

# S&EIA FOR THE PROPOSED MELMOTH IRON ORE PROJECT NEAR MELMOTH, KWAZULU-NATAL

## BACKGROUND INFORMATION DOCUMENT

June 2021

### INTRODUCTION

Jindal Iron Ore (Pty) Ltd (Jindal), owned by Jindal Steel and Power (Mauritius) Limited (74%) and Jindal's BEE partner, Mr. Thabang Khomo (26%), is proposing the development of an open pit iron ore mine and associated infrastructure on a project site located 25 km southeast of Melmoth, within the Mthonjaneni Local Municipality in the KwaZulu-Natal Province (Figure 1).

The **Melmoth Iron Ore Project** would comprise of an open pit, processing plant, waste rock dump (WRD), tailing storage facility (TSF) and associated infrastructure. Mining activities and infrastructure would only be undertaken/developed in portions of the Mining Right area and some infrastructure may be located outside of the area. The Iron ore concentrate would be transported to the Richards Bay Port either by rail or pipeline. The concentrate will be exported as there are limited local markets. A **Bankable Feasibility Study** is in progress to determine specific details of the mine plan.

Jindal intends to lodge an application for a **Mining Right** (MR) with the Department of Mineral Resources and Energy (DMRE) in terms of Section 22 of the Minerals and Petroleum Resources Development Act, 2002 (No. 28 of 2002) (MPRDA).

### ENVIRONMENTAL AUTHORISATION PROCESS

In order for the DMRE (the Competent Authority) to grant a MR the applicant must apply for and obtain an **Environmental Authorisation** (EA) in terms of the National Environmental Management Act, 1998 (No. 107 of 1998) (NEMA).

To inform the DMRE's decision on the EA application, a **Scoping and EIA** (S&EIA) process must be undertaken in terms of Regulations 21 – 24, and 39 – 44 of the Environmental Impact Assessment (EIA) Regulations 2014 (as amended in 2017). The S&EIA process will include application, scoping, and environmental impact assessment phases, as well as the compilation of an **Environmental Management Programme** (EMPr) for the management of environmental and social impacts during the life of the Melmoth Iron Ore Project.

In addition to the requirement for an EA, Jindal will make application for permits / licenses required in terms of the following legislation:

- National Environmental Management: Waste Act, 2008 (Act 59 of 2008) (NEM: WA).
- National Water Act, 1998 (No. 36 of 1998) (NWA).

SLR Consulting (South Africa) (Pty) Ltd ('SLR') has been appointed by Jindal as the Environmental Assessment Practitioner (EAP) to undertake the specified environmental regulatory processes for the Melmoth Iron Ore Project. Separate applications may be required for certain components of the project.

### PURPOSE

This document provides initial information to stakeholders about the proposed Melmoth Iron Ore Project and S&EIA process.

### YOUR ROLE

You have been identified as a potential Interested and Affected Party (I&AP) who may want to be informed about the project and have input into the S&EIA process.

You have an opportunity to register as an I&AP, review this BID and provide your initial comment to SLR for incorporation into the S&EIA process.

Registered I&AP will also be given the opportunity to provide input, including at information meetings, and to review and comment on the Scoping and EIA Reports.

All I&AP comments will be recorded and included in the reports submitted to the Competent Authorities for decision-making.

### HOW TO RESPOND

Responses can be submitted by means of the attached comments sheet and/or through communication with the contact person listed below.

### WHO TO CONTACT

**SLR Consulting**

Gugu Dhlamini

Tel: (011) 467 0945

Cell: 072 997 3082

Email: [gdhlamini@slrconsulting.com](mailto:gdhlamini@slrconsulting.com)

Post: PO Box 1596, Cramerview 2060

**Please submit initial comments to SLR by end July 2021.**

Registered I&APs will have opportunity to Comment on the Scoping and EIA Reports, and will be notified of report availability.

**Project documents will be available from SLR's website:**

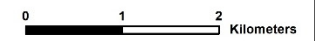
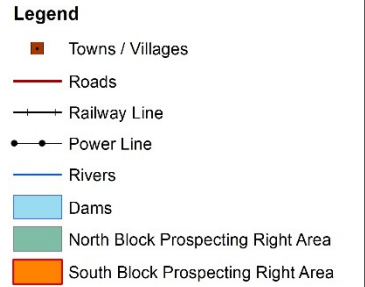
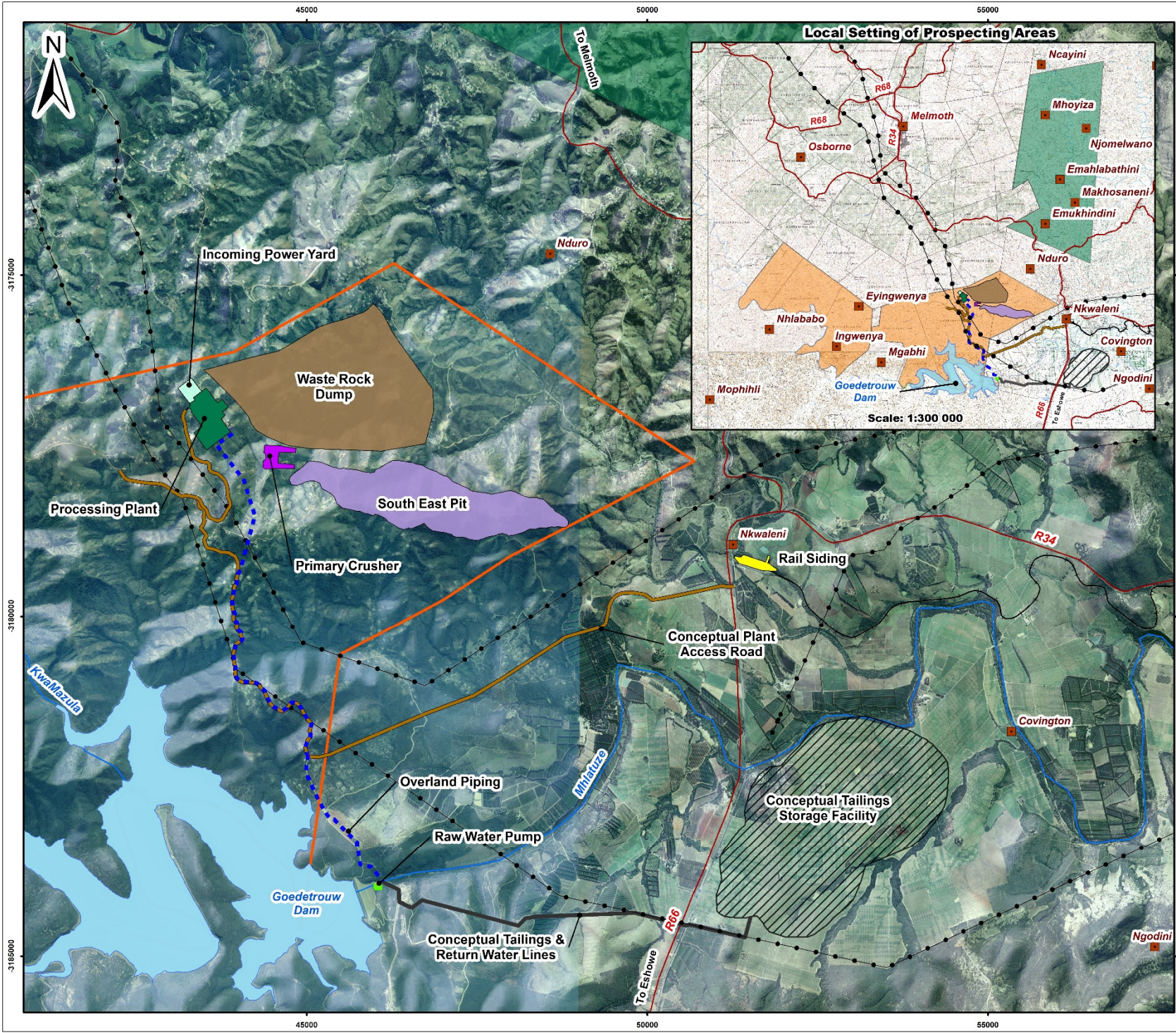
[www.slrconsulting.com/public-documents](http://www.slrconsulting.com/public-documents)

and data-free from mobile devices on:

<https://slrpublicdocs.datafree.co/public-documents>







Scale: 1:54 500 @ A3  
 Projection: Transverse Mercator  
 Datum: WGS1984, Lo31

Jindal Iron Ore (Pty) Ltd

**Figure 1**  
 Local setting of the Melmoth Iron Ore Project

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



## THE MELMOTH IRON ORE PROJECT - BACKGROUND

Jindal holds two Prospecting Rights (PRs) over the project site. The North (PR 10644) and South (PR 10652) blocks have a total combined extent of 20 170 ha. Jindal has previously undertaken prospecting activities, including drilling, within selected areas of these blocks.

In 2014 and 2015, Jindal conducted a Prefeasibility Engineering Study to determine the technical and financial feasibility of developing an open pit iron ore mine. A conceptual mine plan was developed.

At that time Jindal had appointed an independent EAP to undertake a S&EIA process for the proposed project. Various public participation activities and specialist studies were undertaken, and draft Scoping Reports were submitted to the Department of Economic Development, Tourism and Environmental Affairs (EDTEA). However, the Scoping Reports were returned to Jindal with requests for more clarity on various aspects of the project. This, in parallel with a decline in global iron ore prices, caused Jindal to reduce development of the project. That S&EIA process was discontinued in January 2016.

Through 2020 the global iron ore price has recovered, to a level that encouraged Jindal to recommence their consideration of the Melmoth Iron Ore Project. Consultants have been appointed to update the engineering work and conduct the studies required to inform the **Mining Right Application (MRA)**.

### OVERVIEW

Jindal is now proposing development of the Melmoth Iron Ore Project as an open cast mine and processing facility to produce iron ore concentrate for export. Development of the mine and mining infrastructure would be phased. Currently mining is only proposed to be undertaken in specific areas where the iron ore resource has been defined. Infrastructure would be developed to support this mining operation.

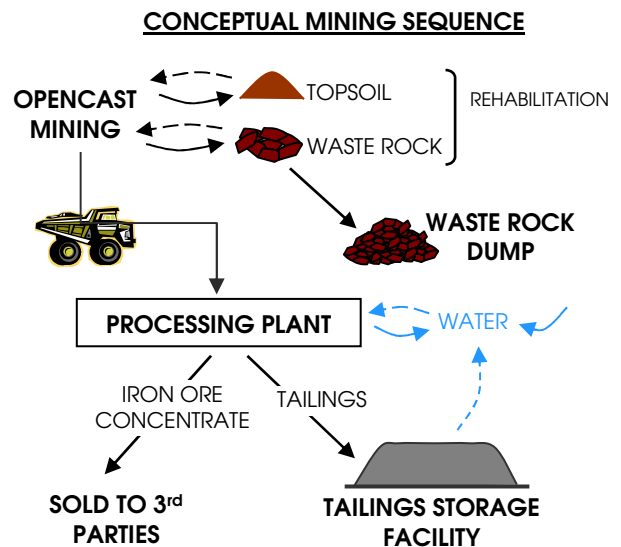
Jindal's intent with this MRA is to consolidate the PRs for the North and South blocks into a single MR. The MRA and S&EIA will consider the entire extent of the two PR blocks, but with a specific focus on the area for Phase 1 of the Melmoth Iron Ore Project as described below.

### PHASE 1: CONCEPT

**NB** the current Phase 1 mine plan is **CONCEPTUAL** and derived from the 2015 Prefeasibility Engineering Study.

An open cast pit mining operation would be developed in the south east area of the South Block. Waste rock stripped from the pit would be disposed on a WRD within the MRA. Run of mine ore would be hauled to a primary processing plant for crushing, milling and magnetic separation. The plant would produce iron ore concentrate and tailings. The iron ore concentrate would be transported to the Richards Bay Port via either rail or pipeline. The concentrate will be exported as there are limited local markets. Tailings would be

disposed to a TSF (location to be finalised as part of a separate process). Associated infrastructure to support the mine could include access and haul roads, electrical transmission line and sub-stations, raw water abstraction and pipelines, stormwater management infrastructure, tailings pipelines, concentrate pipelines, rail siding and offices, change house, workshops and perimeter fencing (amongst others).



Prospecting would be undertaken in the North and South blocks in parallel with the Phase 1 mining.

### PHASE 1: DETAIL

The Melmoth Iron Ore Project would initially target production of up to 20 million tonnes per annum (Mtpa) of iron ore, with production possibly being increased in future.

The method, scale, and location of the Phase 1 mining and mine infrastructure will be determined by the Bankable Feasibility Study, with inputs from this S&EIA process. Additional layout and design details will be presented in the Scoping and EIA Reports as they become available. Alternatives will be considered.

### SEPARATE APPLICATION AND ASSESSMENT(s)

Under NEMA the DMRE is not the competent authority for activities post primary-processing of a mineral where these are located outside of the MR area. Where the project requires such infrastructure, this will be subject to separate application, assessment and approval process(es), as required by applicable legislation.

### POSSIBLE FUTURE PHASES

Results from prospecting would inform planning of possible future phases of the Melmoth Iron Ore Project. The likely concept for future phases would be to increase the life of mine and production rate by accessing iron ore from additional mine pits and/or increasing the capacity of the primary processing plant. Any future development phases of the Melmoth Iron Ore Project would need to be subject to the requisite regulatory application, assessment, and approval processes.

## APPLICATION PROPERTIES

North Block: RESERVE NO.11 15831 (Ptn 3, 4), NTEMBENI 16921.

South Block: NTEMBENI 16921, DIRKCHINBURG 6125, KROMDRAAI 6110, NTEMBENI 16921, BLACK EYES 13385 (Ptn 1, 2, 3, 4, RE), WILDERNESS 6107 (Ptn 3, 4, 5, 6, 7, 8, 12, 13, 14, 15, 16), GOEDGELOOF 6106 (Ptn 1, 2, 3, RE) and VERGELEGEN 6104.

Other properties may underlie some of the infrastructure and will be specified once known.

## CURRENT STATUS OF THE ENVIRONMENT

This S&EIA will investigate the biophysical and social aspects of the project affected area to better understand the social and environmental sensitivities that may be impacted by the proposed project.

The topography of the area is rugged, with steep hilly terrain. Elevation rises from approximately 200 metres above mean sea level (mamsl) in the low-lying valleys to a high of approximately 850 mamsl along the ridges and peaks. Soil type varies considerably, including soils with high agricultural potential. The soils are frequently susceptible to erosion due to the topography, rainfall intensity and soil characteristics.

Land ownership varies across the MR application area with undivided properties falling under the jurisdiction of public bodies and the Ingonyama Trust Board, with other farms being owned by individuals and companies. All of the North Block and most of the eastern portion of the South Block falls under Traditional Authorities including the Zulu-Entembeni, Obuka and Yanguye.

The MR application area is predominantly rural in nature, with sparsely distributed development (mostly on hill tops and ridgelines). Primary land uses include indigenous vegetation, traditional settlements with associated infrastructure, subsistence and small-scale agriculture (e.g. crops and livestock). Commercial agriculture (e.g. citrus, sugar cane and timber) is undertaken on adjacent land.

Groundwater flow follows topography, with substantial variance. Groundwater is generally fit for human consumption and is relied on by rural communities. Some areas do, however receive piped water.

The MRA area is located within the upland region of the Mhlathuze River catchment. The Mhlathuze River and Phobane (Goedetrouw) Dam border the southern portion of the South Block. These water resources are important for potable water supply (e.g. Richards Bay), commercial irrigation (e.g. Nkwaleni Valley), mining (e.g. Fairbreeze) and environmental requirements. The South Block is drained by KwaMazula River and the North Block by the Mfule River. The entire area has numerous minor tributaries. Wetlands are relatively uncommon. Surface water quality is reasonable, although under pressure from increasing salinity, eutrophication, abstraction and siltation.

Vegetation of the MRA area is predominantly Ngongoni Veld with areas of Eastern Valley Bushveld, Northern Zululand Sourveld and Zululand Lowveld. The site falls within the Maputoland – Pondoland floristic region, which is the second richest floristic region in southern Africa. Various endemic plant species occur, most being found within grassland vegetation. Numerous rare and threatened plant species have been recorded in the area, however, many areas also have high densities of alien and invasive plant species. The area has potential to host rare and threatened fauna from various classes. Mammal abundance is likely to be low. Birds are particularly diverse and some sites in the area form part of the Zululand Birding Route. The presence of such species requires verification.

Zulu people have occupied the Melmoth region for some 200 years. Grave sites, artefacts and cultural heritage resources abound. Traditional culture is still observed by many residents and community social structures remain strong. Homesteads have remained within families for many generations and many residents have strong ties to the land. In some areas occupation arose due to the Apartheid policies. The density of homesteads continues to increase in many of the areas.

The town of Melmoth (12km from South Block and 8km from North Block boundaries) is the main commercial and administrative centre in the Mthonjaneni Local Municipality. It services the rural community and commercial agriculture. Economic opportunities are relatively limited and unemployment levels remain high. Commercial agriculture is the primary employer in the region. Persons from surrounding rural areas are mainly dependant on informal trading and subsistence agricultural production.

The R66 is a tarred road which passes between the North and South blocks, connecting Melmoth with Eshowe, via the Nkwaleni Valley. The local road network is unsurfaced and sparsely distributed. Most rural persons reside in formal housing, but service provision (water, electricity, sanitation and waste) levels are low and decrease with distance from the formal road network. Government has established schools and clinics within the area. These are generally located at major nodes on the road network.

## SPECIALIST STUDIES

SLR will appoint a suite of specialists to investigate the status of the environmental and social aspects within project affected area and to identify sensitive sites.

These will include: Geotechnical, Groundwater, Surface Water, Waste Classification, Air Quality & Noise, Biodiversity, Hydrogeology, Visual, Traffic, Heritage, Soils, Land Capability & Agriculture, Blasting & Vibration, Socio-economic, Greenhouse Gases & Climate Change, Health, Resettlement Planning and Closure studies. Specialist study scopes will be detailed in the Scoping Report.

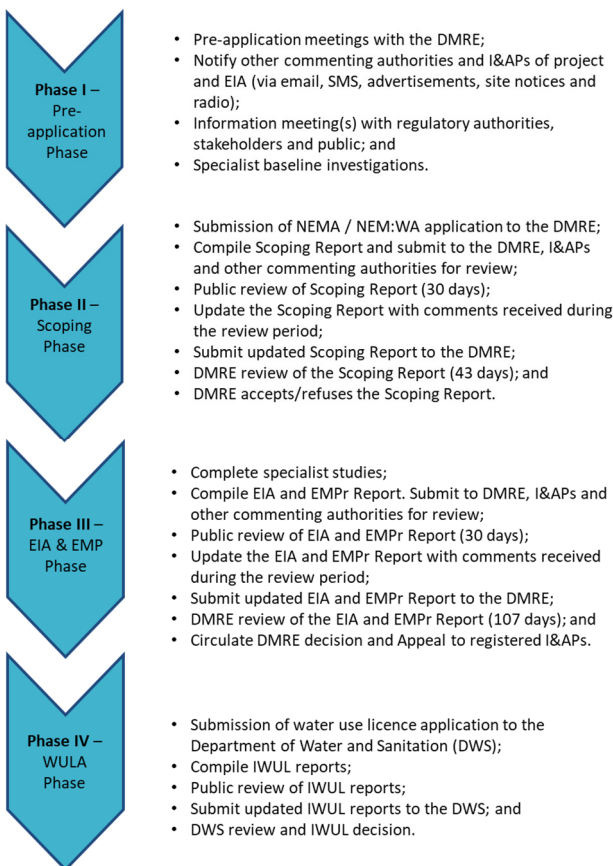
## S&EIA PROCESS TO BE FOLLOWED

The S&EIA regulatory process aims to:

- notify I&APs and provide reasonable opportunity for involvement;
- provide information on the project and its alternatives;
- document the baseline environment that may be affected;
- identify, in consultation with I&APs, and assess the potential impacts of the proposed project and its alternatives;
- present appropriate mitigation or optimisation measures to minimise potential impacts or enhance potential benefits, respectively; and
- allow for informed, transparent and accountable decision-making by the relevant authorities.

## STEPS IN THE S&EIA PROCESS

The process steps for the S&EIA, are in accordance with the EIA Regulations, 2014 and are outlined below. The S&EIA process, from application to decision, is 300 days in duration.



## IMPACT ASSESSMENT

Mining projects have the potential to result in both negative and positive environmental, cultural, economic and social impacts. These impacts can relate to biodiversity, water, air, noise environment, visual resource, use of the land, heritage, safety, sense of place, economic and social wellbeing of an area.

Potential impacts will be identified and assessed during the S&EIA process. Mitigation measures to minimise negative and enhance positive impacts will be identified.

## S&EIA LIMITS

The scope of the S&EIA process is aligned with, and focused on, identifying and assessing impacts of Phase 1 of the proposed mining operation (DMRE as authority).

The assessment of future development phases falls outside of the scope of this S&EIA process. If such work were to be proposed, Jindal would be required to seek further approval from the DMRE in terms of the MPRDA and NEMA. Any further approval would be subject to an additional environmental assessment process, with further public consultation, as required by the NEMA.

## ROLE OF INTERESTED AND AFFECTED PARTIES

I&APs play a key role in any S&EIA process. I&APs are encouraged to participate in the process by registering their contact details with SLR; by sending in any questions related to the project; by sharing their knowledge of the area; by reviewing and commenting on information made available through the S&EIA; by notifying other parties and participating in public participation activities. Registered I&APs will receive notification of public participation opportunities in advance.

All comments received will be recorded and included through a Comments & Response Report to be submitted with the Scoping and EIA Reports.

## WHAT WILL HAPPEN NEXT?

High level timelines (see below), provide I&APs an indication of when I&APs could expect to be involved in, or need to provide input to, the S&EIA processes.

### Identification, notification and registration of I&APs

I&AP Identification, notification of the project (including distribution of the BID, adverts and site notices) and initial registration of I&APs (June – July 2021)

### Scoping engagements with I&APs

Through a blended approach of face-to-face interactions and other engagement tools (June - August 2021)

### Review of environmental reports

Scoping and EIA Reports to be made available for a 30-day review period. Non-technical summaries will be distributed in English and isiZulu.

(Scoping ~ August 2021 , EIA ~ December 2021)

### Feedback engagements with I&APs

Through a blended approach of face-to-face interactions and other engagement tools

(early 2022)

### I&AP notification of decisions

(~ mid 2022)

## PARTIES INVOLVED IN THE ENVIRONMENTAL APPLICATION PROCESS

The stakeholder groups initially identified for consultation during the S&EIA include:

### REGULATORY AUTHORITIES

- Department of Mineral Resources and Energy;
- Department of Human Settlements, Water and Sanitation;
- KwaZulu-Natal Department of Cooperative Governance and Traditional Affairs;
- KwaZulu-Natal Department of Agriculture, Rural Development and Land Reform;
- KwaZulu-Natal Department of Economic Development, Tourism, Environmental Affairs;
- KwaZulu-Natal Department of Transport;
- South Africa Heritage Resource Agency (SAHRA) and AMAFA; and
- Ezemvelo KZN Wildlife.

### LOCAL AUTHORITIES

- King Cetshwayo District Municipality;
- Mthonjaneni Local Municipality and Ward Councillors.

### TRADITIONAL AUTHORITIES

- Zulu-Entembeni, Obuka and Yanguye Traditional Councils and Nduna's

### LANDOWNERS

- Ingonyama Trust Board and owners of property underlying the application area.

### I&APs

- Adjacent landowners, land users and surrounding communities;
- Businesses, associations and parastatals;
- Non-governmental organisations; and
- Interested Parties

**Please let us know of additional parties that should be involved.**

**NB** Updating of the I&AP database to include any new registrations will continue throughout the process.

## NOTICE OF PUBLIC INFORMATION MEETING

1. **Melmoth Golf Club (Golf Street, Melmoth)** on **30 June 2021 at 3 pm**. Attendance numbers limited, only by RSVP to SLR.
2. **Online meeting via MS® Teams** on **6 July 2021 at 3 pm**. Contact SLR to register and receive a meeting link.

**Focus meetings will also be held with directly affected stakeholders.**

**Minutes of all meetings will be included in the relevant reports that will be made available for review by I&APs.**

## COVID CONSIDERATIONS

**NB** - to ensure the health and safety of all stakeholders, COVID protocols will be observed at public meetings and during any face to face interactions. This may require attendance numbers at meetings to be limited.

## POPI

It is assumed that in providing your Personal Information to be registered as an I&AP you authorise SLR to retain and use your Personal Information for this and/or other EIA processes and that you confirm your acceptance for SLR to contact you regarding this and/or other EIA processes. SLR warrants that we will not process your Personal Information, other than as permitted or required for the EIA process or as required by law or public policy. SLR will use reasonable, appropriate security safeguards in order to protect Personal Information, and to reasonably prevent any damage to, loss of, or unauthorised access or disclosure of Personal Information, other than as required for EIA processes or as required by any law or public policy. You may request for your Personal Information to be deleted from the database at any time by contacting SLR.

**THANK YOU FOR TAKING THE TIME TO READ THIS DOCUMENT AND FOR YOUR PARTICIPATION**

JINDAL IRON ORE (PTY) LTD

THE PROPOSED MELMOTH IRON ORE PROJECT, KWAZULU-NATAL  
REGISTRATION AND RESPONSE FORM FOR INTERESTED AND AFFECTED PARTIES

JUNE 2021

PARTICULARS OF THE INTERESTED AND AFFECTED PARTY		DATE	
NAME			
COMPANY			
TELEPHONE NUMBER		CELL PHONE NUMBER	
E-MAIL ADDRESS			
POSTAL ADDRESS			
		POSTAL CODE	

Feel free to make your submission in your home language

PLEASE IDENTIFY YOUR INTEREST IN THE PROPOSED PROJECT

PLEASE WRITE YOUR COMMENTS AND QUESTIONS HERE

PLEASE NOTIFY SLR OF ANY OTHER INTERESTED & AFFECTED PARTY THAT SHOULD BE INCLUDED IN THIS S&EIA PROCESS.

(use additional pages if required)

Please return completed forms to:

SLR Consulting, attention: Gugu Dhlamini

Tel: (011) 467 0945

Cell: 072 997 3082

Email: [gdhlamini@slrconsulting.com](mailto:gdhlamini@slrconsulting.com)

Post: PO Box 1596, Cramerview 2060

(Note: If using post, please also contact us telephonically to notify us of your submission).

Registered I&APs will also have an opportunity to comment on all environmental reports.