

## INTRODUCTION

Taung Gold (Secunda) (Pty) Limited (Taung Gold) holds the mining right and an approved environmental management programme (EMP) associated with the Evander No. 6 Shaft (previously owned by Evander Gold Mines). Taung is proposing to refurbish the shaft and associated infrastructure and establish additional gold mining and processing related infrastructure.

The proposed project is located near Secunda in the Govan Mbeki Local Municipality of the Gert Sibande District Municipality in the Mpumalanga Province. The proposed project will be located on the following farms and portions: Remainder of Portions 86, 4, 22 and 23 of the farm Driefontein 137IS and Remainder of Portion 1 of the farm Holfontein 138IS. The local setting of the proposed project is shown in Figure 1.

## ENVIRONMENTAL APPROVAL

Prior to the commencement of the proposed project a number of approvals are required for the proposed new infrastructure components and activities:

- Amendment of the existing EMP in terms of Section 102 of the Mineral and Petroleum Resources Development Act, (MPRDA, No. 28 of 2002).
- Approval of environmental listed activities in terms of: The National Environmental Management Act, (NEMA; No. 107 of 1998).
- A waste management licence in terms of the National Environmental Management: Waste Act (NEM:WA, No. 59 of 2008).
- A water use license in terms of the National Water Act, (NWA, No. 36 of 1998).
- An atmospheric emissions licence in terms of the National Environmental Air Quality Act, (NEMAQA, No. 39 of 2004).

In this regard, an environmental assessment process is required, which includes an application phase, a scoping phase and an environmental assessment phase.

SLR Consulting (Africa) (Pty) Ltd (SLR), an independent firm of environmental consultants, has been appointed by Taung Gold to manage the environmental assessment process and related applications.

## PURPOSE OF THIS DOCUMENT

This document has been prepared by SLR to inform you about:

- The proposed project
- The environmental assessment process to be followed
- Possible environmental impacts
- How you can have input into the environmental assessment process.

### YOUR ROLE

You have been identified as an interested and affected party (IAP) who may want to be informed about the proposed project and have input into the environmental assessment process.

You have the opportunity to provide input through review and comment on this document, the scoping report and the environmental impact assessment report and interaction with the environmental team.

The following Public Meetings have been planned for the project (the same information will be presented at both meetings):

**Evander Club, Bram Fisher Drive, Evander; 12 October 2016 from 09:00 - 11:00**

**Lilian Ngoyi Centre, Walter Sisulu Rd, Secunda; 12 October 2016 from 13:00 – 15:00**

All comments will be recorded and presented to the project team, and will be addressed as part of the Environmental Impacts Assessment process.

### HOW TO RESPOND

Responses to this document can be submitted by means of the attached comments sheet and/or through communication with the persons listed below.

#### WHO TO CONTACT

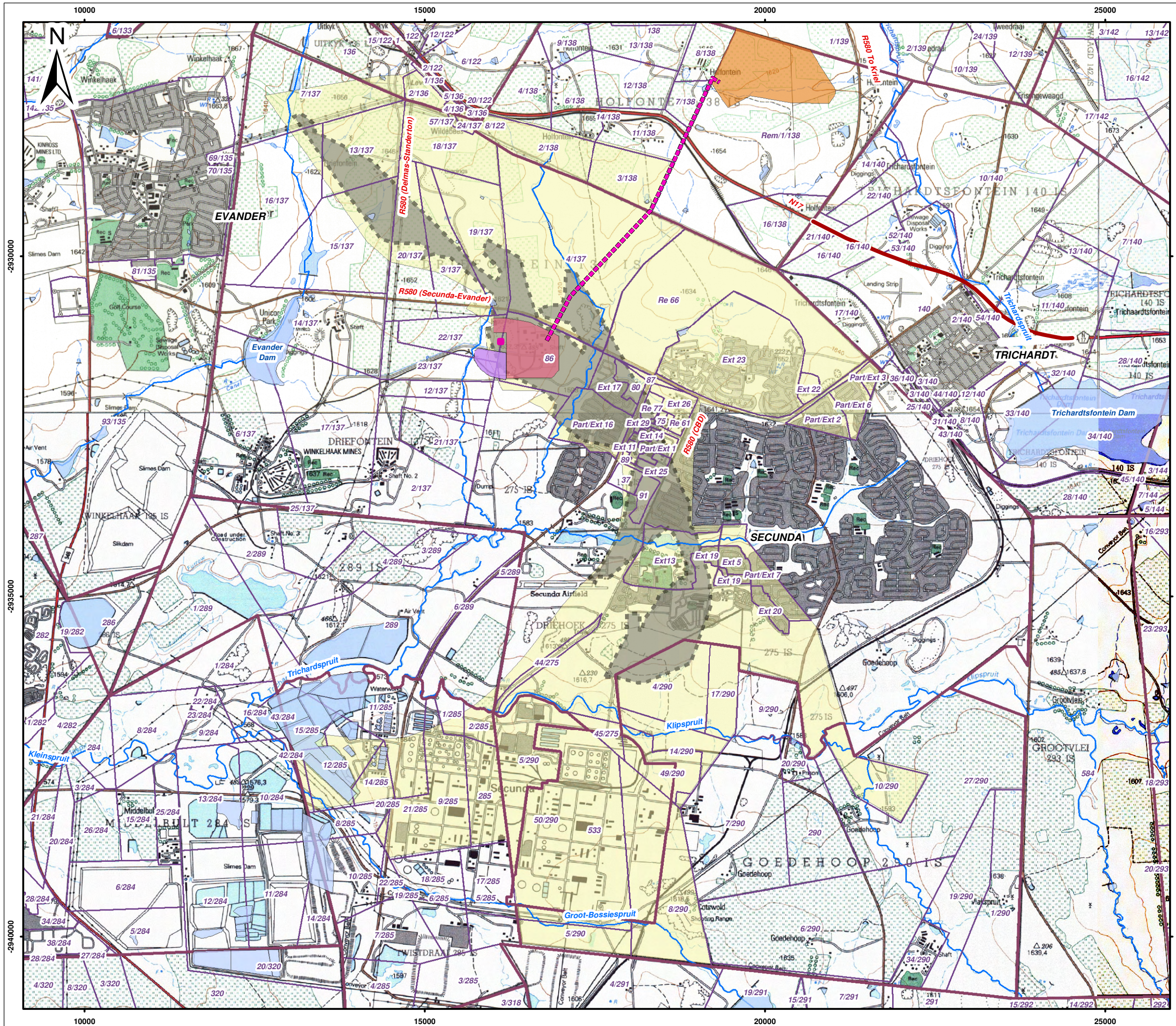
Chiara Kotze or Ntsako Baloyi  
(011) 467 0945 (Tel) or  
(011) 467 0978 (Fax) or

[ckotze@slrconsulting.com](mailto:ckotze@slrconsulting.com) or [nbaloyi@slrconsulting.com](mailto:nbaloyi@slrconsulting.com)

DMR reference number: MP30/5/1/2/2/10020MR

***Other reference numbers to follow as relevant***

**Please ensure that the reference number is included on all correspondence.**



**Legend**

- Approved Mining Right Area
- Approved Underground Mining Area
- Main Roads
- Secondary Roads
- Other Access Roads
- Power Line
- Rivers and Streams
- 20m Contour Lines
- Dams
- Farm Boundaries
- Portion Boundaries

**Site Layout**

- Proposed Tailings Pipeline Route
- Evander No. 6 Shaft Complex
- Proposed Waste Water Treatment Works
- Proposed Tailings Dam Area
- Area for Changes to Approved Waste Rock Dump Footprint

0 600 1200 Meters  
 Scale: 1 : 52 400 @ A3  
 Projection: Transverse Mercator  
 Datum: Hartbeeshoek, Lo29

Taung Gold (Secunda)  
 (Proprietary) Limited

**Figure 1**  
**Locality Map**

**SLR**  
 SLR Consulting (Africa) (Pty) Ltd  
 P O Box 1596, Cramerview, 2060, South Africa  
 Tel: +27 (11) 467-0945 Fax: +27 (11) 467-0978

## PROJECT OVERVIEW

The proposed project will involve the refurbishing and operation of approved shaft related infrastructure, the expansion of an approved waste rock dump footprint, and the establishment of additional facilities for ore processing, tailings disposal, as well as associated support infrastructure and services for water, transport and sewage.

Approved infrastructure and activities:

- Waste rock dump;
- powerlines;
- railway line;
- Eskom yard;
- mine sub-station;
- main shaft;
- vent shaft;
- mine store yards;
- topsoil stockpile area;
- explosives magazine;
- roads;
- hoist rooms;
- lamp and crush room;
- pipelines;
- security facilities
- offices;
- change houses;
- sewerage connection to municipal works;
- dewatering and associated infrastructure;
- storage of less than 80 m<sup>3</sup> diesel;
- power generators; and
- billboards.

Mining:

The mining (as approved) will all be conducted underground at depths between 1.2 km and 2.4 km. The approved mining right area and approved area to be mined is shown in Figure 1.

New infrastructure and/or activities required for the proposed project include:

- Refurbishing and operating of the main production shaft and associated winder house, fridge plant; etc.
- refurbishing and operating of the vent shaft and associated cooling and extraction fans;
- gold processing (metallurgical) plant;
- a wastewater treatment plant and associated infrastructure (including holding tanks) for treating grey water and sewage effluent. Treated water will be recirculated in the process;
- continuation of dewatering as per existing approvals – water will be piped to the existing concrete sump next to Brendan Village from where it will gravitate via the existing 500 mm pipe to Leeuwpan;

- water will be sourced from dewatering and from the waste water treatment works. Should additional water be required, it will be sourced from the Rand Water Board;
- changes to the approved waste rock dump footprint;
- tailings storage facility (TSF) and associated return and storm water dams;
- material storage and handling areas (ore, fuel, lubricants, process materials, gas, hazardous substances, explosives);
- water management infrastructure (clean and dirty water dams, clean and dirty storm water controls)
- a helipad;
- communication and lighting facilities;
- offices, change houses, ablutions, security facilities;
- backfill plant;
- surface workshops;
- additional powerlines;
- additional pipelines (water, tailings and sewage);
- internal and external roads and an access intersection;
- continued use of the approved on site power generation system until power is provided by Eskom. Generators will be used for back-up power;
- additional lighting infrastructure;
- accommodation for employees;
- run of mine (ROM) ore silos;
- new soil stockpiles;
- upgrading of parking areas;
- clinic;
- security and access control fences

Employment: The establishment of the proposed project will allow for the creation of approximately 2402 permanent job opportunities at peak production.

Project timing: The proposed project will take approximately 120 months to establish and will have a Life of Mine of 21 years.

## PROJECT ACTIVITIES REQUIRING AUTHORISATION

The proposed project is likely to incorporate a number of “identified” activities in terms of various environmental regulations. These may include, but are not limited to the following activities:

- Mineral and Petroleum Resources Development Act:  
**Competent Authority:** Mpumalanga Department of Mineral Resources (DMR)  
**High level activity description:** Amendment of the existing environmental management programme in terms of Section 102
- National Environmental Management Act  
**Competent Authority:** Mpumalanga DMR

**Listed Activities:** Activities in Listing Notice 1 GN R983: Activities 9, 10, 12, 13, 19, 24, 25, 28, 30, 34, 45, 46, 48, 49; Listing Notice 2 GN R 984: Activities 4, 6, 15, 16, 21, 27, 28; and Notice 3 GN R985: Activities 1, 3, 4, 12, 14, 18, 23 of December 2014. As per project list above.

- **National Environmental Management: Waste Act:**  
**Competent Authority:** Mpumalanga DMR  
**Listed Activities:** Waste management activities in Category B of GNR 921, Activities 7, 10, 11, of November 2013 for expansion of waste rock stockpile footprint, establishment of a tailings facility.
- **National Environmental Air Quality Act:**  
**Competent Authority:** Gert Sibande District Municipality (GSDM)  
**Listed Activities:** Listed atmospheric emission activities in GN R 893, sub-category 4.17 of November 2013 for gold and associated metal production and refining
- **National Water Act:**  
**Competent Authority:** Mpumalanga Department of Water and Sanitation (DWS)  
**Listed Activities:** various waste and water uses in terms of Section 21 including but not limited to 21(b) for water storage, (c) impeding a watercourse, (g) disposing of waste and water containing waste, (i) altering characteristics of a watercourse, (j) dewatering.

## STATUS OF THE EXISTING ENVIRONMENT

This section provides a basic description of the existing status of the environment.

**Climate:** The average annual precipitation ranges from 600mm to 800mm with rainfall generally in the form of thunderstorms. This region experiences summer rainfall with hot and humid days. Average summer temperatures range from 19°C to 33°C, while average winter temperatures range from 6° C to 26°C. The prevailing wind direction is from the northwest.

**Topography:** The topographical relief of the proposed project area is characterised by a combination of flat and undulating grassland. Topographic elevation varies between 1620 to 1650 metres above mean sea level (mamsl).

**Soils and land capability:** In general soils in the area are dark in colour with a soil depth that ranges from 450 - 750mm and can be susceptible to both wind and water erosion. The soil forms located in the proposed project area vary in terms of clay content. The soil forms with a higher clay content are predominantly located near watercourses.

**Land use:** The proposed project area is surrounded by a combination of farming activities (grazing and crop

cultivation), mining related activities, residential (formal and informal), commercial and recreational (golf course) areas and is bisected by the N17 freeway and the Leven railway line.

**Biodiversity:** The proposed project area is situated within the Soweto Highveld Grassland vegetation type. This vegetation type is classified as Vulnerable in terms of the National List of Threatened Ecosystems. Within this vegetation type, four distinct habitat units were identified in the project area, namely the Open Grassland, Wetland/Riparian, Impacted Grassland Habitat Units and Transformed Areas. The Wetland/ Riparian and Open Grassland Habitat Units are mostly suited as faunal species habitat, with the riparian areas acting as relatively important migratory corridors as these areas provide connectivity with other suitable habitats. The habitat supports diverse avifaunal population. Sensitive fauna and flora species are likely to occur within the project area. Existing infrastructure and land use activities has impacted and/or transformed some of the natural vegetation and habitats in and adjacent to the proposed project area

**Surface water:** The site falls within the C12D and B11D quaternary catchments. There are a number of watercourses (non-perennial and perennial drainage lines and wetlands) located within the proposed project area. Further to this, there are several dams and wetlands surrounding the proposed project area. The ecological integrity and functionality of these watercourses have been altered due to existing mining and farming activities.

**Groundwater:** Two main aquifers are located within the proposed project area, namely a shallow weathered/fractured aquifer and a deep aquifer. Groundwater, mostly from the shallow aquifer, is used as drinking water for cattle, irrigation, industrial purposes, and domestic use.

**Air quality:** Existing sources of air pollution in the immediate vicinity of the proposed project site include emissions from various mining and industrial operations, vehicle tailpipe emissions, domestic fuel burning, biomass burning, and various miscellaneous fugitive dust sources such as agricultural activities, wind erosion of open areas, and vehicle entrainment of dust along unpaved roads.

**Noise:** Existing noise in the proposed project area is mainly caused by surrounding farming activities, localised traffic and mining operations.

**Visual:** The visual resource has been altered by the existing powerlines, housing developments, roads, railway lines, agricultural activities and mining operations in the area.

### **Heritage/cultural resources:**

In general, the proposed project area is located within a cultural landscape that is marked by heritage remains dating from the pre-historical into the historical (colonial) period. Potential heritage/cultural sites include Stone Age

sites, Iron Age sites and colonial remains. Taking this into consideration, sites of heritage/cultural importance may be located within the proposed project area.

**Socio-economic:**

Evander, Trichardt and Secunda are located within a 6km radius of the proposed project area. In general, education facilities are insufficient to cater for all potential learners and unemployment rates are high. Municipal services infrastructure is located mostly within the urban areas. The mining industry together with community services, wholesale and trade dominates the local economies in the local and district municipality.

**POTENTIAL ENVIRONMENTAL IMPACTS**

The following preliminary list of potential impacts has been identified and will be investigated as part of the environmental assessment process.

**Safety:** The proposed project has the potential to alter the topography through the development of infrastructure and excavations which may present potential safety risks for both people and animals.

**Soil and land capability:** The placement of infrastructure and mining activities has the potential to compromise soil resources through physical disturbance (erosion and compaction) and/or pollution. Loss of soil resources has a direct impact on the natural capability of the land.

**Biodiversity:** The placement of infrastructure and mining activities has the potential to damage vegetation, habitat units and related ecosystem functionality.

**Surface water:** The proposed project has the potential to alter surface drainage patterns through the placement of infrastructure and to pollute surface water resources.

**Groundwater:** The proposed project has the potential to contaminate groundwater resources which could impact availability to other groundwater users. Furthermore, the quantity of groundwater resources for users may also be affected due to dewatering impacts.

**Air:** The proposed project has the potential to contribute additional air pollution.

**Noise:** The proposed project has the potential to contribute additional noise pollution.

**Visual:** The placement of infrastructure has the potential to create visual impacts through topographical changes.

**Heritage/cultural resources:** The proposed project has the potential to damage heritage resources should any heritage/cultural resources be identified.

**Land use:** The proposed project has the potential to impact on surrounding land uses such as residential, agriculture and infrastructure (powerlines, railway and roads).

**Socio-economic:** The proposed project has the potential to contribute towards positive and negative socio-economic impacts. Positive impacts include job creation and stimulation of local and regional economy. Negative socio-economic impacts include influx of job seekers with associated potential for increased informal settlement development, and increased pressure on socio-economic service provision.

**ENVIRONMENTAL AUTHORISATION PROCESS**

The environmental process provides information on the proposed project and environment in which it is being undertaken; identifies, in consultation with interested and/or affected parties (IAPs), the potential negative as well as positive impacts of the project; and reports on management measures required to mitigate impacts to an acceptable level.

The likely process steps and timeframes associated with the environmental process are provided below (please note these are estimated timeframes and can change). IAPs and other stakeholders registered on the project’s database will receive notification of information-sharing meetings and report review periods in advance.

<b>STEPS IN THE AUTHORISATION PROCESS (DATES ARE ESTIMATES)</b>
<b>PHASE I – Application phase (September to November 2016)</b>
Submission of NEMA, NEMWA and S102 applications to DMR Notify landowners and land users of proposed project
<b>PHASE II – Public involvement and reporting (September 2016 to November 2017)</b>
Notify other regulatory authorities and IAPs of the proposed project and environmental assessment process (via BID distribution, social scan, placement of newspaper advertisements, placement of site notices, focused and public meetings) Compile draft scoping report and submit to DMR, IAPs and other authorities for review (30 days) Update scoping report with comments received during the review of the draft scoping report and submit the final scoping report to DMR.
<b>PHASE III – EIA/EMP (March to October 2017)</b>
Complete specialist studies Compile draft environmental impact assessment report and submit to DMR, IAPs and other authorities for review (30 days) Update draft environmental impact assessment report with comments received during the review of the draft environmental impact assessment report and submit the

final environmental impact assessment report to DMR. Inform IAPs about DMR decision
<b>PHASE IV – WULA &amp; NEMAQA (July to October 2017)</b>
Submit WULA to DWS Submit NEMAQA Application to GSDM

**PARTIES INVOLVED IN THE ENVIRONMENTAL ASSESSMENT PROCESS**

**IAPs**

- \* Surrounding landowners, land users and communities
- \* Surrounding mines and industries
- \* Non-governmental organisations and associations

**REGULATORY AUTHORITIES**

- \* Department of Economic Development, Environment and Tourism
- \* DMR
- \* DWS
- \* South Africa Heritage Resource Agency
- \* Department of Agriculture, Rural Development and Land Administration
- \* Department of Rural Development and Land Reform
- \* Department of Public Works, Roads and Transport
- \* Mpumalanga Parks and Tourism Agency

**LOCAL AUTHORITIES**

- \* Govan Mbeki Local Municipality
- \* GSDM
- \* Ward councillor – Ward 18

**Please let us know if there are any additional parties that should be involved.**

**TAUNG GOLD (SECUNDA) (PROPRIETARY) LIMITED**  
**BACKGROUND INFORMATION DOCUMENT FOR THE PROPOSED REFURBISHMENT OF THE EXISTING EVANDER NO. 6 SHAFT**  
**AND ESTABLISHMENT OF ADDITIONAL GOLD MINING AND PROCESSING INFRASTRUCTURE**

**REGISTRATION AND RESPONSE FORM FOR INTERESTED AND AFFECTED PARTIES**

<b>DATE</b>		<b>TIME</b>	
<b>PARTICULARS OF THE INTERESTED AND AFFECTED PARTY</b>			
<b>NAME</b>			
<b>POSTAL ADDRESS</b>			
		<b>POSTAL CODE</b>	
<b>STREET ADDRESS</b>			
		<b>POSTAL CODE</b>	
<b>WORK/ DAY TELEPHONE NUMBER</b>		<b>WORK/ DAY FAX NUMBER</b>	
<b>CELL PHONE NUMBER</b>		<b>E-MAIL ADDRESS</b>	

**PLEASE IDENTIFY YOUR INTEREST IN THE PROPOSED PROJECT**

**PLEASE WRITE YOUR COMMENTS AND QUESTIONS HERE (USE ADDITIONAL PAGES AS REQUIRED)**

**OPPORTUNITY TO PROVIDE RESPONSES INCLUDING RESPONSES TO THE QUESTIONS BELOW (IF POSSIBLE)**

1. Please provide information as to how your interests (socio-economic, cultural, heritage or environmental, etc.) may be impacted by the proposed project.
2. What are your suggestions to avoid, mitigate, remedy the potential impacts?
3. What are the current land uses and their location within the proposed project area?
4. What are the locations of significant environmental features within the proposed project area?

**Please return completed forms to:**

**Chiara Kotze or Ntsako Baloyi**

**SLR Consulting (Africa) (Pty) Ltd**

**(011) 467 0945 (Tel) and/or (011) 467 0978 (Fax)**

**[ckotze@slrconsulting.com](mailto:ckotze@slrconsulting.com) or [nbaloyi@slrconsulting.com](mailto:nbaloyi@slrconsulting.com)**

**If possible, please provide initial comments and queries by 19 October 2016**

**Comments and queries can be provided throughout the process**