

Department of Environmental Affairs Requirements

The Department of Environmental Affairs accepted the Final Scoping Report (FSR) on **30 March 2012** and requested a number of information requirements be met. These are listed below, together with the location of the relevant information.

Requirement	Location
<p>Comment from, or proof of attempts made to obtain comments:</p> <ul style="list-style-type: none"> • Siyathemba Local Municipality; • Pixley ka Seme District Municipality; • South African Heritage Resource Agency (SAHRA); • Department of Water Affairs; • South African Civil Aviation Authority; • Northern Cape Department of Environmental Affairs and Nature Conservation; • Eskom; • Department of Agriculture, Forestry and Fisheries. 	<p>Letters have been sent to the relevant commenting authorities and any comments received will be included in the Final Environmental Impact Assessment Report (EIAR).</p>
<p>The EAP must, in order to give effect to regulation 56(2), give registered I&APs access to, and an opportunity to comment on the report in writing within 21 days before submitting the final EIAR.</p>	<p>The Final EIAR will be made available to registered I&APs for comment for 21 days.</p>
<p>In addition the following information must be included in the EIAR:</p> <ol style="list-style-type: none"> 1. 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. 	<p>Refer to Section 2.2.4 of the EIAR.</p>
<ol style="list-style-type: none"> 2. The total footprint of the proposed development should be indicated. Exact locations of the proposed photovoltaic facility and associated infrastructure should be mapped at an appropriate scale. 	<p>Refer to Section 2.2.1 and Figure 2.5 in the EIAR.</p>
<ol style="list-style-type: none"> 3. Should a Water Use License be required, proof of application for a license needs to be submitted. 	<p>For inclusion in Final EIAR.</p>
<ol style="list-style-type: none"> 4. Possible impacts and effects of the development on the agricultural potential of the area. 	<p>Agricultural Impact Assessment Draft EIAR Annexure C.</p>
<ol style="list-style-type: none"> 5. The EIR should include information on the following; 	<p>For inclusion in Final EIAR.</p>

<ul style="list-style-type: none"> • Environmental costs vs benefits of the solar farm facility; • Financial implications to tourism in the area; and • • Economic viability of the facility to the surrounding area and how the local community will benefit. 	
<p>6. 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.</p>	<p>Section 2.2. Proof of agreements to be provided in Final EIAR.</p>
<p>7. 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 eg. roads. The layout plan must indicate the following:</p> <ul style="list-style-type: none"> • PV positions and its associated infrastructure; • 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); • 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; • Cable routes and trench dimensions (where they are not along internal roads); • •Connection routes (including pylon positions) to the distribution/transmission network; 	<p>Refer to the Figure 1.1 for the proposed PV layouts. Related infrastructure to be included in the Final EIAR.</p> <p>Refer to Figure 2.1 and 2.2 of the Draft Lifecycle Environmental Management Programme (LEMP) – Annexure D.</p>

<ul style="list-style-type: none"> • Cut and fill areas at panel sites, 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); • All existing infrastructure on the site, especially roads; • Environmental sensitive features and buffer areas. • Buildings, including accommodation; and • • All “no—go” areas. 	
<p>8. An environmental sensitivity map indicating environmental sensitive areas and features identified during the EIA process.</p>	<p>Refer to Figure 2.1 of the Draft Lifecycle Environmental Management Programme (LEMP) – Annexure D.</p>
<p>9. A map combining the final layout plan superimposed (overlain) on the environmental sensitivity map.</p>	<p>Refer to Figure 2.2 of the Draft Lifecycle Environmental Management Programme (LEMP) – Annexure D.</p>
<p>10. The Environmental Management Programme (EMPr) to be submitted as part of the EIR must include the following:</p> <ul style="list-style-type: none"> • 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 	<p>Refer to the Draft LEMP – Annexure D. These measures have been included in the LEMP.</p>

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

<p>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.</p> <ul style="list-style-type: none"> • An erosion management plan for monitoring and rehabilitating erosion events associated with the facility. Appropriate erosion mitigation must form pan 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, dents and their catchments, and other environmental sensitive areas from construction impacts including the direct or indirect spillage of pollutants. 	
<p>Please ensure that Listing notice activities applied for are specific and can be linked to the development activity or infrastructure in the project description.</p>	<p>Table 1.1 includes all applicable listed activities as well as the relevant aspect of the project they are relevant too.</p>
<p>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).</p>	<p>The public participation process undertaken thus far is included in Section 1.4.4, Chapter 3 and Annexure B.</p>
<p>Please ensure that the Final EIR includes at</p>	<p>Refer to Figure 2.5 of the EIAR. A detailed</p>

<p>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:</p> <ul style="list-style-type: none"> • 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. 	<p>vegetation map will be included in the Final EIAR.</p>
<p>Further, it must be reiterated that, should an application for Environmental Authorisation be subject to the provisions of Chapter 11, 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 11, Section 38(8) of the National Heritage Resources Act, Act 25 of 1999.</p>	<p>Both SAHRA and Northern Cape Heritage have been sent a copy of the EIAR to provide comment on the proposed project.</p>
<p>You are requested to submit two (2) electronic copies (CD/DVD) and two (2) hard copies of the Draft and Final EIR to the Department as per regulation 34(1) (b) of the EIA.</p>	<p>Noted.</p>
<p>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.</p>	<p>Noted.</p>

A list of information required by DEA as part of the submission of the Final EIAR was also attached to DEA's letter of acceptance. This list included General Site Information, Site Maps and GIS Information and Regional Map and GIS Information. This information will be provided on a CD to DEA along with the Final EIAR.

ADDITIONAL INFORMATION REQUIRED BY THE DEA

The numbers in column one corresponds with the numbered items in the Letter from DEA accepting the Final Scoping report and the Plan of Study for EIA (please see Annexure A for the letter from DEA).

NO.	CONTENT AS REQUIRED BY DEA	SECTION/ ANNEXURE
1.	<p>The following general site information is required:</p> <ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> ➤ 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 	<p>The following was included in the Application form:</p> <ul style="list-style-type: none"> • Descriptions of all affected farm portions • 21 digit Surveyor General codes of all affected farm portions • Copies of deeds of all affected farm portions <p>(Please see Annexure A of the Final Scoping Report).</p> <p>Photographs are included throughout the EIR and in the specialist studies included in Annexure C.</p> <p>The solar plant specifications are included in Chapter 2 of the EIR.</p>
2.	<p>Site maps and GIS information should include at least the following:</p> <ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> ➤ Current use of land on the site including: <ul style="list-style-type: none"> ▪ 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 	<p>GIS ESRI Shapefile CD attached to EIR.</p>

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	<p>quality as well as fine scale mapping in respect of Critical Biodiversity Areas and Ecological Support Areas</p> <ul style="list-style-type: none"> ▪ 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 <ul style="list-style-type: none"> ➤ 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): <ul style="list-style-type: none"> ▪ 500m from any irrigated agricultural land ▪ 1km from residential areas ➤ Indicate isolated residential, tourism facilities on or within 1km of the site <ul style="list-style-type: none"> • A slope analysis map/layer that include the following slope ranges: <ul style="list-style-type: none"> ➤ 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: <ul style="list-style-type: none"> ➤ Positions of solar facilities ➤ Foundation footprint ➤ Permanent laydown area footprint ➤ Construction period laydown footprint ➤ Internal roads indicating width (construction period width and operation 	

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	<p>period width) and with numbered sections between the other site elements which they serve (to make commenting on sections possible)</p> <ul style="list-style-type: none"> ➤ 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 <p>With the above information authorities will be able to assess the strategic and site impacts of applications.</p>	
3.	<p>The regional map and GIS information should include at least the following:</p> <ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> ➤ roads including their types (tared 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 	GIS ESRI Shapefile CD attached to EIR.

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	<ul style="list-style-type: none"> ➤ 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 till areas and crossings of rivers and streams. 	
4.	Amongst other important stakeholders, comments from the National Department of Agriculture, Forestry and Fisheries must be obtained and submitted to the Department.	Comments where received 15 March 2012 and responded to in CRR3 Annexure B of the EIR.
B.	<ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> - 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, 	Please see Annexure C for the Agricultural Impact Assessment.

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	vegetation and a degradation assessment) <ul style="list-style-type: none"> • 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 	