



## **environmental affairs**

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

Private Bag X 447, PRETORIA · 0001 · Fedsure Building · 315 Pretorius Street · PRETORIA  
Tel (+ 27 12) 310 3911 · Fax (+ 2712) 322 2882

**NEAS Reference: DEAVEIA/0001086/2012**

**DEA Reference: 12/12/20/2321/3**

**Enquiries: Mpho Morudu**

**Telephone: 012-395-1775 Fax: 012-320-7539 E-mail: Mmorudu@environment.gov.za**

Ms Leila Mahomed-Weideman  
South African Mainstream Renewable Power Loeriesfontein (Pty) Ltd  
P.O. Box 45063  
**CLAREMONT**  
7735

Fax no: 021 671 5665

### **PER FACSIMILE / MAIL**

Dear Ms Mahomed-Weideman

#### **APPLICATION FOR ENVIRONMENTAL AUTHORISATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998: GN R.543/544/545/546: CONSTRUCTION OF A 280MW WIND ENERGY FACILITY AND ITS ASSOCIATED INFRASTRUCTURE NEAR LOERIESFONTEIN, NORTHERN CAPE PROVINCE**

With reference to the above application, please be advised that the Department has decided to accept the final EIAR dated 4 May 2012 and grant authorisation. The environmental authorisation (EA) and reasons for the decision are attached herewith.


In terms of regulation 10(2) of the Environmental Impact Assessment Regulations, 2010 (the Regulations), you are instructed to notify all registered interested and affected parties, in writing and within 12 (twelve) days of the date of the EA, of the Department's decision in respect of your application as well as the provisions regarding the submission of appeals that are contained in the Regulations.

Your attention is drawn to Chapter 7 of the Regulations, which prescribes the appeal procedure to be followed. This procedure is summarised in the attached document. Kindly include a copy of this document with the letter of notification to interested and affected parties.

Should the applicant or any other party wish to appeal any aspect of the decision a notice of intention to appeal must be lodged by all prospective appellants with the Minister, within 20 days of the date of the EA, by means of one of the following methods:

By facsimile: 012 320 7561;  
By post: Private Bag X447,  
Pretoria, 0001; or  
By hand: 2nd Floor, Fedsure Building, North Tower,  
Cnr. Lilian Ngoyi (Van der Walt) and Pretorius Streets,  
Pretoria.

I hereby certify that this is an exact reproduction of the original and that there is no indication that the original has been altered by an unauthorized person.

  
**COMMISSIONER OATHS**  
Elizabeth Enslé Bronner 9/1/8/2 Durban  
4 Pencarrow Crescent, La Lucia Ridge  
P O Box 1899, Umhlanga Rocks, 4320  
Tel: 031 581 1626 / Fax: 031 566 2371



If the applicant wishes to lodge an appeal, it must also serve a copy of the notice of intention to appeal on all registered interested and affected parties as well as a notice indicating where, and for what period, the appeal submission will be available for inspection, should you intend to submit an appeal.

Please include the Department (*Attention: Director: Integrated Environmental Authorisations*) in the list of interested and affected parties, notified through your notification letter to interested and affected parties, for record purposes.

**Appeals must be submitted in writing to:**

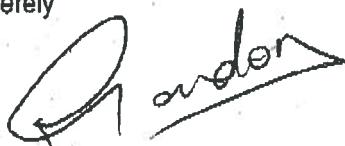
Mr T Zwane, Senior Legal Administration Officer (Appeals), of this Department at the above mentioned addresses or fax number. Mr Zwane can also be contacted at:

Tel: 012-310-3929

Email: [AppealsDirectorate@environment.gov.za](mailto:AppealsDirectorate@environment.gov.za)

The authorised activities shall not commence within twenty (20) days of the date of signature of the authorisation. Further, please note that the Minister may, on receipt of appeals against the authorisation or conditions thereof suspend the authorisation pending the outcome of the appeals procedure.

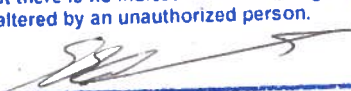
Yours sincerely



**Mr Mark Gordon**  
**Chief Director: Integrated Environmental Authorisations**  
**Department of Environmental Affairs**  
**Date: 29 October 2012**

|     |                |                             |                   |                   |
|-----|----------------|-----------------------------|-------------------|-------------------|
| CC: | Ms Tucker      | SIVEST                      | Tel:011-798-0637  | Fax: 011-803-7272 |
|     | Ms E Botes     | Provincial Department       | Tel: 053-807-7300 | Fax: 053-807-7328 |
|     | Mr I Valentein | Hantam Local Municipality   | Tel: 027-341-8500 | Fax: 027-341-8501 |
|     | Mr T Zwane     | Appeals Authority (DEA)     | Tel: 012-310-3929 | Fax: 012-320-7561 |
|     | Mr S Malaza    | Compliance Monitoring (DEA) | Tel: 012-310-3397 | Fax: 012-320-5744 |

I hereby certify that this is an exact reproduction of the original and that there is no indication that the original has been altered by an unauthorized person.

  
**COMMISSIONER OATHS**  
Elizabeth Enslé Bronner 9/1/8/2 Durban  
4 Pencarrow Crescent, La Lucia Ridge  
P O Box 1899, Umhlanga Rocks. 4320  
Tel: 031 581 1626 / Fax: 031 566 2371



COMMISSIONER OATHS  
Elizabeth Enslé Bronner 9/1/8/2 Durban  
Tel: 031 581 1626 / Fax: 031 581 1627

**APPEALS PROCEDURE IN TERMS OF CHAPTER 7 OF THE NEMA EIA REGULATIONS, 2010 (THE REGULATIONS) AS PER GN R. 543 OF 2010 TO BE FOLLOWED BY THE APPLICANT AND INTERESTED AND AFFECTED PARTIES UPON RECEIPT OF NOTIFICATION OF AN ENVIRONMENTAL AUTHORISATION (EA)**

| APPLICANT  | INTERESTED AND AFFECTED PARTIES (IAPs)   |
|--|--|
| 1. Receive EA from the relevant Competent Authority (the Department of Environmental Affairs (DEA)).   | 1. Receive EA from Applicant/Consultant.   |
| 2. Within 12 days of date of the EA notify all IAPs of the EA and draw their attention to their right to appeal against the EA in terms of Chapter 7 of the Regulations.                                       | 2. N/A.  |
| 3. If you want to appeal against the EA, submit a notice of intention to appeal within 20 days of the date of the EA with the Minister of Water and Environmental Affairs (the Minister).                      | 3. If you want to appeal against the EA, submit a notice of intention to appeal within 20 days of the date of the EA. with the Minister of Water and Environmental Affairs (the Minister).   |
| 4. After having submitted your notice of intention to appeal to the Minister, provide each registered IAP with a copy of the notice of intention to appeal within 10 days of lodging the notice.               | 4. After having submitted your notice of intention to appeal to the Minister, provide the applicant with a copy of the notice of intention to appeal within 10 days of lodging the notice.   |
| 5. The Applicant must also serve on each IAP: <ul style="list-style-type: none"> <li>a notice indicating where and for what period the appeal submission will be available for inspection.</li> </ul>          | 5. Appellant must also serve on the Applicant within 10 days of lodging the notice, <ul style="list-style-type: none"> <li>a notice indicating where and for what period the appeal submission will be available for inspection by the applicant.</li> </ul> |
| 6. The appeal must be submitted in writing to the Minister within 30 days after the lapsing of the period of 20 days provided for the lodging of the notice of intention to appeal.                            | 6. The appeal must be submitted to the Minister within 30 days after the lapsing of the period of 20 days provided for the lodging of the notice of intention to appeal.   |
| 7. Any IAP who received a notice of intention to appeal may submit a responding statement to that appeal to the Minister within 30 days from the date that the appeal submission was lodged with the Minister. | 7. An Applicant who received notice of intention to may submit a responding statement to the appeal to the Minister within 30 days from the date that the appeal submission was lodged with the Minister.  |

**NOTES:**

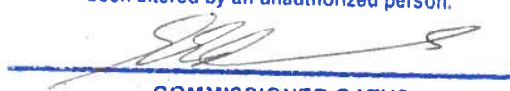
- An appeal against a decision must be lodged with:-**
  - the Minister of Water and Environmental Affairs if the decision was issued by the Director- General of the Department of Environmental Affairs (or another official) acting in his/ her capacity as the delegated Competent Authority;
  - the Minister of Justice and Constitutional Development if the applicant is the Department of Water Affairs and the decision was Issued by the Director- General of the Department of Environmental Affairs (or another official) acting in his/ her capacity as the delegated Competent Authority;
- An appeal lodged with:-**
  - the Minister of Water and Environmental Affairs must be submitted to the Department of Environmental Affairs;
  - the Minister of Justice and Constitutional Development must be submitted to the Department of Environmental Affairs;
- An appeal must be:-**
  - submitted in writing;
  - accompanied by:
    - a statement setting out the grounds of appeal;
    - supporting documentation which is referred to in the appeal; and
    - a statement that the appellant has complied with regulation 62 (2) or (3) together with copies of the notices referred to in regulation 62.





## **environmental affairs**

Department:  
Environmental Affairs  
REPUBLIC OF SOUTH AFRICA

  
**COMMISSIONER OATHS**  
Elizabeth Enslé Bronner 9/1/8/2 Durban  
4 Pencarrow Crescent, La Lucia Ridge  
P O Box 1899, Umhlanga Rocks, 4320  
Tel: 031 581 1626 / Fax: 031 566 2371

# **Environmental Authorisation**

In terms of regulation 36 of the Environmental Impact Assessment Regulations, 2010

**Construction of a 280MW Wind Energy Facility (Phase 2) near Loeriesfontein, Northern Cape Province**


**Namakwa District Municipality**

|                                       |   |
|---------------------------------------|---|
| <b>Authorisation register number:</b> | 12/12/20/2321/3   |
| <b>NEAS reference number:</b>         | DEA/EIA/0001086/2012  |
| <b>Last amended:</b>                  | First issue   |
| <b>Holder of authorisation:</b>       | South African Mainstream<br>Renewable Power Loeriesfontein<br>(Pty) Ltd |
| <b>Location of activity:</b>          | NORTHERN CAPE PROVINCE:<br>Within the Hantam Local Municipality         |

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.



Department of Environmental Affairs  
Environmental Authorisation Reg. No. 12/12/20/2321/3  
NEAS Authorisation No. DEA/EIA/0001086/2012

  
**COMMISSIONER OATHS**  
Elizabeth Enslé Bronner 9/1/8/2 Durban  
4 Pencarrow Crescent, La Lucia Ridge  
P O Box 1899, Umhlanga Rocks, 4320  
Tel: 031 581 1626 / Fax: 031 566 2371

## Decision

The Department is satisfied, on the basis of information available to it and subject to compliance with the conditions of this environmental authorisation, that the applicant should be authorised to undertake the activities specified below.

Non-compliance with a condition of this authorisation may result in criminal prosecution or other actions provided for in the National Environmental Management Act, 1998 and the EIA regulations.

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 107 of 1998) and the Environmental Impact Assessment Regulations, 2010 the Department hereby authorises –

### **SOUTH AFRICAN MAINSTREAM RENEWABLE POWER LOERIESFONTEIN (PTY) LTD**

with the following contact details –

Ms Leila Mahomed-Weideman

South African Mainstream Renewable Power Loeriesfontein (Pty) Ltd

P.O. Box 45063

**CLAREMONT**

7735

Tel: 021 657 4040

Fax: 021 671 5665

Cell: 083 789 2923

E-mail: [Leila.Mahomed-Weideman@mainstreamrp.com](mailto:Leila.Mahomed-Weideman@mainstreamrp.com)



COMMISSIONER OATHS

Elizabeth Enslé Bronner 9/1/8/2 Durban  
4 Pencarrow Crescent, La Lucia Ridge  
P O Box 1899, Umhlanga Rocks. 4320  
Tel: 031 581 1626 / Fax: 031 566 2371

Department of Environmental Affairs  
Environmental Authorisation Reg. No. 12/12/20/2321/3  
NEAS Authorisation No. DEA/EIA/0001086/2012

to undertake the following activities (hereafter referred to as "the activity") indicated in Listing Notices 1, 2 and 3 (GN R. 544, 545 & 546):

| Listed activities   | Activity/Project description   |
|---|--|
| <p><u>GN R. 544: Item 10:</u></p> <p><i>The construction of facilities or infrastructure for the transmission and distribution of electricity –</i></p> <p>(i) <i>outside urban areas or industrial complexes with a capacity of more than 33 but less than 275 kilovolts.</i></p>  | <p>A 66kV to 132kV power line will be connected to the Eskom 400kV Helios Substation.</p>  |
| <p><u>GN R. 544: Item 22:</u></p> <p><i>The construction of a road, outside urban areas,</i></p> <p>(ii) <i>where no reserve exists where the road is wider than 8 metres</i></p>   | <p>A gravel road with a width of between 6m and 10m would need to be constructed to provide access to the proposed facility.</p> |
| <p><u>GN R. 544: Item 23:</u></p> <p><i>The transformation of undeveloped, vacant or derelict land to –</i></p> <p>(ii) <i>residential, retail, commercial, recreational, industrial or institutional use, outside an urban area and where the total area to be transformed is bigger than 1 hectare but less than 20 hectares.</i></p> | <p>The entire area to be transformed by Phase 2 will be approximately 59.92ha.</p>   |
| <p><u>GN R. 545: Item 1:</u></p> <p><i>The construction of facilities or infrastructure for the generation of electricity where the electricity output is 20 megawatts or more.</i></p>   | <p>The proposed wind farm would generate 280 MW.</p>   |
| <p><u>GN R. 545: Item 15:</u></p> <p><i>Physical alteration of undeveloped, vacant or derelict land for residential, retail, commercial, recreational, industrial or institutional use where the total area to be transformed is 20 hectares or more.</i></p>   | <p>The total footprint for Phase 2 is approximately 59.92 hectares and this is the area proposed to be transformed.</p>          |
| <p><u>GN R. 546: Item 13:</u></p> <p><i>The clearance of an area of 1 hectare or more of vegetation where 75% or more of the vegetative</i></p>   | <p>The proposed development site is characterised by vacant land that is dominated by natural</p>                                |



**COMMISSIONER OATHS**  
Elizabeth Enslé Bronner 9/1/8/2 Durban  
4 Pencarrow Crescent, La Lucia Ridge  
P O Box 1899, Umhlanga Rocks, 4320  
Tel: 031 581 1626 / Fax: 031 566 2371

Department of Environmental Affairs  
Environmental Authorisation Reg. No. 12/12/20/2321/3  
NEAS Authorisation No. DEA/EIA/0001086/2012

|  |   |
|--|---|
| cover constitutes indigenous vegetation,<br><br>(b) In Northern Cape<br>(ii) Outside urban areas | vegetation used for grazing. Vegetation clearing would take place over a portion of the buildable areas |
|--|---|

as described in the Environmental Impact Assessment Report (EIR) dated May 2012 at:

| Preferred site                               | Latitude          | Longitude         |
|--|-------------------|-------------------|
| Remainder of the Farm No. 226, Calvinia Road | 30° 26' 18.266" S | 19° 29' 29.622" E |
| Portion 1 of the Farm No. 213, Calvinia Road | 30° 24' 23.062" S | 19° 36' 22.537" E |
| Portion 2 of the Farm No. 213, Calvinia Road | 30° 23' 42.035" S | 19° 34' 46.674" E |


- for the construction of a 280MW Wind Energy Facility and its associated infrastructure near Loeriesfontein within the Hantam Local Municipality, Northern Cape Province, hereafter referred to as "the property".

The infrastructure associated with the facility includes:

- **Turbines:** Up to 214 wind turbines with a total generating capacity of 280MW on approximately 59.92 hectares; hub height of between 80 to 120m and a rotor diameter of 87 to 120m; and foundation of each wind turbine will be approximately 20m x 20m. A hard standing area of approximately 2 400m<sup>2</sup> for crane usage will accompany each wind turbine. The total footprint for each wind turbine and the associated hard standing area will be 2 800m<sup>2</sup>. The foundation will be up to 2.5m deep. The electrical generation capacity for each turbine will range from 1 – 3MW depending on the final wind turbine selected for the proposed development.
- **Electrical connections:** A 66kV to 132kV power line to connect to the Eskom 400kV Helios Substation.
- **Roads:** Access roads of 6-10m wide. The roads will be gravel roads from the site on to the public road. An internal road network to the turbines and other infrastructure will include; turning circles for large trucks; passing points and culverts over gullies and rivers if required; and existing roads will be upgraded.
- **Temporary construction area:** A maximum 10 000m<sup>2</sup> temporary lay down area will be constructed for the proposed development. Components that will comprise the temporary lay down area include an access route and a contractor's site office area of up to 5 000m<sup>2</sup>.



Department of Environmental Affairs  
Environmental Authorisation Reg. No. 12/12/20/2321/3  
NEAS Authorisation No. DEAEIA/0001086/2012

  
**COMMISSIONER OATHS**  
Elizabeth Enslé Bronner 9/1/8/2 Durban  
4 Pencarrow Crescent, La Lucia Ridge  
P O Box 1899, Umhlanga Rocks, 4320  
Tel: 031 581 1626 / Fax: 031 566 2371

- **Administration and warehouse buildings:** A single storey building with a maximum area of up to 5 000 m<sup>2</sup> with a warehouse/workshop space and access, office, telecoms space, security and ablution facilities are to be developed.

## Conditions of this Environmental Authorisation

### Scope of authorisation

1. The preferred site on the Remainder of the Farm No. 226, Portion 1 and 2 of the Farm No. 213, Calvinia Road and the Power Line Alternative 1 for 280 MW is approved.
2. Authorisation of the activity is subject to the conditions contained in this authorisation, which form part of the environmental authorisation and are binding on the holder of the authorisation.
3. The holder of the authorisation is responsible for ensuring compliance with the conditions contained in this environmental authorisation. This includes any person acting on the holder's behalf, including but not limited to, an agent, servant, contractor, sub-contractor, employee, consultant or person rendering a service to the holder of the authorisation.
4. The activities authorised may only be carried out at the property as described above.
5. 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.
6. 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.
7. Commencement with one activity listed in terms of this authorisation constitutes commencement of all authorised activities.
8. The holder of an environmental authorisation has the responsibility to notify the competent authority of any alienation, transfer and change of ownership rights in the property on which the activity is to take place.



Department of Environmental Affairs  
Environmental Authorisation Reg. No. 12/12/20/2321/3  
NEAS Authorisation No. DEAEIA/0001086/2012

COMMISSIONER OATHS  
Elizabeth Enslé Bronner 9/1/8/2 Durban  
4 Pansarrow Crescent, La Lucia Ridge  
P O Box 1899, Umhlanga Rocks. 4320  
Tel: 031 581 1626 / Fax: 031 566 2371

### Notification of authorisation and right to appeal

9. The holder of the authorisation must notify every registered interested and affected party, in writing and within 12 (twelve) calendar days of the date of this environmental authorisation, of the decision to authorise the activity.
10. The notification referred to must –
  - 10.1. specify the date on which the authorisation was issued;
  - 10.2. inform the interested and affected party of the appeal procedure provided for in Chapter 7 of the Environmental Impact Assessment (EIA) Regulations, 2010;
  - 10.3. advise the interested and affected party that a copy of the authorisation will be furnished on request; and
  - 10.4. give the reasons for the decision.
11. The holder of the authorisation must publish a notice –
  - 11.1. informing interested and affected parties of the decision;
  - 11.2. informing interested and affected parties where the decision can be accessed; and
  - 11.3. drawing the attention of interested and affected parties to the fact that an appeal may be lodged against this decision in the newspaper(s) contemplated and used in terms of regulation 54(2)(c) and (d) and which newspaper was used for the placing of advertisements as part of the public participation process.

### Management of the activity

12. A copy of the final site layout map must be submitted to the Department with the amended EMPr for written approval prior to commencement of the activity. All available biodiversity information must be used in the finalisation of the layout map. The site layout map must indicate the following:
  - 12.1. Labelled/numbered turbine positions;
  - 12.2. Foundation footprint;
  - 12.3. 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);
  - 12.4. Wetlands, drainage lines, rivers, stream and water crossing of roads and cables indicating the type of bridging structures that will be used;



Department of Environmental Affairs  
Environmental Authorisation Reg. No. 12/12/20/2321/3  
NEAS Authorisation No. DEA/EIA/0001086/2012

COMMISSIONER OATHS  
Elizabeth Enslé Bronner 9/1/8/2 Durban  
4 Pencarrow Crescent, La Lucia Ridge  
P O Box 1899, Umhlanga Rocks, 4320  
Tel: 031 581 1626 / Fax: 031 566 2371

- 12.5. The location of sensitive environmental features e.g. heritage sites;
- 12.6. Sub-station(s) and/or transformer(s) sites including their entire footprint;
- 12.7. Connection routes (including pylon positions) to the distribution/transmission network;
- 12.8. All existing infrastructure on the site, especially roads;
- 12.9. Buildings including accommodation;
- 12.10. All "no-go" and buffer areas; and
- 12.11. A map combining the final layout map superimposed on the environmental sensitivity map.  
This map must reflect the proposed location of turbines as stated in the EIR dated May 2012 and this authorisation.
13. The Environmental Management Programme (EMPr) submitted as part of the EIR dated May 2012 must be amended and submitted with the abovementioned layout map to the Department for written approval prior to commencement of the activity.
14. The amended EMPr must also include the following:
  - 14.1. All recommendations and mitigation measures recorded in the EIR dated May 2012.
  - 14.2. The requirements and conditions of this authorisation.
  - 14.3. 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 in consultation with the ECO and be implemented prior to commencement of the construction phase.
  - 14.4. An open space management plan to be implemented during the construction and operation of the facility.
  - 14.5. A re-vegetation and habitat rehabilitation plan to be implemented during the construction and operation of the facility including timeframes for restoration which must indicate rehabilitation within the shortest possible time 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.
  - 14.6. 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.
  - 14.7. 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



COMMISSIONER OATHS

Department of Environmental Affairs  
Environmental Authorisation Reg. No. 12/12/20/2321/3  
NEAS Authorisation No. DEA/EIA/0001086/2012

Elizabeth Enslé Bronner 9/1/8/2 Durban  
4 Pencarrow Crescent, La Lucia Ridge  
P O Box 1899, Umhlanga Rocks, 4320  
Tel: 031 581 1626 / Fax: 031 566 2371

- 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.
- 14.8. 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.
- 14.9. 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.
- 14.10. A transportation plan for the transport of turbine components, main assembly cranes and other large pieces of equipment. A permit must be obtained from the relevant transport department for the transportation of all components (abnormal loads) to the sites.
- 14.11. 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 minimise impacts on local commuters e.g. limiting construction vehicles travelling on public roadways during the morning and late afternoon commute time and avoid using roads through densely populated built-up areas so as not to disturb existing retail and commercial operations.
- 14.12. An avifauna and bat monitoring programme to document the effect of the operation of the energy facility on avifauna and bats. This must be compiled by a qualified specialist.
- 14.13. 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.
- 14.14. An environmental sensitivity map indicating environmental sensitive areas and features, and buffer areas identified during the EIA process.
15. The approved EMPr must be implemented and strictly enforced during all phases of the project. It shall be seen as a dynamic document and shall be included in all contract documentation for all phases of the development when approved.
16. Changes to the EMPr, which are environmentally defensible, shall be submitted to this Department for acceptance before such changes could be effected.
17. The Department reserves the right to request amendments to the EMPr should any impacts that were not anticipated or covered in the EIR be discovered.



**COMMISSIONER OATHS**

Elizabeth Enslé Bronner 9/1/8/2 Durban  
4 Pencarrow Crescent, La Lucia Ridge  
P.O. Box 1899, Umhlanga Rocks, 4320  
Tel: 031 581 1626 / Fax: 031 566 2371

Department of Environmental Affairs  
Environmental Authorisation Reg. No. 12/12/20/2321/3  
NEAS Authorisation No. DEA/EIA/0001086/2012

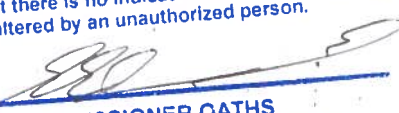
18. The provisions of the approved EMPr including the mitigation measures identified in the EIR and specialist' studies shall be an extension of the conditions of this EA and therefore noncompliance with them would constitute noncompliance with the EA.
19. The holder of this authorisation must appoint qualified botanical, fauna and avifauna specialists to ground-truth every infrastructure footprint and their recommendation must inform the final layout of the facility and the EMPr to be submitted to the department for approval.

**Environmental Control Officer (ECO) and duties**

20. The holder of this authorisation must appoint an independent Environmental Control Officer (ECO) with experience or expertise in the field for the construction phase of the development. The ECO will have the responsibility to ensure that the conditions referred to in this authorisation are implemented and to ensure compliance with the provisions of the EMPr.
21. The ECO must be appointed before commencement of any authorised activity.
22. Once appointed, the name and contact details of the ECO must be submitted to the *Director: Compliance Monitoring* of the Department.
23. The ECO must remain employed until all rehabilitation measures, as required for implementation due to construction damage, are completed and the site is ready for operation.
24. The ECO must:
  - 24.1. Keep record of all activities on site, problems identified, transgressions noted and a schedule of tasks undertaken by the ECO.
  - 24.2. Keep and maintain a detailed incident (including spillage of bitumen, fuels, chemicals, or any other material) and complaint register on site indicating how these issues were addressed, what rehabilitation measures were taken and what preventative measures were implemented to avoid re-occurrence of incidents/complaints.
  - 24.3. Keep and maintain a daily site diary.
  - 24.4. Keep copies of all reports submitted to the Department.
  - 24.5. Keep and maintain a schedule of current site activities including the monitoring of such activities.
  - 24.6. Obtain and keep record of all documentation, permits, licences and authorisations such as waste disposal certificates, hazardous waste landfill site licences etc. required by this facility.
  - 24.7. Compile a monthly monitoring report.



Department of Environmental Affairs  
Environmental Authorisation Reg. No. 12/12/20/2321/8  
NEAS Authorisation No. DEA/EIA/0001086/2012

  
**COMMISSIONER OATHS**  
Elizabeth Enslé Bronner 9/1/8/2 Durban  
4 Pinesrow Crescent, La Lucia Ridge  
P O Box 1899, Umhlanga Rocks, 4320  
Tel: 031 581 1626 / Fax: 031 566 2371

### Recording and reporting to the Department


25. The holder of this authorisation must keep all records relating to monitoring and auditing on site and make it available for inspection to any relevant and competent authority in respect of this development.
26. All documentation e.g. audit/monitoring/compliance reports and notifications, required to be submitted to the Department in terms of this authorisation, must be submitted to the *Director: Compliance Monitoring* at the Department.

### Environmental audit report

27. The holder of the authorisation must submit an environmental audit report to the Department within 30 days of completion of the construction phase (i.e. within 30 days of site handover) and within 30 days of completion of rehabilitation activities.
28. The environmental audit report must:
  - 28.1. Be compiled by an independent environmental auditor;
  - 28.2. Indicate the date of the audit, the name of the auditor and the outcome of the audit;
  - 28.3. Evaluate compliance with the requirements of the approved EMPr and this environmental authorisation;
  - 28.4. Include measures to be implemented to attend to any non-compliances or degradation noted;
  - 28.5. Include copies of any approvals granted by other authorities relevant to the development for the reporting period;
  - 28.6. Highlight any outstanding environmental issues that must be addressed, along with recommendations for ensuring these issues are appropriately addressed;
  - 28.7. Include a copy of this authorisation and the approved EMPr;
  - 28.8. Include all documentation such as waste disposal certificates, hazardous waste landfill site licences etc. pertaining to this authorisation; and
  - 28.9. Include evidence of adherence to the conditions of this authorisation and the EMPr where relevant such as training records and attendance records.



Department of Environmental Affairs  
Environmental Authorisation Reg. No. 12/12/20/2321/3  
NEAS Authorisation No. DEA/EIA/0001086/2012

  
**COMMISSIONER OATHS**  
Elizabeth Enslé Bronner 9/1/8/2 Durban  
Pencarrow Crescent, La Lucia Ridge  
P O Box 1899, Umhlanga Rocks, 4320  
Tel: 031 581 1020 / Fax: 031 556 2371

### **Commencement of the activity**

29. The authorised activity shall not commence within twenty (20) days of the date of signature of the authorisation.
30. An appeal under section 43 of the National Environmental Management Act (NEMA), Act 107 of 1998 (as amended), does not suspend an environmental authorisation or exemption, or any provisions or conditions attached thereto, or any directive, unless the Minister, MEC or delegated organ of state directs otherwise.
31. Should you be notified by the Minister of a suspension of the authorisation pending appeal procedures, you may not commence with the activity until such time that the Minister allows you to commence with such an activity in writing.
32. The holder of this authorisation must obtain a Water Use Licence from the Department of Water Affairs (DWA) prior to the commencement of the project should the holder impact on any wetland or water resource. A copy of the license must be kept by the ECO.

### **Notification to authorities**

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 Notice of Intent to Appeal period, within which construction may not commence.

### **Operation of the activity**

34. Fourteen (14) days written notice must be given to the Department that the activity operational phase will commence.
35. The holder of this authorisation must compile an operational EMP for the operational phase of the activity or alternatively, if the holder has an existing operational environmental management system, it must be amended to include the operation of the authorised activity.




### **Site closure and decommissioning**

36. 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.

I hereby certify that this is an exact reproduction of the original and that there is no indication that the original has been altered by an unauthorized person.

### **Specific conditions**

#### **Avifauna and Bats Monitoring**

  
**COMMISSIONER OATHS**  
Elizabeth Enslé Bronner 9/1/8/2 Durban  
4 Pencarrow Crescent, La Lucia Ridge  
P O Box 1899, Umhlanga Rocks. 4320  
Tel: 031 581 1626 / Fax: 031 566 2371

37. A bird and bat monitoring programme must be implemented for a period of 12 (twelve) months prior to construction to document the effect of the operation of the energy facility on avifauna and bats.
38. The findings/recommendations of the pre-construction bird monitoring programme must inform the final layout map and the construction schedule of the energy facility.
39. Reports regarding bird monitoring must be submitted to the relevant provincial environmental department, BirdLife South Africa, the Endangered Wildlife Trust (EWT) and this Department on a quarterly basis. The report will assist all stakeholders in identifying potential and additional mitigation measures and to establish protocols for a bird monitoring programme for wind energy development in the country.
40. The baseline data collected and documented during the survey must be shared with EWT and Birdlife South Africa for a better understanding of the distribution or breeding behaviour of any of the priority species.
41. The applicant must ensure that lighting on the turbines is kept to a minimum and is coloured (red or green) and intermittent, rather than permanent and white, to reduce confusion effects for nocturnal migrants.
42. The facility must be designed to discourage the use of infrastructure components as perching or roosting substrates by birds and bats.
43. Anti-collision devices such as bird flappers must be installed where power lines cross avifaunal corridors (e.g. grasslands, rivers, wetlands, and dams). The input of an avifaunal specialist must be obtained for the fitting of the anti-collision devices onto specific sections of the line once the exact positions of the towers have been surveyed and pegged. Additional areas of high sensitivity along the preferred alignment must also be identified by the avifaunal specialist for the fitment of



anti-collision devices. These devices must be according to Eskom's Transmission and EWT's Guidelines.

I hereby certify that this is a true and correct copy of the original and that there is no indication that the original has been altered by an unauthorized person.

Vegetation, wetlands and water resources

COMMISSIONER OATHS  
Elizabeth Ensté Bronner 9/1/8/2 Durban  
4 Pencarrow Crescent, La Lucia Ridge  
P O Box 1899, Umhlanga Rocks, 4320  
Tel: 031 581 1626 / Fax: 031 566 2371

44. Vegetation clearing must be limited to the authorised footprint.
45. Before the clearing of the site, the appropriate permits must be obtained from the Department of Agriculture, Forestry and Fisheries (DAFF) for the removal of plants listed in the National Forest Act and from the relevant provincial department for the destruction of species protected in terms of the specific provincial legislation. Copies of the permits must be kept by the ECO.
46. Construction activities must be restricted to demarcated areas to restrict the impact on sensitive environmental features.
47. All areas of disturbed soil must be reclaimed using only indigenous grass and shrubs. Reclamation activities shall be undertaken according to the rehabilitation plan to be included in the final EMPr.
48. Topsoil from all excavations and construction activities must be salvaged and reapplied during reclamation.
49. No exotic plants may be used for rehabilitation purposes; only indigenous plants of the area may be utilised.
50. No activities will be allowed to encroach into a water resource without a water use license being in place from the Department of Water Affairs.
51. Cleared alien vegetation must not be dumped on adjacent intact vegetation during clearing but must be temporarily stored in a demarcated area.
52. Removal of alien invasive species or other vegetation and follow-up procedures must be in accordance with the Conservation of Agricultural Resources Act, 1983 (Act 43 of 1983).
53. The holder of this authorisation must ensure that all the "No-go" areas are clearly demarcated (using fencing and appropriate signage) before construction commences.
54. Contractors and construction workers must be clearly informed of the no-go areas.
55. Where roads pass right next to major water bodies provision shall be made for fauna such as toads to pass under the roads by using culverts or similar structures.
56. Bridge design must be such that it minimise impact to riparian areas with minimal alterations to water flow and must allow the movement of fauna and flora.





COMMISSIONER OATHS

Department of Environmental Affairs  
Environmental Authorisation Reg. No. 12/12/20/2321/3P  
NEAS Authorisation No. DEAEIA/0001086/2012

Elizabeth Enslé Bronner 9/1/8/2 Durban  
4 Pencarrow Crescent, La Lucia Ridge  
P O Box 1899, Umhlanga Rocks, 4320  
Tel: 031 581 1626 / Fax: 031 566 2371

Roads and transportation

57. Existing road infrastructure must be used as far as possible for providing access to the proposed turbine positions. Where no road infrastructure exists, new roads should be placed within existing disturbed areas or environmental conditions must be taken into account to ensure the minimum amount of damage is caused to natural habitats.
58. Signs must be placed along construction roads to identify speed limits, travel restrictions, and other standard traffic control information. To minimize impacts on local commuter, consideration should be given to limiting construction vehicles travelling on public roadways during the morning and late afternoon commute time.
59. Internal access roads must be located to minimize stream crossings. All structures crossing streams must be located and constructed so that they do not decrease channel stability or increase water velocity.
60. A designated access to the site must be created and clearly marked to ensure safe entry and exit.
61. Signage must be erected at appropriate points warning of turning traffic and the construction site.
62. Construction vehicles carrying materials to the site should avoid using roads through densely populated built-up areas so as not to disturb existing retail and commercial operations.
63. Road borders should be regularly maintained to ensure that vegetation remains short and that they therefore serve as an effective firebreak.

Noise

64. Noise from the turbines at the identified noise sensitive areas must be less than the 45dB(A) limit for rural areas presented in SANS10103.
65. The holder of this authorisation must ensure that the National Noise Control Regulations and SANS10103:2008 are adhered to and measures to limit noise from the work site are implemented.
66. The holder of this authorisation must ensure that the construction staff working in areas where the 8-hour ambient noise levels exceed 75dBA must wear ear protection equipment.
67. The holder of this authorisation must ensure that all equipment and machinery are well maintained and equipped with silencers.
68. The holder of this authorisation must provide a prior warning to the community when a noisy activity e.g. blasting is to take place.



  
COMMISSIONER OATHS

Department of Environmental Affairs  
Environmental Authorisation Reg. No. 12/12/20/2321/3  
NEAS Authorisation No. DEA/EIA/0001086/2012  
Elizabeth Enslé Bronner 9/1/8/2 Durban  
4 Pencarrow Crescent, La Lucia Ridge  
Box 1899, Umhlanga Rocks, 4320  
Tel: 031 581 1626 / Fax: 031 566 2371

69. All wind turbines should be located at a setback distance of 500m from any homestead and a day/night noise criteria level at the nearest residents of 45dB(A) should be used to locate the turbines. The 500m setback distance can be relaxed if local factors; such as high ground between the noise source and the receiver, indicates that a noise disturbance will not occur.
70. Positions of turbines jeopardizing compliance with accepted noise levels should be revised during the micro-siting of the units in question and predicted noise levels re-modelled by the noise specialist, in order to ensure that the predicted noise levels are less than 45dB(A).

#### Visual resources

71. The holder of this authorisation must reduce visual impacts during construction by minimising areas of surface disturbance, controlling erosion, using dust suppression techniques and restoring exposed soil as closely as possible to their original contour and vegetation.
72. A lighting engineer must be consulted to assist in the planning and placement of light fixtures in order to reduce visual impacts associated with glare and light trespass.
73. Lighting of main structures (turbines) and ancillary buildings should be designed to minimise light pollution without compromising safety, and turbines must be lit according to Civil Aviation Regulations.
74. Signage on or near wind turbines must be avoided unless they serve to inform the public about wind turbines and their function.
75. Commercial messages and graffiti on turbines must be avoided.

#### Human health and safety

76. A health and safety programme must be developed to protect both workers and the general public during construction, operation and decommissioning of the energy facility. The programme must establish a safety zone for wind turbines from residences and occupied buildings, roads, right-of-ways and other public access areas that is sufficient to prevent accidents resulting from the operation of the wind turbines.
77. Potentials interference with public safety communication systems (e.g. radio traffic related to emergency activities) must be avoided.
78. The holder of this authorisation must ensure that the operation of the wind facility shall comply with the relevant communication regulations or guidelines relating to electromagnetic interference, e.g. microwave, radio and television transmissions.



  
COMMISSIONER OATHS

Department of Environmental Affairs  
Environmental Authorisation Reg. No. 12/12/20/2321/3  
NEAS Authorisation No. DEA/EIA/0001086/2012

Elizabeth Enslé Bronner 9/1/8/2 Durban  
Pencarrow Crescent, La Lucia Ridge  
P O Box 1899, Umhlanga Rocks. 4320  
Tel: 031 581 1626 / Fax: 031 566 2371

79. The holder of this authorisation must obtain approval from the South Africa Civil Aviation Authority that the wind facility will not interfere with the performance of aerodrome radio Communication, Navigation and Surveillance (CNS) equipment, especially the radar, prior to commencement of the activity. A copy of the approval must be kept on site by the ECO.
80. The holder of the authorisation must ensure that the operation of the wind facility has no impact at all to the Square Kilometre Array (SKA).
81. The holder of this authorisation must obtain approval from the South Africa Weather Services (WeatherSA) that the energy facility will not interfere with the performance of their equipment, especially radar, prior to commencement of the activity. A copy of the approval must be kept on site by the ECO.
82. The holder of this authorisation must train safety representatives, managers and workers in workplace safety. The construction process must be compliant with all safety and health measures as prescribed by the relevant act.
83. Liaison with land owners/farm managers must be done prior to construction in order to provide sufficient time for them to plan agricultural activities.
84. No unsupervised fires are allowed on site.

#### Hazardous materials and waste management

85. Areas around fuel tanks must be bunded or contained in an appropriate manner as per the requirements of SABS 089:1999 Part 1.
86. Leakage of fuel must be avoided at all times and if spillage occurs, it must be remedied immediately.
87. Hazardous waste such as bitumen, oils, oily rags, paint tins etc. must be disposed of at an approved waste landfill site licensed to accept such waste.
88. No dumping or temporary storage of any materials may take place outside designated and demarcated laydown areas, and these must all be located within areas of low environmental sensitivity.
89. Hazardous substances must not be stored where there could be accidental leakage into surface or subterranean water.
90. Hazardous and flammable substances must be stored and used in compliance to the applicable regulations and safety instructions. Furthermore, no chemicals must be stored nor may any vehicle maintenance occur within 350m of the temporal zone of wetlands, a drainage line with or without an extensive floodplain or hillside wetlands.



91. Temporary bunds must be constructed around chemical storage to contain possible spills.
92. Spill kits must be made available on-site for the clean-up of spills.
93. An integrated waste management approach must be implemented that is based on waste minimisation and must incorporate reduction, recycling and re-use options where appropriate. Where solid waste is disposed of, such disposal shall only occur at a landfill licensed in terms of section 20(b) of the National Environment Management Waste Act, 2008 (Act 59 of 2008).
94. Temporary ablution facilities must be provided for staff during the construction phase. The ablutions must be cleaned regularly with associated waste being disposed of at a registered waste water treatment plant, and must be removed from the site when the construction phase is completed.

#### Excavation and blasting activities

95. Underground cables and internal access roads must be aligned as much as possible along existing infrastructure to limit damage to vegetation and watercourses.
96. Foundations and trenches must be backfilled with originally excavated materials as much as possible. Excess excavation materials must be disposed of only in approved areas or, if suitable, stockpiled for use in reclamation activities.
97. Borrow materials must be obtained only from authorized and permitted sites. Permits must be kept on site by the ECO.
98. Anti-erosion measures such as silt fences must be installed in disturbed areas.

#### Air emissions

99. Dust abatement techniques must be used before and during surface clearing, excavation, or blasting activities.
100. Appropriate dust suppression techniques must be implemented on all exposed surfaces during periods of high wind. Such measures may include wet suppression, chemical stabilisation, the use of a wind fence, covering surfaces with straw chippings and re-vegetation of open areas.

I hereby certify that this is an exact reproduction of the original and that there is no indication that the original has been altered by an unauthorized person.

  
COMMISSIONER OATHS

Elizabeth Enslé Bronner 9/1/8/2 Durban  
4 Pencarrow Crescent, La Lucia Ridge  
P.O. Box 1899, Umhlanga Rocks, 4320  
Tel: 031 581 1626 / Fax: 031 566 2371



Historical / cultural / paleontological resources

101. If any changes to the approved site layout of the turbines are proposed, additional survey work will be required in order to ensure that no sites are directly impacted and/or to identify the need for an excavation permit.
102. If concentrations of archaeological heritage material, fossils and human remains are uncovered during construction, all work must cease immediately and be reported to the South African Heritage Resources Agency (SAHRA) (021 642 4502) so that a systematic and professional investigation/ excavation can be undertaken.
103. Construction managers/foremen must be informed before construction starts on the possible types of heritage sites and cultural material they may be encountered and the procedures to follow when they find sites.

I hereby certify that this is an exact reproduction of the original and that there is no indication that the original has been altered by an unauthorized person.

Turbines position

  
COMMISSIONER OATHS  
Elizabeth Enslé Bronner 9/1/8/2 Durban  
4 Pencarrow Crescent, La Lucia Ridge  
P O Box 1899, Umhlanga Rocks, 4320  
031 261 1000

104. Turbines must be positioned in such a way that shadow flicker does not affect any farm buildings.

Overhead power line

105. A walk-through survey of the final power line corridor must be undertaken by a botanical specialist, an ornithologist and a heritage specialist to identify areas where mitigation may be required.

**General**

106. A copy of this authorisation and the approved EMP must be kept at the property where the activity 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.
107. The holder of the authorisation must notify both the *Director: Integrated Environmental Authorisations* and the *Director: Compliance Monitoring* at 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.




108. 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: 29 October 2012



Mr Mark Gordon  
Chief Director: Integrated Environmental Authorisations  
Department of Environmental Affairs

I hereby certify that this is an exact reproduction of the original and that there is no indication that the original has been altered by an unauthorized person.



---

COMMISSIONER OATHS  
Elizabeth Enslé Bronner 9/1/8/2 Durban  
4 Pencarrow Crescent, La Lucia Ridge  
P O Box 1899, Umhlanga Rocks. 4320  
Tel: 031 581 1626 / Fax: 031 566 2371



## Annexure 1: Reasons for Decision

### 1. Information considered in making the decision

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

- a) The information contained in the EIR dated May 2012;
- b) The comments received from organs of state and interested and affected parties as included in the EIR dated May 2012;
- c) Mitigation measures as proposed in the EIR dated May 2012 and the EMP;
- d) The information contained in the specialist studies contained within Appendix 6 of the EIR;
- e) Findings of the site visit conducted on May 2012; and
- f) The objectives and requirements of relevant legislation, policies and guidelines, including section 2 of the National Environmental Management Act, 1998 (Act 107 of 1998).

### 2. 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 findings of all the specialist studies conducted and their recommended mitigation measures.
- b) The need for the proposed project stems from the provision of electricity to the national grid in terms of the Renewable Energy Independent Power Producers Procurement Programme (REIPPPP) and the provision of electricity from Independent Power Producers as required by the Department of Energy.
- c) The EIR dated May 2012 identified all legislation and guidelines that have been considered in the preparation of the EIR dated May 2012.
- d) The methodology used in assessing the potential impacts identified in the EIR dated May 2012 and the specialist studies have been adequately indicated.
- e) A sufficient public participation process was undertaken and the applicant has satisfied the minimum requirements as prescribed in the EIA Regulations, 2010 for public involvement.

I hereby certify that this is an exact reproduction of the original and that there is no indication that the original has been altered by an unauthorized person.

  
COMMISSIONER OATHS

Elizabeth Enslin Brommer 9/1/8/2 Durban  
4 Pencarrow Crescent, La Lucia Ridge  
P O Box 1899, Umhlanga Rocks, 4320  
Tel: 031 581 1626 / Fax: 031 556 2371



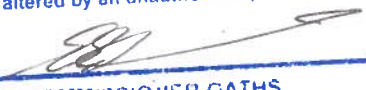
### 3. Findings

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

- a) The identification and assessment of impacts are detailed in the EIR dated May 2012 and sufficient assessment of the key identified issues and impacts have been completed.
- b) The procedure followed for impact assessment is adequate for the decision-making process.
- c) The proposed mitigation of impacts identified and assessed adequately curtails the identified impacts.
- d) EMP measures for the pre-construction, construction and rehabilitation phases of the development were proposed and included in the EIR and will be implemented to manage the identified environmental impacts during the construction process.

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.

I hereby certify that this is an exact reproduction of the original and that there is no indication that the original has been altered by an unauthorized person.

  
COMMISSIONER GATHS  
Elizabeth Enslé Bronner 9/1/8/2 Durban  
4 Pencarrow Crescent, La Lucia Ridge  
P O Box 1899, Umhlanga Rocks, 4320  
Tel: 031 581 1626 / Fax: 031 566 2371