



## 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 (+ 27 12) 322 2682

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Enquiries: Mr Reggy Nkosi  
Telephone: 012 310 3036 Fax: 012 320-7539 E-mail: [Rnkosi@environment.gov.za](mailto:Rnkosi@environment.gov.za)

Ms Elisabeth Nortje  
ARCUS GIBB  
P. O. Box 2700  
RIVONIA  
2128

Tel no: 011 519 4600  
Fax no: 011 807 5670

**PER FACSIMILE / MAIL**

Dear Ms Nortje

**APPLICATION FOR PERMISSION TO CHANGE FROM THE SCOPING AND ENVIRONMENTAL IMPACT REPORTING TO A BASIC ASSESSMENT PROCESS IN TERMS OF SUB-REGULATION 20(4) OF GN R.543: PROPOSED INSTALLATION OF A CO-GENERATION PLANT AT SHAFT 4 OF THE BEATRIX GOLD MINE, THEUNISSEN, FREE STATE PROVINCE**

Your letter and motivation dated 28 March 2012 received by the Department on 10 April 2012 has reference.

With reference to the abovementioned letter, please be advised that the Department has decided to grant permission, in terms of regulation 20(4) of the Environmental Impact Assessment (EIA) Regulations of June 2010, to apply for a basic assessment instead of the Scoping & Environmental Impact Reporting (S&EIR) process for the proposed installation of a cogeneration plant at shaft 4 of the Beatrix Gold Mine.

In reviewing this application, the Department considered the following:

- The Basic Assessment Report (BAR) that will be compiled will accommodate all envisaged environmental impacts that may be caused by the proposed development.
- The proposed project is not close to any human settlements, it is located in the mine.
- The proposed project will be a second phase of an existing operational project.
- The project is consistent with the surrounding land use and will have a minimal impact on the surrounding environment.
- The public will be efficiently consulted through the public participation process, and the possibility of objections from the community is minimal.
- An Environmental Management Programme (EMPr) will also be included with the assessment report, which will contain detail information on any proposed management or mitigation measures that will be taken to address identified environmental impacts.

You are hereby reminded that it is mandatory to investigate and assess the option of not proceeding with the proposed activity (the "no-go" option) in addition to other alternatives identified.

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: Ms Fatima Rawjee**  
**Designation: Acting Director: Integrated Environmental Authorisations**  
**Date: 19/10/2012.**

Cc: Mr Hennie Pretorius

GFI Mining SA

Fax: (057) 733 8545

## A. 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. Request for comment must be submitted to:

Mrs. Anneliza Collett  
 Directorate: Land Use & Soil Management  
 Department of Agriculture, Forestry & Fisheries  
 Tel: 012 - 319 7508  
 Fax: 012 - 329 5938  
 E-mail: AnnelizaC@nda.agric.za  
 www.agis.agric.za

In addition, comments must be requested from Eskom (Mr Kevin Leask or Mr Ronald Marais (011) 8008111) regarding grid connectivity and capacity.

#### 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