



ENVIRO NAMICS

Environmental Consultants

Ref: 2012-12SAHRA Final Scoping Report; CC Reg.No: 2007/225140/23

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For attention: Mr. Sibayi & Mr. Andrew Salomon

AVAILABILITY OF FINAL SCOPING REPORT: ENVIRONMENTAL IMPACT ASSESSMENT (EIA) PROCESS FOR THE DEVELOPMENT OF A 75MW PHOTOVOLTAIC SOLAR PLANT AND ASSOCIATED INFRASTRUCTURE ON THE SOUTHERN PORTION OF THE FARM WATERLOO 992, REGISTRATION DIVISION IN, SITUATED WITHIN THE NALEDI LOCAL MUNICIPALITY AREA OF JURISDICTION

1. As a key stakeholder for the above mentioned project, we would like to notify you of the availability of the Final Scoping Report as well as the opportunity to submit written comments on this document.
2. The developer has commissioned an Environmental Impact Assessment (EIA) process as required by the National Environmental Management Act (107 of 1998). Environamics is appointed as the independent consultant responsible for the EIA. The project entails the generation of approximately 75MW electrical power through photovoltaic (PV) panels. The total footprint of the project will be 150 hectares (including supporting infrastructure on site). The key components of the proposed project are described below:
 - 2.1 PV Panel Array - To produce 75MW, the proposed facility will require numerous linked cells placed behind a protective glass sheet to form a panel. Multiple panels will be required to form the solar PV arrays which will comprise the PV facility. The PV panels will be tilted at a fixed northern angle in order to capture the most sun.
 - 2.2 Wiring to Central Inverters - Sections of the PV array would be wired to central inverters which have a rated power of 500kW each. The inverter is a pulse width mode inverter that converts DC electricity to alternating current (AC) electricity at grid frequency.
 - 2.3 Connection to the grid - Connecting the array to the electrical grid requires transformation of the voltage from 480V to 22,000V. The normal components and dimensions of a distribution rated electrical substation will be required. Output voltage from the inverter is 480V and this is fed into step up transformers to 22kV. A new substation will not be required, since the power will be evacuated via the existing Mookodi substation located approximately 5km west of the site. The electricity generated from the solar panels will be transmitted via either overhead or underground lines to the existing substation.

- 2.4 Supporting Infrastructure - A control facility with basic services such as water and electricity will be constructed on the site and will have an approximate footprint 400m² or less. Other supporting infrastructure includes voltage and current regulators and protection circuitry. In terms of project maintenance, approximately 450m³ of water would be required per annum for the site.
3. In terms of Regulation 54 of the EIA Regulations all registered interested and effected parties, surrounding land owners as well as organs of state that may have jurisdiction over any aspect of the activity, need to be given the opportunity to comment on reports submitted to the Department of Environmental Affairs.
4. We therefore request that you indicate whether you wish to receive an electronic copy of the Final Scoping Report. Stakeholders have until **4 September 2012** (21 days) to provide us with comments on the Final Report.
5. The following amendments were made from the Draft Scoping Report to the Final Scoping Report:
- 5.1 General minor changes i.e. grammatical corrections.
- 5.2 Additional site photographs have been included in the final scoping report.
- 5.3 Plan of study for EIA - Since two separate photovoltaic solar facilities (a 75MW and a 19.5MW) are proposed on the farm Waterloo 992, the EIA Report will include a detailed assessment of the cumulative biophysical impacts of both proposed facilities.
- 5.4 Additional Annexures - Updated comments and response report; additional comments received; and additional proof of correspondence.
6. We trust that you find the above in order. If there are any uncertainties or additional information required please feel free to contact the undersigned or Francois Retief from our offices at 018 299 1586 or 083 639 2293.

Kind regards



Carli Steenkamp