

# **Environmental Authorisation**

**Authorisation register number:** 

Last amended:

Holder of authorisation:

Location of activity:

12/12/20/1569

ACED Renewables Cookhouse

(Pty) Ltd

Farm Portions: Arolsen 69. 148. Farm Farm Rooidraai 146, Bavians Krantz 151, Bavians Krantz 151/2, Klipfonteyn 150/2, Roberts Kraal 281, Zure Kop 74/1, Zure Kop 74/2, Van Wyks Kraal 73/2

& Van Wyks Kraal 73/3



# **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 activity specified below.

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

# **Activities authorised**

By virtue of the powers conferred on it by the National Environmental Management Act, 1998 (Act No. 107 of 1998) and the Environmental Impact Assessment Regulations, 2006 the Department hereby authorises –

ACED Renewables Cookhouse (Pty) Ltd

with the following contact details -

Mr Sam Cooper ACED Renewables Cookhouse (Pty) Ltd PO Box 23777 CLAREMONT 7735

Tel:

(021) 670-3943

Fax:

(021) 670-1220

to undertake the following activities (hereafter referred to as "the activities");

#### **GNR 386**

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

(i) canals;

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- (ii) channels;
- (iii) bridges;
- (iv) dams; and
- (v) weirs.
- 7 The above ground storage of a dangerous good, including petrol, diesel, liquid petroleum gas or paraffin, in containers with a combined capacity of more than 30 cubic metres but less than 1000 cubic metres at any one location or site.
- 12 The transformation or removal of indigenous vegetation of 3 hectares or more or of any size where the transformation or removal would occur within a critically endangered or an endangered ecosystem listed in terms of section 52 of the National Environmental Management: Biodiversity Act, 2004 (Act 10 of 2004).
- 13 = The abstraction of groundwater at a volume where any general authorisation issued in terms of the National Water Act (Act No. 36 of 1998) will be exceeded.
- 14 The construction of masts of any material of type and of any height, including those used for telecommunications broadcasting and radio transmission, but excluding
  (a) masts of 15m and lower exclusively used by:
  - (i) radio amateurs; or
  - (ii) for lighting purposes;
  - (b) flagpoles; and
  - (c) lightning conductor poles.
- 15 The construction of a road that is wider than 4 metres or that has a reserve wider than 6 metres, excluding roads that fall within the ambit of another listed activity or which are access roads of less than 30 metres long.
- 16(a) = The transformation of undeveloped, vacant or derelict land to residential, mixed, retail, commercial, industrial or institutional use where such development does not constitute infill and where the total area to be transformed is bigger than 1 hectare.

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#### **GN R387**

- 1(a) The construction of facilities or infrastructure, including associated structures or infrastructure, for the generation of electricity where
  - (i) the electricity output is 20 megawatts or more; or
  - (ii) the elements of the facility cover a combined area in excess of 1 hectare
- 1(I) The construction of facilities or infrastructure, including associated structures or infrastructure, for the transmission and distribution of above ground electricity with a capacity of 120 kilovolts or more
- 2 Any development activity including associated structures and infrastructure, where the total area of the developed area is, or is intended to be 20 hectares or more.

for the construction of a wind energy facility, an access road, overhead 132kV distribution power lines and two substations as described on page 4 of the Environmental Impact Report (EIR) dated March 2010 at the farm portions Arolsen 69, Farm 148, Farm 148/1, Rooidraai 146, Bavians Krantz 151, Bavians Krantz 151/2, Klipfonteyn 150/2, Roberts Kraal 281, Zure Kop 74/1, Zure Kop 74/2, Van Wyks Kraal 73/2 & Van Wyks Kraal 73/3, which fall within the jurisdiction of the Blue Crane Route Local Municipality in the Eastern Cape Province, hereafter referred to as "the property".

The proposed project will include the following:

- Up to 200 wind turbine units (80-100m in height) with a 100m diameter rotor consisting of 3
   x 50m blades;
- A concrete foundation (15m x 15m x 2m) to support each tower;
- Underground electrical cabling between each turbine and the substation;
- Up to two substations (each approximately 100m x 80m in size) within the boundaries of the site in an appropriate position to receive generated power via underground distribution cabling from each wind turbine;
- Overhead 132kV distribution lines linking up with the existing Poseidon Substation located central to the site;
- · An access road to the site from the main road/s within the area; and



Internal access roads (approximately 3-5m in width) to each wind turbine on site.

The proposed site needed for the proposed wind energy facility and related infrastructure is 91km² in extent.

The granting of this environmental authorisation is subject to the conditions set out below.

# **Conditions**

# Scope of authorisation

- 1.1 The site, as provided in Figure 2.1 of the EIR dated March 2010 and as determined by the site identification and selection process is the site which is authorized. The turbines (approximately 18 in total) proposed in the 500m avifaunal buffer zone of the ridgeline is <u>excluded</u> from this authorisation pending further investigation and studies of the ridgeline.
- 1.2 The preferred alternatives authorised are Substation Site Option 1 and the "Southern Alignment" Power line Corridor from Substation 2 as indicated in the EIR dated March 2010 as well as the supplementary information received in support of the EIR amendment dated 10 May 2010.
- 1.3 The exact siting of Substation Site 2 and the workshop area must be positioned in order to avoid potentially sensitive areas.
- 1.4 The 132kV distribution power line (southern alignment from Substation 2) must be constructed along the corridor recommended in the EIR dated March 2010 (Figure 5.1).
- 1.5 In the event that ACED seek to locate any turbine within the 500m avifaunal ridge buffer, thorough observational data on bird species movement, patterns must be collected on site across a range of times, seasons and conditions to inform the exact delineation and refinement of the buffer demarcated for the edge of the western ridge / escarpment.
- Should the micro siting exercise identify any drainage lines, wetlands, dams and channel beds (including required buffer zone) which may be affected by the development, application for the relevant license and/or general authorisation must be made in terms of the National Water Act (Act 36 of 1998).

- 1.7 The geology and soils study highlighted certain constraints which will have a significant negative impact on the design process. These constraints must be verified in a detailed geotechnical investigation prior to the design processes being finalised.
- 1.8 The results of the noise modelling must be considered during the final design of the facility to reduce the noise impacts of the facility on sensitive receptors to acceptable limits.
- 1.9 A walk-through survey with the suitably qualified specialists must take place prior to construction in order to inform the exact location of the infrastructure, This must include the following:
  - 1.9.1 The turbine positions and access roads in areas of medium to high sensitivity;
  - 1.9.2 The final surveyed powerline route;
  - 1.9.3 The substation site options 1 and 2; and
  - 1.9.4 The workshop area.
- 1.10 An ornithologist from the WEIG-EWT must identify the exact powerline spans requiring marking.
- 1.11 Search and Rescue of certain translocatable, selected succulents, shrubs and bulbs occurring in the development footprints must take place.
- 1.12 All development footprints must be surveyed and pegged out prior to construction.
- 1.13 Unnecessary disturbance to habitats should be strictly controlled and the footprint of the impact must be kept to a minimum.
- 1.14 The site layout must be amended to indicate:
  - 1.14.1 All the internal access roads as well as the haul roads on site.
  - 1.14.2 The exact position of the substations and turbines after micro-siting has taken place.
  - 1.14.3 The exact alignment of the approved powerlines.
- 1.15 Waste disposal must take place in accordance with the National Environmental Management Waste Act, 2008 (Act 59 of 2008).
- 1.16 Authorisation of the activity is subject to the conditions contained in this authorisation, which conditions form part of the environmental authorisation and are binding on the holder of the authorisation.
- 1.17 The holder of the authorisation shall be responsible for ensuring compliance with the conditions by any person acting on his or her behalf, including but not limited to, an agent, sub-contractor, employee or person rendering a service to the holder of the authorisation.

- 1.18 The activity authorised may only be carried out at the property indicated above.
- 1.19 Any changes to, or deviations from, the project description set out in this 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 authorisation in terms of the regulations.
- 1.20 This activity must commence within a period of three (3) years from the date of issue. If commencement of the activity does not occur within that period, the authorisation lapses and a new application for environmental authorisation must be made in order for the activity to be undertaken.
- 1.21 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.
  - 1.21.1 Relevant legislation that must be complied with by the holder of this authorisation include:
    - The requirements of Chapter II, Section 38(1), (3) and (7) of the National Heritage Resources Act, 1999 (Act 25 of 1999), including the comments and recommendations of the relevant heritage resources authority responsible for the area in which the development is proposed.
    - All provisions of the Occupational Health and Safety Act, 1993 (Act 85 of 1993).
    - All provisions of the National Environment Management: Biodiversity Act,
       2004 (Act 10 of 2004).
    - Should fill material be required for any purpose, the use of borrow pits must comply with the provisions of the Minerals and Petroleum Resources Development Act, 2002 (Act 28 of 2002) administered by the Department of Mining.
    - All provisions of the National Road Traffic Act (Act 93 of 1996).
    - All provisions of the National Water Act (Act 36 of 1998).
    - All provisions of the National Environmental Management Waste Act (Act 59 of 2008).

#### Appeal of authorisation

- 1.22 The holder of the authorisation must notify every registered interested and affected party, in writing and within 7 (seven) calendar days, of receiving notice of the Department's decision to authorise the activity.
- 1.23 The notification referred to in 1.22 must -
  - 1.23.1 specify the date on which the authorisation was issued;
  - 1.23.2 inform the interested and affected party of the appeal procedure provided for in Chapter 7 of the regulations;
  - 1.23.3 advise the interested and affected party that a copy of the authorisation will be furnished on request; and
  - 1.23.4 give the reasons for the decision.

## Management of the activity

- 1.24 The Environmental Management Plan (EMP) for the construction and operation of the Cookhouse Wind Energy Facility Project is hereby approved and must be implemented and strictly enforced during all construction and operational activities. The EMP will be seen as a dynamic document. The EMP must be included in all contract documentation for the construction and operational phases of the development.
- 1.25 The EMP should be updated to include the following:
  - The recommendations of a comprehensive stormwater management plan for the substation footprints; and
  - Data collected from a monitoring programme with regards to the numbers of birds affected by the wind energy facility.
- 1.26 The recommendations and mitigation measures recorded in the EIR dated March 2010 (including Appendices F to N) must be adhered to and incorporated as part of the EMP where applicable.
- 1.27 Measures for the management of heritage resources if such are exposed during construction must be implemented. Should any heritage resources be exposed during excavation for the purpose of construction, construction in the vicinity of the finding must be stopped immediately. A registered heritage specialist must be called to the site for inspection. Under no circumstances shall any heritage material be destroyed

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- or removed from the site. The relevant heritage resource agency must be informed about the finding.
- 1.28 All correspondence with regard to this application must be forwarded for attention to The Director: Environmental Impact Evaluation within the Department.

#### Monitoring

- 1.29 The applicant must appoint a suitably 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 authorisation are implemented and to ensure compliance with the provisions of the EMP.
  - 1.29.1 The ECO shall be appointed before commencement of any land clearing or construction activities.
  - 1.29.2 The ECO shall keep record of all activities on site, problems identified, transgressions noted and a task schedule of tasks undertaken by the ECO.
  - 1.29.3 The ECO shall remain employed until all rehabilitation measures, as required for implementation due to construction damage, are completed and the site is ready for operation.
  - 1.29.4 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.
  - 1.29.5 An independent ECO must be appointed upon completion of the proposed project to conduct a consolidated audit that must be submitted to the Department for record purposes.

## Recording and reporting to the Department

- 1.30 The holder of the authorisation must submit an environmental audit report to the Department upon completion of the construction and rehabilitation activities. The environmental audit report must —
  - 1.30.1 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 EMP dated March 2010.



1.30.2 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.

# Commencement of the activity

- 1.31 The authorised activity / ies shall not commence within thirty (30) days of the date of signature of the authorisation.
- 1.32 Should you be notified by the minister of a suspension of the authorisation pending appeal procedures, you shall not commence with the activity / ies unless authorised by the minister in writing.

#### Notification to authorities

1.33 Fourteen (14) days written notice must be given to the Department that the activity will commence. Commencement for the purposes of this condition includes site preparation. The notice must include a date on which it is anticipated that the activity will commence. This notification period may coincide with the period contemplated in 1.31 above.

#### Operation of the activity

1.34 Fourteen (14) days written notice must be given to the Department that the activity operational phase will commence.

## Site closure and decommissioning

1.35 Should the activity ever cease or become redundant, the applicant shall 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.

#### General

1.36 A copy of this authorisation must be kept at the property where the activity (ies) will be undertaken. The authorisation must be produced to any authorised official of the Department who requests to see it and must be made available for inspection by any



- employee or agent of the holder of the authorisation who works or undertakes work at the property.
- 1.37 Where any of the applicant's contact details change, including the name of the responsible person, the physical or postal address and/or telephonic details, the applicant must notify the Department as soon as the new details become known to the applicant.
- 1.38 The holder of the authorisation must notify the Department, in writing and within 48 (forty eight) hours, if any condition of this authorisation cannot be or is not adhered to. Any notification in terms of this condition must be accompanied by reasons for the non-compliance. Non-compliance with a condition of this authorisation may result in criminal prosecution or other actions provided for in the National Environmental Management Act, 1998 and the Regulations.
- 1.39 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 applicant or his 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 applicant 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: 25 Mby 2010

Ws Lize McCourt

CHIEF DIRECTOR: ENVIRONMENTAL IMPACT MANAGEMENT

Department of Environmental Affairs

# **Annexure 1: Reasons for Decision**

## 1. Background

The applicant, ACED Renewables Cookhouse (Pty) Ltd applied for authorisation to carry out the following activities –

#### **GNR 386**

- 1(m) The construction of facilities or infrastructure, including associated structures or infrastructure for any purpose in the one in ten year floodline of a river or stream or within 32 metres from the bank of a river or stream where the flood line is unknown, excluding purposes associated with existing residential use, but including -
  - (i) canals;
  - (ii) channels;
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- The above ground storage of a dangerous good, including petrol, diesel, liquid petroleum gas or paraffin, in containers with a combined capacity of more than 30 cubic metres but less than 1000 cubic metres at any one location or site.
- The transformation or removal of indigenous vegetation of 3 hectares or more or of any size where the transformation or removal would occur within a critically endangered or an endangered ecosystem listed in terms of section 52 of the National Environmental Management: Biodiversity Act, 2004 (Act 10 of 2004).
- 13 \_ The abstraction of groundwater at a volume where any general authorisation issued in terms of the National Water Act (Act No. 36 of 1998) will be exceeded.
- The construction of masts of any material of type and of any height, including those used for telecommunications broadcasting and radio transmission, but excluding:
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    - (ii) for lighting purposes;

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- (b) flagpoles; and
- (c) lightning conductor poles.
- 15 The construction of a road that is wider than 4 metres or that has a reserve wider than 6 metres, excluding roads that fall within the ambit of another listed activity or which are access roads of less than 30 metres long.
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#### **GN R387**

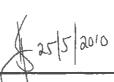
- 1 (a) The construction of facilities or infrastructure, including associated structures or infrastructure, for the generation of electricity where:
  - (iii) the electricity output is 20 megawatts or more; or
  - (iv) the elements of the facility cover a combined area in excess of 1 hectare
- 1(I) The construction of facilities or infrastructure, including associated structures or infrastructure, for the transmission and distribution of above ground electricity with a capacity of 120 kilovolts or more
- 2 Any development activity including associated structures and infrastructure, where the total area of the developed area is, or is intended to be 20 hectares or more.

The applicant appointed Savannah Environmental (Pty) Ltd to undertake an Environmental Impact Assessment process as required by regulation R. 385.

# 2. Information considered in making the decision

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

- a) The information contained in the Scoping Report and Plan of Study for EIR dated October 2009;
- b) The information contained in the EIR dated March 2010;



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- c) The objectives and requirements of relevant legislation, policies and guidelines, including section 2 of the NEMA; and
- d) Comments from the Interested and Affected Parties.

# 3. Key factors considered in making the decision

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

- a) The applicant has met the requirements of the EIR as per the EIA Regulations, 2006.
- b) A detailed public participation process was undertaken and the consultant has satisfied the minimum requirements as prescribed in the EIA Regulations, 2006 for public involvement.
- c) As part of the EIA process, Savannah Environmental (Pty) Ltd, being the principal consultancy, identified potential environmental impacts associated with the proposed construction and operation and proposed feasible mitigation measures to mitigate the identified impacts.
- d) Alternative sites and power line corridors were investigated to minimize the potential harm to the environment.
- e) Comments received from the Interested and Affected Parties (I&APs) were adequately addressed.
- f) As a result of increasing international pressure on countries to increase their share of renewable energy generation, the South African Government has set a 10-year cumulative target for renewable energy of 10 000 GWh renewable energy contribution to final energy consumption by 2013 to be produced mainly from biomass, wind, solar and small-scale hydro power.
- g) The significant environmental impacts identified during the EIR phase were adequately addressed and mitigation measures for these impacts were proposed. The most significant impacts identified were:
  - Visual impacts;
  - Local site specific impacts;
  - o Impacts on the area surrounding the facility;
  - o Impacts associated with the power line and substations; and

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o Impacts on the social environment.

### 4. Findings

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

- The identification and assessment of impacts are detailed in the EIR dated March 2010.
- Sufficient assessment of the key identified issues and impacts have been completed.
- The procedure followed for impact assessment is adequate for the decision-making process.
- The proposed mitigation of impacts identified and assessed; adequately curtail the identified impacts.
- All legal and procedural requirements have been met.
- The information contained in the EIR dated March 2010 and additional information in support of the EIR amendment is accurate and credible.
- The proposed development is compatible with the proposed site for the development.

In view of the above, the Department is satisfied that, subject to compliance with the conditions contained in the environmental authorisation, the proposed activity 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 proposed activity can be mitigated to acceptable levels. The application is accordingly granted.

