



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: 14/12/16/3/3/2/843

Enquiries: Ms Thabile Sangweni

Telephone: (012) 399 9409 **E-mail:** TSangweni@environment.gov.za

Mr Warren Morse
Gemsbok Solar PV5 (Pty) Ltd
PO Box 50
CAPE TOWN INTERNATIONAL AIRPORT
7525

Telephone Number: (021) 934 5268
E-mail Address: warren@mulilo.com

PER E-MAIL / MAIL

Dear Mr Morse

APPLICATION FOR ENVIRONMENTAL AUTHORISATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT NO. 107 OF 1998), AS AMENDED (NEMA); GOVERNMENT NOTICES. R982, R983, R984 AND R985, AS AMENDED FOR THE 75MW GEMSBOK PV5 SOLAR ENERGY FACILITY AND ITS ASSOCIATED INFRASTRUCTURE ON PORTION 8 OF THE GEMSBOK BULT FARM 120 NEAR KENHARDT WITHIN THE KHEIS LOCAL MUNICIPALITY IN THE NORTHERN CAPE PROVINCE

With reference to the above application, please be advised that based on the Appeal Decision dated 28 July 2017, the Department has decided to grant authorisation. The Environmental Authorisation (EA) and reasons for the decision are attached herewith.

The attached EA will replace the EA dated 30 August 2016. All further amendments must be lodged on the attached EA.

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

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

Your attention is drawn to Chapter 2 of the National Environmental Management Act, 1998 (Act No. 107 of 1998) National Appeal Regulations published under Government Notice R993 in Government Gazette No. 38303 dated 08 December 2014 (National Appeal Regulations, 2014), which prescribe the appeal procedure to be followed. Kindly include a copy of this document (National Appeal Regulations, 2014) with the letter of notification to interested and affected parties in this matter.

M.S

Should any person wish to lodge an appeal against this decision, he/she must submit the appeal to the appeal administrator, and a copy of the appeal to the applicant, any registered interested and affected party, and any organ of state with interest in the matter within 20 days from the date that the notification of the decision was sent to the registered interested and affected parties by the applicant; or the date that the notification of the decision was sent to the applicant by the Department, whichever is applicable.

Appeals must be submitted in writing in the prescribed form to:

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

By email: appealsdirector@environment.gov.za;

By hand: Environment House
473 Steve Biko Street
Arcadia
Pretoria
0083; or

By post: Private Bag X447
Pretoria
0001

Please note that in terms of Section 43(7) of the NEMA, the lodging of an appeal will suspend the environmental authorisation or any provision or condition attached thereto. In the instance where an appeal is lodged, you may not commence with any activity authorised in the EA until such time that the appeal is finalised.

To obtain the prescribed appeal form and for guidance on the submission of appeals, please visit the Department's website at [https://www.environment.gov.za/documents/forms#legal authorisations](https://www.environment.gov.za/documents/forms#legal%20authorisations) or request a copy of the documents at appealsdirector@environment.gov.za.

Yours faithfully



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

Date: 19/11/2018

cc: Mr Paul Lochner	Council for Scientific and Industrial Research (CSIR)	E-mail: plochner@csir.co.za
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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

**The 75MW Gemsbok PV5 Solar Energy Facility and its associated infrastructure on Portion 8 of the
Gemsbok Bult Farm 120 near Kenhardt, Kheis Local Municipality, Northern Cape Province**

ZF Mgcawu District Municipality

Application Reference Number:	<i>14/12/16/3/3/2/843</i>
Last amended:	<i>First issue</i>
Applicant:	<i>Gemsbok Solar PV5 (Pty) Ltd</i>
Location of activity:	<i>Portion 8 of the Gemsbok Bult Farm 120 Kheis 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.

MS

Decision

The Department is satisfied, based on 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 –

GEMSBOK SOLAR PV5 (PTY) LTD

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

with the following contact details –

Mr Warren Morse

PO Box 50

CAPE TOWN INTERNATIONAL AIRPORT

7525

Telephone Number: (021) 934 5268

Fax Number: (021) 935 0505

E-mail Address: warren@mulilo.com

to undertake the following activities (hereafter referred to as “the activity”) indicated in Listing Notices 1, 2 and 3 (GN R. 983, 984 & 985):

Activity number	Activity description
<p><u>GN R. 983 Item 9:</u></p> <p><i>“The development of infrastructure exceeding 1000 metres in length for the bulk transportation of water or storm water:</i></p> <ul style="list-style-type: none"> <i>(i) With an internal diameter of 0,36 metres or more; or</i> <i>(ii) With a peak throughput of 120 litres per second or more,</i> <p><i>Excluding where:</i></p> <ul style="list-style-type: none"> <i>(a) Such infrastructure is for bulk transportation of water or storm water or storm water drainage inside a road reserve; or</i> <i>(b) Where such development will occur within an urban area.”</i> 	<p>The proposed project will take place outside of an urban area and will entail the construction of storm water channels. These structures will extend approximately 3000m in length (i.e. will exceed 1000m), will have an internal diameter of more than 0,36m and a peak throughput of more than 120l/s.</p>
<p><u>GN R. 983 Item 11:</u></p> <p><i>“The development of facility of infrastructure for the transmission and distribution of electricity –</i></p> <ul style="list-style-type: none"> <i>(i) Outside urban areas or industrial complexes with a capacity of more than 33 but less than 275 kV.”</i> 	<p>The proposed project will entail the construction and installation of an on-site substation and an overhead 132kV transmission line which will connect the project to the Eskom Nieuwehoop Substation which is outside an urban area. The project will also entail the construction of a new 400/132kV transformer bay at the Eskom Nieuwehoop Substation and a 400/132kV transformer at the Eskom Nieuwehoop Substation.</p>
<p><u>GN R. 983 Item 12:</u></p> <p><i>“The development of:</i></p> <ul style="list-style-type: none"> <i>(x) buildings exceeding 100 square metres in size;</i> <i>(xii) infrastructure or structures with a physical footprint of 100 square metres or more;</i> 	<p>The proposed project will take place outside an urban area and will entail the construction of building infrastructure and structures which are expected to exceed a footprint of 100m² with</p>

<p><i>where such development occurs-</i></p> <p>(a) <i>within a watercourse;</i></p> <p>(c) <i>if no development setback exists, within 32 metres of a watercourse, measured from the edge of a watercourse."</i></p>	<p>some likely to occur within 32m of the watercourses or within minor drainage lines.</p>
<p><u>GN R. 983 Item 19:</u></p> <p><i>"The infilling or depositing of any material of more than 5m³ into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 5m³ from –</i></p> <p>(i) <i>a watercourse."</i></p>	<p>The proposed project may entail the excavation, removal and moving of more than 5m³ of soil, sand, pebbles or rock from the nearby watercourses. The proposed project may also entail the infilling of more than 5m³ of material into the nearby watercourses.</p>
<p><u>GN R. 983 Item 24:</u></p> <p><i>"The development of –</i></p> <p>(ii) <i>a road with a reserve wider than 13,5 metres, or where no reserve exists where the road is wider than 8 metres."</i></p>	<p>An internal gravel road may be constructed from the Transnet Service Road or the unnamed farm road to the proposed site. The internal gravel road would be ~8m wide (without a road reserve). The length of the internal gravel road is ~10km.</p>
<p><u>GN R. 983 Item 28:</u></p> <p><i>"Residential, mixed, retail, commercial, industrial or institutional developments where such land was used for agriculture or afforestation on or after 01 April 1998 and where such development:</i></p> <p>(ii) <i>will occur outside an urban area, where the total land to be developed is bigger than 1 hectares."</i></p>	<p>It is understood that the land is currently used for agricultural purposes mainly grazing. The proposed solar facility which is considered to be a commercial/industrial development will comprise an area of ~220ha.</p>
<p><u>GN R. 984 Item 1:</u></p> <p><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, excluding where such development of facilities or infrastructure is for photovoltaic installations and occurs within an urban area."</i></p>	<p>The proposed project will take place outside of an urban area.</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>The total area of the PV array of the proposed project is expected to be ~220ha. Approximately 25ha of indigenous vegetation could possibly be cleared for the construction of the proposed solar facility which exceeds the threshold of 20ha.</p>
<p><u>GN R. 985 Item 18:</u> <i>"The widening of a road by more than 4 metres, or the lengthening of a road by more than 1 kilometre.</i> <i>(a) In Northern Cape province:</i> <i>(ii) outside urban areas; and</i> <i>(ii) Areas on the watercourse side of the development setback line or within 100 metres from the edge of a watercourse where no such setback line has been determined."</i></p>	<p>In terms of access, the proposed project site can be accessed via an existing gravel road and the existing Transnet Service Road (private). Discussions are being held with Transnet and the project applicant regarding the potential use of the Transnet Road and associated specific requirements. However, should the Transnet Service Road not be used for access, then the unnamed farm gravel road will be used. This farm road, however, will need to be upgraded and widened by more than 4m (where required).</p>

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

21 SG Code:

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Coordinates:

Solar Energy Facility:		
Point	Latitude	Longitude
North- West	29° 05' 44.1564" S	21° 24' 44.2980" E
South- West	29° 07' 04.1844" S	21° 24' 41.9184" E
South- East	29° 07' 14.7576" S	21° 25' 57.2376" E
North- East	29° 05' 39.9192" S	21° 25' 58.1484" E
Powerline Corridor:		
Start point	29° 06' 32.31" S	21° 24' 46.74" E

Middle point	29° 08' 22.97" S	21° 20' 42.05" E
End point	29 09' 01.15" S	21° 20' 19.18" E

- for the 75MW Gemsbok PV5 Solar Energy Facility and its associated infrastructure on Portion 8 of the Gemsbok Bult Farm 120 near Kenhardt within the Kheis Local Municipality in the Northern Cape Province, hereafter referred to as "the property".

The Gemsbok PV5 Solar Energy Facility will comprise the following:

- Solar field;
- Building infrastructure;
- 132kV overhead transmission line;
- On-site substation;
- Additional feeder bay(s), Busbar(s), and a 400/132kV transformer bay at the Eskom Nieuwehoop Substation or extensions of the existing infrastructure;
- Additional 400/132kV transformer at the Eskom Nieuwehoop Substation;
- Extension of the 132kV busbar;
- Extension of the 400kV busbar;
- 22/33kV internal transmission line/underground cables;
- Access roads and internal gravel roads;
- Fencing;
- Panel maintenance and cleaning area;
- Stormwater channels;
- Water pipelines; and,
- Temporary work area during the construction phase (i.e. laydown area).

Technical details for the facility:

Component	Description/ Dimensions
Location of the site	Portion 8 of the Gemsbok Bult Farm 120 near Kenhardt
SG Codes	C0360000000012000008
Site access	The National Road, the R27, and an existing Transnet Service Road leading to the site or the unnamed farm road accessed by the R383
Export capacity	Net generating capacity of 75MW



Proposed technology	PV and/or concentrated PV with fixed, single or double axis tracking technology
Width of internal roads	Width: Between 6m – 8m

Conditions of this Environmental Authorisation

Scope of authorisation

1. The 75MW Gemsbok PV5 Solar Energy Facility and its associated infrastructure 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.

Commencement of the activity

12. 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

13. A copy of the final development layout map must be made available for comments by registered Interested and Affected Parties and the holder of this environmental authorisation must consider such comments. Once amended, the final development layout map must be submitted to the Department for written approval prior to commencement of the activity. All available biodiversity information must be used in the finalisation of the layout map. Existing infrastructure must be used as far as possible e.g. roads. The layout map must indicate the following:
 - 13.1. Cable routes (where they are not along internal roads);
 - 13.2. Position of photovoltaic panels and associated infrastructure;
 - 13.3. Internal roads indicating width;
 - 13.4. Wetlands, drainage lines, rivers, stream and water crossing of roads and cables;

- 13.5. All sensitive features e.g. Important Bird Areas, Critical Biodiversity Areas, Ecological Support Areas, floral sensitive area, heritage sites, wetlands, pans and drainage channels that will be affected by the facility and associated infrastructure;
 - 13.6. Substation(s) inverters and/or transformer(s) sites including their entire footprint;
 - 13.7. Connection routes (including pylon positions) to the distribution/transmission network;
 - 13.8. All existing infrastructure on the site, such as roads;
 - 13.9. Soil heaps (temporary for topsoil and subsoil and permanently for excess material);
 - 13.10. Buildings, including accommodation; and,
 - 13.11. All "no-go" and buffer areas.
14. Furthermore, a shapefile of the approved development layout/footprint must be submitted to this Department within two months from the date of the 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 (please specify if an alternative scale was used). The metadata must include a description of the base data used for digitizing. The shapefile must be submitted in a zip file using the EIA application reference number as the title.

The shape file must be submitted to:

Postal Address:

Department of Environmental Affairs
Private Bag X447
Pretoria
0001

Physical address:

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

15. The Environmental Management Programme (EMPr) submitted as part of the EIAR is not approved and must be amended to include measures as dictated by the final site lay-out map and micro-siting; and the provisions of this environmental authorisation. The EMPr must be made available for comments by registered Interested and Affected Parties and the holder of this environmental authorisation must consider such comments. Once amended, the final EMPr must be submitted to the Department for written approval prior to commencement of the activity. Once approved the EMPr must be implemented and adhered to.
16. The EMPr amendment must include the following:
 - 16.1. A final Electromagnetic Control (EMC) Plan, which identifies potential risk, mitigation measures and appropriate test and acceptable procedures during the design and construction of this facility. The final EMC Plan must be made available by the developer to Square Kilometre Array South Africa (SKA-SA) for acceptance and must be submitted to this Department for approval prior to construction.
 - 16.2. The requirements and conditions of this authorisation.
 - 16.3. All recommendations and mitigation measures recorded in the EIAR.
 - 16.4. The findings and subsequent mitigation measures arising from the EMC plan.
 - 16.5. All mitigation measures as listed in the specialist reports must be included in the EMPr and implemented.
 - 16.6. The final site layout map.
 - 16.7. 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.
 - 16.8. 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.
 - 16.9. A re-vegetation and habitat rehabilitation plan to be implemented during the construction and operation of the facility. Restoration must be undertaken as soon as possible after completion of



construction activities to reduce the amount of habitat converted at any one time and to speed up the recovery to natural habitats.

16.10. A traffic management plan for the site access roads to ensure that no hazards would result from the increased truck traffic and that traffic flow would not be adversely impacted. This plan must include measures to minimize impacts on local commuters 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.

16.11. The post construction avifaunal monitoring plan that is in line with Birdlife's most recent guideline.

16.12. A storm water management plan to be implemented during the construction and operation of the facility. The plan must ensure compliance with applicable regulations and prevent off-site migration of contaminated storm water or increased soil erosion. The plan must include the construction of appropriate design measures that allow surface and subsurface movement of water along drainage lines so as not to impede natural surface and subsurface flows. Drainage measures must promote the dissipation of storm water run-off.

16.13. 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.

16.14. 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.

16.15. A fire management plan to be implemented during the construction and operational phases.

16.16. 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.

16.17. An environmental sensitivity map indicating environmental sensitive areas and features identified during the EIA process.

16.18. A map combining the final layout map superimposed (overlain) on the environmental sensitivity map. This map must reflect the proposed location of the facility as stated in the EIA and this authorisation.

17. The final amended EMP (once approved) 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.

18. Changes to the EMPr must be submitted to this Department for approval before such changes could be effected.
19. The Department reserves the right to amend the approved EMPr should any impacts that were not anticipated or covered in the EIAr be discovered.

Frequency and process of updating the EMPr

20. The EMPr must be updated where the findings of the environmental audit reports, contemplated in Condition 27 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.
21. The updated EMPr must contain recommendations to rectify the shortcomings identified in the environmental audit report.
22. 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.
23. 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.
24. The holder of the authorisation may apply for an amendment of an EMPr, if such amendment is required before an audit is required. The amendment process is prescribed in Regulation 37 of GN R.982. The holder of the authorisation must request comments on the proposed amendments to the impact management outcomes of the EMPr or amendments to the closure objectives of the closure plan from potentially interested and affected parties, including the competent authority, by using any of the methods provided for in the Act for a period of at least 30 days.

Monitoring

25. 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.

- 25.1. The ECO must be appointed before commencement of any authorised activities.
- 25.2. Once appointed, the name and contact details of the ECO must be submitted to the *Director: Compliance Monitoring* of the Department.
- 25.3. The ECO must keep record of all activities on site, problems identified, transgressions noted and a task schedule of tasks undertaken by the ECO.
- 25.4. 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

26. 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.
27. 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.
28. The frequency of auditing and of submission of the environmental audit reports must be as per the frequency indicated in the approved EMPr, taking into account the processes for such auditing as prescribed in Regulation 34 of GN R. 982.
29. 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.
30. 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.
31. 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

32. 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

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

Site closure and decommissioning

34. 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

35. Environmental Authorisation is granted on condition that not more than 6 approved facilities in the project area are awarded preferred bidder status by the Department of Energy (DoE).
36. A final EMC Plan, which identifies potential risk, mitigation measures and appropriate test and acceptable procedures during the design and construction of this facility must be developed. The final EMC Plan must be made available by the holder of the EA to the SARAO (South African Radio Astronomy Observatory) for acceptance and must be submitted to this Department for approval prior to construction.
37. All equipment and infrastructure must comply with the Radio Astronomy Protection Levels Regulations. Transmitters established for the purposes of voice and data communication must also comply with the relevant regulations concerning the restriction of use of the radio frequency spectrum that applies in the area concerned.
38. The footprint of the development must be limited to the areas required for actual construction works and operational activities. Vegetation clearing must be limited to the required footprint.
39. A pre-construction survey of the final development footprint must be conducted by a qualified floral specialist to ascertain the identity and the 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.

40. Vegetation clearing must be limited to the required footprint for actual construction works and operational activities. Mitigation measures must be implemented to reduce the risk of erosion and the invasion of alien species.
41. 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.
42. No exotic plants may be used for rehabilitation purposes. Only indigenous plants occurring within a ten (10) kilometre radius of the development site must be utilised.
43. Periodical inspection of panels to remove and discourage avifaunal nesting is encouraged. Any nest sites must be removed by a qualified avifaunal specialist.
44. The ECO must ensure that any double fencing associated with the facility allows for free movement of small mammals and avifauna.
45. Any fauna directly threatened by the construction activities must be removed to a safe location by a qualified person.
46. Watercourses outside the approved footprint/layout must be treated as "no-go" areas and 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.
47. Should any archaeological sites, artefacts, paleontological fossils or graves be exposed during construction, work in the immediate vicinity of the find must be stopped, SAHRA must be informed and the services of an accredited heritage professional obtained for an assessment of the heritage resources to be made.
48. An integrated waste management approach must be implemented that is based on waste minimisation and must incorporate reduction, recycling, re-use and disposal where appropriate.
49. Any solid waste, which will not be recycled, must be disposed of at a landfill licensed in terms of section 20 (b) of the National Environment Management Waste Act, 2008 (Act No. 59 of 2008). No waste material may be left on site after construction.
50. The recommendations of the EAP in the final EIAr dated May 2018 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

51. A copy of this Environmental Authorisation, the audit and compliance monitoring reports, and the approved EMPr, must be made available for inspection and copying-
- 51.1. at the site of the authorised activity;
 - 51.2. to anyone on request; and
 - 51.3. where the holder of the Environmental Authorisation has a website, on such publicly accessible website.
52. 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: 19/11/2018



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 information contained in the application form submitted on 28 October 2015 and acknowledged by the Department on 30 October 2015.
- b) The information contained in the Environmental Impact Assessment Report (EIAR) dated May 2016 and received by this Department on 18 May 2016.
- c) The comments received during the Scoping and EIA phases of the application and submitted as part of the EIAR dated May 2016.
- d) Mitigation measures as proposed in the EIAR dated May 2016 and the EMPr submitted as part of the EIAR dated May 2016.
- e) Specialist studies submitted as part of the EIAR dated May 2016 and received by this Department on 18 May 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).
- g) The information contained in the specialist studies contained in the EIAR dated May 2016 and as appears below:

Title	Prepared by
Visual Impact Assessment	Henry Holland
Ecological (Ecology & Freshwater) Impact Assessment	Kyllinga Consulting (sub-contracted by Pachnoda Consulting CC)
Terrestrial Fauna Impact Assessment	Pachnoda Consulting CC and associates
Avifaunal Impact Assessment	Pachnoda Consulting CC and associates
Heritage Impact Assessment	ASHA Consulting (Pty) Ltd
Paleontological Impact Assessment	Natura Viva cc
Socio-Economic Impact Assessment	CSIR
Soils & Agricultural Potential Assessment	Johann Lanz

- h) The appeal decision dated 28 July 2017.

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.
- c) The need for the proposed project stems from the provision of electricity to the national grid.
- d) The EIAr dated May 2016 identified all legislation and guidelines that have been considered in the preparation of the EIAr.
- 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 EIAr dated May 2016 and the specialist studies have been adequately indicated.
- g) The location of the proposed development within the Karoo Central Astronomy Area and the significance of identified impacts to the Square Kilometre Array South Africa (SKA-SA) now SARAO (South African Radio Astronomy Observatory).
- h) The cumulative impacts the proposed development will have in the area due to other Renewable Energy Facilities being authorised.
- i) 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.
- j) The appeal decision dated 28 July 2017.

3. Findings

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

- a) 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.
- b) The procedures followed for impact assessment is deemed adequate for the decision-making process.

- c) The appeal decision dated 28 July 2017 is content that the current draft EMC Control Plan can be completed and approved, and that it provides comfort to SRAO that the risk of RFI from the facility will be mitigated.
- d) EMPr measures for the pre-construction, construction and rehabilitation phases of the development were proposed and included in the EIAR and will be implemented to manage the identified environmental impacts during the construction phase.

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