



environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

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DEA Reference: 14/12/16/3/3/1/1916

Enquiries: Ms Mmamohale Kabasa

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Mr Krishnan Moonsamy Terence Govender
ACWA Power SolarReserve Redstone Solar Thermal Plant RF (Pty) Ltd.
PO Box 650200
BENMORE
2196

Telephone Number: (011) 582 6880
Email Address: Terence.Govender@SolarReserve.com

PER E-MAIL / MAIL

Dear Mr Govender

APPLICATION FOR ENVIRONMENTAL AUTHORISATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998: GN R. 982/983/985 CONSTRUCTION OF THE 19.5MW ACWA POWER SOLARRESERVE REDSTONE SOLAR PHOTOVOLTAIC POWER PLANT ON THE REMAINING EXTENT OF THE FARM NO. 469 EAST OF THE TOWN OF POSTMASBURG WITHIN THE TSANTSABANE LOCAL MUNICIPALITY IN THE NORTHERN CAPE PROVINCE

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

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.

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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: 10/07/2018

cc:	T Bigwood	Environmental Management Assistance (Pty) Ltd	Email: taryn.bigwood@emassistance.co.za
	B Fisher	Northern Cape Department of Environment and Nature Conservation	Email: bfisher@ncpg.gov.za
	J Theys	Tsantsabane Local Municipality	Email: dircommserve@tsantsabane.gov.za





environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

Environmental Authorisation

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

For the 19.5MW Acwa Power SolarReserve Redstone Solar Photovoltaic Energy Facility on the Remaining Extent of the Farm No. 469 east of the town of Postmasburg within the Tsantsabane Local Municipality in the Northern Cape Province

ZF Mgcawu District Municipality

Authorisation register number:	<i>14/12/16/3/3/1/1916</i>
Last amended:	<i>First issue</i>
Holder of authorisation:	<i>ACWA Power SolarReserve Redstone Solar Thermal Plant RF (Pty) Ltd.</i>
Location of activity:	<i>The Remaining Extent of the Farm No. 469 Tsantsabane 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, 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 –

ACWA POWER SOLARRESERVE REDSTONE SOLAR THERMAL PLANT RF (PTY) LTD.
(hereafter referred to as the **holder of the authorisation**)

with the following contact details –

Mr Terence Govender
PO Box 650200
BENMORE
2196

Telephone Number: (011) 582 6880
Cell Phone Number: (083) 449 0433
Email Address: Terence.Govender@SolarReserve.com

to undertake the following activities (hereafter referred to as "the activity") indicated in Listing Notice 1 (GN R. 983) and Listing Notice 3 (GN R. 985):

Activity number	Activity description
<p><u>GNR. 983 Activity 1:</u> <i>"The development of facilities for the generation of electricity from a renewable resource where-</i> (i) <i>The electricity output is more than 10 megawatts but less than 20 megawatts, or..."</i></p>	<p>Construction of a photovoltaic plant to generate 19.5 Megawatt to supply the auxiliary load requirements of the Redstone CSP Power Project to avoid the usage of an external power source.</p>
<p><u>GNR. 983 Activity 27:</u> <i>"The clearance of an area of 1 hectares or more, but less than 20 hectares of indigenous vegetation, except where such clearance of indigenous vegetation is required for—</i> (i) <i>the undertaking of a linear activity; or</i> (ii) <i>maintenance purposes undertaken in accordance with a maintenance management plan."</i></p>	<p>Redstone PV Power Project surface area layout will cover an area of 19.5 hectares.</p>
<p><u>GNR. 985 Activity 12:</u> <i>"The clearance of an area of 300 square metres or more of indigenous vegetation except where such clearance of indigenous vegetation is required for maintenance purposes undertaken in accordance with a maintenance management plan..."</i></p>	<p>Placement of solar panels as per the biodiversity impact assessment.</p>
<p><u>GN.R 985 Activity 30:</u> <i>"Any process or activity identified in terms of section 53(1) of the National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004)".</i></p>	<p>Placement of solar panels as per the biodiversity impact assessment.</p>

as described in the Basic Assessment Report (BAR) dated June 2018 at:

Preferred site	Latitude	Longitude
North West Corner	28°17'17.66"S	23°21'24.07"E
North East Corner	28°17'13.55"S	23°21'43.68"E
South East Corner	28°18'30.25"S	23°21'29.86"E
South West Corner	28°18'3.92"S	23°21'4.76"E

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Substation	28°17'56.94"S	23°21'10.86"E
Loop-in loop-out lines Cable 1 Ring Road		
Start	28°17'56.94"S	23°21'10.86"E
Middle	28°17'25.26"S	23°21'25.81"E
End	28°17'11.18"S	23°22'16.57"E
Cable 2 via Redstone CSP facility		
Start	28°17'56.94"S	23°21'10.86"E
Middle	28°17'55.68"S	23°21'58.72" E
End	28°17'11.04"S	23°21'52.67"E
Access to site	28°18'19.98"S	23°21'13.28"E

- for the proposed ACWA Power SolarReserve Redstone Solar Photovoltaic Power Plant located on the Remaining Extent of Farm No. 469 Hay Registration Division, 30 km East of the town of Postmasburg, within the Tsantsabane Local Municipality, Northern Cape Province hereafter referred to as "the property".

The 19.5 Redstone Photovoltaic Solar Energy Facility will comprise of the following:

- PV panel field (PV Panels that encase the solar cells);
- Electrical inverters and transformers;
- Modular storage (batteries and control electronics housed inside a modular container type structure/unit or within a built structure);
- Air-conditioning systems, battery management units, solar central inverters, switchgear, medium-voltage transformer, measuring and monitoring components, and data communication capabilities within the storage units; and
- Substation/s.

Technical details for the proposed facility:

Component	Description/ Dimensions
Location of the site	32km east of the town of Postmasburg
PV Panel area	114442.6752m ² (11.44 hectares)
SG Codes	>> C03100000000046900000
Export capacity	Up to 19.5MW AC`
Proposed technology	Photovoltaic, Crystalline - fixed or tracking
Height of installed panels from ground level	3 - 5 meters
Width and length of internal roads	width: 3m, length: 2900m

Conditions of this Environmental Authorisation

Scope of authorisation

1. The 19.5MW Redstone Photovoltaic Solar Energy Facility 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. Commencement with one activity listed in terms of this environmental authorisation constitutes commencement of all authorised activities.

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 14 (fourteen) 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 the National Appeal Regulations, 2014;
- 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 of the competent authority for the decision.

Commencement of the activity

11. 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

12. Drawing number S1-200-001 titled Proposed Plant Layout-Overall and dated 26 April 2018; and appended to the final BAR on page 14 of 15 of Appendix 4 is approved.
13. The EMPr compiled by Environmental Management Assistance (Pty) Ltd and appended with the final BAR submitted on 7th June 2018 is approved and must be implemented.
14. Changes to the approved EMPr must be submitted in accordance to the EIA Regulations applicable at the time.
15. The Department reserves the right to amend the approved EMPr should any impacts that were not anticipated or covered in the BAR be discovered.

Frequency and process of updating the EMPr

16. The EMPr must be updated where the findings of the environmental audit reports, contemplated in Condition 23 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.

17. The updated EMPr must contain recommendations to rectify the shortcomings identified in the environmental audit report.
18. 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.
19. 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.
20. 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

21. 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.
 - 21.1. The ECO must be appointed before commencement of any authorised activities.
 - 21.2. Once appointed, the name and contact details of the ECO must be submitted to the *Director: Compliance Monitoring* of the Department.
 - 21.3. The ECO must keep record of all activities on site, problems identified, transgressions noted and a task schedule of tasks undertaken by the ECO.
 - 21.4. 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

22. 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.
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23. 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.
24. 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.
25. 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.
26. 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.
27. 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

28. 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

29. 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

30. 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.
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Specific conditions

31. 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.
32. 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.
33. 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.
34. 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.
35. Periodical inspection of panels to remove and discourage avifaunal nesting is encouraged. Any nest sites must be removed by a qualified avifaunal specialist.
36. The ECO must ensure that any double fencing associated with the facility allows for free movement of small mammals and avifauna.
37. Any fauna directly threatened by the construction activities must be removed to a safe location by a qualified person.
38. 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.
39. 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.
40. 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.
41. 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.

42. The recommendations of the EAP in the BAR dated June 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

43. A copy of this Environmental Authorisation, the audit and compliance monitoring reports, and the approved EMPr, must be made available for inspection and copying-
- 43.1. at the site of the authorised activity;
 - 43.2. to anyone on request; and
 - 43.3. where the holder of the Environmental Authorisation has a website, on such publicly accessible website.
44. 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: 10/09/2018



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 listed activities as applied for in the application form received on 04 May 2018.
- b) The information contained in the BAR dated June 2018.
- c) The comments received from the South African Heritage Resources Agency and the Tsantsabane Local Municipality, and interested and affected parties as included in the BAR dated June 2018.
- d) Mitigation measures as proposed in the BAR and the EMPr.
- e) The information contained in the specialist studies contained within the appendices of the BAR dated June 2018 and as appears below:

Title	Prepared by	Date
Ecology assessment	R Robbeson of Bathusi Environmental Consulting	August 2011 and updated April 2018
Visual impact assessment	G Young of Newtown Landscape Architects	September 2011 and updated April 2018
Avifaunal impact assessment	Andrew Pearson of the Endangered Wildlife Trust	September 2011 and updated April 2018
Heritage impact assessment	W Fourie of PGS Heritage & Grave Relocation Consultants	September 2011 and updated April 2018
Socio-economic impact assessment	E Broughton of Urban-Econ Development Economists	May 2011 and updated April 2018
Soils and agriculture impact assessment	DG Paterson of the ARC-Institute for Soil, Climate and Water	May 2011
Surface hydrology	Arthur Chapman of One World and Highlands Hydrological (Pty) Ltd	September 2011 and updated April 2018

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 motivation for the need and desirability of the development.
- c) The BAR dated June 2018 identified all legislations and guidelines that have been considered in the preparation of the BAR.
- d) The methodology used in assessing the potential impacts identified in the BAR dated June 2018 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, 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 BAR dated June 2018 and sufficient assessment of the key identified issues and impacts have been completed.
- b) The addition of this facility will allow the already permitted Redstone CSP Power Project (DEA Reference number: 12/12/20/2316 as amended) to operate 100% off grid – not being reliant on drawing power for auxiliary services from the national grid. The facility will not require any additional services as all auxiliary infrastructure and services requirements will form part of the shared services and infrastructure provided by the Redstone CSP Project.
- c) The procedure followed for impact assessment is adequate for the decision-making process.
- d) The proposed mitigation of impacts identified and assessed adequately curtails the identified impacts.
- e) The information contained in the BAR dated June 2018 is deemed to be accurate and credible.
- f) EMPr measures for the pre-construction, construction and rehabilitation phases of the development were proposed and included in the BAR 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.