NOTIFICATION OF PUBLIC PARTICIPATION PROCESS FOR THE KOLOMELA MINE EXPANSION PROJECT AT KOLOMELA MINE, POSTMASBURG.

This Background Information Document (BID) provides interested and affected parties (IAP) with information on the proposed project and invites them to participate in the public consultation process of the Environmental Impact Assessment (EIA) process.

You are invited to register as an IAP for the proposed Kolomela Expansion (KolEx) Project at the Kolomela Mine, near Postmasburg, Northern Cape Province.

You are requested to raise concerns and ask questions about this project. Please complete and return the comment sheet attached to Synergistics Environmental Services within 14 days. There will also be additional opportunities in the future for you to participate and provide comments.

Please complete the project specific registration / comment sheet and send to:

Roelof Letter
Synergistics Environmental Services

Tel: 011 326 4158
Fax: 011 326 4118
Post: P.O. Box 68821,
Bryanston,
2021
Email: rletter@slrconsulting.com

Background Information Document

ENVIRONMENTAL ASSESSMENT PROCESSES FOR THE KOLOMELA EXPANSION PROJECT AT THE KOLOMELA MINE, NEAR POSTMASBURG, NORTHERN CAPE PROVINCE.

December 2013

The Kolomela Mine is an open pit mining operation in the Northern Cape Province. The mine is located approximately 12 kilometres south west from the town of Postmasburg. The Kolomela Expansion (KolEx) Project will comprise a brownfields expansion of the current Kolomela Mining operations to increase the overall production of the mine by approximately 3 million tonnes per annum.

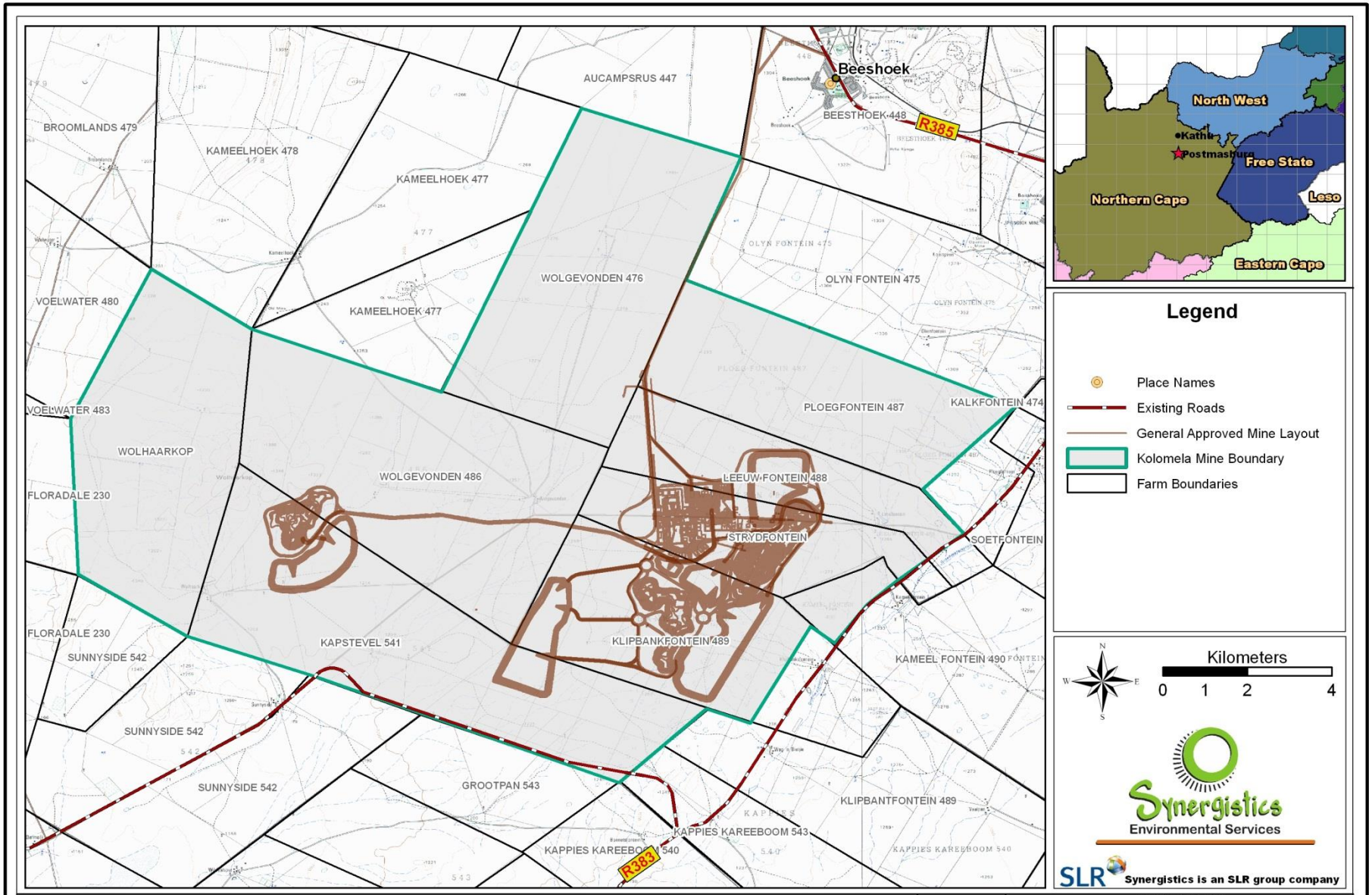
Sishen Iron Ore Company (Pty) Ltd appointed Synergistics Environmental Services (Pty) Ltd (Synergistics) as the independent Environmental Assessment Practitioner responsible for the applications required under South African environmental legislation and to undertake the Environmental Impact Assessment (EIA) process.

PURPOSE OF DOCUMENT

This Background Information Document (BID) provides initial information to Interested and Affected Parties (IAPs) about the environmental applications and the EIA process being undertaken for the KolEx Project.

This document forms the first part of the public consultation process, and aims to elicit comments, questions and responses regarding the proposed project. Initial issues raised will be considered when planning the studies to be undertaken as part of the EIA process.

PROJECT LOCATION



PROJECT DESCRIPTION

The Sishen Iron Ore Company (Pty) Ltd, part of Kumba Iron Ore Limited (hereafter Kumba), owns and operates Kolomela Mine located approximately 12 km south west of Postmasburg and 80 km south of the Sishen Mine in the Northern Cape Province.

The Minister of Mineral Resources granted a mining right for iron ore on 5 May 2008 authorising the exploitation of iron ore by Kumba on the farms Ploegfontein 487, Remainder of Leeuwfontein 488, Strydfontein 614, remainder of Klipbankfontein 489, Portion 1, 2, 3, and the remainder of Kapstevel 541, Wolhaarkop 485, Welgevonden 476 and Welgevonden 486.

Kumba is also the holder of the surface rights of these properties. The Kolomela mining right {(NC) 069 MR}, is valid until 17 September 2038 unless cancelled or suspended.

The Kolomela Mine is an open pit mining operation aimed at producing approximately 9 million tonnes of iron ore per annum. Current mining operations involve mining from three pits on the farms Leeuwfontein 488, Strydfontein 614, remainder of Kapstevel 489 and portion 1, 2, 3, and the remainder of Kapstevel 541. Iron ore reserves have also been identified on the farms Ploegfontein 487 and Kapstevel 541.

Existing processing facilities involve a direct shipping ore (DSO) operation involving crushing and screening of the recovered ore material into stockpiles of 'lump' and 'fines' for transportation by rail to Saldanha Bay.

The Kolomela Expansion (KolEx) project is a brownfield expansion of the current Kolomela Mining operations to increase the overall production of the mine. The project is currently in pre-feasibility stage and various options are still being considered. A detailed project description will be provided in the scoping report planned for submission January 2013

The Environmental Impact Assessment (EIA) will mainly be in support of the following applications:

- **Amendment to the existing Environmental Management Programme (DMR Ref: NC 30/5/3/2/1/069EM**) in terms of **Section 102** of the Minerals and Petroleum Resources Development Act No 28 of 2002;
- **Amendment to the existing integrated water use licence (Licence Number: 25051648)** in terms of **Section 21** of National Water Act No 36 of 1998;
- **Environmental Authorisation** in terms of **GNR 544;** Activity 9,11,12,13,18,22,23,28,37&42**; GNR 545 Activity** 3,5,10 &15 **(DENC Ref No: NC/EIA/15/ZFM/TSA/POS3/ 2013).**

Mining requirements

The expansion project would require additional infrastructure to support the increase in overall production of the mine. At this stage various options are still being considered, including the accelerated mining of current pits and the potential feasibility of mining of additional pits. More information regarding this will be provided in the draft Scoping report.

Plant requirements

Ore is currently hauled from the pits to a primary crusher. Dry DSO material is crushed and screened through a single crushing train with three crushing stages (Primary, secondary and tertiary) to produce the required product specifications. Once crushing of the ore is complete; it is temporarily stored on the product bed stockpiles before being loaded onto the rail and transported to Saldanha Bay.

Two types of material are considered for treatment as part of the KolEx Project:

1. High grade (DSO) ore;

The current Kolomela plant was initially designed to process 9 million tonnes of iron ore per annum and therefore the plant capacity would need to be increased to cater for an overall increase in production of the mine.

At this stage various plant option alternatives are still being considered and more information regarding this will be provided in the draft Scoping report.

2. Normal grade ore (material that requires beneficiation).

The construction of permanent and/or temporary beneficiation plants are also still being considered to enable Kolomela to process lower grade ores, which would then be blended into product ores to obtain required product specification. More information

regarding this will be provided in the draft Scoping report.

Supporting Infrastructure Requirements

It is anticipated that additional supporting infrastructure will need to be established at the Kolomela Mine. At the present time the infrastructural requirements have not been accurately defined, however it would most likely include, water management infrastructure (pollution control dams and water supply dams), additional office requirements, additional fuel storage requirement, additional change house, additional workshops with First Aid Rooms, sewage treatment facility, Laboratory, housing infrastructure etc.

ENVIRONMENTAL LEGAL PROCESSES

The KolEx Project will require various environmental approvals prior to commencement with construction or operational activities relating to the expansion project. Below is the list of applicable legislation and main applications for the project.

National Environmental Management Act, (Act No 107 of 1998) (NEMA)

EIA regulations have been published (Government Notices R543 to R546) in terms of the National Environmental Management Act (No 107 of 1998). Activities listed in the EIA regulations require authorisation from Northern Cape Department of Environmental Affairs and Nature Conservation (DENC) prior to commencement.

The following listed activities will most likely form part of the KolEx Project:

- Clearance of vegetation to allow for mining activities (GNR 545 Activity 15 and GNR 544 Activity 23);
- Construction of haul roads and service roads at the mine (GNR 544 Activities 22);
- Construction of facilities for the storage of dangerous goods i.e. fuel and dangerous goods (GNR 544 Activity 13, 42; GNR 545 Activity 3);
- Construction of water storage and related distribution infrastructure i.e. storage dams and pipelines (GNR 544 Activity 9, 12 & 37 and GNR 545 Activity 10);
- Disturbance of watercourses (pans and drainage lines) (GNR 544 Activity 11 and 18); and
- Construction of facilities that may result in the generation or release of emissions or pollution (pollution control dams) (GNR 544 Activity 28 and GNR 545 Activity 5).

The necessary application forms were submitted to DENC in October 2013 and have been accepted by the department (Please refer to reference numbers above). An EIA process will be undertaken in support of the application to determine the environmental and social impact of the abovementioned activities.

National Water Act (Act No 36 of 1998) (NWA)

A new application and/or an amendment of the existing integrated water use licence (IWUL) will be submitted in consultation with and to the Department of Water Affairs (DWA); for potential Section 21 water uses to be triggered. These water uses to be triggered may include the following:

- Additional dewatering requirements to ensure water levels are dropped below pit excavations to ensure safe continuation of work.
- Impeding or diverting the flow of water in a watercourse; for additional stormwater diversion infrastructure etc.
- Aquifer recharging by surplus water obtained from pit dewatering activities.
- Disposing of waste in a manner which may detrimentally impact on a water resource; additional waste rock dumps, upgrading sewage treatment plan, expansion of tailings storage facility etc. may be required.

The exact section 21 water uses to be triggered by the KolEx Project will be provided once more detail about the project has been quantified. An updated integrated water and waste management plan (IWWMP) will also be submitted in support of the required applications.

Minerals and Petroleum Resources Development Act, (Act No 28 of 2008) (MPRDA)

The current approved EMP for the Kolomela Mine (DMR Reference: MC 30/5/3/2/1/069EM) does not cover the proposed new activities to be undertaken as part of the KolEx Project and therefore an amendment to the existing EMP is required.

Section 102 of the MPRDA states; that an EMP cannot be amended or varied without obtaining written consent from the Minister first. A letter of intent to

amend the EMPR will be submitted to the Northern Cape Department of Mineral Resources (DMR).

EMP amendment will be submitted to the DMR to communicate the environmental impacts of the new activities to be undertaken as part of this project.

Other legislative requirements

Various other authorisations, permits and/or licences may be required, the details of which will be confirmed as the project planning continues:

- **National Environmental Management: Waste Act (No 59 of 2008);**
- **National Environmental Management: Air Quality Act (No 39 of 2004);**
- **National Environmental Management: Biodiversity 2004 (Act 10 of 2004);**
- **Northern Cape Nature Conservation Act, 2009 (No 9 of 2009);**
- **National Forests Act, 1998 (Act No 84 of 1998);**
- **National Heritage Resources Act, 1999 (Act No. 25 of 1999);**
- **Northern Cape Planning and Development Act, 1998 (No 7 of 1998).**

APPLICATION PROCESS

An integrated EIA process, taking cognisance of the requirements of the NEMA, the MPRDA, and NWA will be undertaken complemented by a combined public participation process (PPP).

An EIA is a study that is undertaken to determine the effect that a planned operation will have on the environment and surrounding communities. Once the impact is known, mitigation measures can be developed. The EIA process consists of a scoping and impact assessment phase.

Scoping

Scoping involves the identification of environmental issues and concerns. Public input is a key component of the scoping phase of the assessment. During the scoping process the plan of study for the EIA is determined with the terms of reference for the different environmental aspects to be investigated.

Environmental Impact Assessment (EIA)

This involves the review of available projects and environmental information to identify the potential environmental impact and to assess the level of significance thereof. Specialists will be involved to provide expert opinion on the above, incorporating computer modelling where necessary and feasible. This assessment will include specialist studies to assist in predicting the impact on air quality, groundwater, surface water, ecology, traffic, heritage resources and the socio-economic environment.

The findings of the impact assessment and the proposed measures identified to mitigate any negative effects will be documented in an Environmental Impact Report. The findings will be presented and discussed with the public and the draft and final reports will be made available for public comment.

Environmental Management Programme (EMP)

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

Integrated Water and Waste Management Plan (IWWMP).

The updating of the existing IWWMP document will seek to assimilate existing and new specialist studies, environmental management programmes, conditions of the water use licences and current operational management procedures to provide coherent structure for the identification and management of waste and water at Kolomela Mine, including the KolEx Project.

The IWWMP provides an overview of the operations undertaken at Kolomela Mine with special attention to waste and water related activities;

APPLICATION PROCESS CONTINUED

- Provides a description of the current operational and baseline ecological conditions to be used as a base to measure impacts against;
- Provides a risk assessment for all activities that have waste and water related impacts;
- Details an integrated environmental management plan which includes specific measures taken to manage the risks identified;
- Provides an overview of the monitoring systems used and/or to be used to record activities and their impacts, to detect operational deficiencies and take corrective action; and
- Defines operational management measures required to implement, maintain and communicate this documented system and identifies knowledge gaps.

The updated IWWMP will serve as a technical report to the new and/or amendment IWUL in elaborating the specific water uses and their impacts on the receiving environment.

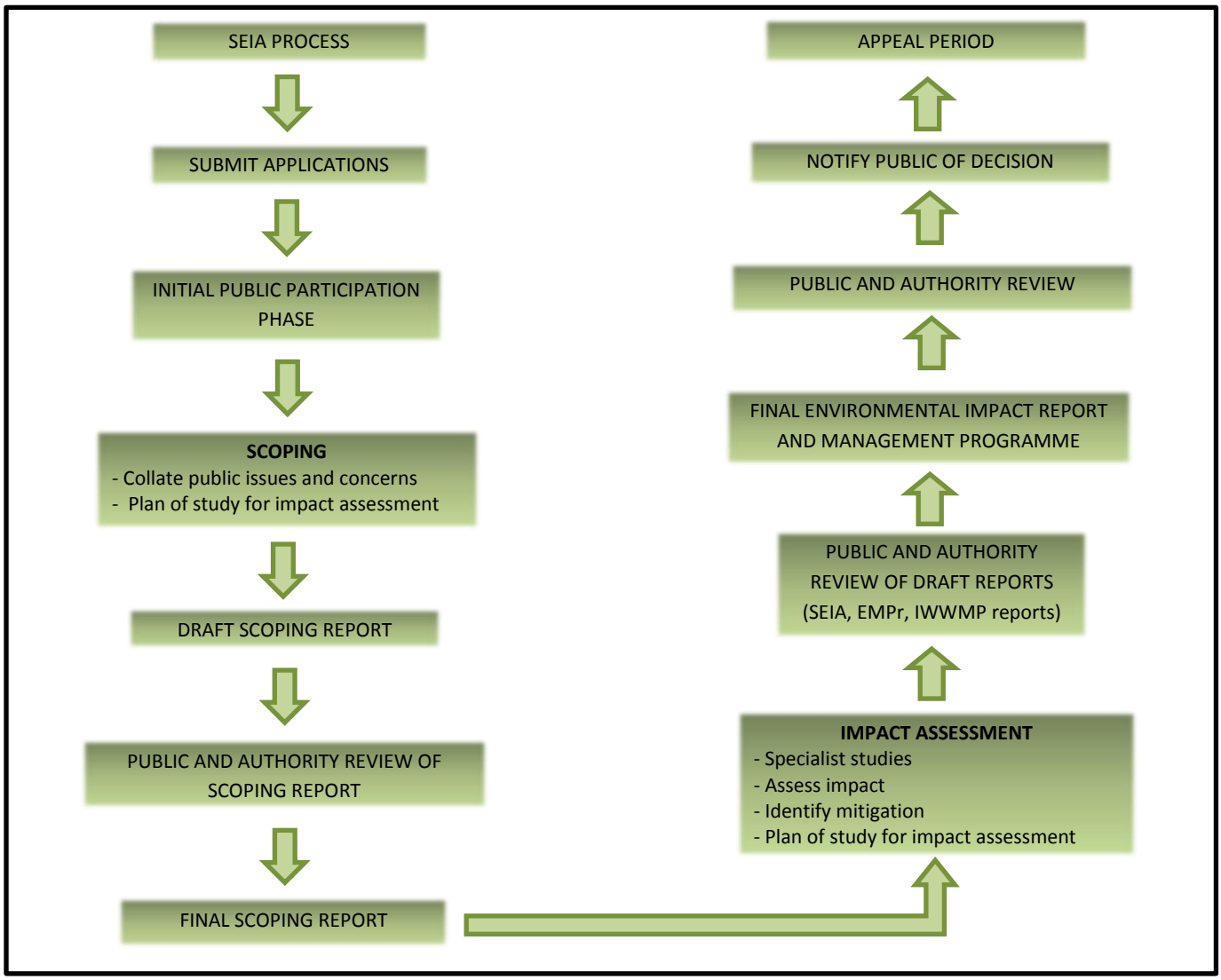


Figure 1: EIA Process for the KolEx Project.

PUBLIC INPUT SHEET KOLOMELA EXPANSION PROJECT AT THE KOLOMELA MINE, POSTMASBURG.	
Name:	
Address:	
Telephone/cell phone:	
Fax:	
E-mail:	
Date:	
Signature:	

If you know of others who should be informed of the project, please provide us with their contact details:

Name:	
Address:	
Telephone/cell phone:	
Fax:	
E-mail:	

ISSUES, CONCERNS AND QUESTIONS **(use additional pages if required)** **Please complete and return to Synergistics Environmental Services (as below) within 14 days.**

RETURN COMPLETED SHEET TO:
Roelof Letter
Kolomela Expansion Project at the Kolomela mine, Postmasburg.
Synergistics Environmental Services
Tel: 011 326 4158
Fax: 011 326 4118
E-mail: rletter@slrconsulting.com
Post: PO Box 68821, Bryanston, 2021, South Africa

Synergistics Environmental Services

SLR Synergistics is a SLR group company