

**NOTICE OF  
ENVIRONMENTAL IMPACT ASSESSMENT FOR  
THE COZA IRON ORE PROJECT**

**May 2013**

This Background Information Document (BID) provides Interested and Affected Parties (IAP's) with information on the COZA Iron Ore Project and invites them to participate in a public consultation process for the project. You are hereby invited to:

1. Register as an IAP for the COZA Iron Ore Project;
2. To raise concerns and ask questions about the Project; and
3. Attend the Public Consultation Meeting for the Project.

Please send us your initial comments and questions by 31 May 2013. There will be additional opportunities in the future for you to participate and provide comments.

**Should you wish to register or have any issues or environmental concerns, please complete the registration/comment sheet (last page of this document) and return to Synergistics (Zama Khumalo)**

COZA Iron Ore Project

Synergistics Environmental Services (Pty) Ltd

Tel: 011 326-4158

Fax: 011 326-4118

Post: P.O. Box 68821, Bryanston, 2021

Email: [zama@synergistics.co.za](mailto:zama@synergistics.co.za)

**You are also invited to attend an information sharing meeting for the project. Meeting details are as follows:**

Venue: Town Hall, Postmasburg

Date: 23 May 2013

Time: 10h00 –13h00

Please RSVP by 17 May 2013

*(you are welcome to leave a message and we will gladly call you back)*



# Background Information Document

## Environmental Impact Assessment for the COZA Iron Ore Project

**May 2013**

ArcelorMittal South Africa (Pty) Ltd (AMSA) is planning to develop a new opencast iron ore mine, the COZA Iron Ore Mine, in the Tsantsabane Local Municipality of the Northern Cape Province. The project is a green-fields project that will comprise mining from two separate pits located on the farms Driehoekspan 435 (Remaining Extent) and Doornpan 445 (Portion 1). There are a number of environmental authorisations that are required for the proposed development.

AMSA appointed Synergistics Environmental Services (Pty) Ltd (Synergistics) as the independent Environmental Assessment Practitioner to assist with the applications required under South African environmental legislation and to undertake the Environmental Impact Assessment (EIA) process.

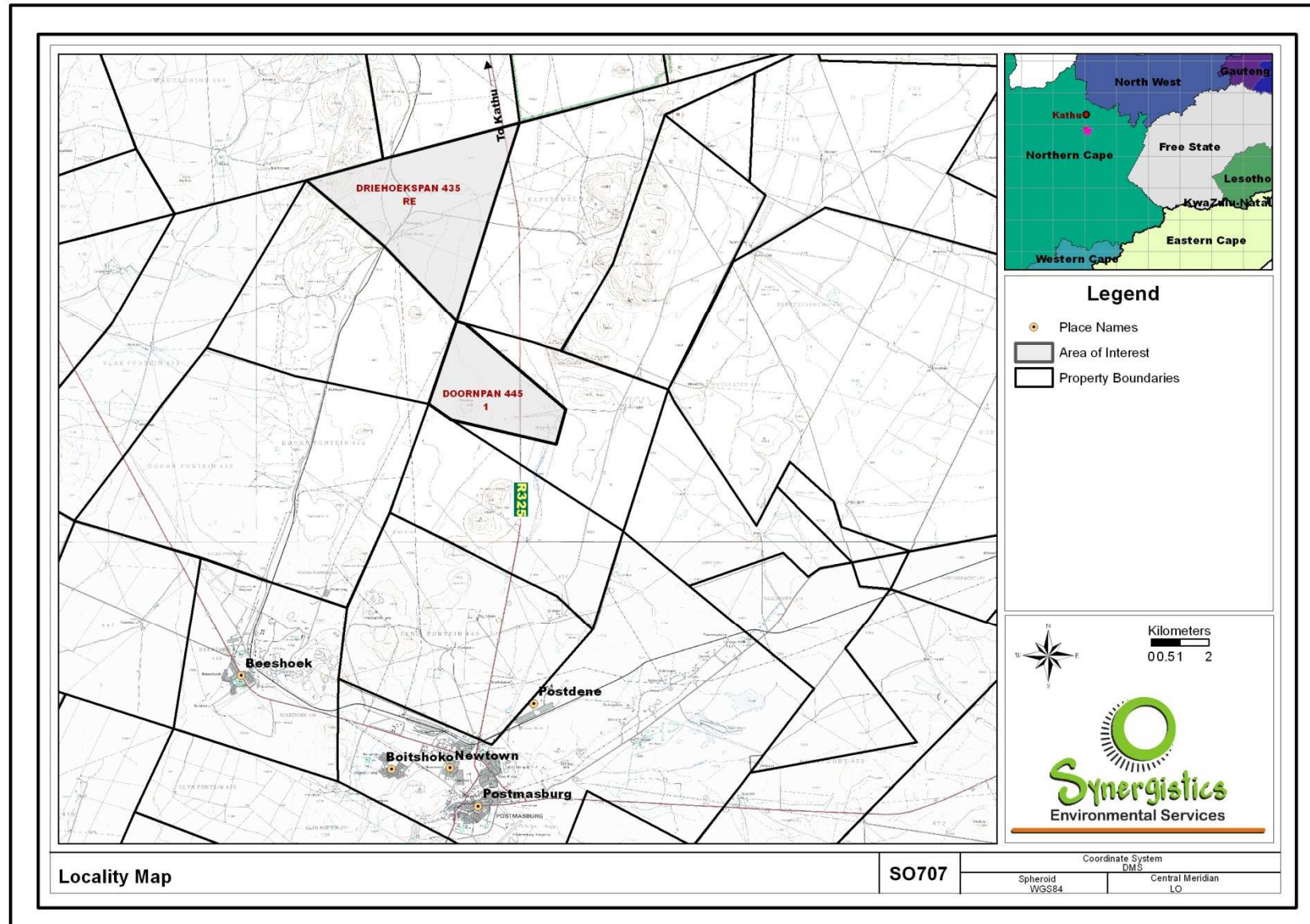
### PURPOSE OF DOCUMENT

This Background Information Document (BID) provides initial information to Interested and Affected Parties (IAP's) and stakeholders about the environmental applications and Environmental Impact Assessment being undertaken for the proposed COZA Iron Ore Project.

This document forms the first part of the public consultation process, which is required as part of the EIA 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

The COZA Iron Ore Project will be located approximately 10 km NNW of Postmasburg on the farms Driehoekspan 435 (remaining Extent) and Doornpan 445 (Portion 1) as indicated on the accompanying map.



## PROJECT DESCRIPTION

### Mining Method

The proposed COZA Iron Ore Project will comprise opencast mining from two separate pits on farms Doornpan and Driehoekspan. Two separate mining right applications will be submitted for the two mining areas. Mining will be undertaken by means of truck and shovel. Topsoil will be stripped and stockpiled and the overburden will be placed on waste rock dumps located near to the pits within the infrastructure area. At full development the COZA Iron Ore Project is expected to produce approximately 500 000 tons of ore per annum with an estimated life of mine of approximately 10 years.

### Mine Plan

Mining activities will be undertaken simultaneously from the two pits. It is estimated that the pits will reach an average depth of between 80 and 100 m below surface. The following preliminary information is available on the surface area to be disturbed by mining activities:

- Total area of the Farm Doornpan is 2837 ha. The total area to be disturbed by the project is estimated to be ~25 ha. Disturbances will include the pit, waste rock dump, run of mine (ROM) stockpile, crushing and screening facilities, access roads and supporting infrastructure.
- Total area of Farm Driehoekspan is 1983 ha with ~80 ha estimated to be affected by similar disturbances as described for Farm Doornpan.

### Processing

Ore processing methods will involve crushing, screening and blending. These processing activities will take place at the ROM stockpile adjacent to the pit. No further process or tailings facilities will be developed at the mine.

### Transportation

Ore will be trucked from site using existing access roads that link to the R325. From the R325 ore will be trucked to existing mines for further processing. A number of alternative processing sites are located within 30 km of the proposed mine site.

Later in the project life, the mined ore may be transported to another local AMSA project (not part of this assessment) that is likely to include the development of a processing and beneficiation plant.

### Supporting Infrastructure Requirements

It is anticipated that minimal supporting infrastructure will be established at the two mine pit sites. The infrastructure that will be developed includes access roads with entrance controls, mine fencing, water management infrastructure (pollution control dams and water supply dams), power supply, a small office, change house, workshops with First Aid Room, packaged sewage treatment, temporary waste storage facilities and areas for the storage of explosives and fuel.

During the construction phase, workers will be accommodated at the temporary construction village on site. Once operations at the mine commence, staff will be accommodated within surrounding towns.

Power for the mine will be sourced from diesel generators during the construction phase and later a power supply line will be constructed to link to an existing Eskom line.

## ENVIRO-LEGAL REQUIREMENTS

The COZA Iron Ore Project will require various environmental approvals prior to commencement with construction or operational activities. Below is the list of applicable legislation and applications for the project.

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

Two mining right applications will be submitted to the Northern Cape Department of Mineral Resources for the mining of iron ore on farms Driehoekspan and Doornpan. An EIA process will be undertaken to determine the overall impact of mining to the environment. An Environmental Management Programme (EMPR) will be developed to manage the impact. The EMRP, to be approved by the DMR, will be a legally binding document that cannot be amended without written consent from the Minister or his delegate (Northern Cape DMR).

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

The EIA Regulations (Government Notice 543 to 546) published in terms of the NEMA, lists activities that potentially could have a detrimental impact on the environment. Activities listed in the EIA Regulations require environmental authorisation prior to commencement. The following listed activities will form part of the COZA Iron Ore Project:

- Clearance of vegetation to allow for mining activities (GNR 545 Activity 15 and GNR 546 Activity 14);
- Construction of haul roads and service roads at the mine (GNR 544 Activities 22 and 47);
- Construction of electricity generation and related distribution infrastructure (GNR 544 Activities 1 and 10);
- Construction of facilities for the storage of dangerous goods i.e. fuel and explosives (GNR 544 Activity 13, GRN 545 Activity 3;
- Construction of water storage and related distribution infrastructure i.e. storage dams and pipelines (GNR 544 Activity 9, 12, 13, 41 and GNR 545 Activity 10, and 19);
- 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 545 Activity 5 and 26.

An application for environmental authorisation has been submitted to the Northern Cape Department of Environment and Nature Conservation (DENC) (Ref: NC/EIA/04/SIY/TSA /POS/DRIE/2013 /NCP/EIA/0000215/2013). An EIA process will be undertaken in support of the application to determine the environmental impact of the abovementioned activities.

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

An application for an integrated water use licence (IWUL) will be submitted to the Northern Cape Department of Water Affairs for the following Section 21 water uses:

- Section 21 (a) for the extraction of groundwater from boreholes;
- Section 21 (b) for the construction of dams and the storage of water in it;
- Section 21 (c) for disturbing drainage lines and pans (impeding or diverting flow);
- Section 21 (f) for discharging water into a water resource through a pipe (possible recharge of groundwater);

- Section 21 (g) for the dumping of waste rock and sewage treatment works;
- Section 21 (i) for disturbing drainage lines and pans (altering the beds and banks of a watercourse); and
- Section 21 (j) for dewatering pits (if required).

An integrated water and waste management plan (IWWMP) will also be submitted in support of the application.

**National Environmental Management: Waste Act (Act No 59 of 2008) (NEM:WA)**

In support of mining, waste management facilities will be required at the mine. A waste management licence application has been submitted to the National Department of Environmental Affairs with the following activities listed in GNR 718 included:

- Category A, Activity 1 and 2: temporary hazardous and general waste storage facilities;
- Category A, Activity 4: waste tyre storage facilities;
- Category A, Activity 5: facilities for the sorting and bailing of recyclable waste;
- Category A, Activity 18: construction of facilities listed under Category A;
- Category B, Activity 7: sewage treatment plant, Category B (7); and
- Category B, Activity 11: construction of facilities listed under Category B.

**National Environmental Management: Air Quality Act (Act No 39 of 2004) (NEM:AQA)**

Should the fuel stored at the mine meet the quantities that require a licence in terms of GNR 248 of NEM:AQA, an application for an atmospheric emissions licence will be submitted to the Department of Environment and Nature Conservation for consideration. The application will be submitted for Category 2 Subcategory 2.2 as listed in GNR 248 of NEM:AQA.



## APPLICATION PROCESS

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

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, mitigatory 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

This involves the review of available project 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 report and final report will be made available for public comment.

### Environmental Management Programme

An environmental management programme (EMPR) will be developed aimed at addressing identified mining impact and developing mitigation measures to reduce environmental risks to acceptable levels. Recommendations of the specialists are used to assist in developing the EMPR.

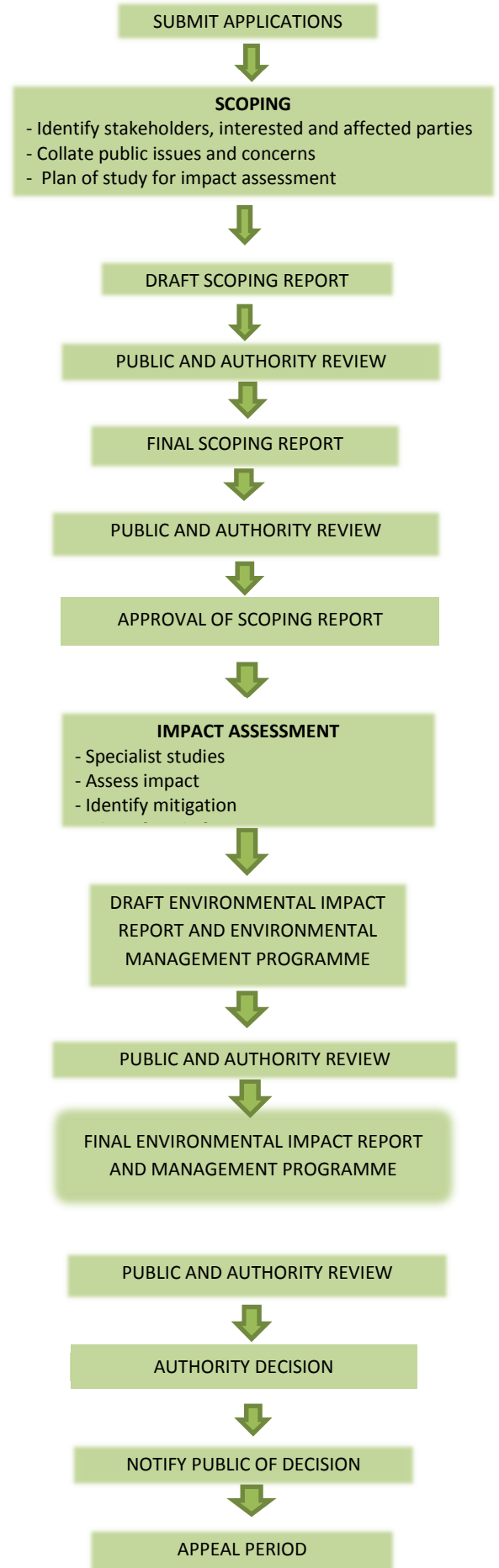


Figure 1: EIA Process for the COZA Iron Ore Project

## PUBLIC INPUT SHEET FOR COZA IRON ORE PROJECT

<b>Name:</b>	
<b>Address:</b>	
<b>Telephone/cell phone:</b>	
<b>Fax:</b>	
<b>E-mail:</b>	
<b>Date:</b>	
<b>Signature:</b>	

**\* Please indicate your preferred method of receiving information.**

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

<b>Name:</b>	
<b>Address:</b>	
<b>Telephone/cell phone:</b>	
<b>Fax:</b>	
<b>E-mail:</b>	

**If you have any direct business, financial, personal or other interests in the approval or refusal of the application, please disclose these:**

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**ISSUES, CONCERNS AND QUESTIONS (use additional pages if required)**

**All initial comments must reach us by 31 May 2013 to be considered in the process.**


**RETURN COMPLETED SHEET TO:**

**Zama Khumalo**  
**Synergistics Environmental Services (Pty) Ltd**  
**Fax: (011) 326-4118**  
**E-mail: zama@synergistics.co.za**  
**Post: P.O. Box 68821, Bryanston, 2021, South Africa**

