



environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

Private Bag X 447 · PRETORIA · 0001 · Fedsure Building · 315 Pretorius Street · PRETORIA
Tel (+ 27 12) 310 3911 · Fax (+ 2712) 322 2682

NEAS Reference: DEA/EIA/0000987/2012

DEA Reference: 14/12/16/3/3/2/273

Enquiries: Phathutshedzo Radzilani

Telephone: 012-310-3891 **Fax:** 012-320-7539 **E-mail:** pradzilani@environment.gov.za

Karen Jodas
Savannah (Pty) Ltd
P.O.Box 148
SUNNIMGHILL
2157

Fax No: 086 684 0547

PER FACSIMILE / MAIL

Dear Karen Jodas

APPLICATION FOR ENVIRONMENTAL AUTHORISATION: PROPOSED CONSTRUCTION OF SAN SOLAR ENERGY FACILITY ON A SITE NEAR KATHU, NORTHERN CAPE

The amended Final Scoping Report (FSR) and Plan of Study for Environmental Impact Assessment dated August 2012 and received by the Department on 13 August 2012 refer.

The Department has evaluated the submitted amended FSR and the Plan of Study for Environmental Impact Assessment dated August 2012 and is satisfied that the documents comply with the minimum requirements of the Environmental Impact Assessment (EIA) Regulations, 2010. The amended FSR is hereby accepted by the Department in terms of regulation 30(1)(a) of the EIA Regulations, 2010.

You may proceed with the environmental impact assessment process in accordance with the tasks contemplated in the Plan of Study for Environmental Impact Assessment as required in terms of the EIA Regulations, 2010.

Please provide the Department with an amended application form with the correctly cited listed activities as in the amended FSR dated August 2012 as soon as possible.

Please ensure that comments from all relevant stakeholders are submitted to the Department with the Final Environmental Impact Report (EIR). This includes but is not limited to: the Department of Energy, Department of Water Affairs, Northern Cape Nature Conservation, South African Heritage Resources Agency, Wildlife Environment of Southern Africa, Department of Transport and Public Works, South African National Roads Agency, Department of Land Affairs, Gamagara Local Municipality and Kgalagadi District Municipality. Proof of correspondence with the various stakeholders must be included in the Final EIR. Should you be unable to obtain comments, proof should be submitted to the Department of the attempts that were made to obtain comments.

In addition, the following amendments and additional information are required for the EIR:

- a) Details of the future plans for the site and infrastructure after decommissioning in 20-30 years and the possibility of upgrading the proposed infrastructure to more advanced technologies.
- b) The total footprint of the proposed development should be indicated. Exact locations of the Photovoltaic Solar Plant, and associated infrastructure should be mapped at an appropriate scale.
- c) Should a Water Use License be required, proof of application for a license needs to be submitted.
- d) Possible impacts and effects of the development on the vegetation ecology with regard to lowland-highland interface in the locality should be indicated.
- e) Possible impacts and effects of the development on the surrounding industrial area.
- f) The EIR should include information on the following:
 - Environmental costs vs. benefits of the Photovoltaic Solar Plant activity; and
 - Economic viability of the facility to the surrounding area and how the local community will benefit.
- g) Information on services required on the site, e.g. sewage, refuse removal, water and electricity. Who will supply these services and has an agreement and confirmation of capacity been obtained? Proof of these agreements must be provided.
- h) A copy of the final site layout plan. All available biodiversity information must be used in the finalisation of the layout plan. Existing infrastructure must be used as far as possible e.g. roads. The layout plan must indicate the following:
 - PV positions and its associated infrastructure;
 - Foundation footprint;
 - Internal roads indicating width (construction period width and operation period width) and with numbered sections between the other site elements which they serve (to make commenting on sections possible);
 - Wetlands, drainage lines, rivers, stream and water crossing of roads and cables indicating the type of bridging structures that will be used;
 - The location of heritage sites that will be affected by the facility and associated infrastructure;
 - Sub-station(s) and/or transformer(s) sites including their entire footprint;
 - Connection routes (including pylon positions) to the distribution/transmission network;
 - All existing infrastructure on the site, especially roads;
 - Environmental sensitive features and buffer areas.
 - Buildings, including accommodation; and
 - All "no-go" areas.

The Environmental Management Programme (EMPr) to be submitted as part of the EIR must include the following:

- All recommendations and mitigation measures recorded in the EIR.
- The final site layout plan.
- Measures as dictated by the final site lay-out plan and micro-siting.
- An environmental sensitivity map indicating environmental sensitive areas and features identified during the EIA process.
- A map combining the final layout plan superimposed (overlain) on the environmental sensitivity map.
- 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.

- 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 and be implemented prior to commencement of the construction phase.
- 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.
- An open space management plan to be implemented during the construction and operation of the facility.
- 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.
- A transportation plan for the transport of PV components, main assembly cranes and other large pieces of equipment.
- 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.
- 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.
- 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.
- 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.

Please ensure that all the relevant Listing notice activities are applied for, that the Listing notice activities that are applied for are specific and can be linked to the development activity or infrastructure in the project description.

The applicant is hereby reminded to comply with the requirements of regulation 67 with regard to the time period allowed for complying with the requirements of the Regulations, and regulations 56 and 57 with regard to the allowance of a comment period for interested and affected parties on all reports submitted to the competent authority for decision-making. The reports referred to are listed in regulation 56(3a-3h).

Please ensure that the Final EIR includes at least one A3 regional map of the area and the locality maps included in the final EIR illustrate the different proposed alignments and above ground storage of fuel. The maps must be of acceptable quality and as a minimum, have the following attributes:

- Maps are relatable to one another;
- Cardinal points;
- Co-ordinates;
- Legible legends;
- Indicate alternatives;
- Latest land cover;
- Vegetation types of the study area; and
- A3 size locality map.

Further, it must be reiterated that, should an application for Environmental Authorisation be subject to the provisions of Chapter II, Section 38 of the National Heritage Resources Act, Act 25 of 1999, then this Department will not be able to make nor issue a decision in terms of your application for Environmental Authorisation pending a letter from the pertinent heritage authority categorically stating that the application fulfils the requirements of the relevant heritage resources authority as described in Chapter II, Section 38(8) of the National Heritage Resources Act, Act 25 of 1999.

You are requested to submit five (5) copies of the Environmental Impact Report (EIR) to the Department as per regulation 34(1) (b) of the EIA Regulations, 2010. Please submit at least one electronic copy (CD/DVD) of the complete final report with two (2) hard copy documents.

You are hereby reminded of Section 24F of the National Environmental Management Act, Act No 107 of 1998, as amended, that no activity may commence prior to an environmental authorisation being granted by the Department.

Yours sincerely



Mr Mark Gordon

Chief Director: Integrated Environmental Authorisations

Department of Environmental Affairs

Letter signed by: Fatima Rawjee

Designation: Director: Integrated Environmental Authorisations

Date: 15/10/2012

CC:

Keith Kirby	San Solar Energy Facility (Pty) Ltd	Tel: 021 863 4582	Fax: 086 557 2061
Ndindani Humphrey Hlupheka	NCDENC	Tel: 053 712 0108	Fax: 086 617 0647
Clement Itumenleng	Gamagara Local Municipality	Tel: 053 723 2261	Fax: 053 723 2021

EIA INFORMATION REQUIRED FOR SOLAR ENERGY FACILITIES

1. General site information

The following general site information is required:

- Descriptions of all affected farm portions
- 21 digit Surveyor General codes of all affected farm portions
- Copies of deeds of all affected farm portions
- Photos of areas that give a visual perspective of all parts of the site
- Photographs from sensitive visual receptors (tourism routes, tourism facilities, etc.)
- Solar plant design specifications including:
 - Type of technology
 - Structure height
 - Surface area to be covered (including associated infrastructure such as roads)
 - Structure orientation
 - Laydown area dimensions (construction period and thereafter)
 - Generation capacity
- Generation capacity of the facility as a whole at delivery points

This information must be indicated on the first page of any Scoping or EIA document. It is also advised that it be double checked as there are too many mistakes in the applications that have been received that take too much time from authorities to correct.

2. Site maps and GIS information

Site maps and GIS information should include at least the following:

- All maps/information layers must also be provided in ESRI Shapefile format
- All affected farm portions must be indicated
- The exact site of the application must be indicated (the areas that will be occupied by the application)
- A status quo map/layer must be provided that includes the following:
 - Current use of land on the site including:
 - Buildings and other structures
 - Agricultural fields
 - Grazing areas
 - Natural vegetation areas (natural veld not cultivated for the preceding 10 years) with an indication of the vegetation quality as well as fine scale mapping in respect of Critical Biodiversity Areas and Ecological Support Areas
 - Critically endangered and endangered vegetation areas that occur on the site
 - Bare areas which may be susceptible to soil erosion
 - Cultural historical sites and elements
 - Rivers, streams and water courses
 - Ridgelines and 20m continuous contours with height references in the GIS database
 - Fountains, boreholes, dams (in-stream as well as off-stream) and reservoirs

- High potential agricultural areas as defined by the Department of Agriculture, Forestry and Fisheries
- Buffer zones (also where it is dictated by elements outside the site):
 - 500m from any irrigated agricultural land
 - 1km from residential areas
- Indicate isolated residential, tourism facilities on or within 1km of the site
- A slope analysis map/layer that include the following slope ranges:
 - Less than 8% slope
 - between 8% and 12% slope
 - between 12% and 14% slope
 - steeper than 18 % slope
- A map/layer that indicate locations of birds and bats including roosting and foraging areas (specialist input required)
- A site development proposal map(s)/layer(s) that indicate:
 - Positions of solar facilities
 - Foundation footprint
 - Permanent laydown area footprint
 - Construction period laydown footprint
 - Internal roads indicating width (construction period width and operation period width) and with numbered sections between the other site elements which they serve (to make commenting on sections possible)
 - River, stream and water crossing of roads and cables indicating the type of bridging structures that will be used
 - Substation(s) and/or transformer(s) sites including their entire footprint.
 - Cable routes and trench dimensions (where they are not along internal roads)
 - Connection routes to the distribution/transmission network (the connection must form part of the EIA even if the construction and maintenance thereof will be done by another entity such as ESKOM)
 - Cut and fill areas along roads and at substation/transformer sites indicating the expected volume of each cut and fill
 - Borrow pits
 - Spoil heaps (temporary for topsoil and subsoil and permanently for excess material)
 - Buildings including accommodation

With the above information authorities will be able to assess the strategic and site impacts of applications.

3. Regional map and GIS information

The regional map and GIS information should include at least the following:

- All maps/information layers must also be provided in ESRI Shapefile format
- The map/layer must cover an area of 20km around the site
- Indicate the following:
 - roads including their types (tarred or gravel) and category (national, provincial, local or private)
 - Railway lines and stations
 - Industrial areas
 - Harbours and airports
 - Electricity transmission and distribution lines and substations
 - Pipelines
 - Waters sources to be utilised during the construction and operational phases
 - A visibility assessment of the areas from where the facility will be visible

- Critical Biodiversity Areas and Ecological Support Areas
- Critically Endangered and Endangered vegetation areas
- Agricultural fields
- Irrigated areas
- An indication of new road or changes and upgrades that must be done to existing roads in order to get equipment onto the site including cut and fill areas and crossings of rivers and streams

4. Important stakeholders

Amongst other important stakeholders, comments from the National Department of Agriculture, Forestry and Fisheries must be obtained and submitted to the Department. Any application, documentation, notification etc. should be forwarded to the following officials:

Ms Mashudu Marubini
 Delegate of the Minister (Act 70 of 1970)
 E-mail: MashuduMa@daff.gov.za
 Tel 012- 319 7619

Ms Thoko Buthelezi
 AgriLand Liaison office
 E-mail: ThokoB@daff.gov.za
 Tel 012- 319 7634

All hardcopy applications / documentation should be forwarded to the following address:

Physical address:
 Delpen Building
 Cnr Annie Botha and Union Street
 Office 270
 Attention: Delegate of the Minister Act 70 of 1970

Postal Address:
 Department of Agriculture, Forestry and Fisheries
 Private Bag X120
 Pretoria
 0001
 Attention: Delegate of the Minister Act 70 of 1970

In addition, comments must be requested from Eskom regarding grid connectivity and capacity. Request for comment must be submitted to:

Mr John Geeringh
 Eskom Transmission
 Megawatt Park D1Y38
 PO Box 1091
JOHANNESBURG
 2000

Tel: 011 516 7233
 Fax: 086 661 4064
John.geeringh@eskom.co.za

B. AGRICULTURE STUDY REQUIREMENTS

- Detailed soil assessment of the site in question, incorporating a radius of 50 m surrounding the site, on a scale of 1:10 000 or finer. The soil assessment should include the following:
 - Identification of the soil forms present on site
 - The size of the area where a particular soil form is found
 - GPS readings of soil survey points
 - The depth of the soil at each survey point
 - Soil colour
 - Limiting factors
 - Clay content
 - Slope of the site
 - A detailed map indicating the locality of the soil forms within the specified area,
 - Size of the site
- Exact locality of the site
- Current activities on the site, developments, buildings
- Surrounding developments / land uses and activities in a radius of 500 m of the site
- Access routes and the condition thereof
- Current status of the land (including erosion, vegetation and a degradation assessment)
- Possible land use options for the site
- Water availability, source and quality (if available)
- Detailed descriptions of why agriculture should or should not be the land use of choice
- Impact of the change of land use on the surrounding area
- A shape file containing the soil forms and relevant attribute data as depicted on the map



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Enquiries: Nyiko Nkosi

Tel: 012 395 1694/1768 Fax: 012 320 7539 E-mail: nnkosi@environment.gov.za

Karen Jodas
Savannah Environmental (Pty) Ltd
PO Box 148
SUNNINGHILL
2157

Fax: 086 684 0547

Tel: 011 234 6621

PER FACSIMILE / MAIL

Dear Sir/Madam

ACKNOWLEDGEMENT OF RECEIPT AND ACCEPTANCE OF NEW APPLICATION FOR ENVIRONMENTAL AUTHORISATION (SCOPING&EIA PROCESS) FOR THE PROPOSED ESTABLISHMENT OF THE SAN SOLAR ENERGY FACILITY 2 ON A SITE NEAR KATHU, NORTHERN CAPE PROVINCE

The Department confirms having received the Application Form and EAP Declaration of Interest on 13 February 2012 for environmental authorisation for the abovementioned project. The Application is accepted.

Please note that the Department will request the delegation of authority from the provincial Department and will notify you with regards to the outcome.

Please include both reference numbers (NEAS Reference and DEA Reference), as listed above, on all documents and correspondence submitted to the Department.

Please note that one hard copy and one electronic copy (saved on CD/DVD) of draft reports, and five hard copies and one electronic copy of final reports must be submitted to the Department.

In addition, please consider the following during compilation of reports for this application for environmental authorisation:

- All applicable Departmental Guidelines must be considered throughout the application process. These can be downloaded from the Department's website: www.environment.gov.za, Environmental Impact Management button, listed under "EIA Administration"; Integrated Environmental Management Information Series link. These include, but are not limited to, the following topics: Scoping, Environmental Impact

You are hereby reminded of Section 24F of the National Environmental Management Act, Act No 107 of 1998, as amended, that no activity may commence prior to an environmental authorisation being granted by the Department.

Yours sincerely



Mr Ishaam Abader
Deputy Director-General: Environmental Quality and Protection
Department of Environmental Affairs
Letter signed by: Ms Nyiko Nkosi
Designation: Environmental Officer: Environmental Impact Evaluation
Date: 27/02/2012

CC:	Keith Kirby	Vexcen Trading and Investments	Tel: 021 863 4582	Fax: 086 557 2061
	Ndindani Hlupheka	Northern Cape DENC	Tel: 053 712 0108	Fax: 086 617 0647
	Clement Itumeleng	Gamagara Local Municipality	Tel: 053 723 2261	Fax: 053 723 2021

- High potential agricultural areas as defined by the Department of Agriculture, Forestry and Fisheries
- Buffer zones (also where it is dictated by elements outside the site):
 - 500m from any irrigated agricultural land
 - 1km from residential areas
- Indicate isolated residential, tourism facilities on or within 1km of the site
- A slope analysis map/layer that include the following slope ranges:
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- A map/layer that indicate locations of birds and bats including roosting and foraging areas (specialist input required)
- A site development proposal map(s)/layer(s) that indicate:
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 - Foundation footprint
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 - Borrow pits
 - Spoil heaps (temporary for topsoil and subsoil and permanently for excess material)
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With the above information authorities will be able to assess the strategic and site impacts of applications.

3. Regional map and GIS information

The regional map and GIS information should include at least the following:

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- The map/layer must cover an area of 20km around the site
- Indicate the following:
 - roads including their types (tarred or gravel) and category (national, provincial, local or private)
 - Railway lines and stations
 - Industrial areas
 - Harbours and airports
 - Electricity transmission and distribution lines and substations

- Possible land use options for the site
- Water availability, source and quality (if available)
- Detailed descriptions of why agriculture should or should not be the land use of choice
- Impact of the change of land use on the surrounding area
- A shape file containing the soil forms and relevant attribute data as depicted on the map



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Reference: 14/12/16/3/3/2/273

Enquiries: Lind Poll-Jonker

Tel: 012 395 1767 Fax: 012 320 7539 E-mail: lpoll-jonker@environment.gov.za

Sanusha Govender
Savannah Environmental (Pty) Ltd
PO Box 148
SUNNINGHILL
2157

Fax: 086 684 0547

PER FACSIMILE / MAIL

Dear Sir/Madam

ACKNOWLEDGEMENT OF RECEIPT OF THE DRAFT SCOPING REPORT FOR THE PROPOSED SAN SOLAR ENERGY FACILITY ON A SITE NEAR KATHU, NORTHERN CAPE PROVINCE

The Department confirms having received the Draft Scoping Report dated March 2012 for the above-mentioned project on 20 March 2012.

Please note that the Department will start reviewing once the final Scoping Report is received.

You are hereby reminded that the activity may not commence prior to an environmental authorisation being granted by the Department.

Yours sincerely


Mr Ishaam Abader

Deputy Director-General: Environmental Quality and Protection

Department of Environmental Affairs

Letter signed by: Ms Mmatlala Rabothata

Designation: PEO: Environmental Impact Evaluation

Date: 10/04/2012



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Enquiries: Nyiko Nkosi

Tel: 012 395 1694/1768 Fax: 012 320 7539 E-mail: nnkosi@environment.gov.za

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Savannah Environmental (Pty) Ltd
PO Box 148
SUNNINGHILL
2157

Fax: 086 684 0547

Tel: 011 234 6621

PER FACSIMILE / MAIL

Dear Sir/Madam

ACKNOWLEDGEMENT OF RECEIPT OF AMENDED APPLICATION FOR ENVIRONMENTAL AUTHORISATION (SCOPING&EIA PROCESS) FOR THE PROPOSED ESTABLISHMENT OF THE SAN SOLAR ENERGY FACILITY ON A SITE NEAR KATHU, NORTHERN CAPE PROVINCE

The Department confirms having received the amended Application Form, amending the project applicant name and project title on 29 March 2012 for environmental authorisation for the abovementioned project.

You are hereby reminded of Section 24F of the National Environmental Management Act, Act No 107 of 1998, as amended, that no activity may commence prior to an environmental authorisation being granted by the Department.

Yours sincerely

Mr Ishaam Abader
Deputy Director-General: Environmental Quality and Protection
Department of Environmental Affairs

Letter signed by: Ms Nyiko Nkosi

Designation: Environmental Officer: Environmental Impact Evaluation

Date: 10/04/2012