BACKGROUND INFORMATION DOCUMENT

Environmental Applications for Changes to Infrastructure at Bakubung Platinum Mine, Ledig, North West Province





INTRODUCTION

Wesizwe Platinum Limited is the owner of Bakubung Platinum Mine, currently shaft sinking on the farm Frischgewaagd 96JQ (Portions 3, 4 and 11). The mine is located near Ledig, just south of the Pilanesburg Game Reserve and Sun City in the North West Province. Two reefs will be mined for Platinum Group Elements - platinum, palladium, rhodium and gold, with copper and nickel as byproducts. A locality map of the mine is shown in Figure 1.

The Bakubung Platinum Mine received Environmental Authorisation in 2009. in terms of both the National Environmental Management Act (Act 107 of 1998) (NEMA) and Mineral and Petroleum Resources Development Act (Act 28 of 2002) (MPRDA). The mine's Water Use Licence was issued in 2010.

Wesizwe would now like to make several changes to the approved mine which require additional Environmental Authorisations, a Waste Management Licence and an additional Water Use Licence.

Wesizwe appointed SLR Consulting (Africa) (Pty) Ltd (SLR) as the independent Environmental Assessment Practitioner to assist with the applications required for authorisation in terms of the environmental legislation. The initial legal review has indicated that the changes to the Bakubung Platinum Mine will require multiple authorisations under a number of different sets of legislation administered by different competent authorities.

NOTICE OF APPLICATION FOR ENVIRONMENTAL AUTHORISATION, ENVIRONMENTAL MANAGEMENT **PROGRAMME AMENDMENT, WATER USE LICENCE AND WASTE** MANAGEMENT LICENCE

FOR THE CHANGES TO INFRASTRUCTURE AT BAKUBUNG PLATINUM MINE

YOUR ROLE

The purpose of this Background Information Document (BID) is to provide Interested and Affected Parties (IAPs) with information and invite them to participate in a public consultation process regarding the changes to the Bakubung Platinum Mine. You have been identified as an IAP who may want to be informed about the proposed project and have input into the environmental assessment process.

ATTEND ONE OF THE PUBLIC OPEN DAYS

Two Public Open Days will be held to give further details about the project:

Open Day 2:
Place: Bakubung Community
Hall, Ledig
Date: 12 August 2015
Time: 10h00 to 16h00

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

All comments will be recorded and will be addressed as part of the EIA process.

Please send us your initial comments and questions by 24 August **2015**. There will be additional opportunities in the future for you to provide further comments.

HOW TO RESPOND

Please respond by submitting the attached comment sheet (last page of this document) or communicating with the persons listed below.

WHO TO CONTACT

Shelley Seton-Rogers or Chiara Kotze Tel: 011 467-0945, Fax: 011 467-0978, Post: P.O. Box 1596, Cramerview, 2060 Email: sholt@slrconsulting.com /ckotze@slrconsulting.com

PROJECT LOCATION

The changes to the Bakubung Platinum Mine will take place on the farms Frischgewaagd 96JQ (Portions 3, 4 and 11) and Mimosa 81JQ near Ledig and Sun City, North West. The site is located near the R565 and R556 roads, and lies north of the Elands River (Figure 1).

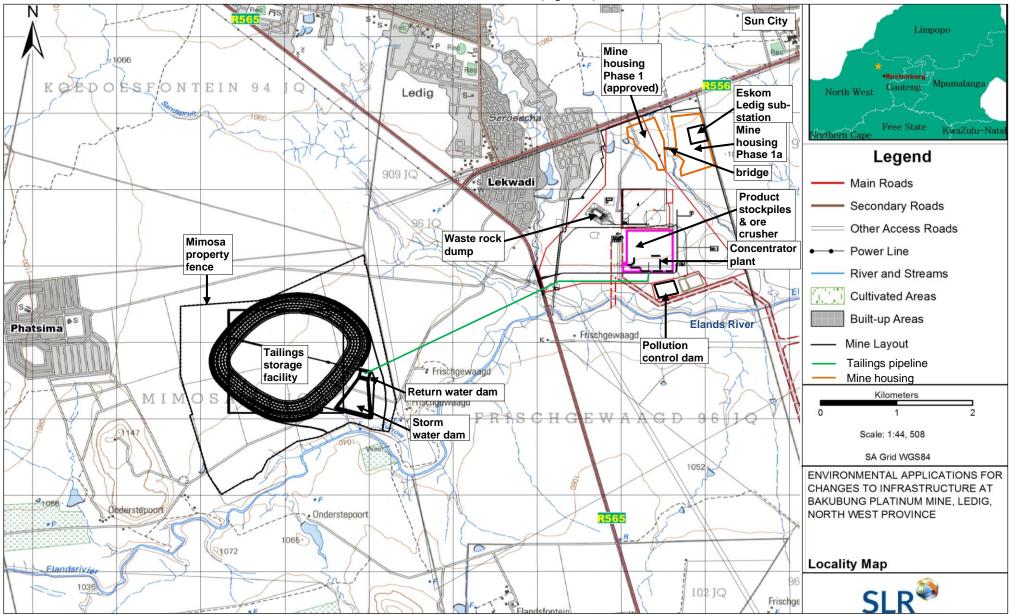


Figure 1. Locality map of the Bakubung Platinum Mine and related infrastructure

PROJECT OVERVIEW

The proposed project will involve the following changes to the approved Bakubung Platinum Mine (note that this is a preliminary list):

- The construction of a larger tailings dam on the farm Mimosa 81JQ. The area will increase from 142 ha to approx. 166 ha. The height will be approx. 44m;
- A tailings pipeline between the mine and the tailings dam;
- An increase in the capacity of the concentrator plant from 230 000 tons per month to approx. 265 000 tons per month;
- Increased capacity of the mine product stockpiles;
- Relocation of the ore crusher from underground to the surface;
- Inclusion of the minerals in the waste rock into the mining licence, as the waste rock may potentially be crushed and sold as aggregate;
- Construction of erosion control measures along watercourses within the mine;
- Storage and handling of dangerous goods such as diesel and reagents on site;
- Various pipeline and road crossings over watercourses, including a bridge crossing;
- New sewage and water pipelines;
- New internal mine roads;
- Ventilation shafts and raise boreholes;
- Generators or possibly a solar power plant on site, for back up ventilation; and
- The construction of phase 1a of the mine housing.

The following <u>water uses</u> will take place, which will require an amendment to the Bakubung Platinum Mine's Water Use Licence:

- *Taking water from a water resource* dewatering the mine shafts;
- Storing of water (not containing waste) storing water in water reservoirs;
- Impeding or diverting the flow of water in a water course, and altering the bed banks, course, or characteristics of a watercourse various watercourse crossings including a bridge, and erosion control measures;
- Disposing of waste in a manner which may impact on a water resource tailings dam, return water dams, storm water dams, pollution control dams, settling dams, waste rock dumps, sewage treatment plant, ore stockpiles, dust suppression with water;
- Removing, discharging or disposing of water found underground if it is necessary for the efficient continuation of an activity, or for the safety of people dewatering the mine shafts.

The following waste activities will take place, which will require a Waste Management Licence:

- The tailings dam;
- Waste rock dumps;
- The salvage yard (temporary storage of general and hazardous waste).

POTENTIAL ENVIRONMENTAL IMPACTS

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

<u>Safety</u>: The proposed project has the potential to alter the topography and present infrastructure and excavations which may present potential safety risks for both people and animals.

<u>Soil and land capability</u>: The placement of infrastructure 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.

<u>Biodiversity</u>: The placement of infrastructure has the potential to disturb and/or destroy vegetation, habitat units and related ecosystem functionality.

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

<u>Groundwater</u>: The proposed project has the potential to contaminate groundwater resources which could impact availability to other groundwater users.

<u>Air</u>: The proposed project has the potential to contribute additional air pollution.

<u>Noise</u>: The proposed project has the potential to cause noise pollution through the construction of infrastructure and activities.

<u>Visual</u>: The placement of infrastructure has the potential to create visual impacts through topographical changes.

<u>Heritage/cultural resources</u>: 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 livestock grazing, surrounding mines and infrastructure (powerlines, railway and roads).

<u>Socio-economic</u>: The proposed project has the potential to contribute towards positive and negative socioeconomic impacts. Positive impacts include job creation and stimulation of local and regional economy. Negative socio-economic impacts such as the influx of job seekers are linked to social pathologies.

ENVIRO-LEGAL REQUIREMENTS

An initial legal review has indicated that the changes to the Bakubung Platinum Mine will likely require multiple authorisations under various environmental legislation and administered by different competent authorities.

Notice is hereby given in terms of the following legislation, that applications for required authorisations will be submitted to the relevant government authorities listed below:

Legislation	Listed Activities (preliminary	Process Required	Competent Authority
	list of potential activities)		
National	GNR 983 (2), (9), (10), (12),	Submission of	North West Department of
Environmental	(14), (19), (25), (27), (28).	application, Scoping &	Mineral Resources (DMR)
Management Act 107	GNR 984 (2), (4), (6), (15),	EIA Reports	
of 1998	(17), (21), (25).		
	GNR 985 (4), (10), (12).		
National Environ-	N/A	Submission of application	North West Department: Rural,
mental Management:		form (if required and if	Environment & Agricultural
Biodiversity Act 10 of		protected species are	Development/ Dept. of
2004		found on site).	Agriculture, Fisheries & Forestry
National Water Act 36	Water uses: S21(a), (b), (c),	Integrated water use	Department of Water and
of 1998	(g), (i) and (j).	licence amendment	Sanitation
National Heritage	N/A	Notify South African	SAHRA
Resources Act 25 of		Heritage Resources	
1999		Agency (SAHRA).	

Legislation	Listed Activities (preliminary	Process Required	Competent Authority
	list of potential activities)		
National Environ-	GNR 921 Category B (7)	Submission of	DMR
mental Management:		application, Scoping &	
Waste Act 59 of 2008		EIA Reports	
Mineral & Petroleum	N/A	Section 102 Amendment	North West DMR – as part of
Resources		- submission of Scoping &	the NEMA authorisation
Development Act 28		EIA Reports (including	
of 2002		EMPr).	

ENVIRONMENTAL PROCESS

The environmental process provides information on the project and environment in which it is being undertaken. It 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.

Prior to the commencement of the proposed project, an environmental assessment process is required, which includes an application, a scoping report, an EIA and an EMP.

Scoping

Scoping involves the identification of environmental issues and concerns. Public input is a key component of the scoping phase of the assessment. The methods to be used in conducting the EIA study are planned, to ensure that the identified issues will be adequately addressed.

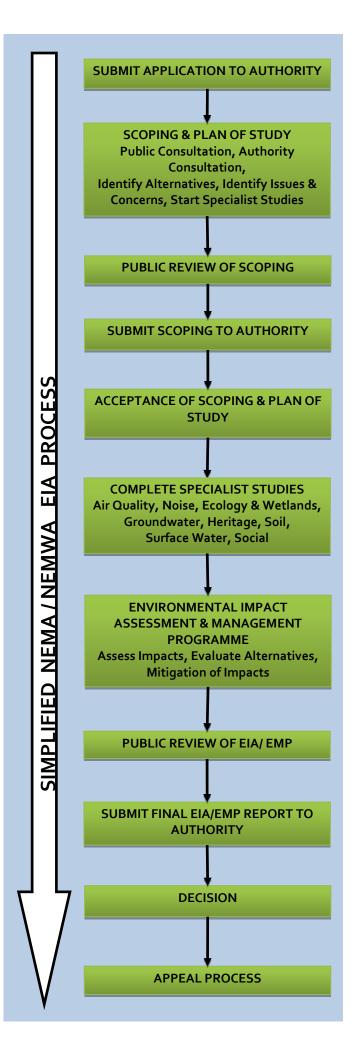
Environmental Impact Assessment (EIA)

This involves the review of available project and environmental information to identify potential environmental impacts and to assess the level of significance of these impacts. Specialists are involved to provide expert opinion on the impacts and often use computer modelling to assist with their studies.

Environmental Management Programme (EMP)

An EMP will be developed, aimed at addressing impacts identified and developing mitigation measures to reduce risks to acceptable levels. Recommendations of the specialists are used to assist in developing the EMP.

The likely process steps are provided below. IAPs and other stakeholders registered on the project's database will receive notification of information-sharing open days and report review periods in advance.



PUBLIC INPUT SHEET FOR CHANGES TO BAKUBUNG PLATINUM MINE, LEDIG, NORTH WEST PROVINCE

All initial co	mments must reach us by 24 August 2				
DATE		NAME	in additional pages in required.		
POSTAL ADDRESS					
		POSTAL CODE			
STREET ADDRESS					
		POSTAL CODE			
WORK/ DAY TEL		WORK/ DAY FAX			
NUMBER		NUMBER			
CELL NUMBER		E-MAIL ADDRESS			
IF YOU KNOW OF O	THERS WHO SHOULD BE INFORMED, PLE	ASE PROVIDE US V	VITH THEIR CONTACT DETAILS		
PLEASE WRITE YOU	R COMMENTS AND QUESTIONS HERE (us	e extra pages if ne	eded)		
PLEASE PROVIDE RE	SPONSES TO THE QUESTIONS BELOW (IF	POSSIBLE)			
	ormation as to how your interests (socio-eco	onomic, cultural, he	ritage or environmental, etc.) will be		
affected by the pro	oposed project.				
2. How do you consid	der that the proposed activities will impact o	on you or your socio	o-economic conditions?		
3 What are your sug	gestions to mitigate the anticipated impacts	s of each activity for	the project?		
S. What are your sug	Bestions to mitibate the unterpated impact				
4. According to you, what are the current land uses and their location within the project area?					
5. What are the locations of environmental features on site?					
6. How can the potential environmental impacts be remedied, and to what standard?					
·					
7 How can the note	ntial impacts on your socia aconomic condit	ions he mitigated (induced)2		
7. How can the poter	ntial impacts on your socio economic condit	ions de mitigated (r	eaucea)?		
8. How can the potential impacts on your infrastructure be managed, avoided or remedied?					
Please return completed forms to:					
Shelley Seton-Rogers or Chiara Kotze					
SLD Consulting (Africa) (Dtu) Ltd					
(011) 467 0978 (Fax) / (011) 467 0945 (Tel)					
(011) 467 0978 (Fax) / (011) 467 0945 (Tel) Email: ckotze@slrconsulting.com or sholt@slrconsulting.com Post: P.O. Box 1596. Cramerview. 2060. South Africa					