 9 MW PV facility (Vredelus);
  - Sere 100 MW WEF (Skaapvlei); and
  - Kerschbosch 65 MW WEF (Hopefield).
- Situations where the distribution network in the West Coast area will see notable benefits from the introduction of BESS:
  - Reduction in electricity supply losses;
  - Peak load reduction on critically loaded network components;
  - Peak load reduction allowing for deferment of capital investment;
  - Reduction in loading / congestion of upstream High Voltage networks;
  - Improvement of local network attributes and quality of supply; and
  - Peak load reduction where the peak load is concurrent with national system peak (i.e. winter evenings).

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<sup>1</sup> The World Bank requested that sites be identified where the batteries can be charged by renewable projects.

- Availability of sufficient Medium Voltage connection capacity for the BESS; and
- Availability of sufficient space at the substation for installation of the BESS containers.

### **Technology Alternatives**

Eskom is considering two BESS technology alternatives for battery storage:

- Self-contained (solid state) batteries; and
- Flow batteries.

A single battery technology or combination thereof<sup>2</sup> will be implemented at Paleisheuvel. The chemical composition of the BESS can be hazardous (typically comprised of a blend of one or more of the hazardous substances listed in SANS 10234), and the batteries will therefore be stored in intermodal containers (or similar) in a bunded area. The design capacity of the BESS to store dangerous goods will not exceed 500 m<sup>3</sup>.

### **Self-contained Batteries**

Self-contained (solid state) batteries are suitable to many applications and create a robust and adaptable energy grid. Self-contained battery cells typically consist of a graphite anode, metal-oxide cathode, and an electrolyte gel packaged in a flat pouch or rolled up like a jelly-roll. The electrolyte typically consists of a mixture of any of the following materials: lithium nickel cobalt aluminium oxide, lithium nickel manganese cobalt oxide, lithium nickel manganese oxide or lithium cobalt oxide. Sealed thermal management systems within the batteries contain coolants and refrigerants (ethylene glycol and tetrafluoroethane). Solid state batteries contain either liquid, gel or solid state electrolytes.

Battery cells are integrated into battery modules, which are installed in standard racks similar to those used for telecommunication equipment (refer to Figure 2-1 below). Typically, the racks are then installed in a specially prepared shipping container to function as an integrated battery system (refer to Figure 2-2 below) (Platte River Power Authority, 2017).

Solid State batteries are suitable for energy storage applications with power ratings from 10's of kW to 10's of MW with storage durations between minutes to several hours.

As a worst-case scenario, the total footprint of each container will be ~63 m<sup>2</sup>. This consists of the footprint of the container (~30m<sup>2</sup>) and spacing between each container to adhere to safety requirements (~33 m<sup>2</sup>).

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<sup>2</sup> For the purposes of impact assessment, SRK has assessed the impacts based on a single battery technology.



 **srk consulting**

**PALEISHEUWEL BATTERY STORAGE**  
Battery cells in battery module

Project No. 533767

**Figure 2-1: Battery cells in a battery module**

Source: [Engadget.com](http://Engadget.com)



 **srk consulting**

**PALEISHEUWEL BATTERY STORAGE**  
Integrated self-contained battery system

Project No. 533767

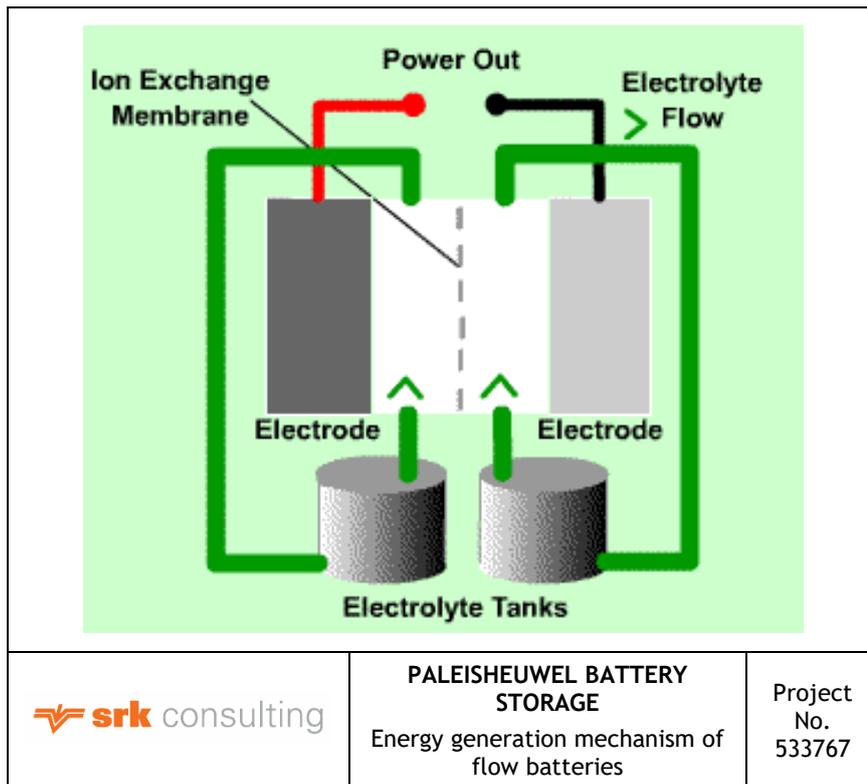
**Figure 2-2: Integrated self-contained battery system**

Source: [Insideevs.com](http://Insideevs.com)

**Flow Batteries**

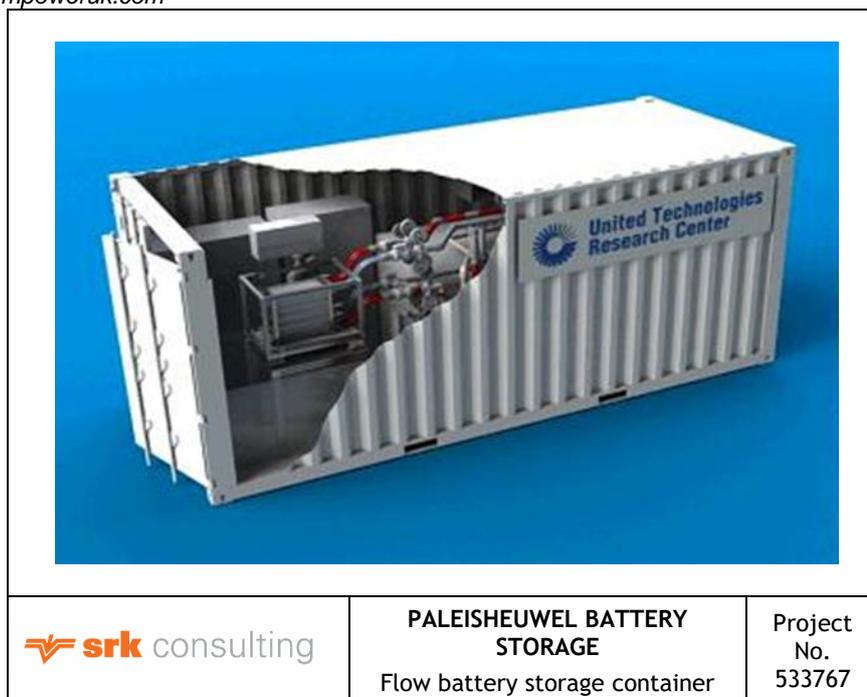
Flow batteries are suitable for energy storage applications with power ratings from 10's of kW to 10's of MW with storage durations between 2-10 hours. All flow batteries share the common topology of a battery cell with flowable electrolyte pumped between storage tanks (refer to Figure 2-3 below). Electrolyte is pumped through the cell for charging or discharging and is stored in separate tanks for longer duration storage. The electrolyte storage tanks and cells may be installed in specially prepared shipping containers (refer to Figure 2-3 and Figure 2-4). The containers typically have secondary and tertiary containment for the electrolyte fluid (Platte River Power Authority,

2017).



**Figure 2-3: Energy generation mechanism of flow batteries**

Source: [mpoweruk.com](http://mpoweruk.com)



**Figure 2-4: Flow battery storage container**

Source: *Renewable Energy Focus*

**Location / Site Alternatives**

A number of site locations were screened out by Eskom – see above for a detailed discussion regarding the criteria that were considered in the selection of suitable sites for the BESS. Eskom proposes to install a BESS at the existing Paleisheuvel Substation primarily because of:

1. Location – the BESS will be located within the Paleisheuvel Substation adjacent to the Paleisheuvel Solar PV Plant; and
2. Land Ownership - Eskom owns the property and therefore does not need to acquire new land, reducing the cost of connection to evacuate into the grid.

Location / site alternatives have thus not been considered for further assessment.

However, the EAP and a vegetation specialist considered the location of the proposed BESS footprint adjacent to the Paleisheuvel Substation and did not identify any environmental constraints or specific areas of high sensitivity.

Does the project form part of any of the Strategic Infrastructure Projects (SIPs) as described in the National Development Plan, 2011?	YES	NO
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If YES, please indicate which SIPs are applicable in **Appendix 2**. You are also required to provide confirmation of SIP applications from the relevant sector representative which must be attached in **Appendix 2**

Please indicate which sector the project falls under by crossing out the relevant block in the table below:

**Table 1**

Green economy + “Green” and energy-saving industries		Greenfield transformation to urban or industrial form (including mining)	
Infrastructure – electricity (generation, transmission & distribution)	X	Biodiversity or sensitive area related activities	
Oil and gas		Mining value chain	
Biofuels		Potential of metal fabrication capital & transport equipment – arising from large public investments	
Nuclear		Boat building	
Basic services (local government) – electricity and electrification		Manufacturing – automotive products and components, and medium and heavy commercial vehicles	
Basic services (local government) – area lighting		Manufacturing – plastics, pharmaceuticals and chemicals	
Infrastructure – transport (ports, rail and road)		Manufacturing – clothing textiles, footwear and leather	
Basic services (local government access roads)		Forestry, paper, pulp and furniture	
Basic services (local government) – public transport		Business process servicing	
Infrastructure – water (bulk and reticulation)		Advanced materials	
Basic services (local government) – sanitation		Aerospace	
Basic services (local government) – waste management		Basic services (local government) – education	
Basic services (local government) water		Basic services (local government) – health	
Agricultural value chain + agro-processing (linked to food security and food pricing imperatives)		Basic services (local government) - housing	

Infrastructure – information and communication technology		Basic services (local government) security of tenure	
Tourism + strengthening linkages between cultural industries and tourism		Other	
Basic services (local government) – public open spaces and recreational facilities			

**Table 2**

Does the listed activity/ies applied for form part of a larger project which is not a listed activity itself e.g. a road that is a listed activity that is needed to access a drilling site where the drilling does not constitute a listed activity.	YES	NO
If indicated yes above, please provide a brief description on how the activity/ies relate to the larger project that forms part there of: N/A		

### 3. GENERAL INFORMATION

Applicant name:	Eskom Holdings SOC Limited		
Registration number (if applicant is a company)	Reg No 2002/015527/30		
Trading name (if any)	Eskom		
Responsible person name (If the applicant is a company):	Justine Wyngaardt		
Applicant/ Responsible person ID number:	8109250099083		
Responsible position, e.g. Director, CEO, etc.:	Environmental Manager		
Physical address:	Eskom Road, Protea Heights, Brackenfell		
Postal address:	PO Box 222, Brackenfell		
Postal code:	7560	Cell:	082 938 3479
Telephone:	021 980 3112	Fax:	021 980 3053
E-mail:	wyngaajo@eskom.co.za	BBBEE status	7

Provincial Authority:	Department of Environmental Affairs and Development Planning		
Contact person:	Adri la Meyer		
Postal address:	Private Bag X9086, Cape Town, 8000		
Postal code:	8000	Cell:	N/A
Telephone:	021 483 2887	Fax:	021 483 3016
E-mail:	Adri.LaMeyer@westerncape.gov.za		

Local municipality	Matzikamma Local Municipality		
Contact person:	Danie Lubbe (Municipal Manager)		
Postal address:	37 Church Street, Vredendal		
Postal code:	8160	Cell:	084 604 8985
Telephone:	027 201 3301	Fax:	027 213 3238
E-mail:	daniel@matzikamamun.co.za		

In instances where there is more than one local authority involved, please attach a list of those local authorities with their contact details as **Appendix 3**.

Landowner:	Eskom
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Contact person:	Justine Wyngaardt		
Postal address:	PO Box 222, Brackenfell		
Postal code:	7560	Cell:	082 938 3479
Telephone:	021 980 3112	Fax:	021 980 3053
E-mail:	wyngaajo@eskom.co.za		

In instances where there is more than one landowner, please attach a list of those landowners with their contact details as **Appendix 4**. If the applicant is not the owner or person in control of the land, proof of notice to the landowner or person in control of the land on which the activity is to be undertaken must be submitted in **Appendix 4**.

Identified Competent Authority to consider the application:	National Department of Environment, Forestry and Fisheries (DEFF)
Reason(s) in terms of S 24C of NEMA 1998 as amended	Applicant is a parastatal

#### 4. ENVIRONMENTAL ASSESSMENT PRACTITIONER (EAP) INFORMATION

EAP:	Scott Masson		
Professional affiliation/registration:	BSc. (Hons), MLA		
Contact person (if different from EAP):	N/A		
Company:	SRK Consulting (South Africa) (Pty) Ltd		
Physical address:	The Administrative Building, Albion Springs, 183 Main Road, Rondebosch		
Postal address:	Postnet Suite #206, P. Bag x18, Rondebosch		
Postal code:	7700	Cell:	072 134 6897
Telephone:	021 659 3060	Fax:	086 530 7003
E-mail:	smasson@srk.co.za		

If an EAP has not been appointed please ensure that an independent EAP is appointed as stipulated by Regulation 12 of GN R.982, dated December 2014, prior to the commencement of the process. The declaration of independence and the Curriculum Vitae (indicating the experience with environmental impact assessment and the relevant application processes) of the EAP must also be submitted to the Department.

#### 5. SITE DESCRIPTION

Provide a detailed description of the site involved in the application.

Province	Western Cape
District Municipality	West Coast District Municipality.
Local Municipality	Cederberg Local Municipality
Ward number(s)	Ward 4
Nearest town(s)	Piketberg
Farm name(s) and number(s)	N/A
Portion number(s)	Erf 10/400, Clanwilliam SG Region

SG 21 Digit Code(s)

(If there are more than 4, please attach a list with the rest of the codes as **Appendix 5**)

C	0	2	0	0	0	0	0	0	0	0	0	0	4						
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1	2	3	4	5															

Are there any other applications for Environmental Authorisation on the same property?		YES	NO
If YES, please indicate the following:			
Competent Authority	N/A		
Reference Number	N/A		
Project Name	N/A		
Please provide details of the steps taken to ascertain this information: Confirmation was obtained from the landowner (Eskom).			

## 6. ACTIVITIES TO BE AUTHORISED

For an application for authorisation that involves more than one listed activity that, together, make up one development proposal, all the listed activities pertaining to this application must be indicated.

<b>Detailed</b> description of listed activities associated with the project	
Listed activity as described in GN R 983, 984 and 985	Description of project activity that triggers listed activity
<b>e.g. GN R.983 Item XX(x): The development of bridge exceeding 100 square metres in size within a watercourse</b>	<b>e.g. A bridge measuring 110 square metres will be constructed within the watercourse</b>
<b>GN R 983, Activity 14:</b> The development and related operation of facilities or infrastructure, for the storage, or for the storage and handling, of a dangerous good, where such storage occurs in containers with a combined capacity of 80 cubic metres or more but not exceeding 500 cubic metres.	The capacity of the battery storage container will be greater than 80 but less than 500 m <sup>3</sup> .

Please note that any authorisation that may result from this application will only cover activities specifically applied for. Co-ordinate points indicating the location of each listed activity must be provided with the relevant report (i.e. either BAR or EIR).

Please provide a project map indicating any sensitive areas (e.g. critical biodiversity area, World Heritage Site, etc.) overlaid by the study area in **Appendix 6**.

A project schedule, indicating the different phases and timelines of the project, must be attached as **Appendix 7**.

## 7. PUBLIC PARTICIPATION

Provide details of the public participation process proposed for the application as required by Regulation 41(2) of GN R .982, dated December 2014.

### **Newspaper Advertisements and Posters**

A newspaper advertisement announcing the commencement of the BA process, the availability of the BAR and inviting IAPs to register on the project database was placed in Die Weslander on 29 August 2019.

In addition to the advertisement, an A2 poster was placed at the entrance to the Paleisheuwel Substation. These posters contained brief details of the proposed project and process and the contact details of the consultant.

### **Identification of Key Stakeholders and IAPs**

Relevant IAPs from local, provincial and national authorities, conservation bodies, Non-Governmental Organisations (NGO) groups, local businesses and forums and surrounding land owners and occupants were considered for inclusion in the initial notification of the project and BA process. Relevant authorities were automatically registered as IAPs.

As specified in GN R 982, authorities and all persons who submit written comments or request in writing to be placed on the register will be registered as IAPs.

### **Notification of BAR for Public Comment**

Identified stakeholders have been notified of the release of the draft BAR for public review. Notification letters have been posted, faxed or e-mailed to all registered IAPs. Stakeholders will be afforded a 30-day comment period, ending on 28 September 2019.

Hard copies of the draft BAR are available for public review at the following venues:

- Redelinghuys and Piketberg Public Libraries; and
- SRK's office in Rondebosch, Cape Town.

The report is also accessible as an electronic copy on SRK's website [www.srk.co.za](http://www.srk.co.za) (via the "library" and then "public documents" links). A copy (either hardcopy or electronic) of the draft BAR / EMPr has been made available to each of the following authorities, to facilitate comment:

- DEFF;
- Department of Environmental Affairs & Development Planning (DEA&DP);
- Western Cape Department of Agriculture;
- CapeNature;
- WCDM; and
- MLM.

DEFF was notified that the reports were sent to the organs of state listed above to request their comment. Proof of notifications will be provided to DEFF in the Final BAR.

## **8. OTHER AUTHORISATIONS REQUIRED**

<b>LEGISLATION</b>	<b>AUTHORISATION REQUIRED</b>		<b>APPLICATION SUBMITTED</b>	
<b>SEMA's</b>				
National Environmental Management: Air Quality Act	YES	NO	YES	NO

National Environmental Management: Biodiversity Act	YES <sup>3</sup>	NO	YES	NO
National Environmental Management: Integrated Coastal Management Act	YES	NO	YES	NO
National Environmental Management: Protected Areas Act	YES	NO	YES	NO
National Environmental Management: Waste Act	YES	NO	YES	NO
<b>National legislation</b>				
Mineral Petroleum Development Resources Act	YES	NO	YES	NO
National Water Act	YES	NO	YES	NO
National Heritage Resources Act	YES	NO	YES	NO
Others: Please specify	YES	NO	YES	NO

If authorisation is necessary in terms of the National Environmental Management: Waste Act, please contact the Department for guidance on the **Integrated Permitting System**.

## 9. LIST OF APPENDICES

		SUBMITTED	
Appendix 1	Motivation for Fee Exemption	YES	N/A
Appendix 2	Strategic Infrastructure Projects	YES	N/A
Appendix 3	List of Local Municipalities (with contact details)	YES	N/A
Appendix 4	List of land owners (with contact details) and proof of notification of land owners.	YES	N/A
Appendix 5	List of SGIDs	YES	N/A
Appendix 6	Project map	YES	NO
Appendix 7	Project schedule	YES	N/A
Appendix 8	Declaration of Applicant	YES	NO
Appendix 9	Declaration of EAP	YES	NO

<sup>3</sup> Four species protected in terms of the Western Cape Nature Conservation Laws Amendment Act (2000) were recorded on site and will require permits from CapeNature for removal.



**APPENDIX 1**  
**PROOF OF PAYMENT/ MOTIVATION FOR EXCLUSION**





28 August 2019  
533767

Chief Directorate: Integrated Environmental Authorisations  
Department of Environmental Affairs  
Private Bag X447  
Pretoria  
0001

### Attention: Director: Integrated Environmental Authorisations

## MOTIVATION FOR EXEMPTION FROM PAYMENT OF ENVIRONMENTAL AUTHORISATION APPLICATION FEE

Eskom Holdings SOC Limited (Eskom) proposes to install Battery Energy Storage Systems (BESSs) at various (existing) distribution substations throughout South Africa to:

- Strengthen the electricity distribution network and address current voltage and capacity constraints;
- Integrate a greater amount of renewable energy [in this case Sere Wind Energy Facility (WEF)] into the electricity grid; and
- Reduce the requirement for investment in new conventional generation capacity (i.e. gas, nuclear, coal) and new distribution substations and powerlines to strengthen networks.

The BESS project will strengthen the electricity distribution network from Sere WEF to the West Coast area, and make the generated electricity dispatchable.

SRK Consulting (South Africa) (Pty) Ltd (SRK) has been appointed by Eskom to undertake the Basic Assessment (BA) processes for the proposed BESSs at the Paleisheuwel Substation and the Skaapvlei Substation along the West Coast in the Western Cape.

As the applicant is a state-owned enterprise, we understand that Eskom is exempt from paying the fee for the Environmental Authorisation application.

**Partners** R. Armstrong, S. Bartels, N. Brien, JM. Brown, CD. Dalglish, BM. Engelsman, R. Gardiner, M. Hinsch, W. Jordaan, WC. Joughin, DA. Kilian, S. Kisten, F. Lake, JA. Lake, V. Maharaj, I. Mahomed, HAC. Meintjes, MJ. Morris, GP. Nel, VS. Reddy, T. Shepherd, PJ. Shepherd, MJ. Sim, VM. Simposya, JS. Stiff, AT. van Zyl, MD. Wanless, ML. Wertz, A. Wood

**Directors** AJ. Barrett, CD. Dalglish, WC. Joughin, V. Maharaj, VS. Reddy, PE. Schmidt, PJ. Shepherd

**Associate Partners** PJ. Aucamp, CM. Bauman, LSE. Coetser, M. du Toit, SG. Jones, L. Linzer, JI. Mainama, L. Nedeljkovic, RD. O'Brien, S. Reuther, M. van Huyssteen, D. Visser

**Consultants** JR. Dixon, PrEng, GC. Howell, PrEng, PhD, PR. Labrum, PrEng, RRW. McNeill, PrTech Eng, PN. Rosewame, PrSci Nat, MSc, AA. Smithen, PrEng, TR. Stacey, PrEng, DSc, PJ. Terbrugge, PrSci Nat, MSc, HFJ. Theart, PrSci Nat, PhD, DJ. Venter, PrTech Eng

#### African Offices:

Cape Town	+ 27 (0) 21 659 3060
Durban	+ 27 (0) 31 279 1200
East London	+ 27 (0) 43 748 6292
Johannesburg	+ 27 (0) 11 441 1111
Pietermaritzburg	+ 27 (0) 33 347 5069
Port Elizabeth	+ 27 (0) 41 509 4800
Pretoria	+ 27 (0) 12 361 9821
Accra	+ 23 (3) 24 485 0928
Lubumbashi	+ 243 (0) 81 999 9775

#### Group Offices:

Africa  
Asia  
Australia  
Europe  
North America  
South America



Yours faithfully,

**SRK Consulting (South Africa) (Pty) Ltd**

SRK Consulting - Certified Electronic Signature



533767/43698/Letter

6916-8920-1214-HILL-23/08/2019

This signature has been printed digitally. The Author has given permission for its use for this document. The details are stored in the SRK Signature Database

Amy Hill

Environmental Consultant

**APPENDIX 2  
STRATEGIC INFRASTRUCTURE PROJECTS**

N/A

**APPENDIX 3 (IF APPLICABLE)  
LIST OF LOCAL MUNICIPALITIES**

N/A

**APPENDIX 4  
LIST OF LAND OWNERS  
PROOF OF NOTIFICATION OF LAND OWNERS**

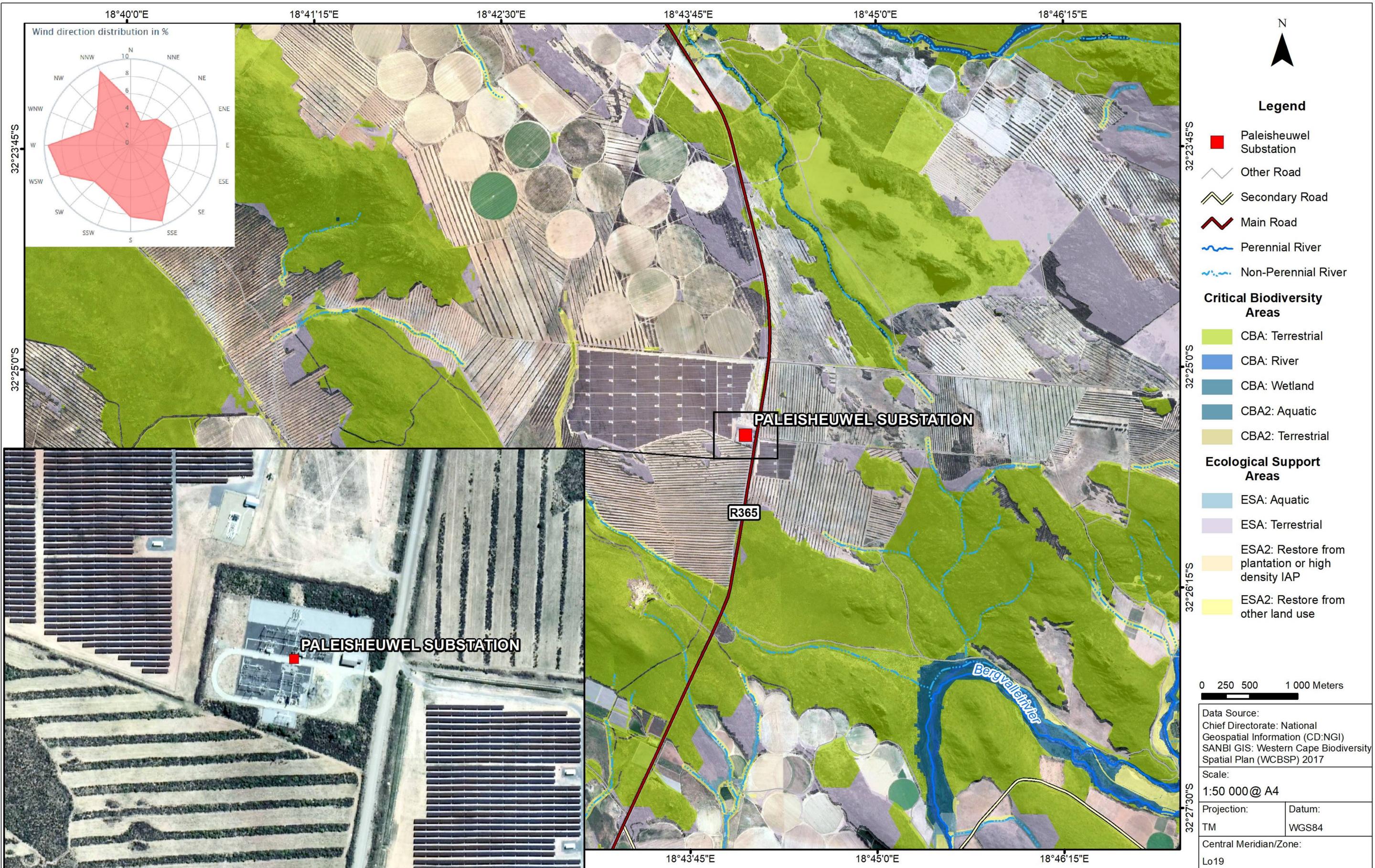
N/A

**APPENDIX 5 (IF APPLICABLE)  
LIST OF SGIDS**

N/A

**APPENDIX 6  
PROJECT MAP**





# ESKOM BATTERY STORAGE BA: PALEISHEUWEL

## LOCALITY MAP



**APPENDIX 7  
PROJECT SCHEDULE**



ID	Task Name	Duration	Start	Finish	Predecessors	June 2018	July 2018	August 2018	September 2018	October 2018	November 2018	December 2018	January 2019	February 2019	March 2019	April 2019	May 2019	June 2019	July 2019	August 2019	September 2019	October 2019	November 2019	December 2019	January 2020	February 2020	March 2020	April 2020					
1	<b>Eskom Battery Storage BA</b>	<b>300 days</b>	<b>Mon 18/06/18</b>	<b>Sat 13/04/19</b>		[Gantt bar from Mon 18/06/18 to Sat 13/04/19]																											
2	<b>Pre-Application</b>	<b>424 days</b>	<b>Fri 22/06/18</b>	<b>Mon 19/08/19</b>		[Gantt bar from Fri 22/06/18 to Mon 19/08/19]																											
3	Appointment	1 day	Fri 22/06/18	Fri 22/06/18		[Task bar]																											
4	Kick-off meeting	1 day	Tue 10/07/18	Tue 10/07/18	3	[Task bar]																											
5	Site Inspection	2 days	Tue 26/06/18	Wed 27/06/18	3FS+3 days	[Task bar]																											
6	<i>Eskom provides initial project information</i>	7 days	Thu 28/06/18	Wed 04/07/18	5	[Task bar]																											
7	Review Available Information	5 days	Thu 05/07/18	Mon 09/07/18	6	[Task bar]																											
8	Compile specialist ToR and appoint specialists	2 days	Thu 05/07/18	Fri 06/07/18	6	[Task bar]																											
9	Specialist studies	14 days	Sat 07/07/18	Fri 20/07/18	8	[Task bar]																											
10	Review draft specialist studies	5 days	Sat 21/07/18	Wed 25/07/18	9	[Task bar]																											
11	Specialists finalise studies	5 days	Thu 26/07/18	Mon 30/07/18	10	[Task bar]																											
12	Submit DEA Request for Pre-Application Meeting	1 day	Tue 16/10/18	Tue 16/10/18																													
13	Approval of Modification (VO) 1	1 day	Tue 06/11/18	Tue 06/11/18																													
14	EAP meeting with DEA	1 day	Wed 07/11/18	Wed 07/11/18	13	[Task bar]																											
15	Apply to DEA for combined application	2 days	Thu 17/01/19	Fri 18/01/19	14	[Task bar]																											
16	<i>Confirmation of scope (listed activities and sites to be assessed)</i>	160 days	Thu 08/11/18	Tue 16/04/19	13	[Task bar]																											
17	Draft EMPr submitted to Eskom	1 day	Wed 10/04/19	Wed 10/04/19																													
18	Submit NID to HWC	1 day	Mon 15/04/19	Mon 15/04/19																													
19	Compile BARs and EMPs	44 days	Wed 17/04/19	Thu 30/05/19	16	[Task bar]																											
20	<i>Eskom review of SWMPs</i>	7 days	Tue 14/05/19	Mon 20/05/19																													
21	Finalise SWMPs	7 days	Tue 21/05/19	Mon 27/05/19	20	[Task bar]																											
22	<i>Eskom provide risk assessment</i>	1 day	Wed 29/05/19	Wed 29/05/19																													
23	<i>Appointment of Botanist</i>	1 day	Thu 30/05/19	Thu 30/05/19																													
24	Review Botanical Specialist Study	5 days	Thu 11/07/19	Mon 15/07/19	23	[Task bar]																											
25	<i>Approval of Modification (VO) 2</i>	1 day	Fri 12/07/19	Fri 12/07/19																													
26	Finalise BARs and EMPs	31 days	Sat 13/07/19	Mon 12/08/19	25	[Task bar]																											
27	Complete EA Application Forms	5 days	Thu 08/08/19	Mon 12/08/19	26FF	[Task bar]																											
28	<i>Client review of BARs, EMPs, EA Application Forms</i>	2 days	Tue 13/08/19	Wed 14/08/19	27	[Task bar]																											
29	Compile preliminary IAP database	5 days	Tue 13/08/19	Sat 17/08/19	27	[Task bar]																											
30	Pre-application meeting with DWS	1 day	Fri 28/06/19	Fri 28/06/19																													
31	Finalise BAR, EMP and EA Application Forms	5 days	Thu 15/08/19	Mon 19/08/19	28	[Task bar]																											
32	<b>Basic Assessment Phase (max 90 calendar days)</b>	<b>93 days</b>	<b>Mon 26/08/19</b>	<b>Tue 26/11/19</b>																													
33	Submit EA Application Form to Competent Authority	2 days	Mon 26/08/19	Tue 27/08/19	31FS+6 days	[Task bar]																											
34	Advertise project, notify stakeholders and release BAR and EMP for formal public comment	1 day	Wed 28/08/19	Wed 28/08/19	33	[Task bar]																											
35	<i>Public comment period (30 calendar days)</i>	31 days	Thu 29/08/19	Sat 28/09/19	34	[Task bar]																											
36	Compile Issues and Responses Summary	3 days	Sun 29/09/19	Tue 01/10/19	35	[Task bar]																											
37	<i>Client review of Issues and Responses Summary</i>	1 day	Wed 02/10/19	Wed 02/10/19	36	[Task bar]																											
38	Finalise Issues and Responses Summary and BAR, EMP	1 day	Thu 03/10/19	Thu 03/10/19	37	[Task bar]																											
39	Submit BAR to DEA	1 day	Fri 04/10/19	Fri 04/10/19	38	[Task bar]																											
40	Submission Deadline: BAR to DEA	1 day	Tue 26/11/19	Tue 26/11/19	33FS+90 days	[Task bar]																											
41	<b>Decision and Notification</b>	<b>147 days</b>	<b>Sat 05/10/19</b>	<b>Fri 28/02/20</b>																													
42	DEA Decision (107 calendar days)	107 days	Sat 05/10/19	Sun 19/01/20	39	[Task bar]																											
43	DEA Site Visit	2 days	Fri 18/10/19	Sun 20/10/19	42SS+3 wks	[Task bar]																											
44	DEA notifies proponent	5 days	Mon 20/01/20	Fri 24/01/20	42	[Task bar]																											
45	Notify Stakeholders of Decision	14 days	Sat 25/01/20	Fri 07/02/20	44	[Task bar]																											
46	Appeal submission period (20 days from notification)	1 day	Fri 28/02/20	Fri 28/02/20	45FS+20 days	[Task bar]																											



**APPENDIX 8  
DECLARATION OF THE APPLICANT**

I, JUSTINE WYNGAERT declare that I -

- ~~am~~, or represent<sup>2</sup>, the applicant in this application;
- have appointed / ~~will appoint (delete that which is not applicable)~~ an environmental assessment practitioner to act as the independent environmental assessment practitioner for this application / ~~will obtain exemption from the requirement to obtain an environmental assessment practitioner<sup>3</sup>~~;
- will provide the environmental assessment practitioner and the competent authority with access to all information at my disposal that is relevant to the application;
- will be responsible for the costs incurred in complying with the Regulations, including but not limited to –
  - costs incurred in connection with the appointment of the environmental assessment practitioner or any person contracted by the environmental assessment practitioner;
  - costs incurred in respect of the undertaking of any process required in terms of the Regulations;
  - costs in respect of any fee prescribed by the Minister or MEC in respect of the Regulations;
  - costs in respect of specialist reviews, if the competent authority decides to recover costs; and
  - the provision of security to ensure compliance with conditions attached to an environmental authorisation, should it be required by the competent authority;
- will ensure that the environmental assessment practitioner is competent to comply with the requirements of the Regulations and will take reasonable steps to verify that the EAP
  - know the Act and the regulations, and how they apply to the proposed development
  - know any applicable guidelines
  - perform the work objectively, even if the findings do not favour the applicant
  - disclose all information which is important to the application and the proposed development
  - have expertise in conducting environmental impact assessments
  - complies with the Regulations
- will inform all registered interested and affected parties of any suspension of the application as well as of any decisions taken by the competent authority in this regard;
- am responsible for complying with the conditions of any environmental authorisation issued by the competent authority;
- hereby indemnify the Government of the Republic, the competent authority and all its officers, agents and employees, from any liability arising out of the content of any report, any procedure or any action which the applicant or environmental assessment practitioner is responsible for in terms of these Regulations;
- will not hold the competent authority responsible for any costs that may be incurred by the applicant in proceeding with an activity prior to obtaining an environmental authorisation or prior to an appeal being decided in terms of these Regulations;
- will perform all other obligations as expected from an applicant in terms of the Regulations;
- 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.

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<sup>2</sup> If this is signed on behalf of the applicant, proof of such authority from the applicant must be attached.

<sup>3</sup> If exemption is obtained from appointing an EAP, the responsibilities of an EAP will automatically apply to the person conducting the environmental impact assessment in terms of the Regulations.

  
Signature<sup>4</sup> of the applicant<sup>5</sup>/ Signature on behalf of the applicant:  
ESKOM HOLDINGS SOC  
Name of company (if applicable):  
23/08/2019  
Date:

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<sup>4</sup> Only original signatures will be accepted. No scanned, copied or faxed signatures will be accepted.  
<sup>5</sup> If the applicant is a juristic person, a signature on behalf of the applicant is required as well as proof of such authority. An EAP may not sign on behalf of an applicant.

**APPENDIX 9  
DECLARATION OF THE EAP**

I, SCOTT MASSON declare that –

General declaration:

- I act as the independent environmental practitioner 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 environmental impact assessments, 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 will take into account, to the extent possible, the matters listed in regulation 8 of the Regulations when preparing the application and any report relating to the application;
- 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;
- I will ensure that information containing all relevant facts in respect of the application is distributed or made available to interested and affected parties and the public and that participation by interested and affected parties is facilitated in such a manner that all interested and affected parties will be provided with a reasonable opportunity to participate and to provide comments on documents that are produced to support the application;
- I will ensure that the comments of all interested and affected parties are considered and recorded in reports that are submitted to the competent authority in respect of the application, provided that comments that are made by interested and affected parties in respect of a final report that will be submitted to the competent authority may be attached to the report without further amendment to the report;
- I will keep a register of all interested and affected parties that participated in a public participation process; and
- I will provide the competent authority with access to all information at my disposal regarding the application, whether such information is favourable to the applicant or not
- all the particulars furnished by me in this form are true and correct;
- will perform all other obligations as expected from an environmental assessment practitioner in terms of the Regulations; and
- I realise that a false declaration is an offence in terms of regulation 48 of the Regulations and is punishable in terms of section 24F of the Act.

**Disclosure of Vested Interest (delete whichever is not applicable)**

- I do not have and will not have any vested interest (either business, financial, personal or other) in the proposed activity proceeding other than remuneration for work performed in terms of the Regulations;
- I have a vested interest in the proposed activity proceeding, such vested interest being:

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Signature of the environmental assessment practitioner:

SRI CONSULTING (SOUTH AFRICA) (PTY) LTD

Name of company:

23/08/2019

Date: