JUNE 2011

ENVIRONMENTAL BASIC ASSESSMENT PROCESS

PROPOSED RUSTMO2 PV PLANT ON A SITE NEAR RUSTENBURG NORTH WEST PROVINCE

12/12/20/2283

BACKGROUND INFORMATION DOCUMENT

Savannah ENVIRONMENTAL (PTY) LTD

Momentous Energy

Momentous Energy, as an independent power producer, has identified a viable site for the proposed establishment of a solar photovoltaic (PV) plant in the North West Province of South Africa. The site is located adjacent to the Marikana Platinum Mine, approximately 20 km east of Rustenburg.

The proposed project will be referred to as RustMo2 and will have a maximum generating capacity of 10 MW which will be evacuated into the national electricity grid as part of a power purchase agreement with Eskom and the South African Treasury. This proposed PV facility is proposed as the second phase of a broader development which also includes the project referred to as RustMo1, for which a separate Basic Assessment process has already been undertaken.

PURPOSE OF THIS BACKGROUND INFORMATION DOCUMENT

This document aims to provide you, as an interested and affected party, with:

» An overview of the proposed RustMo2 PV facility;
» An overview of the Environmental Basic Assessment process including the specialist studies being undertaken to assess the potential impacts of the proposed project; and
» Details of how you can become involved in the process, receive information, or raise issues, which may concern and/or interest you.

DESCRIPTION OF THE PROPOSED PV FACILITY

The solar PV facility is proposed on the remaining extent of portion 24 of the farm Spruitfontein 341 which is situated next to Marikana Platinum Mine (refer to the locality map attached). The study area is considered to be highly desirable for the establishment of a solar facility based on several key factors such as solar resource, climatic conditions, extent of the site, orographic conditions, availability of land and proximity to an electricity evacuation point. Eskom's Spruitfontein substation is situated adjacent to the site (approximately 200 m). The proposed facility is to be the second phase of RustMo1 (adjacent proposed facility, DEA reference No. 12/12/20/2145). Therefore, the facility is proposed to link to the first phase of the development and connect to the grid via the same power line. Therefore, no feasible site alternatives have been identified for investigation within the Basic Assessment process.

The solar energy facility is proposed to accommodate an array of photovoltaic (PV) panels with a generating capacity of up to 10 MW. A broader study area of 18 ha is being considered within which the facility is to be constructed, although the actual development footprint of the proposed facility would be smaller in extent. Therefore, the PV panels and the associated infrastructure can be appropriately placed within the boundaries of the broader site to avoid any identified environmental sensitivities.

Infrastructure associated with the facility will include:

» Photovoltaic solar panels with a generating capacity of up to 10 MW;
» Inverters to convert the electricity produced to Alternating Current (AC);
» Cabling between the project components, to be laid underground where practical;

» Internal access roads; and
» Standalone water taps.

The overall aim of the design and layout of the facility is to maximise electricity production through exposure to the solar radiation, while minimising infrastructure, operation and maintenance costs, and social and environmental impacts. The use of solar energy for power generation can be described as a non-consumptive use of natural resources which emits zero greenhouse gas emissions. The generation of renewable energy contributes to South Africa's electricity generating market which has to date been dominated by coal-based power generation.

PHOTOVOLTAIC (PV) SOLAR ENERGY FACILITIES AND THE GENERATION OF ELECTRICITY

Solar energy facilities, such as those using PV panels use the energy from the sun to generate electricity through a process known as the Photovoltaic Effect. This effect refers to photons of light colliding with electrons, and therefore placing the electrons into a higher state of energy to create electricity.

A Photovoltaic Cell is made of highly pure silicone which acts as a semiconductor used to produce the photovoltaic effect. Individual PV cells are linked and placed behind a protective glass sheet to form a photovoltaic panel. The PV cell is positively charged on one side and negatively charged on the other side and electrical conductors are attached to either side to form a circuit. This circuit then captures the released electrons in the form of an electric current (direct current). An inverter must then be used to change the Direct Current (DC) produced to Alternating Current (AC). The voltage is then stepped up to meet the substation voltage; from the substation this electricity is then transmitted through a power line for distribution and use.

Figure 1: Photo showing view of photovoltaic panels from ground level

The PV panels will be fixed to a support structure that is bedded into the ground and then set at an angle so to receive the maximum amount of solar radiation. The angle of the panel is dependent on the latitude of the proposed facility and the angles may be adjusted to optimise for summer or winter solar radiation characteristics. The PV panels are designed to operate continuously for more than 20 years, unattended and with low maintenance.

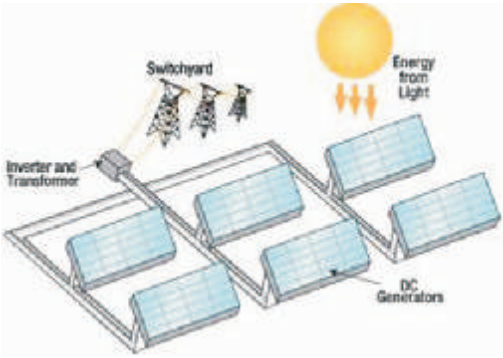
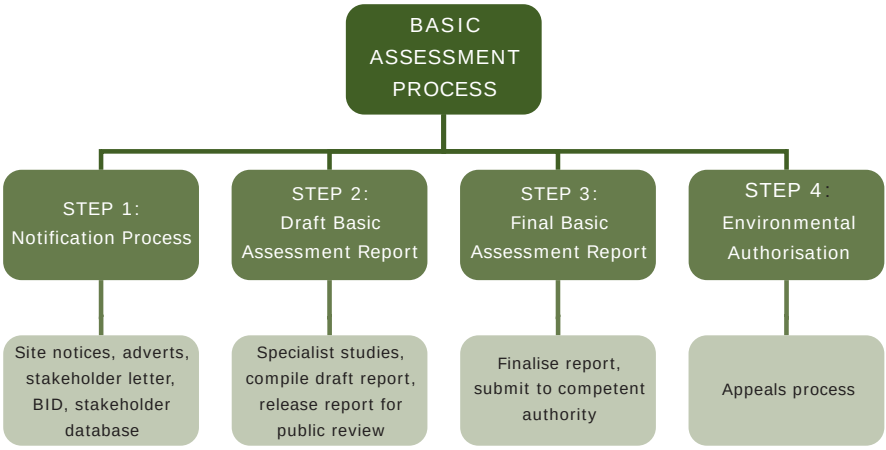


Figure 2: Schematic diagram of a PV plant

BASIC ASSESSMENT PROCESS

In terms of the EIA Regulations published in terms of Section 24(5) of the National Environmental Management Act (NEMA, Act No. 107 of 1998), Momentous Energy requires authorisation from the National Department of Environmental Affairs (DEA) (in consultation with the North West Department of Economic Development, Environment, Conservation and Tourism), for the construction and operation of the proposed PV plant. In terms of sections 24 and 24D of the NEMA, as read with the EIA Regulations of GNR 543, GNR544, GNR545, and GNR546, a Basic Assessment process is required to be undertaken for the proposed project. This project has been registered with the National DEA under application reference number 12/12/20/2283.

The Basic Assessment process comprises of the following phases:



The Basic Assessment process will allow for the identification and assessment of potential environmental impacts resulting from the proposed project. Furthermore it will allow these impacts to be appropriately managed during the project's construction and operation phases. Lastly, this

process will provide an opportunity for dialogue with interested and affected parties.

Momentous Energy has appointed Savannah Environmental, as the independent environmental consultants, to undertake the required Basic Assessment process to identify and assess potential environmental impacts associated with the proposed project, and propose appropriate mitigation and management measures as part of an Environmental Management Programme. As part of these environmental studies, interested and affected parties will be actively involved through a public participation process.

POTENTIAL IMPACTS ASSOCIATED WITH THE PROPOSED PV PLANT

Although a PV plant utilises a renewable resource to generate electricity, the construction and operation of the proposed facility has the potential to impact on the environment both directly and indirectly. A number of potential environmental impacts, both positive and negative, associated with the proposed facility have been identified and will be assessed through the following specialist studies:

- Ecology impact assessment: the proposed project development site can be classified as a Greenfields site as it has been left to lie fallow for more than 10 years. The construction of the facility and the associated disturbance of vegetation may therefore affect the ecology and biodiversity of the site.
- Soil and agricultural potential impact assessment: the construction of the facility may affect the underlying geology in terms of potential soil degradation and/or erosion. In addition, the proposed facility will occupy an area of 18ha which may result in the loss of agricultural land.
- Heritage impact assessment: disturbance to or destruction of heritage sites and fossils may result during the construction phase through excavation activities.
- Desktop social impact assessment: the construction and operation of the facility may result in positive socio-economic opportunities in terms of local employment as well as negative impacts in terms of safety, security, and land use characteristics.

Specialist studies will be guided by existing information, field observations (where necessary), and input from the public participation process.

PUBLIC PARTICIPATION PROCESS AND YOUR RESPONSIBILITIES AS AN INTERESTED AND AFFECTED PARTY

The sharing of information forms the basis of the public participation process and offers you the opportunity to become actively involved in the process from the outset. Comments and inputs from interested and affected parties throughout the process are encouraged in order to ensure that potential impacts are considered within the ambit of the study. The public participation process aims to ensure that:

- Information that contains all the relevant facts in respect of the project is made available to interested and affected parties for review.
- Participation is facilitated in such a manner that parties are provided with a reasonable opportunity to comment on the proposed project.
- An adequate review period is provided for interested and affected parties to comment on the findings of the Draft Basic Assessment Report.

In terms of the EIA Regulations, your attention is drawn to your responsibilities as an interested and affected party:

- In order to participate in the process, you must register yourself on the project database.
- You must ensure that any comments regarding the proposed project are submitted within the stipulated timeframes.
- You are required to disclose any direct business, financial, personal or other interest that you may have in the approval or refusal of the application for the proposed solar facility.

Interested and affected parties can involve themselves in the Basic Assessment Process via the following channels:

- By responding (via phone, fax, or e-mail) to our invitation for your participation which has been advertised in local and/or national newspapers.
- By completing the project reply form; in this way you are automatically registered on the project database, and you are ensured that your comments, concerns, or queries raised will be noted.
- By attending the public meeting to be held during the course of the project. As a registered party you will be invited to attend this meeting. The date for the public meeting will also be advertised in local and/or regional newspapers.
- By contacting the consultants with queries or comments.
- By reviewing and commenting on the Draft Basic Assessment Report within the stipulated 30-day review period.

We urge you to make use of the opportunities created by the public participation process to provide comment, or raise those issues and concerns which affect and/or interest you, and about which you would like more information. Your input into this process forms a key element of the process.

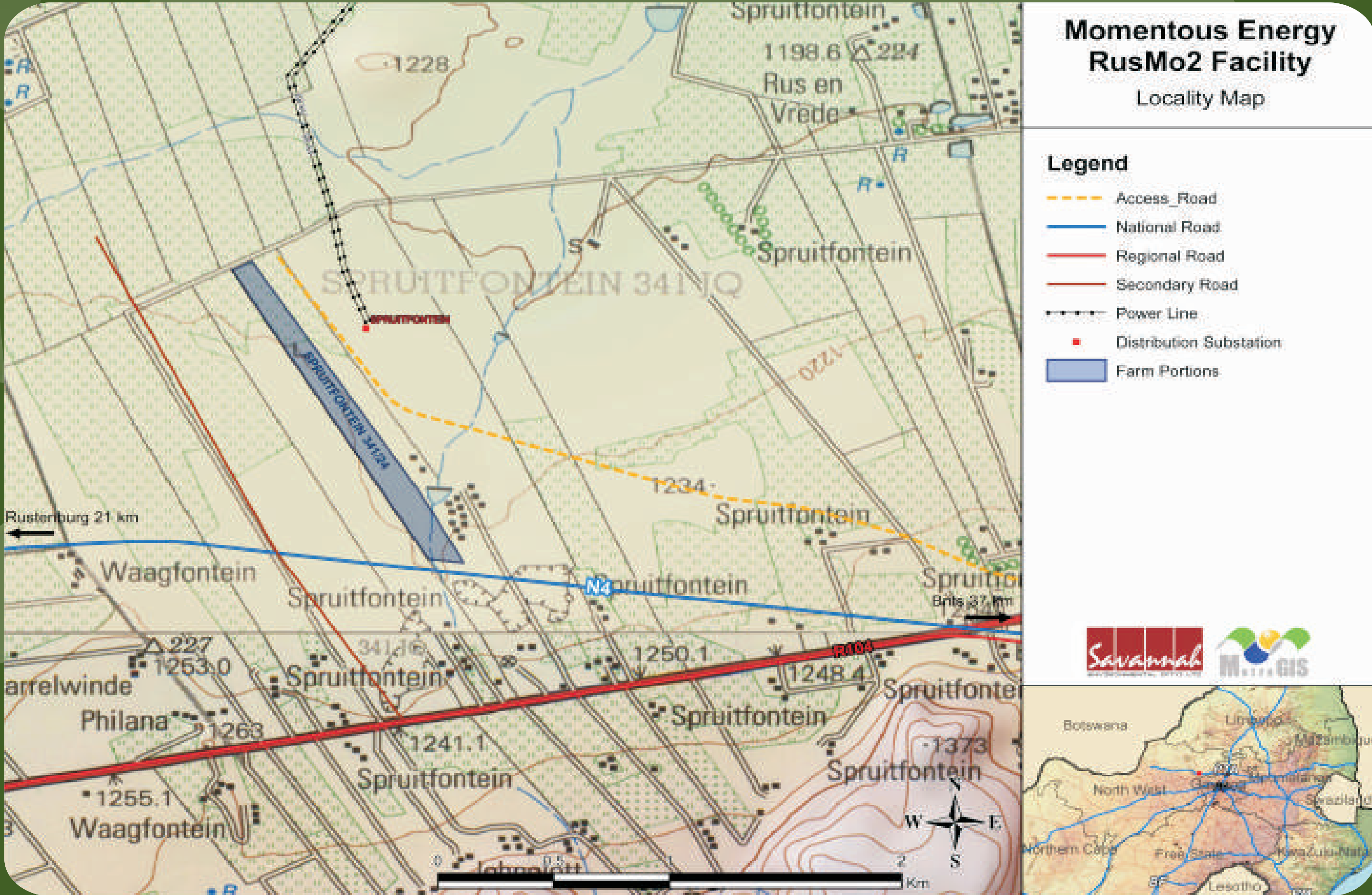
COMMENTS AND QUERIES

Please submit all reply forms, comments, queries, or responses to:

Bongani Khupe
PO Box 148, Sunninghill, Johannesburg, 2157
Phone: 011 234 6621
Fax: 086 684 0547
E-mail: bongani@savannahsa.com

To view project documentation, visit

www.savannahSA.com



Momentous Energy
RusMo2 Facility
Locality Map
Legend
Access_Road
National Road
Regional Road
Secondary Road
Power Line
Distribution Substation
Farm Portions
SPRUITFONTEIN 341 JQ
SPRUITFONTEIN 341/24
Spruitfontein
Rus en Vrede
Waagfontein
Philana
Rustenburg 21 km
Brits 37 km
N4
R104
1228
1198.6
224
1234
1250.1
1248.4
1241.1
1253.0
227
1263
1255.1
1373
Botswana
North West
Northern Cape
Free State
Lesotho
Swaziland
Km

ENVIRONMENTAL IMPACT ASSESSMENT PROCESS:

PROPOSED RUSTMO2 PV PLANT ON A SITE NEAR RUSTENBURG

NORTH WEST PROVINCE

PUBLIC INVOLVEMENT PROCESS REPLY FORM

Return completed reply form to: **Bongani Khupe** of **Savannah Environmental**

Fax: **086 684 0547** Phone: **011 234 6621**

E-mail: **bongani@savannahsa.com**

Postal Address: **P.O. Box 148, Sunninghill, Johannesburg, 2157**

Please provide your complete contact details:

Name & Surname:			
Organisation & Designation:			
Postal Address:			
Telephone:		Cellphone:	
Fax:		E-mail:	

Would you like to register as an interested and affected party (I&AP)? (please tick the relevant box)

YES	
NO	

Note: You are required to register as an I&AP to receive further correspondence regarding the EIA process for the project.

Please state your interest in the project (add additional pages if necessary)**:**

Please list your questions, views or concerns regarding the project (add additional pages if necessary)**:**

Please provide contact details of other persons who you regard as a potential interested or affected party:

Name & Surname:			
Organisation & Designation:			
Postal Address:			
Telephone:		Cellphone:	
Fax:		E-mail:	

What is your preferred language of correspondence? (please tick the relevant box)

English	
Afrikaans	

Savannah ENVIRONMENTAL (PTY) LTD

This assessment is being conducted on behalf of Momentous Energy