



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: 14/12/16/3/3/2/929

Enquiries: Mr Herman Alberts

Telephone: (012) 399 9371 **E-mail:** HAlberts@environment.gov.za

Mr Ernst Jordaan Burger
Manlenox (Pty) Ltd
PO Box 225
HIGHLANDS NORTH
2037

Telephone Number: (086) 599 3858
Email Address: manlenoxza@gmail.com/ ernst@edras.co.za

PER E-MAIL / MAIL

Dear Mr Burger

APPLICATION FOR ENVIRONMENTAL AUTHORISATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998: GN R. 982/983/984/985: FOR THE 120MW MANLENOX RENEWABLE ENERGY GENERATION PROJECT ON THE FARM GROOTVLEI 296, BARKLEY WEST RD, KGATELOPELE LOCAL MUNICIPALITY, ZF MGCAWU DISTRICT MUNICIPALITY, NORTHERN CAPE PROVINCE

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

In terms of Regulation 4(2) of the Environmental Impact Assessment Regulations, 2014 (the Regulations), you are instructed to notify all registered interested and affected parties, in writing and within 14 (fourteen) 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 2 of Government Notice No. R. 993, which prescribes the appeal procedure to be followed. An appellant must submit an appeal to the appeal administrator, and a copy of the appeal to the applicant, any registered interested and affected party and any organ of state with interest in the matter within 20 days from the date that the notification of the decision was sent to the registered interested and affected parties by the applicant.

By post: Private Bag X447,
Pretoria, 0001; or

By hand: Environment House
473 Steve Biko,
Arcadia,
Pretoria, 0083

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.

M.S

Appeals must be submitted in writing to:

Mr Z Hassam, Director: Appeals and Legal Review, of this Department at the above mentioned addresses. Mr Hassam can also be contacted at:

Tel: (012) 399 9356

Email: Appealsdirector@environment.gov.za

Please note that in terms of section 43(7) of the National Environmental Management Act, 1998, an appeal under section 43 of that Act will suspend the environmental authorisation or any provision or condition attached thereto. In the instance where an appeal is lodged, you may not commence with the activity until such time that the appeal is finalised.

For guidance on appeals submitted to the Minister in terms of NEMA and the SEMAs, please find a copy of the guideline on the administration of appeals on the Department's website:
(https://www.environment.gov.za/documents/forms#legal_authorisations).

Kindly include a copy of this document with the letter of notification to interested and affected parties.

Yours faithfully



Mr Sabelo Malaza
Chief Director: Integrated Environmental Authorisations
Department of Environmental Affairs

Date: 13/03/2019

cc:	Ms Engela Grobler	AGES Limpopo (Pty) Ltd	Email: jbotha@ages-group.com
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environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

Environmental Authorisation

In terms of Regulation 25 of the Environmental Impact Assessment Regulations, 2014

Construction of the Manlenox Renewable Energy Generation Project on the Farm Grootvlei 296,
Barkley West Rd, Kgatelopele Local Municipality, ZF Mgcawu District Municipality, Northern Cape
Province

ZF Mgcawu District Municipality

Authorisation register number:	<i>14/12/16/3/3/2/929</i>
Last amended:	<i>First issue</i>
Holder of authorisation:	<i>Manlenox (Pty) Ltd</i>
Location of activity:	<i>Remaining Extent of the Farm Grootvlei No. 296 Kgatelopele Local Municipality ZF Mgcawu District Municipality Northern Cape Province</i>

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.

Decision

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

Non-compliance with a condition of this environmental authorisation may result in criminal prosecution or other actions provided for in the National Environmental Management Act, 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 No.107 of 1998) and the Environmental Impact Assessment Regulations, 2014 the Department hereby authorises –

MANLENOX (PTY) LTD

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

with the following contact details –

Mr Ernst Jordaan Burger

PO Box 225

HIGHLANDS NORTH

2037

Telephone Number: (086) 599 3858

Cell phone Number: (082) 449 7626

Email Address: manlenoxza@gmail.com/ ernst@edras.co.za

to undertake the following activities (hereafter referred to as "the activity") indicated in Listing Notice 1 and Listing Notice 2 (GN R. 983 and 984):

Activity number	Activity description
<p><u>GN R. 983 Item 11:</u></p> <p><i>"The development of facilities or infrastructure for the transmission and distribution of electricity –</i></p> <p><i>(i) Outside urban area or industrial complexes with a capacity of more than 33 but less than 275 kilovolts..."</i></p>	<p>The connection of the Manlenox Solar Park to the Eskom grid will be done according to the Eskom connection solution which will require:</p> <p>(i) one small on-site 22kV/275kV loop-in loop-out substation with one or more 22kV/275kV power transformers and a 275kV busbar (switching station) to connect to one of the two Eskom 275kV powerlines crossing the project site;</p> <p>(ii) two new small sections of 275kV powerline allowing the Eskom 275kV powerline to loop in and out of the 275kV busbar of the new on-site substation.</p> <p>The connection solution may also entail intervention on the Eskom grid.</p>
<p><u>GN R. 983 Item 19:</u></p> <p><i>"The infilling or depositing of any material of more than 5 m³ into, or the dredging, excavation, removal or moving of soil, sand, more than 5 m³ from:</i></p> <p><i>(i) a watercourse;"</i></p>	<p>The Farm Grootvlei 296 is scattered with pans and seasonal wetlands and the possibility exists that excavations might take place in these wetlands.</p>
<p><u>GN R. 983 Item 22:</u></p> <p><i>"The development of -</i></p> <p><i>(ii) a road, with a reserve wider than 13.5 metres, or where no reserve exists where the road is wider than 8 meters."</i></p>	<p>An access road wider than 8m or a reserve wider than 13.5m may be constructed. Some internal roads may be wider than 8m. This will mainly be needed for construction purposes as construction vehicles will need extra space to manoeuvre.</p>

<p><u>GN R. 984 Item 1:</u> <i>"The development of facilities or infrastructure for the generation of electricity from a renewable resource where the electricity output is 20 megawatts or more."</i></p>	<p>The Manlenox Solar Park will consist of the construction, operation and maintenance of a Photovoltaic (PV) Power Plant with a generating capacity of 120MW with associated infrastructure and structures.</p>
<p><u>GN R. 984 Item 9:</u> <i>"The development of facilities or infrastructure for the transmission and distribution of electricity with a capacity of 275 kilovolts or more, outside an urban area or industrial complex."</i></p>	<p>The connection of the Manlenox Solar Park to the Eskom grid will be done according to the Eskom connection solution which will require:</p> <ul style="list-style-type: none"> (i) one small on-site 22kV/275kV loop-in loop-out substation with one or more 22kV/275kV power transformers and a 275kV busbar (switching station) to connect to one of the two Eskom 275kV powerlines crossing the project site; (ii) two new small sections of 275kV powerline allowing the Eskom 275kV powerline to loop in and out of the 275kV busbar of the new on-site substation. <p>The connection solution may also entail intervention on the Eskom grid.</p>
<p><u>GN R. 984 Item 15:</u> <i>"The clearance of an area of 20 hectares or more of indigenous vegetation."</i></p>	<p>An area larger than 20ha (250ha) will be cleared from indigenous vegetation for the construction of the facility with associated infrastructure and structures.</p>

as described in the Environmental Impact Assessment Report (EIAR) dated November 2016 at:

21 SG Code:

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Site:	Latitude	Longitude
	28° 20' 55" S	23° 47' 12" E

Substation:	Latitude	Longitude
	28° 20' 47.99" S	23° 47' 18.52" E

Powerline connection to Eskom powerline:	Latitude	Longitude
	28° 20' 44.57" S	23° 47' 18.21" E

- for the Manienox Renewable Energy Generation Project located on the Farm Grootvlei 296, Barkley West RD, Kgatelopele Local Municipality, ZF Mgcawu District Municipality in the Northern Cape Province, hereafter referred to as "the property".

The facility will comprise the following:

- Photovoltaic modules;
- Mounting systems (fixed or trackers) for the PV arrays;
- Internal cabling and string boxes;
- Medium voltage stations hosting DC/AC inverters and LV/MV power transformers;
- Medium voltage receiving station and control building;
- Offices and small parking area;
- Workshop and warehouse;
- Small on-site high-voltage loop-in loop-out substation;
- Two new small sections of high-voltage powerline;
- Storm water collection system;
- Lighting system;
- Grounding system;
- Access road and internal roads;
- Fencing of the site and alarm and video-surveillance system;
- Water access point and water extraction on-site borehole(s) point; and
- Water supply pipelines and water treatment facility (less than 2000 cubic metres) (Ballam Waterslot system).

Technical details of the proposed facility:

Component	Description/ Dimensions
Location of the site	Remaining Extent of the Farm Grootvlei No. 296 near Barkley West.
PV Panel area	250ha
SG Codes	C00700000000029600000
Preferred Site access	The access road during the construction period will be from the R385, which is a secondary road, entering the farm from the south. The access road during the operational phase will be from the secondary road R31, which enters the farm to the north.
Export capacity	120 MW
Proposed technology	Photovoltaic
Height of installed panels from ground level	Approximately 3.1 m

Conditions of this Environmental Authorisation

Scope of authorisation

1. The construction of the Manlenox Renewable Energy Generation Project on the Farm Grootvlei 296, Barkley West Rd, Kgatelopele Local Municipality, ZF Mgcawu District Municipality in the Northern Cape Province, as described above is hereby approved.
2. Authorisation of the activity is subject to the conditions contained in this environmental authorisation, which form part of the environmental authorisation and are binding on the holder of the authorisation.
3. The holder of the authorisation is responsible for ensuring compliance with the conditions contained in this environmental authorisation. This includes any person acting on the holder's behalf, including but not limited to, an agent, servant, contractor, sub-contractor, employee, consultant or person rendering a service to the holder of the authorisation.
4. The activities authorised 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 environmental authorisation must be approved, in writing, by the Department before such changes or deviations may be effected. In assessing whether to grant such approval or not, the Department may request such information as it deems necessary to evaluate the significance and impacts of such changes or deviations and it may be necessary for the holder of the authorisation to apply for further environmental authorisation in terms of the regulations.
6. The holder of an environmental authorisation must apply for an amendment of the environmental authorisation with the competent authority for any alienation, transfer or change of ownership rights in the property on which the activity is to take place.
7. This activity must commence within a period of five (05) years from the date of issue of this environmental authorisation. 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.
8. Construction must be completed within five (05) years of the commencement of the activity on site.
9. Commencement with one activity listed in terms of this environmental authorisation constitutes commencement of all authorised activities.

Notification of authorisation and right to appeal

10. The holder of the authorisation must notify every registered interested and affected party, in writing and within 14 (fourteen) calendar days of the date of this environmental authorisation, of the decision to authorise the activity.
 11. The notification referred to must –
 - 11.1. specify the date on which the authorisation was issued;
 - 11.2. inform the interested and affected party of the appeal procedure provided for in the National Appeal Regulations, 2014;
 - 11.3. advise the interested and affected party that a copy of the authorisation will be furnished on request; and
 - 11.4. give the reasons of the competent authority for the decision.
 12. The holder of the authorisation must publish a notice –
 - 12.1. informing interested and affected parties of the decision;
 - 12.2. informing interested and affected parties where the decision can be accessed; and
 - 12.3. drawing the attention of interested and affected parties to the fact that an appeal may be lodged against this decision in terms of the National Appeal Regulations, 2014.
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Commencement of the activity

13. The authorised activity shall not commence until the period for the submission of appeals has lapsed as per the National Appeal Regulations, 2014. In terms of section 43(7), an appeal under section 43 of the National Environmental Management Act, 1998 will suspend the environmental authorisation or any provision or condition attached thereto. In the instance where an appeal is lodged you may not commence with the activity until such time that the appeal has been finalised.

Management of the activity

14. The Environmental Management Programme (EMPr) submitted as part of the application for EA is hereby approved. This EMPr must be implemented and adhered to.
15. The EMPr must be implemented and strictly enforced during all phases of the project. It must be seen as a dynamic document and must be included in all contract documentation for all phases of the development when approved.
16. Should the holder of this environmental authorisation propose any changes to the EMPr, the holder of this environmental authorisation must undertake the required actions as prescribed by legislation at the time and comply with all relevant legal requirements administered by any relevant and competent authority at that time.
17. The Department reserves the right to amend the approved EMPr should any impacts that were not anticipated or covered in the EIAr be discovered.
18. A shapefile of the development layout/footprint must be submitted to this Department within two months from the date of this decision. 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 or 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:

Department of Environmental Affairs
Environment House
473 Steve Biko
Arcadia
Pretoria

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

Frequency and process of updating the EMPr

19. The EMPr must be updated where the findings of the environmental audit reports, contemplated in Condition 26 below, indicate insufficient mitigation of environmental impacts associated with the undertaking of the activity, or insufficient levels of compliance with the environmental authorisation or EMPr.
20. The updated EMPr must contain recommendations to rectify the shortcomings identified in the environmental audit report.
21. The updated EMPr must be submitted to the Department for approval together with the environmental audit report, as per Regulation 34 of GN R. 982. The updated EMPr must have been subjected to a public participation process, which process has been agreed to by the Department, prior to submission of the updated EMPr to the Department for approval.

22. In assessing whether to grant approval of an EMPr which has been updated as a result of an audit, the Department will consider the processes prescribed in Regulation 35 of GN R.982. Prior to approving an amended EMPr, the Department may request such amendments to the EMPr as it deems appropriate to ensure that the EMPr sufficiently provides for avoidance, management and mitigation of environmental impacts associated with the undertaking of the activity.
23. The holder of the authorisation may apply for an amendment of an EMPr, if such amendment is required before an audit is required. The holder must notify the Department of its intention to amend the EMPr at least 60 days prior to submitting such amendments to the EMPr to the Department for approval. In assessing whether to grant such approval or not, the Department will consider the processes and requirements prescribed in Regulation 37 of GN R. 982.

Monitoring

24. The holder of the authorisation must appoint an experienced independent Environmental Control Officer (ECO) for the construction phase of the development that will have the responsibility to ensure that the mitigation/rehabilitation measures and recommendations referred to in this environmental authorisation are implemented and to ensure compliance with the provisions of the approved EMPr.
 - 24.1. The ECO must be appointed before commencement of any authorised activities.
 - 24.2. Once appointed, the name and contact details of the ECO must be submitted to the *Director: Compliance Monitoring* of the Department.
 - 24.3. The ECO must keep record of all activities on site, problems identified, transgressions noted and a task schedule of tasks undertaken by the ECO.
 - 24.4. The ECO must remain employed until all rehabilitation measures, as required for implementation due to construction damage, are completed and the site is ready for operation.

Recording and reporting to the Department

25. All documentation e.g. audit/monitoring/compliance reports and notifications, required to be submitted to the Department in terms of this environmental authorisation, must be submitted to the *Director: Compliance Monitoring* of the Department.
 26. The holder of the environmental authorisation must, for the period during which the environmental authorisation and EMPr remain valid, ensure that project compliance with the conditions of the environmental authorisation and the EMPr are audited, and that the audit reports are submitted to the *Director: Compliance Monitoring* of the Department.
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27. The frequency of auditing and of submission of the environmental audit reports must be as per the frequency indicated in the EMPr, taking into account the processes for such auditing as prescribed in Regulation 34 of GN R. 982.
28. The holder of the authorisation must, in addition, submit environmental audit reports to the Department within 30 days of completion of the construction phase (i.e. within 30 days of site handover) and a final environmental audit report within 30 days of completion of rehabilitation activities.
29. The environmental audit reports must be compiled in accordance with Appendix 7 of the EIA Regulations, 2014 and must indicate the date of the audit, the name of the auditor and the outcome of the audit in terms of compliance with the environmental authorisation conditions as well as the requirements of the approved EMPr.
30. Records relating to monitoring and auditing must be kept on site and made available for inspection to any relevant and competent authority in respect of this development.

Notification to authorities

31. A written notification of commencement must be given to the Department no later than fourteen (14) days prior to the commencement of the activity. 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, as well as a reference number.

Operation of the activity

32. A written notification of operation must be given to the Department no later than fourteen (14) days prior to the commencement of the activity operational phase.

Site closure and decommissioning

33. Should the activity ever cease or become redundant, the holder of the authorisation must undertake the required actions as prescribed by legislation at the time and comply with all relevant legal requirements administered by any relevant and competent authority at that time.

Specific conditions

34. The footprint of the development must be limited to the areas required for actual construction works and operational activities.
 35. Areas outside of the footprint, including sensitive areas and buffer areas, must be clearly demarcated (using fencing and appropriate signage) before construction commences and must be regarded as "no-go" areas.
 36. Contractors and construction workers must be clearly informed of the no-go areas.
 37. Vegetation clearing must be limited to the required footprint. Mitigation measures must be implemented to reduce the risk of erosion and the invasion of alien species.
 38. 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 made available to this Department on request.
 39. Construction activities must be restricted to demarcated areas to restrict the impact on sensitive environmental features.
 40. All areas of disturbed soil must be reclaimed using only indigenous vegetation. Reclamation activities shall be undertaken according to the EMPr.
 41. Topsoil from all excavations and construction activities must be salvaged and reapplied during reclamation.
 42. Wetlands, rivers and river riparian areas must be treated as "no-go" areas and appropriately demarcated as such. No vehicles, machinery, personnel, construction material, fuel, oil, bitumen or waste must be allowed into these areas without the express permission of and supervision by the ECO, except for rehabilitation work in these areas.
 43. No discharge of effluents or polluted water must be allowed into any rivers or wetland areas.
 44. No spoil material, including stripped topsoil, must be temporarily stockpiled within 30m of freshwater ecosystems identified to be of low or moderate conservation importance and 50m of freshwater ecosystems identified to be of high conservation importance.
 45. Underground cables and internal access roads must be aligned as much as possible along existing infrastructure to limit damage to vegetation and watercourses.
 46. Anti-erosion measures such as silt fences must be installed in disturbed areas.
 47. No activities will be allowed to encroach into a water resource without a Water Use License being in place from the Department Water and Sanitation.
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48. Cleared alien vegetation must not be dumped on adjacent intact vegetation during clearing but must be temporarily stored in a demarcated area.
49. Workers must be made aware of the importance of not polluting rivers or wetlands and the significance of not undertaking activities that could result in such pollution, and this awareness must be promoted throughout the construction phase.
50. Signs must be placed along construction roads to identify speed limits, travel restrictions, and other standard traffic control information. To minimize impacts on local commuters, consideration should be given to limiting construction vehicles travelling on public roadways during the morning and late afternoon commute time.
51. 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.
52. Roads must be designed so that changes to surface water runoff are avoided and erosion is not initiated.
53. A designated access to the site must be created and clearly marked to ensure safe entry and exit.
54. Signage must be erected at appropriate points warning of turning traffic and the construction site.
55. 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.
56. Should abnormal loads have to be transported by road to the site, a permit must be obtained from the relevant authorities.
57. All construction vehicles should adhere to a low speed limit to avoid collisions with susceptible species such as snakes and tortoises.
58. 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.
59. 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 legislation.
60. Liaison with land owners/farm managers must be done prior to construction in order to provide sufficient time for them to plan agricultural activities.
61. No unsupervised open fires for cooking or heating must be allowed on site.
62. 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).

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63. The holder of this authorisation must provide sanitation facilities within the construction area and along the road so that workers do not pollute the surrounding environment. These facilities must be removed from the site when the construction phase is completed as well as associated waste to be disposed of at a registered waste disposal site.
 64. The holder of this authorisation must take note that no temporary site camps will be allowed outside the footprint of the development area as the establishment of such structures might trigger a listed activity as defined in the Environmental Impact Assessment Regulations.
 65. 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.
 66. Borrow materials must be obtained only from authorised and permitted sites. Permits must be kept on site by the ECO.
 67. Dust abatement techniques must be used before and during surface clearing, excavation, or blasting activities.
 68. 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.
 69. A pre-construction survey of the final development footprint must be conducted to ascertain the identity and exact number of individuals of protected species affected by the proposed development. Prior to the commencement of construction, a rescue and rehabilitation operation for these species which could survive translocation must be conducted.
 70. No construction activities can commence without having obtained the necessary permits for threatened or protected species (ToPS) listed and provincially protected species within the study area.
 71. All construction vehicles must remain on properly demarcated roads. No construction vehicles should be allowed to drive over the vegetation except where no cleared roads are available. In such cases a single track should be used and multiple paths should not be formed. Where temporary access roads are created, they should be rehabilitated as outlined in the rehabilitation plan after completion of construction.
 72. Regular monitoring for erosion must take place to ensure that no erosion problems are occurring at the site as a result of the roads and other infrastructure. All erosion problems observed should be rectified as soon as possible as outlined in the erosion management plan within the EMPr.
 73. Excavations must be inspected daily in order to rescue trapped animals.
 74. An appropriately designed and effective storm water management system must be implemented.
 75. Kerbs and storm water channels must be designed in such a way that they can allow small animals and reptiles to move freely.
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76. Top soil and subsoil must be stockpiled separately and replaced according to the correct profile i.e. topsoil replaced last. Stockpiles should not be situated such that they obstruct natural water pathways and drainage channels.
 77. Any fauna directly threatened by the construction activities should be removed to a safe location by a suitably qualified person.
 78. Should any archaeological sites, artefacts, paleontological fossils or graves be exposed during construction work, work in the immediate vicinity of the find must be stopped, the South African Heritage Resources Agency (SAHRA) must be informed and the services of an accredited heritage professional obtained for an assessment of the heritage resources must be made.
 79. The collection, hunting, or harvesting of any plants or animals at the site is strictly forbidden.
 80. Lighting for both the construction period and through the operation of the facility must be of low-pressure sodium type, preferably yellow. All perimeter and security lighting must be attached to motion detectors, and should be dark-sky friendly.
 81. Electric fencing should not have any strands within 30cm of the ground, which should be sufficient to allow smaller mammals, reptiles and tortoises to pass through (tortoises retreat into their shells when electrocuted and eventually succumb from repeated shocks), but still remain effective as a security barrier.
 82. All new powerlines must be marked with bird flight diverters along their entire length. To create a net benefit, where possible, the new lines must run parallel to existing marked lines so as to reduce the collision risk posed by the older lines.
 83. The poles should be fitted with bird perches on top of the poles to draw birds, particularly vultures away from the potentially risky insulators.
 84. All pylons to be constructed should make use of "bird friendly" monopole structures, fitted with a bird perch, as per Eskom standard guidelines.
 85. Road borders should be regularly maintained to ensure that vegetation remains short and that they therefore serve as an effective firebreak.
 86. All declared aliens must be identified and managed in accordance with the Conservation of Agricultural Resources Act, 1983 (Act No. 43 of 1983). There should be an alien species monitoring and eradication program to prevent encroachment of these problem plants for the duration of the operation.
 87. The washing of panels during maintenance must be done with biodegradable soaps to avoid soil contamination and poisoning of small animals.
 88. Any vegetation clearing that needs to take place as part of maintenance activities, should be done in an environmentally friendly manner, including avoiding the use of herbicides and using manual clearing methods wherever possible.
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89. Lighting for both the construction period and through the operation of the facility must be of low-pressure sodium type, preferably yellow. All perimeter and security lighting must be attached to motion detectors, and should be dark-sky friendly.
 90. During operation, any electrocution and collision events that occur should be recorded, including the species affected and the date. If repeated collisions occur within the same area, then, further mitigation and avoidance measures may need to be implemented.
 91. The recommendations of the EAP in the EIAr dated November 2016 and the specialist studies attached must be adhered to. In the event of any conflicting mitigation measures and conditions of the Environmental Authorisation, the specific condition of this Environmental Authorisation will take preference.

General

92. A copy of this environmental authorisation, the audit and compliance monitoring reports, and the approved EMPr, must be made available for inspection and copying-
 - 92.1. at the site of the authorised activity;
 - 92.2. to anyone on request; and
 - 92.3. where the holder of the environmental authorisation has a website, on such publicly accessible website.
93. National government, provincial government, local authorities or committees appointed in terms of the conditions of this authorisation or any other public authority shall not be held responsible for any damages or losses suffered by the holder of the authorisation or his/her successor in title in any instance where construction or operation subsequent to construction be temporarily or permanently stopped for reasons of non-compliance by the holder of the authorisation with the conditions of authorisation as set out in this document or any other subsequent document emanating from these conditions of authorisation.

Date of environmental authorisation: 13/03/2017


Mr Sabelo Malaza

Chief Director: Integrated Environmental Authorisations
Department of Environmental Affairs

Annexure 1: Reasons for Decision

1. Information considered in making the decision

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

- a) The listed activities as applied for in the application form received on 13 January 2016.
- b) The information contained in the EIAr dated November 2016.
- c) The comments received from the SKA-SA and SANRAL, and interested and affected parties as included in the EIAr dated November 2016.
- d) Mitigation measures as proposed in the EIAr and the EMPr dated November 2016.
- e) The information contained in the specialist studies contained within the appendices of the EIAr dated November 2016 and as appears below:

Title	Prepared by	Date
Ecological Impact Assessment	Exigo Sustainability	October 2016
Avifauna Specialist Report	Exigo Sustainability	October 2016
Soils, Land Use, Agricultural Potential	Exigo Sustainability	October 2016
Heritage Impact Assessment	Marko Hutten	September 2016
Palaeontological Desktop Study	Bruce Rubidge	June 2013
Geotechnical and Geohydrological Study	Geotechnical Consult Services	November 2016
Visual Impact Assessment Report	Newtown Landscape Architects	September 2016
Socio-Economic Impact Study	Glen Steyn and Associates	June 2016

- 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) Details provided of the qualifications of the Environmental Assessment Practitioner (EAP).
- b) The findings of all the specialist studies conducted and their recommended mitigation measures.

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- c) The need for the proposed project stems from the provision of electricity to the national grid.
 - d) The EIA dated November 2016 identified all legislation and guidelines that have been considered in the preparation of the EIA.
 - e) The description of the environment that may be affected by the activity and the manner in which the physical, biological, social, economic and cultural aspects of the environment may be affected by the proposed activity.
 - f) The methodology used in assessing the potential impacts identified in the EIA dated November 2016 and the specialist studies have been adequately indicated.
 - g) A sufficient public participation process was undertaken and the applicant has satisfied the minimum requirements as prescribed in the EIA Regulations, 2014 for public involvement.

3. Findings

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

- a) The identification and assessment of impacts are detailed in the EIA dated November 2016 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) The information contained in the EIA dated November 2016 is deemed to be accurate and credible.
- e) EMP measures for the pre-construction, construction and rehabilitation phases of the development were proposed and included in the EIA and will be implemented to manage the identified environmental impacts during the construction phase.

In view of the above, the Department is satisfied that, subject to compliance with the conditions contained in the environmental authorisation, the authorised activities will not conflict with the general objectives of integrated environmental management laid down in Chapter 5 of the National Environmental Management Act, 1998 and that any potentially detrimental environmental impacts resulting from the authorised activities can be mitigated to acceptable levels. The environmental authorisation is accordingly granted.