

environmental affairs

Department: Environmental Affairs REPUBLIC OF SOUTH AFRICA

Private Bag X 447· PRETORIA - 0001· Environment House · 473 Steve Biko Road - Arcadia - PRETORIA Tel (+ 27 12) 399 9372

> DEA Reference: 14/12/16/3/3/2/1018 Enquiries: Mr Thando Booi Telephone: (012) 399 9387 E-mail: TBooi@environment.gov.za

Ms Andrea Gibb Sivest SA (Pty) Ltd PO Box 2921 **RIVONIA** 2128

Telephone Number:(011) 798 0638Email Address:andreag@sivest.co.za

PER EMAIL / MAIL

Dear Ms Gibb

ACCEPTANCE OF THE SCOPING REPORT FOR THE PROPOSED CONSTRUCTION OF THE XHA! BOOM WIND FARM NEAR LOERISFONTEIN, NORTHERN CAPE PROVINCE

The Scoping Report (SR) and Plan of Study for Environmental Impact Assessment (PoSEIA) dated August 2017 and received by this Department on 04 August 2017 refer.

This Department has evaluated the submitted SR and the PoSEIA dated August 2017 and is satisfied that the documents comply with the minimum requirements of the Environmental Impact Assessment (EIA) Regulations, 2014, as amended. The SR is hereby accepted by the Department in terms of Regulation 22 (a) of the EIA Regulations, 2014.

You may proceed with the Environmental Impact Assessment process in accordance with the tasks contemplated in the PoSEIA and the requirements of the EIA Regulations, 2014, as amended.

All comments and recommendations made by all stakeholders (including authorities which falls within the geographical area of the proposed development) and Interested and Affected Parties (I&APs) in the draft SR and submitted as part of the final SR must be taken into consideration when preparing the Environmental Impact Assessment report (ElAr) in respect of the proposed development. The concerns raised by the stakeholders and I&APs must be adequately addressed prior the submission of the final ElAr to the Department. The stakeholders and I&APs includes but is not limited to the Northern Cape Department of Environment and Nature Conservation (DENC), the Department of Agriculture, Forestry and Fisheries (DAFF), the provincial Department of Agriculture, the South African Civil Aviation Authority (SACAA), the Department of Transport, the Local Municipality, the District Municipality, the Department of Water and Sanitation (DWS), the South African National Roads Agency Limited (SANRAL), the Square Kilometre Array (SKA), the South African Heritage Resources Agency (SAHRA), SENTEC, the Endangered Wildlife Trust (EWT), BirdLife SA, the Department of Mineral Resources, the Department of Rural Development and Land Reform, the Department of Environmental Affairs: Directorate Biodiversity and Conservation, and the South African Astronomy Observation (SAAO).

Please be advised that the contact person at the SAAO office is Dr Ramotholo Sefako and he can be contacted on Tel: (011) 447 0025 or E-mail: rrs@saao.ac.za.

In addition to the above, please ensure the following is included in the final EIAr:

- The comments and response report in accordance with the requirements of the EIA Regulations, 2014, as amended.
- The details of the PPP in accordance with Regulation 41 of the EIA Regulations.
- A copy of the draft ElAr must be submitted to Department's Biodiversity Planning Directorate so that they provide comments on the draft ElAr.
- Proof of correspondence with the various stakeholders must be included in the EIAr. Should you be unable to obtain comments, proof should be submitted to the Department of the attempts that were made to obtain comments.
- The EAP must, in order to give effect to Regulation 40(1), give registered I&APs access to, and an
 opportunity to comment on the report in writing within 30 days before submitting the final EIAr to the
 Department.
- Furthermore, it must be reiterated that, should an application for Environmental Authorisation be subject to the provisions of Chapter II, Section 38 of the National Heritage Resources Act, Act 25 of 1999, then this Department will not be able to make nor issue a decision in terms of your application for Environmental Authorisation pending a letter from the pertinent heritage authority categorically stating that the application fulfils the requirements of the relevant heritage resources authority as described in Chapter II, Section 38(8) of the National Heritage Resources Act, Act 25 of 1999. Comments from SAHRA and/or the provincial department of heritage must be provided in the EIAr.

Please ensure that all mitigation measures and recommendations in the specialist studies are addressed and included in the final EIAr and Environmental Management Programme (EMPr).

In addition, the following additional information is required and must be incorporated in the EIAr:

- a. SKA-SA on their comments dated 18 November 2016 indicated that as a result of the medium to high risk associated with the wind facilities, the SKA project office recommends that further Electro Magnetic Interference (EMI) and Radio Frequency Interference (RFI) detailed studies be conducted as significant mitigation measures may be required to lower the risk of detrimental impact to an acceptable level.
- b. Based on the above, the applicant must conduct detailed EMI and RFI specialist studies which must be included in the EIAr. SKA-SA must be engaged to guide the drafting of the terms of reference and comments from SKA-SA must be included in the EIAr.
- c. The Path Loss and Risk Assessment report compiled by Interference Testing and Consultancy Services (ITC) is noted. However, comments regarding this report must be sought from SKA-SA and must form part of the draft EIAr.
- d. Following a review of the final SR dated 04 August 2017 received by the Department on 04 August 2017, and as stated under the executive summary that a separate application (Basic Assessment process) for an on-site substation and a 132kV power line will be lodged with the Department for an environmental authorisation, this Department, therefore; advises that the application form and the report must be amended to include the correct listed activities linked to the development activity or infrastructure in the project description.

It is noted that the following activity has been applied for in this application process, hence; it must be removed since it is not relevant to the proposed XhalBoom Wind Energy Facility (WEF) development:

<u>"GN R 983 Item 11:</u>

The development of facilities or infrastructure for the transmission and distribution of electricity-Outside urban areas or industrial complexes with a capacity of more than 33 but less than 275 kilovolts.

- e. Due to the number of similar applications in the area, all the specialist assessments must include a cumulative environmental impact statement for the WEFs in the surrounding area. Identified cumulative impacts must be clearly defined, and where possible the size of the identified impact must be quantified and indicated, i.e. hectares of cumulatively transformed land.
- f. Detailed cumulative impact assessments must be provided in the EIAr for all specialist studies conducted. The specialist studies must provide proof that other specialist reports that were conducted for renewable energy projects in the area were reviewed and indicate how the recommendations, mitigation measures and conclusions have been taken into consideration when the conclusion and mitigation measures were drafted for this project.
- g. The Bat and Avifaunal specialist assessments must assess and make recommendations for definite measurements for the preferred hub heights and rotor diameter.
- h. The 12 months Bird and Bat Monitoring must be conducted in line with the latest guidelines. It is noted that monitoring was done from 31 July 2004 to 13 September 2004, therefore, the Department is of the opinion that this study cannot be valid and applicable to this project. As such, this must be amended to include the updated requirements and information which is relevant to the proposed development. A copy of the latest guidelines can be found on the BirdLife South Africa's and SABAAP's website.
- i. You are required to submit an avifauna and bat pre-construction monitoring report together with the draft EIAr. Baseline monitoring must be undertaken for a period of 12 months. The avifauna and bat preconstruction monitoring must be conducted in accordance with the minimum requirements guidelines produced by Bird Life South Africa and the South African Bat Advisory Panel. The baseline monitoring programme for avifauna and bats must cover the entire site as well as the height of the entire facility. i.e., you may be required to install more monitoring masts at height.
- j. The EIAr must provide a detailed description of the need and desirability, not only providing motivation on the need for clean energy in South Africa of the proposed activity. The need and desirability must also indicate if the proposed development is needed in the region and if the current proposed location is desirable for the proposed activity compared to other sites. The need and desirability must take into account cumulative impacts of the proposed development in the area.
- k. Two specialist studies were undertaken by in-house specialists i.e. <u>Surface Water Impact Assessment</u> and <u>Visual Impact Assessment</u>. These studies must be peer-reviewed by external specialists. The format of each peer-review must address the following:
 - > A CV clearly showing expertise of the peer reviewer;
 - > Acceptability of the terms of reference;
 - > Is the methodology clearly explained and acceptable;
 - > Evaluate the validity of the findings (review data evidence);
 - > Discuss the suitability of the mitigation measures and recommendations;
 - > Identify any short comings and mitigation measures to address the short comings;
 - > Evaluate the appropriateness of the reference literature;
 - > Indicate whether a site-inspection was carried out as part of the peer review; and
 - > Indicate whether the article is well-written and easy to understand.
- The EIAr must provide the technical details for the proposed facility in a table format as well as their description and/or dimensions. A sample for the minimum information required is listed under point 2 of the EIA information required for wind energy facilities below.
- m. The EIAr must provide the four corners coordinate points for the proposed development site (note that if the site has numerous bend points, each bend point coordinates must be provided).
- n. Details of the future plans for the site and infrastructure after decommissioning in 20-30 years and the possibility of upgrading the proposed infrastructure to more advanced technologies.
- o. Information on services required on the site, e.g. sewage, refuse removal, water and electricity. Who will supply these services and has an agreement and confirmation of capacity been obtained? Proof of these agreements must be provided.
- p. Should the Water Use License be required, proof of application for a license must be submitted.
- q. This Department requires that the wind resource data be submitted as part of the EIAr. The wind resource data must be a summary of the wind resource available in the study area and motivation that the site has

a good wind resource to sustain the Xha! Boom Wind Farm must also be provided. In addition, whilst the information may be deemed to be confidential, your attention is drawn to Regulation 10 of the EIA Regulations 2014, as amended, which states that *"An applicant must provide the competent authority with all information that reasonably has or may have the potential of influencing any decision with regard to an application."*

- r. It has been noted that there are wetland and drainage lines on the sensitivity layout plan prepared by KLS on 02 February 2017 and revised on 19 June 2017 (Map Ref No 13622/SCO-X10), therefore, a sensitivity layout plan overlaid by the sensitive features and the buffer zones i.e. rocky outcrops, wetland, drainage lines, etc, and also the existing structure (roads, power lines, etc,) in the vicinity of the preferred site, the location of the turbines, substation, permanent laydown area footprint, buildings, including accommodation and all "no-go" areas must be submitted as part of the final report for analysis of the effect of the proposed project on the environment. Please ensure all features are clearly indicated on the legend of the sensitivity layout plan.
- x. A shapefile of the preferred development layout/footprint must be submitted to this Department. The shapefile must be created using the Hartebeesthoek 94 Datum and the data should be in Decimal Degree Format using the WGS 84 Spheroid. The shapefile must include at a minimum the following extensions i.e. .shp; .shx; .dbf; .prj; and, .xml (Metadata file). If specific symbology was assigned to the file, then the .avl and/or the .lyr file must also be included. Data must be mapped at a scale of 1:10 000 (please specify if an alternative scale was used). The metadata must include a description of the base data used for digitizing. The shapefile must be submitted in a zip file using the EIA application reference number as the title. The shape file must be submitted to:

Postal Address:

Department of Environmental Affairs Private Bag X447 Pretoria 0001

Physical address:

Environment House 473 Steve Biko Road Pretoria

For Attention: Muhammad Essop Integrated Environmental Authorisations Strategic Infrastructure Developments Telephone Number: (012) 399 9406 Email Address: MEssop@environment.gov.za

- Please ensure the assessment is undertaken as per the EIA Regulations 2014 (as amended), Appendix
 3. In addition, please ensure the following is addressed in the final EIAr:
 - An alien invasive management plan to be implemented during construction and operation of the facility. The plan must include mitigation measures to reduce the invasion of alien species and ensure that the continuous monitoring and removal of alien species is undertaken.
 - A plant rescue and protection plan which allows for the maximum transplant of conservation important species from areas to be transformed. This plan must be compiled by a vegetation specialist familiar with the site and be implemented prior to commencement of the construction phase.
 - A re-vegetation and habitat rehabilitation plan to be implemented during the operation of the facility. Restoration must be undertaken as soon as possible after completion of construction activities to reduce the amount of habitat converted at any one time and to speed up the recovery to natural habitats.

- An open space management plan to be implemented during the construction and operation of the facility.
- A traffic management plan for the site access roads to ensure that no hazards would result from the increased truck traffic and that traffic flow would not be adversely impacted. This plan must include measures to minimize impacts on local commuters.
- A transportation plan for the transport of components, main assembly cranes and other large pieces of equipment.
- A storm water management plan to be implemented during the construction and operation of the facility. The plan must ensure compliance with applicable regulations and prevent off-site migration of contaminated storm water or increased soil erosion. The plan must include the construction of appropriate 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 storm water run-off.
- A fire management plan to be implemented during the construction and operation of the facility.
- An erosion management plan for monitoring and rehabilitating erosion events associated with the facility. Appropriate erosion mitigation must form part of this plan to prevent and reduce the risk of any potential erosion.
- An effective monitoring system to detect any leakage or spillage of all hazardous substances during their transportation, handling, use and storage. This must include precautionary measures to limit the possibility of oil and other toxic liquids from entering the soil or storm water systems.
- Measures to protect hydrological features such as streams, rivers, pans, wetlands, dams and their catchments, and other environmental sensitive areas from construction impacts including the direct or indirect spillage of pollutants.

The EAP must provide detailed motivation if any of the above requirements is not required by the proposed development and not included in the final EIAr.

z. Please ensure the content of the EMPr complies with the requirements of Appendix 4 of the EIA Regulations, 2014 as amended.

You are hereby reminded that should the EIAr fail to comply with the requirements of this acceptance letter, the project will be **refused** in accordance with the EIA Regulations, 2014, as amended.

The applicant is hereby reminded to comply with the requirements of Regulation 45 with regard to the time period allowed for complying with the requirements of the Regulations, and Regulations 43 and 44 with regard to the allowance of a comment period for interested and affected parties on all reports submitted to the competent authority for decision-making.

In addition to the above, the Department will undertake a site inspection prior to or upon receipt of the draft EIAr for comment.

You are requested to submit two (2) electronic copies (CD/DVD and two (2) hard copies of the Environmental Impact Report (EIAr) to the Department.

Please also find attached information that must be used in the preparation of the Environmental Impact Report. This will enable the Department to speedily review the EIAr and make a decision on the application.

You are hereby reminded of Section 24F of the National Environmental Management Act, Act No 107 of 1998, as amended, that no activity may commence prior to an Environmental Authorisation being granted by the Department.

You are hereby reminded of Section 24F of the National Environmental Management Act, Act No 107 of 1998, as amended, that no activity may commence prior to an Environmental Authorisation being granted by the Department.

Yours faithfully

Alphalo

Mr Sabelo Malaza Chief Director: Integrated Environmental Authorisations Department of Environmental Affairs Letter Signed by: Ms Olivia Letlalo Designation: Deputy Director: Strategic Infrastructure Developments Date: IS 09 2007

CC:	Mr M Mangnall	South	African	Mainstream	Renewable	Power	Email: eiaadmin@biothermenergy.com
	Developments (Pty) Ltd						

A. EIA INFORMATION REQUIRED FOR WIND ENERGY FACILITIES

1. General site information

The following general site information is required:

- Descriptions of all affected farm portions
- 21 digit Surveyor General codes of all affected farm portions
- Copies of deeds of all affected farm portions
- · Photos of areas that give a visual perspective of all parts of the site
- Photographs from sensitive visual receptors (tourism routes, tourism facilities, etc.)
- Solar plant design specifications including:
 - > Type of technology
 - Structure height
 - > Surface area to be covered (including associated infrastructure such as roads)
 - Structure orientation
 - > Laydown area dimensions (construction period and thereafter)
 - Generation capacity
- Generation capacity of the facility as a whole at delivery points

This information must be indicated on the first page of the EIAr. It is also advised that it be double checked as there are too many mistakes in the applications that have been received that take too much time from authorities to correct.

2. Sample of technical details for the proposed facility

Component	Description/ Dimensions
Location of the site	
Facility area	
SG Codes	
Site access	
Export capacity	
Proposed technology	
Hub height from ground level	
Rotor diameter	
Area occupied by substations	
Area occupied by both permanent and construction laydown areas	
Area occupied by buildings	
Width and length of internal roads	
Proximity to grid connection	
Type and height of fencing	

3. Site maps and GIS information

Site maps and GIS information should include at least the following:

- All maps/information layers must also be provided in ESRI Shapefile format
- All affected farm portions must be indicated
- The exact site of the application must be indicated (the areas that will be occupied by the application)

- A status quo map/layer must be provided that includes the following:
 - Current use of land on the site including:
 - Buildings and other structures
 - Agricultural fields
 - Grazing areas
 - Natural vegetation areas (natural veld not cultivated for the preceding 10 years) with an indication of the vegetation quality as well as fine scale mapping in respect of Critical Biodiversity Areas and Ecological Support Areas
 - Critically endangered and endangered vegetation areas that occur on the site
 - Bare areas which may be susceptible to soil erosion
 - Cultural historical sites and elements
 - > Rivers, streams and water courses
 - > Ridgelines and 20m continuous contours with height references in the GIS database
 - > Fountains, boreholes, dams (in-stream as well as off-stream) and reservoirs
 - High potential agricultural areas as defined by the Department of Agriculture, Forestry and Fisheries
 - > Buffer zones (also where it is dictated by elements outside the site):
 - 500m from any irrigated agricultural land
 - 1km from residential areas
 - > Indicate isolated residential, tourism facilities on or within 1km of the site
- A slope analysis map/layer that include the following slope ranges:
 - Less than 8% slope (preferred areas for WIND TURBINE and infrastructure)
 - between 8% and 12% slope (potentially sensitive to WIND TURBINE and infrastructure)
 - between 12% and 14% slope (highly sensitive to WIND TURBINE and infrastructure)
 - steeper than 18 % slope (unsuitable for WIND TURBINE and infrastructure)
- A site development proposal map(s)/layer(s) that indicate:
 - Foundation footprint
 - > Permanent laydown area footprint
 - > Construction period laydown footprint
 - Internal roads indicating width (construction period width and operation period width) and with numbered sections between the other site elements which they serve (to make commenting on sections possible)
 - River, stream and water crossing of roads and cables indicating the type of bridging structures that will be used
 - Substation(s) and/or transformer(s) sites including their entire footprint.
 - Cable routes and trench dimensions (where they are not along internal roads)
 - Connection routes to the distribution/transmission network (the connection must form part of the EIA even if the construction and maintenance thereof will be done by another entity such as ESKOM)
 - Cut and fill areas at WIND TURBINE sites along roads and at substation/transformer sites indicating the expected volume of each cut and fill
 - Borrow pits
 - > Spoil heaps (temporary for topsoil and subsoil and permanently for excess material)
 - Buildings including accommodation

With the above information authorities will be able to assess the strategic and site impacts of the application.

4. Regional map and GIS information

The regional map and GIS information should include at least the following:

- All maps/information layers must also be provided in ESRI Shapefile format
- The map/layer must cover an area of 20km around the site
- Indicate the following:
 - > roads including their types (tarred or gravel) and category (national, provincial, local or private)
 - Railway lines and stations
 - Industrial areas
 - Harbours and airports
 - > Electricity transmission and distribution lines and substations
 - > Pipelines
 - > Waters sources to be utilised during the construction and operational phases
 - > A visibility assessment of the areas from where the facility will be visible
 - Critical Biodiversity Areas and Ecological Support Areas
 - Critically Endangered and Endangered vegetation areas
 - > Agricultural fields
 - Irrigated areas
 - An indication of new road or changes and upgrades that must be done to existing roads in order to get equipment onto the site including cut and fill areas and crossings of rivers and streams

5. Important stakeholders

Amongst other important stakeholders, comments from the National Department of Agriculture, Forestry and Fisheries must be obtained and submitted to the Department. Any application, documentation, notification etc. should be forwarded to the following officials:

Ms Mashudu Marubini Delegate of the Minister (Act 70 of 1970) E-mail: MashuduMa@daff.gov.za Tel 012- 319 7619

Ms Thoko Buthelezi AgriLand Liaison office E-mail: ThokoB@daff.gov.za Tel 012- 319 7634

All hardcopy applications / documentation should be forwarded to the following address:

Physical address: Delpen Building Cnr Annie Botha and Union Street Office 270 Attention: Delegate of the Minister Act 70 of 1970

<u>Postal Address:</u> Department of Agriculture, Forestry and Fisheries Private Bag X120 Pretoria 0001 Attention: Delegate of the Minister Act 70 of 1970 In addition, comments must be requested from Eskom regarding grid connectivity and capacity. Request for comment must be submitted to:

Mr John Geeringh Eskom Transmission Megawatt Park D1Y38 PO Box 1091 JOHANNESBURG 2000

Tel: 011 516 7233 Fax: 086 661 4064 John.geeringh@eskom.co.za

B. AGRICULTURE STUDY REQUIREMENTS

- Detailed soil assessment of the site in question, incorporating a radius of 50 m surrounding the site, on a scale of 1:10 000 or finer. The soil assessment should include the following:
 - Identification of the soil forms present on site
 - The size of the area where a particular soil form is found
 - GPS readings of soil survey points
 - The depth of the soil at each survey point
 - Soil colour
 - Limiting factors
 - Clay content
 - Slope of the site
 - A detailed map indicating the locality of the soil forms within the specified area,
 - Size of the site
- Exact locality of the site
- Current activities on the site, developments, buildings
- · Surrounding developments / land uses and activities in a radius of 500 m of the site
- · Access routes and the condition thereof
- Current status of the land (including erosion, vegetation and a degradation assessment)
- Possible land use options for the site
- Water availability, source and quality (if available)
- · Detailed descriptions of why agriculture should or should not be the land use of choice
- · Impact of the change of land use on the surrounding area
- A shape file containing the soil forms and relevant attribute data as depicted on the map.

C. ASTRONOMY GEOGRAPHIC ADVANTAGE ACT, 2007 (ACT NO. 21 OF 2007)

The purpose of the Act is to preserve the geographic advantage areas that attract investment in astronomy. The entire Northern Cape Province excluding the Sol Plaatjie Municipality had been declared an astronomy advantage area. The Northern Cape optical and radio telescope sites were declared core astronomy advantage areas. The Act allowed for the declaration of the Southern Africa Large Telescope (SALT), MeerKAT and Square Kilometre Array (SKA) as astronomy and related scientific endeavours that had to be protected.

You are requested to indicate the applicability of the Astronomy Geographic Advantage Act, Act No. 21 of 2007 on the application in the BAR/EIR. You must obtain comments from the Southern African Large Telescope (SALT) if the proposed development is situated within a declared astronomy advantage area.



environmental affairs

Department: **Environmental Affairs REPUBLIC OF SOUTH AFRICA**

Private Bag X 447 · PRETORIA · 0001 · Environment House · 473 Steve Biko Road, Arcadia · PRETORIA

DEA Reference: 14/12/16/3/3/2/1018 Enquiries: Phaphama Mdunywa Tel: 012 399 8913 E-mail: PMdunywa@environment.gov.za

Andrea Gibb SiVEST Environmental Division P O Box 2921 **RIVONIA** 2128

Telephone number: 011 798 0600 Email address: info@sivest.co.za

PER EMAIL / MAIL

Dear Sir/Madam

ACKNOWLEDGEMENT OF RECEIPT OF FINAL SCOPING REPORT FOR THE PROPOSED DEVELOPMENT OF THE XHA: BOOM WIND FARM NEAR LOERIESFONTEIN WITHIN THE NORTHERN CAPE PROVINCE.

The Department confirms having received the Final Scoping Report for Environmental Authorisation for the above-mentioned project on 04 August 2017.

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

Kindly quote this reference number in all your future submissions.

Yours Sincerely

Mr Sabelo Malaza Chief Director: Integrated Environmental Authorisations **Department of Environmental Affairs** Letter signed by: Ms Toinette Van Der Merwe Designation: Environmental Officer Specialised Production: EIA Coordination, Strategic Planning and Support

Date: 07/08/20/7

Stephan Jacobs

From:	Stephan Jacobs
Sent:	Monday, August 28, 2017 3:30 PM
То:	'vchauke@environment.gov.za'
Cc:	Andrea Gibb; Hlengiwe Ntuli
Subject:	13622 Mainstream Wind Farms Near Loeriesfontein - Acknowledgement of Receipt
	Letters Outstanding
Attachments:	20170807 DEA Acknowledgment of Receipt of FSR HL.pdf
Importance:	High

Good Afternoon Mr. Chauke,

My company (SiVEST) has been appointed as the Environmental Assessment Practitioner (EAP) to undertake the Environmental Impact Assessment (EIA) processes for the proposed development of four (4) wind farms and associated infrastructure near Loeriesfontein in the Northern Cape province. The wind farms are referred to as the Graskoppies (<u>DEA Ref No.: 14/12/16/3/3/2/1015</u>), Hartebeest Leegte (<u>DEA Ref No.: 14/12/16/3/3/2/1015</u>), Ithemba (<u>DEA Ref No.: 14/12/16/3/3/2/1015</u>), Ithemba (<u>DEA Ref No.: 14/12/16/3/3/2/1015</u>) and Xha! Boom (<u>DEA Ref No.: 14/12/16/3/3/2/1018</u>) Wind Farms respectively.

The Final Scoping Reports (FSRs) for the above-mentioned projects were submitted to the DEA on the 4th of August 2017. However, as discussed, SiVEST have only received an Acknowledgement of Receipt Letter (see attached) for the Hartebeest Leegte Wind Farm (<u>DEA Ref No.: 14/12/16/3/3/2/1015</u>). We have not yet received anything for the other three (3) proposed wind farms (i.e. Graskoppies - <u>14/12/16/3/3/2/1017</u>; Ithemba - <u>14/12/16/3/3/2/1016</u> and Xha! Boom - <u>14/12/16/3/3/2/1018</u>).

As such, please can you investigate this for us and advise why the acknowledgement of receipt letters for the other three (3) proposed wind farms (Graskoppies, Ithemba and Xha! Boom) have not yet been issued.

Your urgent response will be greatly appreciated.

Kind Regards,

Stephan Jacobs (B.Sc.(Hons) Environmental Management and Analysis) Environmental Consultant SiVEST Environmental Division





environmental affairs

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Private Bag X 447· PRETORIA · 0001· Environment House · 473 Steve Biko, Arcadia· PRETORIA Tel (+ 27 12) 399 9372

> DEA Reference: 14/12/16/3/3/2/1018 Enquiries: Mr Thando Booi Telephone: (012) 399 9387 E-mail: TBooi@environment.gov.za

Andrea Gibb SiVEST SA (PTY) Ltd P.O. Box 2921 **RIVONIA** 2128

Telephone Number:011 798 0638Email Address:andreag@sivest.co.za

PER E-MAIL / MAIL

Dear Andrea

COMMENTS ON THE DRAFT SCOPING REPORT FOR PROPOSED DEVELOPMENT OF THE XHA! BOOM WIND FARM NEAR LOERISFONTEIN, NORTHERN CAPE PROVINCE

The draft Scoping Report (SR) dated 21 June 2017 and received by this Department on 21 June 2017 refers.

This Department has the following comments on the abovementioned application:

- Please ensure that all relevant listed activities are applied for, are specific and can be linked to the development activity or infrastructure as described in the project description.
- The two specialist studies namely Visual Impact Assessment and Surface Water Assessment that were conducted by in house specialists do not comply with regulation 13(1)(a) and therefore these studies must be externally reviewed by specialists in compliance with regulations 13(2) and 13(3) of the amended EIA regulations of 2014.
- It has been noted that there is inconsistency with regard to the number of turbines proposed. On page 12
 of the Scoping Report (under the project description) and page iii of the Noise Report, it has been
 mentioned that 70 and 47 turbines will be constructed. Please ensure that the final Scoping Report include
 the correct number of turbines to be constructed on site.
- Please ensure that all issues raised and comments received during the circulation of the SR from registered I&APs and organs of state which have jurisdiction (including this Department's Biodiversity Section) in respect of the proposed activity are adequately addressed in the final SR. Proof of correspondence with the various stakeholders must be included in the final SR. Should you be unable to obtain comments, proof should be submitted to the Department of the attempts that were made to obtain comments. The Public Participation Process must be conducted in terms of Regulations 39, 40, 41, 42, 43 & 44 of the EIA Regulations 2014.
- This Department requires a cumulative impact assessment to be undertaken in the final SR to determine
 potential fatal flaws as this project is one part of three projects that make up one project.
- Please provide a description of any identified alternatives for the proposed activity that are feasible and reasonable, including the advantages and disadvantages that the proposed activity or alternatives will have on the environment and on the community that may be affected by the activity as per Appendix 2 of

GN R.982 of 2014. Alternatively, you should submit written proof of an investigation and motivation if no reasonable or feasible alternatives exist in terms of Appendix 2.

- You are advised to comply with Regulation 21(1) of the amended EIA Regulations, 2014.
- You are further reminded that the final SR to be submitted to this Department must comply with all the requirements in terms of the scope of assessment and content of scoping reports in accordance with Appendix 2 of the amended EIA Regulations, 2014 and ensure that the final SR submitted to this Department for consideration meets the requirements in terms of identifying, assessing and providing mitigation measures of the impacts on the alternative and preferred sites.
- Further note that in terms of Regulation 45 of the EIA Regulations 2014, this application will lapse if the applicant fails to meet any of the timeframes prescribed in terms of the these Regulations, unless an extension has been granted in terms of Regulation 3(7).

You are hereby reminded of Section 24F of the National Environmental Management Act, Act No 107 of 1998, as amended, that no activity may commence prior to an environmental authorisation being granted by the Department.

Yours faithfully

Chalo

Mr Sabelo Malaza Chief Director: Integrated Environmental Authorisations Department of Environmental Affairs Signed by: Ms Olivia Letlalo Designation: Deputy Director: Strategic Infrastructure Developments Date: 06 07 2017

í c	x:	Mr Mike Mangnall	South African Mainstream	Cell:082 598 1123	Émail:
		•	Renewable Developments (Pty) Ltd		mike.mangnall@mainstreamrp.com
		Thulani Mthombeni	Northern Cape Department of Environment and Nature Conservation	Tel: 053 807 7300	Email: <u>tmtho@webmail.co.za</u>
		Charles du Plessis	Hantam Local Municipality	Tel:027 341 8500	Email:municipalmanager@hantam.gov. za



environmental affairs

Department: Environmental Affairs REPUBLIC OF SOUTH AFRICA

Private Bag X 447 · PRETORIA · 0001 · Environment House · 473 Steve Biko Road, Arcadia · PRETORIA

DEA Reference: 14/12/16/3/3/2/1018 Enquiries: Ms Toinette van der Merwe Tel: 012 399 9320 E-mail: tvandermerwe@environment.gov.za

Andrea Gibb SiVEST SA (PTY) Ltd PO Box 2921 **RIVONIA** 2128

 Fax:
 011 803 7272

 Tel:
 011 798 0638

 Email:
 andreag@sivest.co.za

PER EMAIL / MAIL

Dear Sir/Madam

ACKNOWLEDGEMENT OF RECEIPT OF THE NEW APPLICATION FOR ENVIRONMENTAL AUTHORISATION (ENVIRONMENTAL IMPACT ASSESSMENT PROCESS) AND SCOPING REPORT FOR THE PROPOSED DEVELOPMENT OF THE XHA! BOOM WIND FARM NEAR LOERIESFONTIN, NORTHERN CAPE PROVINCE

The Department confirms having received the Application for Environmental Authorisation and Draft Scoping Report for the abovementioned project on 21 June 2017. You have submitted these documents to comply with the Environmental Impact Assessment Regulations (EIA), 2014, as amended.

Note that in terms of Regulation 45 of the EIA Regulations, 2014, as amended, this application will lapse if the applicant fails to meet any of the time-frames prescribed in terms of these Regulations, unless an extension has been granted by the Department in terms of Regulation 3(7) of the EIA Regulations, 2014, as amended.

You are hereby reminded of Section 24F of the National Environmental Management Act, Act No. 107 of 1998, as amended, that no activity may commence prior to an Environmental Authorisation being granted by the Department.

Kindly quote the abovementioned reference number in any future correspondence in respect of the application.

Yours sincerely

Mr/Sabelo Malaza Chief Director: Integrated Environmental Authorisations Department of Environmental Affairs Letter signed by: Ms Toinette van der Merwe Designation: Environmental Officer: EIA Coordination, Strategic Planning and Support Date: JJ /06/J0/7

CC Mr Mike Mangnall	South Africa Mainstream Renewable Power Email: mike.mangnall@mainstreamrp.com Developments (Pty) Ltd
Thulani Mthombeni	Northern Cape Department of Environmental Affairs and Email: tmtho@webmail.co.za



environmental affairs

Department: Environmental Affairs REPUBLIC OF SOUTH AFRICA

APPLICATION FORM FOR ENVIRONMENTAL AUTHORISATION

File Reference Number: NEAS Reference Number: Date Received:

or official use only)	
or official use offig	

Yes ✓ No

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

Proposed Construction of the Xha! Boom Wind Farm near Loeriesfontein, Northern Cape Province

Indicate if the DRAFT report accompanies the application

Kindly note that:

- 1. This application form is current as of 1 April 2016. 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.
- 5. This application must be handed in at the offices of the National Department of Environmental Affairs where the Minister is the competent authority in respect of the application.
- 6. No faxed or e-mailed applications will be accepted. An electronic copy (in the form of a CD) 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 may become public information on receipt by the competent authority.
- 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:

Postal address: Department of Environmental Affairs Attention: Director: Integrated Environmental Authorisations Private Bag X447 Pretoria 0001

Physical address: Department of Environmental Affairs Attention: Director: Integrated Environmental Authorisations Environment House 473 Steve Biko Road Arcadia Pretoria

Queries must be addressed to the contact below:

E-mail: EIAAdmin@environment.gov.za

Please note that this form <u>must</u> be copied to the relevant provincial environmental department/s.

View the Department's website at <u>http://www.environment.gov.za/</u> 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

	✓	
_		_
		J

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	
This is an updated version of an existing application	

FEE AMOUNT	Fee
Application for an environmental authorisation for which basic assessment is required in terms of the Environmental Impact Assessment Regulations	
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:

Payment Enquiries: Tel: 012 399 9119 Email: eiafee@environment.gov.za	
Banking details: ABSA Bank Branch code: 632005 Account number: 1044 2400 72 Current account	
Reference number: Reference number to be provided in the spe of site in decimal degrees to 5 or 6 decimal places: latitude/longi e.g33.918861/18.423300 Proof of payment must accompany the application form: Indicate	ude
Tax exemption status: Status: Tax exempted Reference number: SiVEST SA (Refer to Appendix 1 for expla	

2. **PROJECT DESCRIPTION**

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

South Africa Mainstream Renewable Power Developments (Pty) Ltd (hereafter referred to as Mainstream) are proposing to construct a wind farm and associated infrastructure near Loeriesfontein in the Northern Cape Province of South Africa (hereafter referred to as the 'proposed development'). The proposed development will consist of a wind farm with a maximum export capacity of up to 235MW referred to as Xha! Boom Wind Farm. The overall objective of the project is to generate electricity to feed into the National Grid.

The proposed wind farm is located approximately 68km north of Loeriesfontein in the Northern Cape Province, within the Hantam Local Municipality. The application site is on the following property:

• Entire part of Portion 2 of the Farm Georg's Vley No. 217.

The project site has been identified through pre-feasibility studies conducted by Mainstream based on wind resource, grid connection suitability, competition, flat topography, land availability and site access. The buildable area of the site will however be determined by the sensitive areas identified during the EIA.

Technical details and infrastructure necessary for the proposed project

- Up to **70 wind turbines**, between 3 and 5MW, with an export capacity up to 235MW.
- Wind turbines will have a hub height of up to 160m and a rotor diameter of up to 160m.
- 132kV on-site Xha! Boom IPP Substation
- The turbines will be connected via **medium voltage cables** to the proposed 132kV on-site Xha! Boom IPP Substation.
- Internal access roads are proposed to be up to 13.5 m wide. This would however only be for the construction phase as the width of the internal access roads will be reduced to 6 - 8m during the operational phase.
- A temporary construction lay down area.
- A hard standing area / platform per turbine.
- The **operations and maintenance buildings**, including an on-site spares storage building, a workshop and an operations building.
- Fencing (if required) will be up to 5m where required and will be either mesh or palisade.

The total amount of developable area is approximately 3804 hectares. The total buildable area for the proposed Wind Farm is 1897.20 hectares. The proposed project will encompass the installation of a wind turbines and associated infrastructure, in order to generate electricity that is to be fed into the National Grid. The facility will have a maximum export capacity of up to 235MW.

The wind turbines and all other project infrastructure will be placed strategically within the development area based on environmental constraints. The size of the wind turbines will depend on the development area and the total generation capacity that can be produced as a result. The wind turbines will therefore likely have a hub height of up to 160m and a rotor diameter of up to 160m. Each wind turbine will have a foundation diameter of up to 25m and will be approximately 3m deep, however, these dimensions may be larger if geotechnical conditions dictate as such. The hardstand area occupied by each wind turbine will be up to 0.5 hectares (85m x 60m). The excavation area will be approximately 1 000m² in sandy soils due to access requirements and safe slope stability requirements. A hard standing area / platform of approximately 2 400m² (60m x 40m) per turbine will be required for turbine crane usage. There will be up to 70 wind turbines constructed with an export capacity up to 235MW. The electrical generation capacity for each turbine will range between 3MW and 5MW, depending on the final wind turbine selected for the proposed development. It must be noted that the final selection for the turbine type will be conducted after the project has been selected as a Preferred Bidder project under the DoE REIPPPP. This is as a result of technology constantly changing as time progresses.

The wind turbines will be connected to the proposed 132kV on-site Xha! Boom substation using buried (up to a 1.5m depth) medium voltage cables except where a technical assessment of the proposed design suggests that overhead lines are more appropriate such as over rivers, gullies and long runs. Where overhead power lines are to be constructed, self-supported or H-pole tower types will be used. The height will vary based on the terrain, but will ensure minimum Overhead Line (OHL) clearances with buildings, roads and surrounding infrastructure will be maintained. The dimensions of the specific OHL structure types will depend on electricity safety requirements. The exact location of the towers, the selection of the final OHL structure types and the final designs will comply with the best practise and SANS requirements.

Internal access roads with a maximum width of 20m are initially being proposed for the construction phase. This is however only temporary as the width of proposed internal access roads will be reduced to approximately 6 - 8m for maintenance purposes during the operational phase. The proposed internal access roads will include the net load carrying surface excluding any V drains that might be required.

The temporary construction lay down area will be approximately 10 000m² (100m x 100m) and will include an access road and contractor's site office area of up to 5 $000m^2$. A hard standing area / platform of approximately 2 400m² (60m x 40m) per turbine will be required for turbine crane usage.

The operation and maintenance buildings will include an on-site spares storage building, a workshop and operations building with a total combined footprint that will not exceed 5 000m². The operation and maintenance buildings will be situated in proximity to the wind farm substation due to requirements for power, water and access.

Additionally, Mainstream are proposing to construct the associated Xha! Boom on-site and linking substations and power line with a capacity of up to 132kV. This associated electrical infrastructure will require a separate Environmental Authorisation and is being conducted as a part of a separate Basic Assessment (BA) process. The 132kV Xha! Boom power line has been included in the wind farm EIA for background information but will be authorised under a separate BA to allow for handover to Eskom. The proposed 132kV on-site Xha! Boom substation will include an Eskom portion and an Independent Power Producer (IPP) portion, hence the substation has been included in the wind farm EIA and in the on-site substation and power line BA to allow for handover to Eskom. Although the wind farm and associated electrical infrastructure will be assessed separately, a single public participation process is being undertaken to consider both of the proposed 132kV on-site Xha! Boom substation as power of the cumulative impact assessment. The DEA reference number allocated for the proposed 132kV on-site Xha! Boom substation and associated 132kV power line has not yet been allocated by the DEA. This will be provided in the Final Environmental Impact Assessment Report (FEIAr).

Does the project form part of any of the Strategic Infrastructure Projects (SIPs) as described in the National Development Plan, 2011?

NO

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**

1			
1	Is the project subject to the Integrated Resource Plan 2010 - 2030 (IRP) bidding	1.477.0	1
1	LIS LIE DIDIECT SUDIECT TO THE INTEGRATED RESOURCE Plan 2010 - 2030 (IRP) bidding	YES	
1		ILS	
1	process?		
1	process;		

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	1.	Greenfield transformation to urban or industrial form (including mining)	~
Infrastructure – electricity (generation, transmission & distribution)		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.

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:

Not Applicable

3. GENERAL INFORMATION

h African Mainstream Renewable Power Developments (Pty) Ltd
/007850/07
h African Mainstream Renewable Power Developments (Pty) Ltd
I Three Contributor

Responsible person	Mr Michael Mangnall					
name (If the applicant						
is a company);						
	7044045404004					
Applicant/ Responsible	7211245134081					
person ID number:						
Responsible position,	Country Manager: South Afric	а				
e.g. Director, CEO,						
etc.:						
Physical address:	4th Floor Mariendahl House	, Newlar	nds on Main, Cnr Main Road and			
	Campground, Claremont, Cap	e Town				
Postal address:	PO Box 45063, CLAREMONT					
Postal code:	7735	Cell:	083 785 1492			
Telephone:	021 657 4045	Fax:	021 671 5665			
E-mail:	mike.mangnall@mainstreamrp.com					
Droutingial Authority	Northern Cape Department of	Environm	ent and Nature Conservation (NC			
Provincial Authority:	DENC)					
Contact person:	Thulani Mthombeni					
Postal address:	Private Bag X 86102, Kimberl	91/				
Postal code:	8300	Cell:	072 409 2277			
Telephone:	053 807 7466	Fax:				
E-mail:	tmtho@webmail.co.za	rax.	053 831 3530			
	tintho@webmail.co.za					
Local municipality:	Hontom Local Municipality					
Contact person:	Hantam Local Municipality					
Postal address:	Mr Charl du Plessis					
	PO Box 16, Prieska					
Postal code:	8940	Cell:	082 898 4012			
Telephone:						
E-mail:	027 341 8500 municipalmanager@hantam.go	Fax:	027 341 8501			

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:	Maria Magdelena Burden		
Contact person:	Hendrik Willem Burden		
Postal address:	Posbus 113, Loeriesfontein		
Postal code:	8185	Cell:	083 676 0318
Telephone:	027 662 9861	Fax:	N/A
E-mail:	Hein.carli@gmail.com		

In instances where there is more than one landowner, please attach a list of those landowners with their contact details as **Appendix 4**. Unless the application is in respect of linear activities or strategic integrated projects as contemplated in the Infrastructure Development Act, 2014, written consent of landowner/s must be submitted in **Appendix 4**.

Identified Competent Authority to consider the application: Reason(s) in terms of S24C of NEMA 1998 as amended:

Department of Environmental Affairs (DEA)

The proposed project is for a renewable energy generating facility by an Independent Power Producer (IPP). According to the *Guidelines on EIAs for Facilities to be Included in the Electricity Response Plan*, the project forms part of the National Electricity Response Plan (NERP). All Provincial environmental authorities have agreed that the DEA is the Competent Authority for all applications from IPPs where they are included in the NERP.

4. ENVIRONMENTAL ASSESSMENT PRACTITIONER (EAP) INFORMATION

EAP company name:	SiVEST SA (Pty) Ltd				
B-BBEE	Contribution level	3	Percent	age	110%
	(indicate 1 to 8 or non		Procure	ment	
	compliant)		recognit	ion	
Professional	None				
affiliation/registration:					
Contact person:	Andrea Gibb				
Company:	SiVEST SA (Pty) Ltd				
Physical address:	51 Wessel Road, Rivonia				
Postal address:	PO Box 2921, Rivonia				
Postal code:	2128		Cell:	+27 72 58	7 6525
Telephone:	+27 11 798 0638		Fax:	+27 11 80	3 7272
E-mail:	andreag@sivest.co.za				

The appointed EAP must meet the requirements of Regulation 13 of GN R.982, dated December 2014. The declaration of independence of the EAP and undertaking under oath or affirmation that all the information submitted or to be submitted for the purposes of the application is true and correct must be submitted as **Appendix 9**.

5. SITE DESCRIPTION

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

Province	Northern Cape Province
District Municipality	Namakwa District Municipality
Local Municipality	Hantam Local Municipality
Ward number(s)	5
Nearest town(s)	Loeriesfontein
Farm name(s) and	Farm Georg's Vley No. 217.
number(s)	
Portion number(s)	Entire Portion 2

Surveyor General 21 digit code

(If there are more than 4, please attach a list with the rest of the codes as **Appendix 5**. Where the 21 digit SGID and farm name are not available, the coordinates of the boundary of the property or properties must be provided in **Appendix 5**.

С	0	1	5	0	0	0	0	0	0	0	0	0	2	1	7	0	0	0	0	2
1	9	2				3		10.1				4					37 L	5		

Are there any other app property?	YES					
If YES, please indicate the following:						
Competent Authority Department of Environmental Affairs (DEA)						
Reference Number To be confirmed once the applications have been submitted.						
Project Name The proposed construction of the Xha! Boom 132kV Substations ar						
Power Line near Loeriesfontein Northern Cape Province.						
Please provide details of	of the steps taken to ascertain this information:					
SiVEST has been appointed by Mainstream to act as the EAP with regards to the proposed construction of the Xha! Boom Substations and Power lines near Loeriesfontein, Northern Cape						

Province. The 132kV Substations and Power Line are being proposed to link the Xha! Boom Wind Farm to the Eskom grid. The electrical infrastructure is being authorised under a separate Basic Assessment in order to facilitate handover to Eskom. The application for the 132kV Substations and Power Line will be submitted to the DEA in due course.

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.

Detailed description of listed activities associat	ed with the project
Listed activity as described in GN R 983, 984 and 985 (as amended on 07 April 2017)	Description of project activity that triggers listed activity
GN R. 983 Item 11: The development of facilities or infrastructure for the transmission and distribution of electricity-	An on-site IPP substation will be constructed as part of the proposed wind farm. The proposed on- site IPP substation will be located outside an urban area and will have a capacity of 132kV.
(<i>i</i>) outside urban areas or industrial complexes with a capacity of more than 33 but less than 275 kilovolts	
 GN R. 983 Item 12: The development of: ii) infrastructure or structures with a physical footprint of 100 square metres or more; where such development occurs- (a) within a watercourse; (c) if no development setback exists, within 32 metres of a watercourse, measured from the edge of a watercourse. 	The proposed development will entail the construction of buildings and other infrastructure exceeding 100 square metres in size. Internal access roads will be required which will need to route to the respective wind turbines locations and to the O&M building and infrastructure. The Surface Water Scoping Study identified two (2) Depression Wetlands, three (3) Major Drainage Line (drainage lines with channel width >5m) and two hundred and thirty, six (236) Drainage Lines (drainage lines with a channel width <5m). As a result, the layout of the proposed development will likely fall within 32m of surface water features.
 GN R. 983 Item 19: The infilling or depositing of any material of more than 10 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 10 cubic metres from a watercourse; But excluding where such infilling, depositing, dredging, excavation, removal or moving-(a) will occur behind a development setback; (b) is for maintenance purposes undertaken in accordance with a maintenance management plan; (c) falls within the ambit of activity 21 in this Notice, in which case that activity applies. 	The scoping phase surface water assessment revealed that there are surface water features located within the development area. The Surface Water Scoping Study identified two (2) Depression Wetlands, three (3) Major Drainage Line (drainage lines with channel width >5m) and two hundred and thirty, six (236) Drainage Lines (drainage lines with a channel width <5m). Although the layout of the proposed development will be designed to avoid the identified surface water features as far as possible, some of the internal and access roads, may need to traverse the identified surface water features and during construction of these roads soil may need to be removed from the watercourses.
GN R. 983 Item 24: The development of a road - ii) with a reserve wider than 13,5 meters, or where no reserve exists where the road is wider than 8 metres;	Internal access roads with a maximum width of 20m are initially being proposed for the construction phase. This is however only temporary as the width of proposed internal access roads will be reduced to approximately 6 - 8m for maintenance purposes during the operational phase.

GN R. 983 Item 28: Residential, mixed, retail, commercial, industrial or institutional developments where such land was used for agriculture, game farming, equestrian purposes or afforestation on or after 01 April 1998 and where such development: (ii) will occur outside an urban area, where the total land to be developed is bigger than 1 hectare; excluding where such land has already been	The proposed project site is currently used for agricultural purposes, specifically commercial sheep farming, and the proposed project will result in an area greater than 1 hectare being transformed into an industrial land use.
developed for residential, mixed, retail, commercial, industrial or institutional purposes.	
GN R. 983 Item 56: The widening of a road by more than 6 metres, or the lengthening of a road by more than 1 kilometre - (ii) where no reserve exists, where the	It is likely that existing access roads will need to be upgraded in order to access the site. Internal access roads with a maximum width of 13.5m are initially being proposed for the construction phase. This is however only temporary as the
existing road is wider than 8 metres – excluding where widening or lengthening occur inside urban areas.	width of proposed internal access roads will be reduced to approximately 6 - 8m for maintenance purposes during the operational phase. The required width and length of the expansion will be confirmed during the EIA process.
GN R. 984 Item 1: The development of facilities or infrastructure for the generation of electricity from a renewable resource where the electricity output is 20 megawatts or more, excluding where such development of facilities or infrastructure is for photovoltaic installations and occurs – (a) within an urban are; or (b) on existing infrastructure.	It is proposed that a wind farm with an export capacity up to 235MW will be constructed.
GN R. 984 Item 15: The clearance of an area of 20 hectares or more of indigenous vegetation, excluding where such clearance of indigenous vegetation is required for-	The proposed development will transform more than 20 hectares of indigenous vegetation. Clearance will also be required for the proposed on-site substation, O&M building, internal access roads and other associated infrastructure.
 (i) the undertaking of a linear activity; or (ii) maintenance purposes undertaken in accordance with a maintenance management plan. 	

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.

The public participation process was initiated in October 2016 with the issuing of the BID and initial landowner consultation. Site notices (as per regulations) were placed near the study area during a site visit undertaken from the 24th-28th of October 2016. Public notification of the EIA process will be advertised in a local/regional newspaper as required under the Environmental Impact Assessment (EIA) Regulations (2014).

The Information gathered on the initial site visit formed the basis of the database with surrounding landowner and other potential I&APs. Other important stakeholders (such as parastatals, municipalities and other governmental departments etc.) were identified that are relevant to the study area and included in the database. The I&AP database is a working database that allows potential I&APs identified throughout the Scoping and EIA Phase process to be added/removed.

The Draft Scoping Report (DSR) will be released for public review in early June 2017. Thirty (30) day review periods will provided for general public and for authorities as required by the EIA Regulations (2014). During the review period of the Environmental Impact Assessment Report (DEIAr), meetings will be undertaken to present the proposed development to the public and solicit comments. One (1) Public Meeting and up to two (2) Focus Group Meetings will be undertaken during both the Environmental Impact Phase. Minutes of the meetings will be taken and distributed to the attendees for final comment. Once finalised, the minutes will be incorporated into the Final Environmental Impact Assessment Report (FEIAr). Full Comments and Responses Reports (C&RRs) will also be drafted to capture all comments received during the Scoping and Environmental Impact Phases. They will also be included into the FSR and FEIAr respectively.

Upon DEA accepted of the FSR and the Plan of Study for the Environmental Impact Phase is approved, an EIA Newsletter will be prepared and distributed. The EIA Newsletter will provide a brief overview of the Scoping Phase and provide an overview of the process to be followed during the Environmental Impact Phase.

The public participation process will come to a close for the proposed development when the decision on environmental authorisation (EA) is received and is made available to the public. All registered I&APs will be notified of the EA and appeal process.

8. OTHER AUTHORISATIONS REQUIRED

LEGISLATION	AUTHORISATION REQUIRED		APPLICATIO SUBMITTED		
SEMAs					
National Environmental Management: Air Quality Act		NO		NO	
National Environmental Management: Biodiversity Act	YES - possibly			NO	
National Environmental Management: Integrated Coastal		NO	1 1	NO	
Management Act	11 Per 14	19 2.00			
National Environmental Management: Protected Areas Act		NO		NO	
National Environmental Management: Waste Act		NO		NO	
National legislation		-			
Mineral Petroleum Development Resources Act		NO		NO	
National Water Act	YES - possibly			NO	
National Heritage Resources Act	YES - possibly			NO	
Others: Please specify		NO		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**.

Note that in terms of sections 7B and 7C of the National Environmental Management: Integrated Coastal Management Act, 2008 (Act No. 24 of 2008) ICMA, a pre-approval for a reclamation application in terms of the ICMA should first be issued by the Minister prior to the submission of a NEMA Chapter 5 EA application to the NEMA competent authority (CA).

9. LIST OF APPENDICES

)
Appendix 1	Proof of Payment	YES	
Appendix 2	Strategic Infrastructure Projects		N/A
Appendix 3	List of Local Municipalities (with contact details)	YES	
Appendix 4	List of land owners (with contact details) and written consent of land owners.		N/A
Appendix 5	List of SGIDs		N/A
Appendix 6	Project map	YES	
Appendix 7	Project schedule	YES	
Appendix 8	Declaration of Applicant	YES	
Appendix 9	Declaration of EAP and undertaking under oath or affirmation	YES	

APPENDIX 1 PROOF OF PAYMENT/ MOTIVATION FOR EXCLUSION

Please note that South Africa Mainstream Renewable Power Developments (Pty) Ltd has appointed SiVEST SA (Pty) Ltd as the Environmental Assessment Practitioners for four (4) separate proposed Wind Farms near Loeriesfontein, Northern Cape Province (Namely Graskoppies, Hartebeest Leegte, Ithemba and Xha! Boom Wind Farms). As such four separate application payments are required for each project. However, SiVEST's accounts department accidently assumed that since the money was going to the same Department that a bulk payment was necessary rather than four (4) separate individual payments. Therefore the reference numbers associated with the attached payment is incorrect. However the required amount for the applications associated with the four projects is correct and has been paid. Please see attached. Once this mistake was identified SiVEST contacted the DEA accounts department and were advised that we did not need to apply for the payments to be reversed and redo individual payments, but that we could rather explain what transpired and that the bulk payment of R40,000.00 covers the following applications:

- Proposed Construction of the Graskoppies Wind Farm near Loeriesfontein, Northern Cape Province
- Proposed Construction of the Hartebeest Leegte Wind Farm near Loeriesfontein, Northern Cape Province
- Proposed Construction of the Ithemba Wind Farm near Loeriesfontein, Northern Cape Province
- Proposed Construction of the Xha! Boom Wind Farm near Loeriesfontein, Northern Cape Province



NOTIFICATION OF PAYMENT

To whom it may concern:

First National Bank hereby confirms that the following payment has been made:

Date Actioned Time Actioned Trace ID Payer Details	: 2017-01-30 : 18:18:56 : XCCZB7CD02
Payment From Amount	: SIVEST SA (PTY) LTD : 40000.00
Payce Details	
Recipient/Account no Recipient Name Bank Branch Code Reference	:240072 : DEPART OF ENV AFFAIR : ABSA Bank : 632005 : SIVEST SA
Channel	: INTERNET

END OF NOTIFICATION

To authenticate this Payment Notification please visit our website at https://www.fnb.co.za, click on Online Banking, select the "Verify Payment" option and follow the on-screen instructions

Our customer (the payer) has requested FirstRand Bank Limited to send this notification of payment to you. Should you have any queries regarding the contents of this notice, please contact the payer. FirstRand Bank Limited does not guarantee or warrant the accuracy and integrity of the information and data transmitted electronically and we accept no liability whatsoever for any loss, expense, claim or damage, whether direct, indirect or consequential, arising from the transmission of the information and data.

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FirstRand Bank Directors: LL Dippenaar (Chairman), JP Burger (CEO), VW Bartlett, AP Pullinger (Deputy CEO), MS Bomela, P Cooper (Alternate), JJ Durand, GG Gelink, PM Goss, NN Gwagwa, PK Harris, WR Jardine, HS Kellan, F Knoetze, RM Loubser, EG Matenge-Sebesho, PJ Makosholo, AT Nzimande, D Premnarayen (India), BJ van der Ross, JH van Greuning

First National Bank, a division of FirstRand Bank Limited. Reg.No.1929/001225/06. An Authorised Financial Services and Credit Provider (NCRCP20).

APPENDIX 2 STRATEGIC INFRASTRUCTURE PROJECTS

NOT APPLICABLE

APPENDIX 3 (IF APPLICABLE) LIST OF LOCAL MUNICIPALITIES

NOT APPLICABLE

APPENDIX 4 LIST OF LAND OWNERS WRITTEN CONSENT OF LAND OWNERS

PORTION 2 OF THE FARM GOERGS VLEY NO. 217

Landowner:	Maria Magdelena Burden			
Contact person:	Hendrik Willem Burden			
Postal address:	Posbus 113, Loeriesfontei	n		
Postal code:	8185	Cell:	083 676 0318	
Telephone:	027 662 9861	Fax:	N/A	
E-mail:	Hein.carli@gmail.com			

SiVEST Environmental

51 Wessel Road, Rivonia PO Box 2921, Rivonia 2128 Gauteng, South Africa

Phone + 27 11 798 0600 Fax +27 11 803 7272 Ernail info@sivest.co.za www.sivest.co.za



Established 1952

LANDOWNER CONSENT FORM

ENVIRONMENTAL IMPACT ASSESSMENT (EIA) FOR THE PROPOSED DEVELOPMENT OF THE <u>IXHA</u> BOOM WIND FARM NEAR LOERIESFONTEIN, NORTHERN CAPE PROVINCE

Property Details:	Portion 2 of the Farm Georgs Vley No 217	
Registered Title Deed Owner	M.M. Burden	
Full name(s) & Surname of Owner/Occupier/Legal Representative of land:	Hendrik Willem Burden	
Identification Number:	831014 51 51 085	
Postal Address:	Pasheus 113	
	LocriesFontein	
Telephone Number:	027 662 9861	
Fax Number:		
Cell Phone Number:	083 6760 318	
E-mail Address:	hein, Carli @ gmail. com	
SIGNATURE	MuBuch	

A Division of SiVEST SA (Pty) Ltd Offices: South Africa Durban, Johannesburg, Ladysmith, Pietermaritzburg, Richards Bay, Cape Town. Africa Harare (Zimbabwe)

Part of the SiVEST Group

SIVEST SA (Pty) Ltd Registration No 2000/006717/07 1/a ACESA

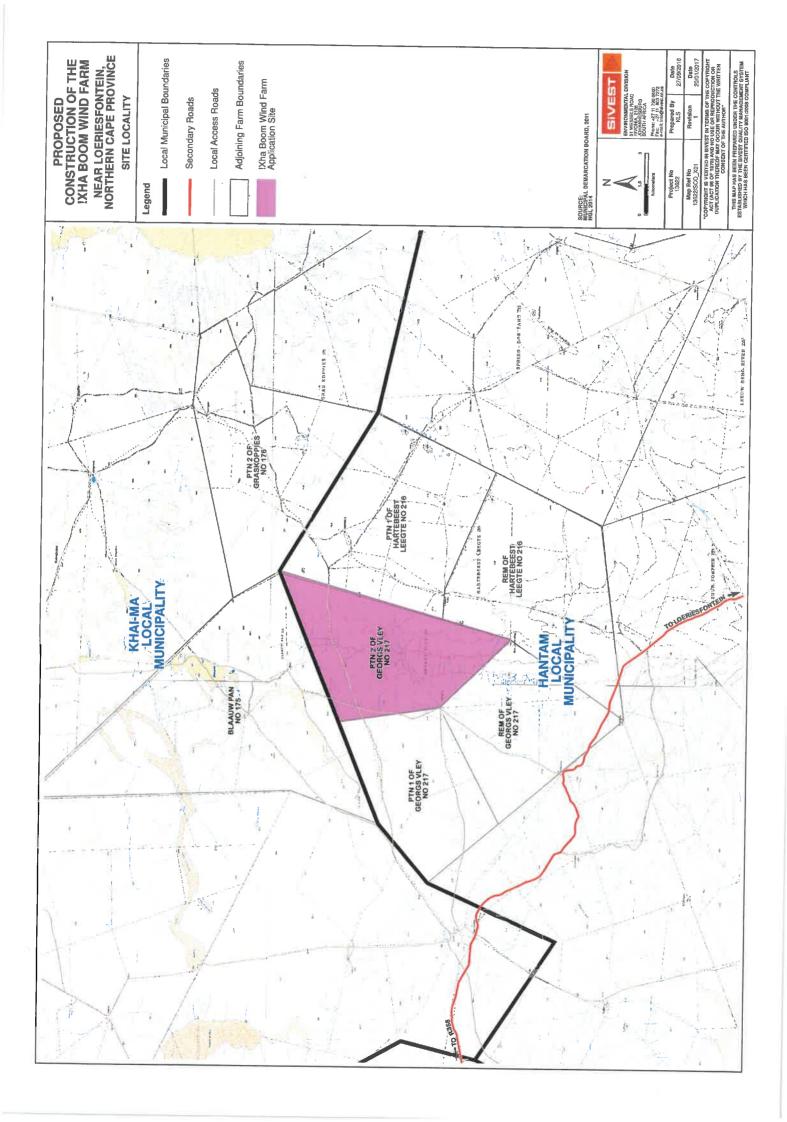
GREEN BUILDING COUNCIE

HENDER ARBANDSATDAY 2015

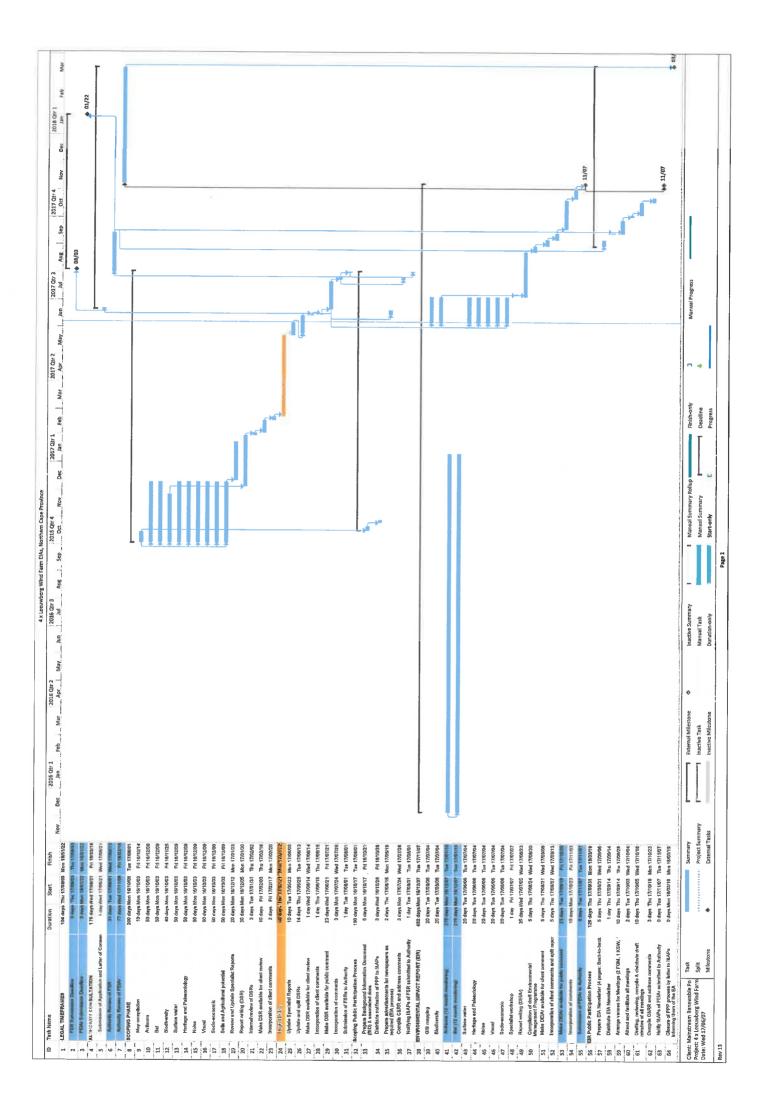
APPENDIX 5 (IF APPLICABLE) LIST OF SGIDS / COORDINATES OF THE BOUNDARY OF THE PROPERTY OR PROPERTIES (WHERE SGID AND FARM NAME ARE NOT AVAILABLE)

NOT APPLICABLE

APPENDIX 6 PROJECT MAP



APPENDIX 7 PROJECT SCHEDULE



APPENDIX 8 DECLARATION OF THE APPLICANT

I, Michael Mangnall, declare that -

- I am, or represent¹, the applicant in this application;
- I have appointed an Environmental Assessment Practitioner (EAP) to act as the independent EAP for this application / have obtained exemption from the requirement to obtain an EAP²;
- I will take all reasonable steps to verify whether the EAP and specialist/s appointed are independent and have expertise in conducting environmental impact assessments or undertaking specialist work as required, including knowledge of the Act, the EIA Regulations and any guidelines that have relevance to the proposed activity;
- I will provide the EAP and the competent authority with access to all information at my disposal that is relevant to the application;
- I 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 EAP or any person contracted by the EAP:
 - 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;
- I 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;
- I am responsible for complying with the conditions of any environmental authorisation issued by the competent authority;
- I hereby indemnify the Government of the Republic of South Africa, 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 EAP is responsible for in terms of these Regulations;
- I 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;
- I will perform all 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 am aware of what constitutes an offence in terms of Regulation 48 and that a person convicted of an offence in terms of Regulation 48(1) is liable to the penalties as contemplated in section 49B of the Act.
- I am aware that in terms of Section 24F of the National Environmental Management Act, Act No 107 of 1998, as amended, that no listed activity may commence prior to an environmental authorisation being granted by the Competent Authority.

Signature³ of the applicant/ Signature on behalf of the applicant

South African Mainstream Renewable Power Developments (Pty) Ltd

Name of company (if applicable)

20 June 2017

Date:

¹ If this is signed on behalf of the applicant, proof of such authority from the applicant must be attached. If the applicant is a juristic person, a signature on behalf of the applicant is required as well as proof of such authority. ² 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. ³ Only original signatures will be accepted. No scanned, copied or faxed signatures will be accepted. An EAP may not sign on behalf

of an applicant.

APPENDIX 9 9.1 DECLARATION OF THE EAP

I, Andrea Gibb, declare that -

- I act as the independent environmental assessment practitioner in this application;
- 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 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 will take into account, to the extent possible, the matters listed in Regulation 18 of the Regulations when preparing the application and any report relating to the application;
- 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, unless access to
 that information is protected by law, in which case it will be indicated that such information exists
 and will be provided to the competent authority;
- I will perform all obligations as expected from an environmental assessment practitioner in terms of the Regulations; and
- I am aware of what constitutes an offence in terms of Regulation 48 and that a person convicted of an offence in terms of Regulation 48(1) is liable to the penalties as contemplated in section 49B 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:

Signature of the environmental assessment practitioner

SiVEST SA (Pty) Ltd Name of company:

20 JUNE 2017

Date

APPENDIX 9 9.2 UNDERTAKING UNDER OATH/ AFFIRMATION

I, Andrea Gibb, swear under oath / affirm that all the information submitted or to be submitted for the purposes of this application is true and correct.

Signature of the environmental assessment practitioner

SiVEST SA (Pty) Ltd Name of company

20/06/2017

Date

CUENT SERVICE SERVICE 11 Signature of the commissioner of oaths 2017 KLIENTE GENS DENTRUM 201-06-20 Date