### HERNIC FERROCHROME (PTY) LTD

Environmental process for the proposed mining right amendment (Section 102) for the inclusion of Platinum Group Metals (PGMs) at Hernic's Maroelabult operations

BACKGROUND INFORMATION DOCUMENT

October 2012

### INTRODUCTION

Hernic Ferrochrome (Pty) Ltd (Hernic) operates a chrome mine and ferrochrome smelter on the farm De Kroon 444 JQ near Brits in the North West Province (Figure 1). The mine operates with an approved Environmental Management Programme (EMP) under the Mining Rights NW 30/5/1/2/2/396 MR and NW 30/5/1/2/2/308 MR.

Hernic is proposing to amend its existing mining rights and approved EMP to cater for the inclusion of additional minerals found within the chrome seams. These minerals include chrome ore, platinum group metals (namely platinum, ruthenium, rhodium, palladium, osmium and iridium), gold ore, silver ore, nickel ore, copper ore, cobalt, rare group elements, vanadium and iron ore and the non-metallic elements being sulphur, selenium and tellurium, and sand manufactured from waste rocks.

### **ENVIRONMENTAL AUTHORISATION PROCESS**

Prior to the commencement of the proposed project, an environmental assessment is required. The environmental assessment comprises an application phase, public consultation process and an environmental impact assessment (EIA) and EMP phase. In accordance with Section 102 of the Mineral and Petroleum Resources Development Act, 28 of 2002 (MPRDA), Hernic has submitted an application to the Department of Mineral Resources (DMR) for this project. The application was reviewed and accepted by the DMR and Hernic have been instructed to continue with the public consultation process and EIA and EMP phase.

SLR Consulting (Africa) (Pty) Ltd (SLR), an independent firm of environmental consultants, has been appointed by Hernic to manage the environmental process.

### **PURPOSE OF THIS DOCUMENT**

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

- the proposed changes to the approved mining rights and EMP;
- \* to provide information on the current baseline environment;
- \* the environmental assessment process to be followed;
- \* possible environmental impacts; and
- \* how you can have input into the environmental authorisation process.

### Public involvement is an essential part of the environmental assessment process!

### YOUR ROLE

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

All comments will be recorded and presented to the project team. You will receive feedback on how your comments have been taken into account and the outcome of the assessment.

#### **HOW TO RESPOND**

Responses to this document can be submitted:

- 1. Using the attached comments sheet AND/OR
- 2. Input at the stakeholder meeting (see details below)
- AND/OR
  3. Through communication with the person listed below.

### WHO TO CONTACT

Caitlin Pringle on (011) 467 0945 (Tel) or (011) 467 0978 (Fax) or cpringle@slrconsulting.com

DMR reference numbers:(NW 30/5/1/2/2/396 EM and NW 30/5/1/2/2/308 EM)

Please ensure that all reference numbers are included on all correspondence.

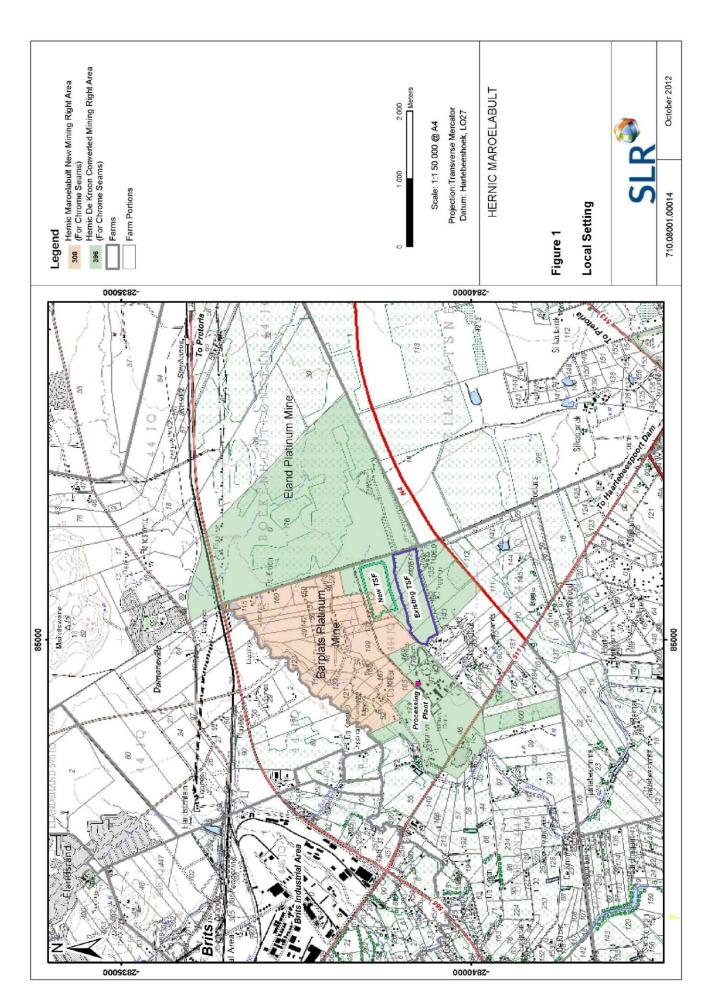
### **NOTICE OF MEETING**

You are invited to attend a presentation on the proposed project and environmental assessment process which will be given at Hernic's next quarterly stakeholder forum meeting.

The details of the meeting are as follows:

Date	Thursday 25 October 2012
Venue	Lapa at Hernic's Maroelabult administration offices
Time	10h00
Language	English (Afrikaans and Setswana)

Figure 1: Locality Map



### **PROJECT OVERVIEW**

Hernic currently holds the mining rights NW 30/5/1/2/2/396 MR and NW 30/5/1/2/2/308 MR on various portions of the farm De Kroon 444 JQ. The proposed EMP amendment caters for the inclusion of additional minerals at Hernic's mineral processing operations. These minerals will be extracted from tailings generated at Hernic's Maroelabult operations. This process will require the re-mining and reprocessing of material, potential upgrade of existing on-site facilities and possible disposal at Hernic's new tailings dam.

### **ON-SITE AND OFF-SITE ALTERNATIVES**

Alternative options are being considered for the processing of the material. These include upgrading and/or expanding on-site processing facilities or off-site alternatives at existing third party operations.

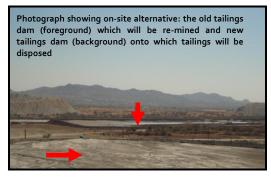
### On-site alternative:

- re-mining of old tailings dam at Hernic
- upgrade of existing processing facilities on site for material processing
- disposal of tailings in Hernic's new tailings dam

### Off-site alternative:

- re-mining of old tailings dam at Hernic
- transport of re-mined material to off-site for 3<sup>rd</sup> party processing
- options for final disposal of tailings at 3<sup>rd</sup> party or Hernic's new tailings dam are being considered





# STATUS OF THE EXISTING ENVIRONMENT

The proposed project activities will take place within an area already disturbed by current mining and associated activities. A summarised overview of the existing status of the environment is provided below. More detailed information will be provided in the EIA and EMP amendment report.

<u>Geology:</u> The project area is situated in the Bushveld Igneous Complex (BIC).

<u>Climate:</u> Located in the Middle Veld climatic zone. The area is characterised by a mild climate. Annual precipitation is approximately 700 mm per year.

<u>Topography:</u> Topography on site is influenced by the current Hernic operations. Surrounding areas are characterised by undulating terrain interspersed with norite koppies.

<u>Soils</u>: The major soil types that occur within the area include clay rich soils, weakly structured or shallow soils and clay-rich wet-based soils.

<u>Land use:</u> The land use within the project site is dominated by mining activities. Surrounding land uses include mining and industrial type activities, commercial businesses, residential areas, community activities, and agricultural activities (crop cultivation and grazing).

<u>Natural plant and animal life:</u> Limited natural vegetation occurs on the site. Disturbance caused by existing land uses in and around the project area has resulted in the fragmentation of the natural veld and loss of naturally occuring fauna.

<u>Surface water:</u> The project area is located in the Crocodile River catchment. The area is drained by non-perennial tributaries of the Crocodile River and Kareespruit respectively.

<u>Groundwater:</u> The depth of groundwater levels varies between 2.5 and 23 m below ground level. Boreholes are mostly used for domestic and agricultural (irrigation) purposes.

<u>Air quality, noise levels and visual aspects:</u> Air quality, ambient noise levels and visual aesthetics of the area have been influenced by existing land uses both on site and in the surrounding environment.

<u>Heritage/cultural and palaeontological resources</u>: Due to nature of the project, no heritage resources will be disturbed by project activities.

<u>Socio-economic:</u> Hernic is located close to the town of Brits. The area is relatively well-populated and is heavily dependent on the mining and agricultural sectors for employment.

# ENVIRONMENTAL ASSESSMENT PROCESS

The environmental process provides information on:

- the 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 for the environmental process are provided below.

### STEPS IN THE AUTHORISATION PROCESS

### Application phase (April to September 2012)

Section 102 Application submitted to DMR (accepted 19 September 2012)

### Initial public consultation (October 2012)

Distribution of background information documents (BIDs), placement of site notices and advertisements (October 2012) WE ARE HERE!

Stakeholder engagement meeting (25 October 2012)

### EIA and EMP amendment phase (October 2012 to April 2013)

Compile EIA and EMP amendment report that considers the consolidated operations, including a summary

Distribute report and summary to DMR, IAPs and other authorities for review (December 2012)

Public review of EIA and EMP amendment report (30 days – closing date for comments will take into account the December holidays)

Receive IAP and authorities' comments in writing, update comments and response report and forward to DMR (February 2013)

Circulate DMR decision to IAPs registered on the project database (usually 120 days after submission of the report to DMR)

## ENVIRONMENTAL DECISIONS REQUIRED FOR THE PROJECT

- \* Decision from the DMR on the Section 102 application
- \* No NEMA, NEM:WA or NWA activities have been identified at this stage

# PARTIES INVOLVED IN THE ENVIRONMENTAL ASSESSMENT PROCESS

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

### **IAPs**

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

### **REGULATORY AUTHORITIES**

- \* Department of Mineral Resources (DMR)
- Department of Economic Development, Environment, Conservation and Tourism (DEDECT)
- \* Department of Water Affairs (DWA)
- \* South Africa Heritage Resource Agency (SAHRA)
- \* Department of Agriculture, Forestry and Fisheries (DAFF)
- \* Department of Rural Development and Land Reform (DRDLR)

### **LOCAL AUTHORITIES**

- Madibeng Local Municipality
- \* Bojanala District Municipality
- Municipal Ward councillors

## POTENTIAL ENVIRONMENTAL IMPACTS

The following environmental aspects will be considered and investigated as part of the environmental assessment process:

- Soils, land capability, land use
- Biodiversity
- \* Surface water
- \* Groundwater
- \* Air
- \* Visual
- \* Noise
- Heritage resources
- \* Socio-economic

# HERNIC FERROCHROME (PTY) LTD: MAROELABULT OPERATIONS SECTION 102 FOR THE INCLUSION OF ADDITIONAL MINERALS REGISTRATION AND RESPONSE FORM FOR INTERESTED AND AFFECTED PARTIES

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

PLEASE IDENTIFY YOUR INTEREST IN THE PROPOSED PROJECT		
PLEASE WRITE YOUR COMMENTS AND QUESTIONS HERE		
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Please return completed forms to:

Caitlin Pringle
SLR Consulting (Africa) Pty Ltd
(011) 467 0945 (Tel) and/or( 01) 467 0978 (Fax)
crpringle@slrconsulting.com