



# forestry, fisheries & the environment

Department:  
Forestry, Fisheries and the Environment  
REPUBLIC OF SOUTH AFRICA

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**DFFE Reference:** 14/12/16/3/3/2/2529  
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Mr. Alberto Gambacorta  
Biesjesvlei 4 (Pty) Ltd  
5 Buitengracht Street  
20<sup>th</sup> Floor, Portside Building  
Cape Town City Centre  
**CAPE TOWN**  
8001

**Telephone Number:** (021) 202 1230

**Email Address:** [REDACTED]

## PER EMAIL / MAIL

Dear Mr Gambacorta

### **APPLICATION FOR ENVIRONMENTAL AUTHORISATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, ACT NO. 107 OF 1998, AS AMENDED: FOR THE DEVELOPMENT OF THE UP TO 1200MWh BIESJESVLEI BATTERY ENERGY STORAGE SYSTEM AND ASSOCIATED INFRASTRUCTURE (i.e., BIESJESVLEI BESS 2) NEAR SMITHFIELD, WITHIN THE MOHOKARE LOCAL MUNICIPALITY IN THE FREE STATE PROVINCE**

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

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

In terms of the Promotion of Administrative Justice Act, Act No. 3 of 2000, you are entitled to the right to fair, lawful, and reasonable administrative action; and to written reasons for administrative action that affects you negatively. Further, your attention is drawn to the provisions of the Protection of Personal Information Act, Act No. 4 of 2013 which stipulate that the Department should conduct itself in a responsible manner when collecting, processing, storing, and sharing an individual or another entity's personal information by holding the Department accountable should the Department abuse or compromise your personal information in any way.

Your attention is drawn to Chapter 2 of the National Environmental Management Act, Act No. 107 of 1998 National Appeal Regulations published under Government Notice R993 in Government Gazette No. 38303 dated 08 December 2014 (National Appeal Regulations, 2014) which prescribes the appeal procedure to be followed.



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The processing of personal information by the Department of Forestry, Fisheries and the Environment is done lawfully and not excessive to the purpose of processing in compliance with the POPI Act, any codes of conduct issued by the Information Regulator in terms of the POPI Act and / or relevant legislation providing appropriate security safeguards for the processing of personal information of others.

Kindly include a copy of this document (National Appeal Regulations, 2014) with the letter of notification to interested and affected parties in this matter.

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:**

The Director: Appeals and Legal Review of this Department at the below-mentioned addresses.

By email: [appeals@dffe.gov.za](mailto:appeals@dffe.gov.za)

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, Act No. 107 of 1998, as amended, 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](https://www.environment.gov.za/documents/forms#legal_authorisations) or request a copy of the documents at [appeals@dffe.gov.za](mailto:appeals@dffe.gov.za).

Yours faithfully



**Dr Sabelo Malaza**  
**Chief Director: Integrated Environmental Authorisations**  
**Department of Forestry, Fisheries and the Environment**

Date: 10/11/2024

cc:	Mr. Paul Lochner	Council for Scientific and Industrial Research (CSIR)	
	Ms. Grace Mkhosana	Free State Department of Economic, Small Business Development, Tourism and Environmental Affairs	Email: <a href="mailto:mkhosana@destea.gov.za">mkhosana@destea.gov.za</a> / <a href="mailto:mokoenad@destea.gov.za">mokoenad@destea.gov.za</a>
	Mr. MJ Kanwendo	Mohokare Local Municipality	Email: <a href="mailto:info@mohokare.gov.za">info@mohokare.gov.za</a> / <a href="mailto:kanwendoj@gmail.com">kanwendoj@gmail.com</a>

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## forestry, fisheries & the environment

Department:  
Forestry, Fisheries and the Environment  
REPUBLIC OF SOUTH AFRICA

# Environmental Authorisation

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

The development of the up to 1200MWh Biesjesvlei Battery Energy Storage System and associated infrastructure (i.e., Biesjesvlei BESS 2) near Smithfield, within the Mohokare Local Municipality, Free State Province

Xhariep District Municipality

Authorisation register number:	14/12/16/3/3/2/2529
Last amended:	First issue
Holder of authorisation:	Biesjesvlei 4 (Pty) Ltd
Location of activity:	<b><u>Biesjesvlei BESS 2 and associated infrastructure:</u></b> Farm Paalland 373 – Portion 0 <b><u>Access Road Option A:</u></b> Farm Salpetervlei 756 – Portion 0 Farm Paalland 373 – Portion 0 <b><u>Access Road Option B:</u></b> Farm Benoni 534 – Portion 0 Farm Klein Badfontein 369 – Portion 0 Farm Paalland 373 – Portion 0 <b><u>Access Road Option C:</u></b>

M.S

*Remaining Extent of Farm Biesjespoort 521 – Remaining Extent*

*Farm Benoni 534 – Portion 0*

*Farm Klein Badfontein 369– Portion 0*

*Farm Paalland 373– Portion 0*

**Intersection Widening:**

*Farm Benoni 534 – Portion 0*

*Remaining Extent of Farm Biesjespoort 521 – Remaining Extent*

*Portion 1 of Farm Biesjespoort 521 – Portion 1*

*Remaining Extent of Farm Elizabethfontein 374 -*

*Remaining Extent*

*Farm Klein Badfontein 369 – Portion 0*

*Farm Salpetervlei 756 – Portion 0*

*Remaining Extent of Klein Sevenfontein 156 –*

*Remaining Extent*

*Mohokare Local Municipality*

*Xhariep District Municipality*

*Free State Province*

This 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, Act No. 107 of 1998, as amended and the EIA Regulations, 2014, as amended.

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, Act No. 107 of 1998, as amended and the Environmental Impact Assessment Regulations, 2014, as amended, the Department hereby authorises –

### **BIESJESVLEI 4 (PTY) LTD**

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

with the following contact details –

Mr. Alberto Gambacorta  
5 Buitengracht Street  
20th Floor, Portside Building  
Cape Town City Centre

### **CAPE TOWN**

8001

Telephone Number: 021 202 1230

Email Address: 

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to undertake the following activities (hereafter referred to as "the activity") indicated in Listing Notice 1 and Listing Notice 3 of the NEMA EIA Regulations, 2014 as amended:

Activity number	Activity description
<p><u>Listing Notice 1, 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 kilovolts."</i></p>	<p>The project entails the development of a 33/88kV facility substation to connect to the Marang / Waterkloof 88kV powerline connected to the existing Eskom 400/88kV Marang MTS.</p>
<p><u>Listing Notice 1, Item 14</u></p> <p><i>"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."</i></p>	<p>The proposed facility will require the construction and operation of facilities and infrastructure for the storage and handling of dangerous goods (combustible and flammable liquids, such as oils, lubricants, solvents) associated with the substations where such storage will occur within containers with a combined capacity of 80 cubic metres or more but not exceeding 500 cubic metres.</p>
<p><u>Listing Notice 1, Item 24</u></p> <p><i>"The development of a road -</i></p> <p><i>(ii) with reserve wider than 13,5 meters, or where no reserve exists where the road is wider than 8 meters."</i></p>	<p>The proposed Sandpan BESS and associated infrastructure proposes the development of internal, access and perimeter roads with a width of up to 12m. The proposed roads will therefore exceed the threshold of this activity.</p>
<p><u>Listing Notice 1, Item 27</u></p> <p><i>"The clearance of an area of 1 hectares or more, but less than 20 hectares of indigenous vegetation."</i></p>	<p>The total area for the development will exceed 1ha for the location of the Sandpan BESS and associated infrastructure. The total development footprint will be up to 10ha.</p>
<p><u>Listing Notice 1, Item 28</u></p> <p><i>"Residential, mixed, retail, commercial, industrial or institutional developments where such land was used for agriculture, game farming, equestrian purposes or</i></p>	<p>The total area to be developed for the Sandpan BESS and associated infrastructure is greater than 1ha and occurs outside an urban area in an</p>

Activity number	Activity description
<p><i>afforestation on or after 01 April 1998 and where such development:</i></p> <p><i>(ii) will occur outside an urban area, where the total land to be developed is bigger than 1 hectare."</i></p>	<p>area currently zoned for agriculture. The total development footprint will be up to 10ha.</p>
<p><u>Listing Notice 1, Item 56</u></p> <p><i>"The widening of a road by more than 6 metres, or the lengthening of a road by more than 1 kilometre-</i></p> <p><i>(ii) where no reserve exists, where the existing road is wider than 8 metres."</i></p>	<p>The proposed Sandpan BESS and Associated Infrastructure proposes the development of internal, access and perimeter roads with a width of up to 12m. The proposed roads will therefore exceed the threshold of this activity.</p>
<p><u>Listing Notice 3, Item 4</u></p> <p><i>"The development of a road wider than 4 metres with a reserve less than 13,5 metres".</i></p> <p><i>(h) In the North West;</i></p> <p><i>(vi) Areas within 5 kilometres from protected areas identified in terms of NEMPAA or from a biosphere reserve."</i></p>	<p>The proposed Sandpan BESS and associated infrastructure proposes the development of internal, access and perimeter roads with a width up to 12m. The proposed roads will exceed the threshold of this activity. The project is located within 5km of the Magalies Biosphere Reserve transition area.</p>
<p><u>Listing Notice 3, Item 18</u></p> <p><i>"The widening of a road by more than 4 metres, or the lengthening of a road by more than 1 kilometre.</i></p> <p><i>(h) In the North West;</i></p> <p><i>(ii) Areas within 5 kilometres from protected areas identified in terms of NEMPAA or from a biosphere reserve."</i></p>	<p>The proposed Sandpan BESS and associated infrastructure entails the development of internal, access and perimeter roads. The proposed roads, with a width of up to 12m, will exceed the threshold of this activity. The project is located within 5km of the Magalies Biosphere Reserve transition area.</p>

As described in the Environment Impact Assessment Report (EIAr) dated September 2024 at:

**Farm portions and SG codes for the Study Area**

Farm Portion	SG Code
Farm Benoni 534	F0310000000053400000
Remaining Extent of Farm Biesjespoort 521	F0310000000052100000



<b>Farm Portion</b>	<b>SG Code</b>
Farm Biesjesvlei 372	F03100000000037200000
Farm Klein Badfontein 369	F03100000000036900000
Farm Modderkuil 396	F03100000000039600000
Farm Paalland 373	F03100000000037300000
Remaining Extent of Farm Pompoenfontein 118	F03100000000011800000
Portion 1 of Farm Pompoenfontein 118	F03100000000011800001
Farm Ronde Bult 408	F03100000000040800000
Farm Salpetervlei 756	F03100000000075600000
Portion 1 of Farm Schoemanskraal 34	F0310000000003400001

**Affected Farm Properties for the Biesjesvlei BESS 2 and associated infrastructure (Project 5):**

<b>Farm Portion</b>	<b>21-digit Surveyor General code</b>
<b>BESS and associated infrastructure</b>	
Farm Paalland 373	F03100000000037300000
<b>Access Road Option A</b>	
Farm Salpetervlei 756	F03100000000075600000
Farm Paalland 373	F03100000000037300000
<b>Access Road Option B</b>	
Farm Benoni 534	F03100000000053400000
Farm Klein Badfontein 369	F03100000000036900000
Farm Paalland 373	F03100000000037300000
<b>Access Road Option C</b>	
Remaining Extent of Farm Biesjespoort 521	F03100000000052100000
Farm Benoni 534	F03100000000053400000
Farm Klein Badfontein 369	F03100000000036900000
Farm Paalland 373	F03100000000037300000
<b>Widening of Existing Road Intersections</b>	
Farm Benoni 534	F03100000000053400000
Remaining Extent of Farm Biesjespoort 521	F03100000000052100000
Portion 1 of Farm Biesjespoort 521	F03100000000052100001
Remaining Extent of Farm Elizabethfontein 374	F03100000000037400000
Farm Klein Badfontein 369	F03100000000036900000
Farm Salpetervlei 756	F03100000000075600000
Remaining Extent of Klein Sevenfontein 156	F03100000000015600000



**Co-ordinates for the Biesjesvlei BESS 2 and associated infrastructure (Project 5):**

Co-ordinate Point	Decimal Degrees		Degrees, Minutes, Seconds	
	Latitude (Y)	Longitude (X)	Latitude (S)	Longitude (E)
<b>BESS and associated infrastructure</b>				
Corner Point 1	-30.11626085	26.36529505	30° 06' 58.53907440" S	26° 21' 55.06216200" E
Corner Point 2	-30.11627683	26.36866848	30° 06' 58.59658654" S	26° 22' 07.20653447" E
Corner Point 3	-30.11924913	26.36864958	30° 07' 09.29687880" S	26° 22' 07.13847720" E
Corner Point 4	-30.11923287	26.36527604	30° 07' 09.23834280" S	26° 21' 54.99374760" E
<b>Access Road Option A</b>				
Start-Point	-30.10215751	26.40774589	30° 06' 07.76702867" S	26° 24' 27.88519696" E
Mid-Point	-30.10967631	26.38279884	30° 06' 34.83470520" S	26° 22' 58.07583840" E
End-Point	-30.11793164	26.36865796	30° 07' 04.55391840" S	26° 22' 07.16864514" E
<b>Access Road Option B</b>				
Start-Point	-30.09332796	26.38856668	30° 05' 35.98065095" S	26° 23' 18.84049168" E
Mid-Point	-30.10404815	26.37116602	30° 06' 14.57332301" S	26° 22' 16.19768272" E
End-Point	-30.11793164	26.36865796	30° 07' 04.55391840" S	26° 22' 07.16864514" E
<b>Access Road Option C</b>				
Start-Point	-30.08834041	26.37831337	30° 05' 18.02546520" S	26° 22' 41.92812120" E
Mid-Point	-30.10079365	26.37118663	30° 06' 02.85712442" S	26° 22' 16.27186086" E
End-Point	-30.11793164	26.36865796	30° 07' 04.55391840" S	26° 22' 07.16864514" E
<b>Widening of Existing Road Intersections</b>				
Mid-Point (S1262/S119 intersection)	-30.10423498	26.4123598	30° 06' 15.24592316" S	026° 24' 44.49527212" E
Mid-Point (S119/Option A)	-30.10220739	26.40774196	30° 06' 07.94659649" S	026° 24' 27.87105360" E
Mid-Point (S119/Option B)	-30.09339592	26.38873086	30° 05' 36.22530598" S	026° 23' 19.43109165" E
Mid-Point (S119/Option C)	-30.08839031	26.37833609	30° 05' 18.20510587" S	026° 22' 42.00993312" E

- for the development of the up to 1200MWh Biesjesvlei Battery Energy Storage System (BESS) and associated infrastructure (Biesjesvlei BESS 2) near Smithfield, within the Mohokare Local Municipality in the Free State Province, hereafter referred to as "the property".

The key components of the development are as follows:

- BESS units;

- BESS laydown area;
- BESS IPP Substation;
- Laydown area for the BESS IPP Substation;
- BESS O&M Office, including ablutions;
- External access roads;
- Internal roads;
- Internal cables;
- Stormwater infrastructure;
- Fencing and security; and
- Parking area.

Below is a table of the description of the components for the **Biesjesvlei BESS 2 and Associated Infrastructure (Project 5)**:

Component	Description
<b>Battery Energy Storage System (BESS)</b>	
BESS Area/Facility	<ul style="list-style-type: none"> <li>▪ <u>Technology</u>: Lithium-Ion BESS</li> <li>▪ <u>Estimated Capacity</u>: Maximum 1 200MWh</li> <li>▪ <u>Total Footprint</u>: Approximately 10ha</li> <li>▪ <u>Height</u>: Between 5m and 10m</li> <li>▪ The BESS area will include the following sub-components:                             <ul style="list-style-type: none"> <li>○ BESS Units;</li> <li>○ BESS Laydown Area;</li> <li>○ BESS IPP Substation;</li> <li>○ Laydown area for the BESS IPP Substation;</li> <li>○ BESS Operational and Maintenance (O&amp;M) Office, including Ablutions;</li> <li>○ Access Roads;</li> </ul> </li> </ul>

Component	Description
	<ul style="list-style-type: none"> <li>○ Internal Roads;</li> <li>○ MV cables between BESS Units;</li> <li>○ Transformer at the BESS IPP Substation;</li> <li>○ Internal cables; and</li> <li>○ Overhead cables at the BESS IPP Substation;</li> <li>○ Fencing and Security; and</li> <li>○ Parking Area.</li> </ul>
<b>BESS Sub-Components (to be located within the 10 ha area of the overall BESS Facility)</b>	
BESS Units	<ul style="list-style-type: none"> <li>▪ This will include battery packs or containers, with an area of approximately 6ha, and height up to 5m.</li> </ul>
BESS Laydown Area	<ul style="list-style-type: none"> <li>▪ <u>Footprint</u>: Approximately 1.25ha</li> </ul>
BESS IPP Substation	<ul style="list-style-type: none"> <li>▪ <u>Footprint</u>: Approximately 1ha</li> <li>▪ <u>Height</u>: Up to 15m</li> <li>▪ <u>Capacity</u>: 33kV to 132kV</li> <li>▪ This will be maintained by the IPP.</li> </ul>
Laydown Area for the BESS IPP Substation	<ul style="list-style-type: none"> <li>▪ <u>Footprint</u>: Approximately 0.5ha</li> </ul>
BESS Operational and Maintenance (O&M) Office	<ul style="list-style-type: none"> <li>▪ <u>Maximum height</u>: Up to 5m</li> <li>▪ <u>Footprint</u>: Approximately 0.5ha</li> <li>▪ The BESS O&amp;M Office will also include Ablution facilities.</li> </ul>
External Access Roads	<ul style="list-style-type: none"> <li>▪ The study area can be accessed via various existing main roads and gravel roads. Specifically, three access route options have been considered: Access Route Option A, Option B and Option C, which are routed along the N6; S1262; and S119. Access Route Options A, B and C have different access points off the S119. Direct access to the proposed projects will be taken from the S119 along an existing farm access point, and thereafter new access roads will be developed within the study area, where they</li> </ul>

Component	Description
	<p>do not align with existing roads, or existing roads will be used where possible. Existing roads will be used as far as practically achievable.</p> <ul style="list-style-type: none"><li>▪ <u>New Access Roads</u>: Where new access roads are required within the study area, these will be 4 - 8m wide.</li><li>▪ <u>Existing Access Roads</u>: Where existing roads are used within the study area, they may need to be upgraded, as described below.</li><li>▪ The Traffic Specialist has noted the following:<ul style="list-style-type: none"><li>○ The N6, S1262, and S119 are of a sufficient width to accommodate truck movement, however widening by more than 4 m or more than 6 m will be required at localised positions (i.e. intersections). Specifically, road widening by approximately 9 m will be required at the S1262 and S119 intersection. In addition, the N6 and S1262 intersection will need to be widened by approximately 2 m on the western side of the intersection and by approximately 2 m on the eastern side of the intersection.</li><li>○ Existing internal farm roads (local farm roads within the farm property boundaries) will need to be upgraded to accommodate the abnormal loads as required. This includes the following:<ul style="list-style-type: none"><li>▪ <u>Intersection S119 and Access Route Option A</u>: Road widening by approximately 14 m (at the widest point) will be required.</li><li>▪ <u>Intersection S119 and Access Route Option B</u>: Road widening by approximately 7 m (at the widest point) will be required.</li><li>▪ <u>Intersection S119 and Access Route Option C</u>: Road widening by approximately 14 m (at the widest point) will be required.</li><li>▪ The existing bridge on the S119 will also need to be inspected by a Structural Engineer.</li></ul></li></ul></li></ul>

Component	Description
	<ul style="list-style-type: none"> <li>▪ The existing bridge on the existing internal farm road along Access Route Option A will need to be rebuilt/upgraded or realigned to minimise the turns that the abnormal loads need to navigate, if this access route is used for the proposed projects.</li> <li>▪ A new bridge will need to be developed along Access Route Option B, if this option is used for the proposed projects.</li> <li>▪ A new bridge will need to be developed along Access Route Option C, if this option is used for the proposed projects.</li> </ul>
Internal Roads	<ul style="list-style-type: none"> <li>▪ <u>Details</u>: New internal gravel roads will need to be established within the BESS facility area.</li> <li>▪ <u>Width</u>: Up to 4m</li> </ul>
Medium Voltage (MV) cables between the BESS Units	<ul style="list-style-type: none"> <li>▪ <u>Placement</u>: Buried/Ducted</li> <li>▪ <u>Capacity</u>: Ranges from 1kV up to 33kV</li> <li>▪ <u>Depth</u>: Up to 2m</li> </ul>
Transformer at the BESS IPP Substation	<ul style="list-style-type: none"> <li>▪ <u>Capacity</u>: Ranges above 33kV</li> <li>▪ <u>Depth/Height</u>: Up to 2m</li> </ul>
Internal cables in the BESS facility	<ul style="list-style-type: none"> <li>▪ <u>Placement</u>: Buried / ducted</li> <li>▪ <u>Capacity</u>: Ranges from 1kV up to 33kV</li> <li>▪ <u>Depth</u>: Up to 2m</li> </ul>
Overhead cables at the BESS IPP Substation	<ul style="list-style-type: none"> <li>▪ <u>Placement</u>: Overhead</li> <li>▪ <u>Capacity</u>: Ranges above 33kV</li> <li>▪ <u>Height</u>: Up to 12m</li> </ul>

Component	Description
Fencing of the BESS Facility and Security	<ul style="list-style-type: none"> <li>▪ <u>Type</u>: Palisade or mesh or fully electrified</li> <li>▪ <u>Height</u>: Up to 5m</li> <li>▪ <u>Security</u>: Access to the BESS Facility will be managed and monitored by an appointed security service provider.</li> </ul>
Parking Area	<ul style="list-style-type: none"> <li>▪ A parking area will be established at the BESS Facility for staff</li> </ul>
Storm water channels	<ul style="list-style-type: none"> <li>▪ Details to be confirmed once the Engineering, Procurement and Construction (EPC) contractor has been selected and the design is finalised. Where necessary, a detailed storm water management plan would need to be developed.</li> </ul>
Water Requirements	<ul style="list-style-type: none"> <li>▪ Approximately 350m<sup>3</sup> to 450m<sup>3</sup> of water is estimated to be required per year for the construction phase.</li> <li>▪ Approximately 200m<sup>3</sup> to 300m<sup>3</sup> of water is estimated to be required per year for the operational phase.</li> <li>▪ Water requirements during the decommissioning phase are expected to be the same as the construction phase.</li> <li>▪ Potential sources: Existing boreholes on site or from the Local Municipality via trucks.</li> </ul>
Construction Period	<ul style="list-style-type: none"> <li>▪ 12 - 24 months</li> </ul>
Operational Period	<ul style="list-style-type: none"> <li>▪ Once the commercial operation date is achieved, the proposed BESS will store and dispatch electricity for a minimum period of 20 to 30 years.</li> </ul>

## Conditions of this Environmental Authorisation

### Scope of authorisation

1. The development of the up to 1200MWh Biesjesvlei Battery Energy Storage System (BESS) and associated infrastructure (i.e., Biesjesvlei BESS 2) near Smithfield, within Ward 41603006 of the Mohokare Local Municipality in the Free State Province, is approved as per the geographic coordinates cited in the tables above.
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 must 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 ten (10) years from the date of issue of this Environmental Authorisation. If the 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. Construction must be completed within five (05) years of the commencement of the activity on site. The continuation of any such activities after the lapsing of the above-mentioned period may trigger one or more listed and/or specified activities, including activity 32 of LN1. Such continuation without the required environmental authorisation will constitute an offence or offences in terms of section 49A(1)(a) read with section 24F(1)(a) of NEMA.



9. Commencement with one activity listed in terms of this environmental authorisation constitutes commencement of all authorised activities.

#### **Notification of authorisation and right to appeal**

10. 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.
11. The notification referred to must –
- 11.1. specify the date on which the authorisation was issued;
  - 11.2. inform the interested and affected party of the appeal procedure provided for in the National Appeal Regulations, 2014;
  - 11.3. advise the interested and affected party that a copy of the authorisation will be furnished on request; and
  - 11.4. Give the reasons of the Competent Authority for the decision.

#### **Commencement of the activity**

12. The authorised activity must not commence until the period for the submission of appeals has lapsed as per the National Appeal Regulations, 2014, and no appeal has been lodged against the decision. In terms of Section 43(7), an appeal under Section 43 of the National Environmental Management Act, Act No. 107 of 1998, as amended 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 combined project layout plan attached as Figure D in Appendix D of the final EIAr and labelled "*Final Layout Map for the proposed Biesjesvlei Solar PV Facility 2; Biesjesvlei BESS 2; and Biesjesvlei EGI 2 (including the Biesjesvlei MTS and LILO for context), near Smithfield in the Free State,*" for the up to 1200MWh Battery Energy Storage System (BESS) and associated infrastructure (i.e., Biesjesvlei BESS 2) which forms part of the "*Biesjesvlei PV Facilities, BESS and EGI Cluster,*" is approved.
14. The Environmental Management Programme (EMPr) for the up to 1200MWh Biesjesvlei Battery Energy Storage System (BESS) and associated infrastructure (i.e., Biesjesvlei BESS 2), submitted as part of the EIAr dated September 2024 is approved and must be implemented and adhered to.
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15. The Generic Environmental Management Programme (EMPr), *"for the development and expansion of substation infrastructure for the transmission and distribution of electricity" for the up to 132kV BESS IPP Substation Hub/Complex*, specifically Part C: Site Specific Environmental Attributes, dated 10 September 2024 submitted as part of the EIAr, is approved and must be implemented and adhered to.
16. The EMPrs must be implemented and strictly enforced during all phases of the project. They shall be seen as dynamic documents and shall be included in all contract documentation for all phases of the development when approved.
17. Changes to the approved EMPrs must be submitted in accordance with the EIA Regulations applicable at the time.
18. The Department reserves the right to amend the approved EMPrs should any impacts that were not anticipated or covered in the EIAr be discovered.

### **Frequency and process of updating the EMPr**

19. The EMPr must be updated where the findings of the environmental audit reports, contemplated in Condition 26 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.
20. The updated EMPr must contain recommendations to rectify the shortcomings identified in the environmental audit report.
21. The updated EMPr must be submitted to the Department for approval together with the environmental audit report, as per Regulation 34 of the EIA Regulations, 2014 as amended. The updated EMPr must have been subjected to a public participation process, which process has been agreed to by the Department, before submission of the updated EMPr to the Department for approval.
22. In assessing whether to approve an EMPr which has been updated as a result of an audit, the Department will consider the processes prescribed in Regulation 35 of the EIA Regulations, 2014 as amended. 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.
23. The holder of the authorisation must apply for an amendment of an EMPr if such amendment is required before an audit is required. The amendment process is prescribed in Regulation 37 of the EIA Regulations, 2014, as amended. The holder of the authorisation must request comments on the proposed amendments to the impact management outcomes of the EMPr or amendments to the closure objectives of the closure

plan from potentially interested and affected parties, including the competent authority, by using any of the methods provided for in the Act for a period of at least 30 days.

## Monitoring

24. The holder of the authorisation must appoint an experienced 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 EMPs.
  - 24.1. The ECO must be appointed before the commencement of any authorised activities.
  - 24.2. Once appointed, the name and contact details of the ECO must be submitted to the *Director: Compliance Monitoring* of the Department.
  - 24.3. The ECO must keep record of all activities on site, problems identified, transgressions noted and a task schedule of tasks undertaken by the ECO.
  - 24.4. 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

25. 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.
26. The holder of the environmental authorisation must, for the period during which the environmental authorisation and EMPs remain valid, ensure that project compliance with the conditions of the environmental authorisation and the EMPs are audited and that the audit reports are submitted to the *Director: Compliance Monitoring* of the Department.
27. The frequency of auditing and submission of the environmental audit reports must be as per the frequency indicated in the EMPs, considering the processes for such auditing as prescribed in Regulation 34 of the NEMA EIA Regulations, 2014 as amended.
28. 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.
29. The environmental audit reports must be compiled in accordance with Appendix 7 of the NEMA EIA Regulations, 2014 as amended 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 EMPs.

30. 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**

31. A written notification of commencement must be given to the Department no later than fourteen (14) days prior to the commencement of the activity. 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**

32. 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**

33. 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**

34. No activities, which require a water use license, must be allowed to encroach into a water resource without a water use authorisation being in place from the Department of Water and Sanitation.
35. A permit must be obtained from the relevant Department for the removal or destruction of indigenous, protected, or endangered plant or animal species (if any) and a copy of such permit/s must be submitted to the Department for record keeping.
36. No exotic plants may be used for rehabilitation purposes. Only indigenous plants of the area may be utilised.
37. Foundations and trenches must be backfilled with originally excavated materials as much as possible. Excess excavation materials must be disposed of only in approved areas or, if suitable, stockpiled for use in reclamation activities.

38. 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 uncovered during construction, work in the immediate area must be halted, and Heritage Authorities must be alerted immediately, and a professional archaeologist or palaeontologist (depending on the nature of the finds) must be contacted as soon as possible to inspect the findings.
39. Construction must include design measures that allow surface and subsurface movement of water along drainage lines so as not to impede natural surface and subsurface flows. Drainage measures must promote the dissipation of stormwater run-off.
40. An integrated waste management approach must be implemented that is based on waste minimisation and must incorporate reduction, recycling, reuse, and disposal where appropriate. Any solid waste 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).

**General**

41. A copy of this Environmental Authorisation, the audit and compliance monitoring reports, and the approved EMPs must be made available for inspection and copying-
- 41.1. at the site of the authorised activity;
  - 41.2. to anyone on request; and
  - 41.3. Where the holder of the Environmental Authorisation has a website, on such publicly accessible website.
42. 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: 10/11/2024



**Dr Sabelo Malaza**  
**Chief Director: Integrated Environmental Authorisations**  
**Department of Forestry, Fisheries & the Environment**

## 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 amended application form received by the Department on 12 September 2024.
- b) The information contained in the final EIAr dated September 2024.
- c) The comments received from interested and affected parties as included in the final EIAr dated September 2024.
- d) Mitigation measures as proposed in the final EIAr dated September 2024 and the EMPs.
- e) The information contained in the specialist input contained within the Appendices of the final EIAr dated September 2024.
- f) The findings of the site visit undertaken on 07 November 2024.

### 2. Key factors considered in making the decision

All information presented to the Department was considered 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 input conducted and their recommended mitigation measures.
- b) The need for the project stems from the provision of electricity to the national grid.
- c) The final EIA, dated September 2024, identified all legislation and guidelines that were considered in its preparation.
- d) The location of the proposed up to 1200MWh Biesjesvlei Battery Energy Storage System and associated infrastructure (i.e., Biesjesvlei BESS 2) which forms part of the "Biesjesvlei PV Facilities, BESS and EGI Cluster."
- e) The methodology used in assessing the potential impacts identified in the final EIAr dated September 2024 and the specialist input have been adequately indicated.
- f) A sufficient public participation process was undertaken, and the applicant has satisfied the minimum requirements as prescribed in the NEMA EIA Regulations, 2014 as amended for public involvement.



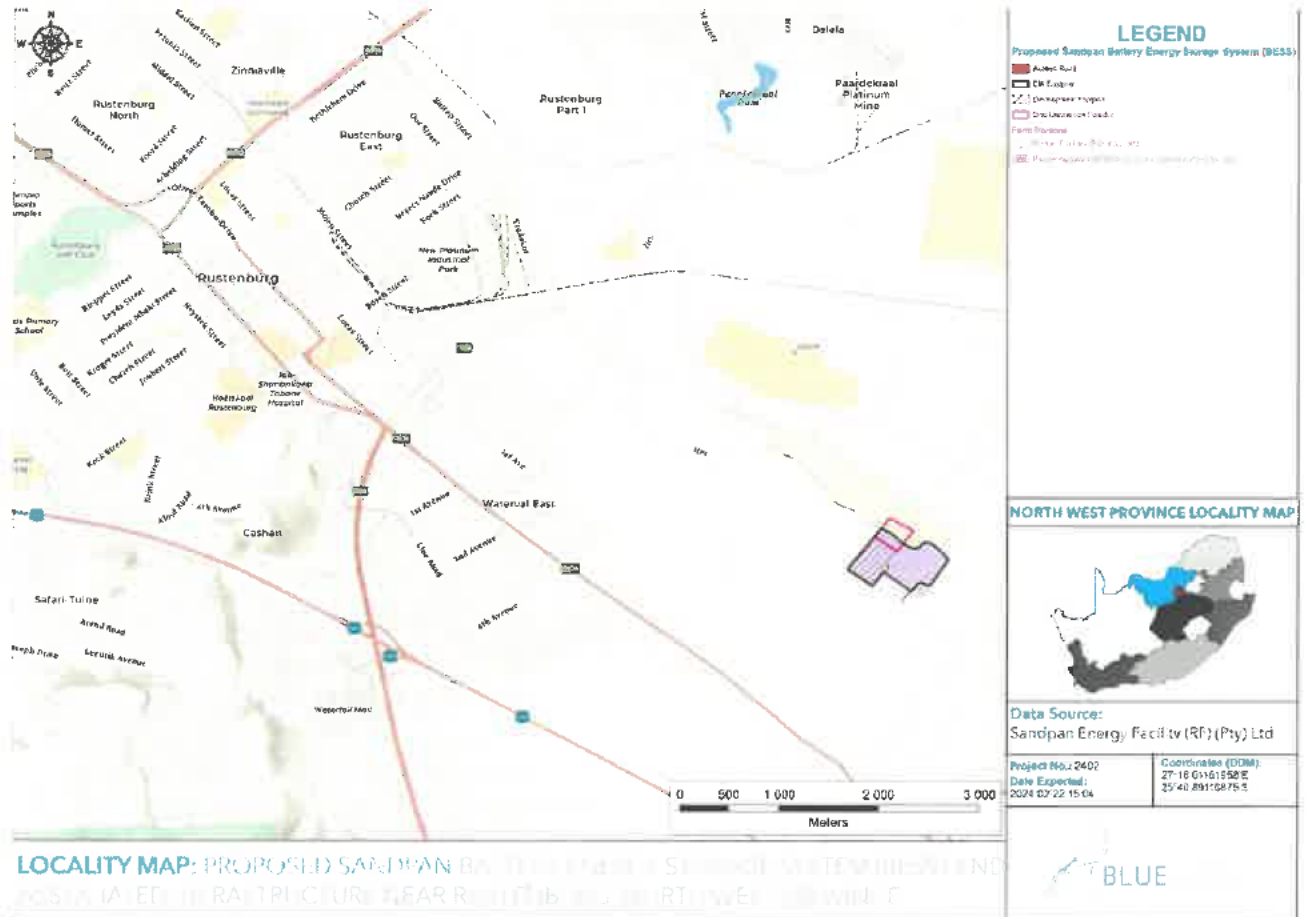
### 3. Findings

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 final EIAr dated September 2024 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 information contained in the final EIAr dated September 2024 is deemed to be accurate and credible.
- d) The proposed mitigation of impacts identified and assessed adequately curtails the identified impacts.
- e) EMPr measures for the pre-construction, construction and rehabilitation phases of the development were proposed and included in the final EIAr 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.**

## Annexure 2: Locality Map



*M.J.*

## Annexure 3: Project Layout Plan

