

APPROVALS

Jomela Consulting (Pty) Ltd	
<p>.....</p> <p>Cecil Khosa Managing Director <i>(BA (Hons) Geography, M.Sc. Earth Sciences)</i></p>	<p>Date:</p>
<p>.....</p> <p>Mandla Masango Environmentalist - <i>(B.Sc. (Hons) Hydrology and Water resources)</i></p>	<p>Date:</p>

QUALIFICATIONS OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER

Company	Representatives	Qualifications
Jomela Consulting (Pty) Ltd	Cecil Khosa	(i) BA (Hons) Geography; (iii) MSc. Earth Sciences (Environment & Safety)
	Mandla Masango	(i) BSc. (Hons) Hydrology & Water Resources

EXPERIENCE

Mr. Khosa has over 16 years of both regulatory and industry experience in the Mining Rights and Environmental Management disciplines. He boasts a number of academic and professional qualifications obtained in South African Universities. His previous employers include the Department of Minerals and Energy Regional and Head Offices where he started as Environmental Office and ultimately became Deputy Director: Environmental Management at the time of leaving the Department. He also worked as Environmental Manager (also acting as Mining Rights advisory and support role) for Harmony Gold Mining Company Limited at the corporate office in Randfontein, Johannesburg.

He was involved in the Development of the Mineral and Petroleum Resources Development Act, 2002 and its supporting guidelines, such as the Calculation of Quantum for Financial Provision.

Mr. Masango has significant experience with regards to conducting Mining Right Applications, Prospecting Right Applications, Integrated Water Use Licence Applications, Environmental Impact Assessment (EIA), and Hydrological Studies.

He is a member of the Water institute of Southern Africa (WISA) and Ground Water Division of the Geological Society of South Africa (GSSA).

EXECUTIVE SUMMARY

Wide Investments 100 (Pty) Ltd applied for a Mining Right in terms of Section 22 of the Mineral and Petroleum Resources Development Act (MPRDA), 2002 (Act No. 28 of 2002) with the Department of Mineral Resources, Kimberley, Northern Cape Province.

Under the MPRDA regulations, Wide Investments is required to submit an EIA-EMP for the proposed Mashwening Iron Ore Mine.

The proposed project is located approximately 70 km south west from the town of Kuruman and 20 km of Kathu respectively, the latter town locates in the Gamagara Local Municipality of the John Taolo Gaetsewe District Municipality.

The Mashwening Iron Ore Mine planned to utilize the open cast mining method for the whole life span of the mine. This type of mining involves considerable depth and will reach a maximum depth of about 49 m below the earth surface. The method involves pre-stripping of vegetation to clear the pit area, followed by the removal of topsoil and overburden to expose the ore.

The total estimated resource to be mined is 14 million tonnes of ore in the ground. However, the total recoverable and saleable ore for the resource is 6.5 million tones.

Jomela Consulting (Pty) Ltd has been appointed as an independent environmental assessment practitioner to undertake the Scoping (See Figure (i) below) and Environmental Impact Assessment process for the proposed mining project.

The establishment of Mashwening Iron Ore Mine will trigger NEMA Listed Activities. Wide Investments has applied for environmental authorisation to the Northern Cape Department of Environment and Nature Conservation (DENC). The activities applicable to Mashwening Mine are as follows:

GNR 544 Listing Notice 1: Activities requiring an environmental authorisation subject to a Basic Assessment		
Notice	Activity No (s) (in terms of the relevant or notice)	Description of the Listed Activity
GNR 544	Activity 9	The construction of facilities or infrastructure exceeding 1000 metres in length for the bulk transportation of water, sewage or storm water- (i) with an internal diameter of 0.36 metres or more; or (ii) with a peak throughput of 120 litres per second or more, excluding where: a. such facilities or infrastructure are for bulk transportation of water, sewage or storm water or storm water drainage inside a road reserve.

GNR 544	Activity 10	The construction of facilities or infrastructure for the transmission and distribution of electricity (i) outside urban areas or industrial complexes with a capacity of more than 33 but less than 275 kilovolts; or (ii) inside urban areas or industrial complexes with a capacity of 275 kilovolts or more.
GNR 544	Activity 12	The construction of facilities or infrastructure for the off-stream storage of water, including dams and reservoirs, with a combined capacity of 50 000 cubic metres or more, unless such storage falls within the ambit of activity 19 of Notice 545 of 2010.
GNR 544	Activity 13	The construction of facilities or infrastructure for the storage, or for the storage and handling, of a dangerous good, where such storage occurs in containers with a combined capacity of 80 but not exceeding 500 cubic metres;
GNR 544	Activity 22	The construction of a road, outside urban areas, (ii) where no reserve exists where the road is wider than 8 metres.
GNR 545 Listing Notice 2: Activities requiring an environmental authorisation subject to a Scoping and Environmental Impact Assessment.		
GNR 545	Activity 15	Physical alteration of undeveloped, vacant or derelict land for residential, retail, commercial, recreational, industrial or institutional use where the total area to be transformed is 20 hectares or more;
GNR 545	Activity 19	The construction of a dam, where the highest part of the dam wall, as measured from the outside toe of the wall to the highest part of the wall, is 5 metres or higher or where the high-water mark of the dam covers an area of 10 hectares or more
GNR 545	Activity 20	Any activity which requires a mining right or renewal thereof as contemplated in sections 22 and 24 respectively of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002).

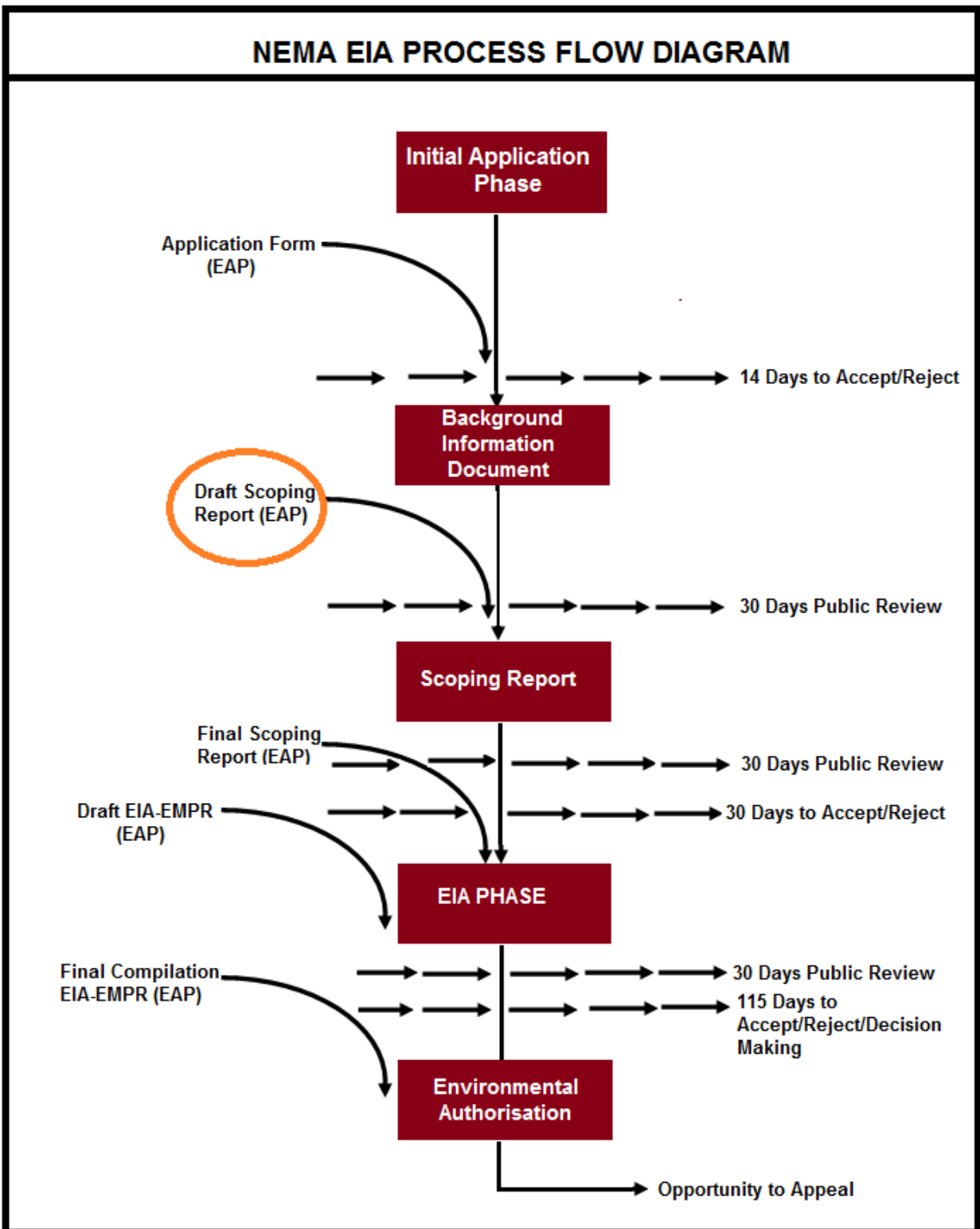


Figure (i): EIA phases.

An Environmental Impact Assessment (EIA) Comprise of several phases. The proposed Mashwening Iron Ore Mine is currently in the **Scoping Phase**.

An Integrated Water Use Licence Application (IWULA) will also be submitted to the Department of Water Affairs since water will be required to operate the mine. Below is a list of water uses to be applied for:

List of Water Use Licensing Application Forms	
FORM NUMBER	TITLE
Part 1 Application Forms: Applicant, Property, and Ownership Information	
DW 758/771	Licensing Part 1: Company, Business or Partnership: National or Provincial Government
Part 2: Application Forms for Water Use License	
DW 773	Licensing Part 2(a): Taking water from a water resources <ul style="list-style-type: none"> • Boreholes • Vaal Gamagara Water Supply Scheme • Pit-Dewatering
DW 774	Licensing Part 2(b): Storing Water <ul style="list-style-type: none"> • Pre-Fabricated Steel Tank
DW 767	Licensing Part 2(g): Disposing of waste in a manner which may detrimentally impact on a water resource <ul style="list-style-type: none"> • Ore stockpiles • Waste rock dump • Overburden stockpiles • Sewage disposal facility • Thickener dam • Clarifier dam
DW 805	Licensing Part 2(j): 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.
Supplementary Forms	
DW 784	Taking water from a water resource: pump technical data.
DW 788	Taking water from a water resource: power generation, industrial or mining use.
DW 790	Storing water: dam and basin technical data <ul style="list-style-type: none"> • Sedimentation basin dimensions • Retention time
DW 901	Property where water use occurs
DW 902	Details of property owner <ul style="list-style-type: none"> • Including title deed
DW 905	Details of waste management facility.

PROJECT INFORMATION

PROPONENT	
NAME OF MINE:	Mashwening Mine
COMPANY:	Wide Investment 100 (Pty) Ltd
REGISTRATION NO.	2007/022620/07
REPRESENTATIVE:	Mzamani Mdaka
PROJECT TITLE:	Draft Scoping Report in terms of Regulation 28 of the NEMA-EIA Regulations and Waste Activities in terms of NEM:WA for the proposed mining of the Mashwening Iron and Manganese Ore deposits on Mashwening 557 farm, Kuruman District, Northern Cape Province.
DMR PRA REF NO:	(NC) 30/5/1/1/2/ (1440) PR
DMR MRA REF NO:	(NC) 30/5/1/2/2/ (10037) MR
DENC REF NO:	NC/EIA/12/JTG/GAE/KAT2/2013 and NCP/EIA/0000242/2013
POSTAL ADDRESS:	P. O. Box 2449 Houghton 2041
PHYSICAL ADDRESS:	19 Periwinkle Complex, Edgar Street Noordwyk Extension 2, Midrand 1687
TEL NO:	(+27) 82 819 5398
FAX NO:	(+27) 11 475 1649
EMAIL:	mzamanim@vodamail.co.za
LOCATION:	The remaining extent of the farm Mashwening 557 located in the Magisterial District of Kuruman, Northern Cape Province.
COMMODITY	(i) Iron and Iron Ore bearing minerals including Haematite, Goethite, Specularite, and Limonite (Code: Fe (B)) (ii) Manganese and Manganese bearing minerals (Code: Mn (B))
LIFE OF MINE	15 Years
HECTARES	1679.5094

CONSULTANT	
COMPANY:	Jomela Consulting (Pty) Ltd
REGISTRATION NO:	2013/023450/07
REPRESENTATIVE:	Mr. Cecil Khosa
DOCUMENT NO:	SR-2013/0002
PHYSICAL ADDRESS:	3695 Platanus Close, Amberfield Valley, Rooihuiskraal, Centurion, 0157
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STRUCTURE OF THE SCOPING REPORT

Section 29(1) of the EIA Regulations requires that the following information is provided:

Section 29(1) of Regulation 385

(a) Details of:

- the EAP who prepared the report;
- the expertise of the EAP to carry out Scoping procedures;

(b) a description of the proposed activity and of any feasible reasonable alternatives that have been identified;

(c) a description of the property on which the activity is to be undertaken and the location of the activity on the property, or if it is:

- a linear activity, a description of the route of the activity; or
- an ocean-based activity, the coordinates where the activity is to be undertaken;

(d) a description of the environment that may be affected where the activity and the manner in which the physical, biological, social, economic and cultural aspects of the environment may be affected by the proposed activity;

(e) an identification of all legislation and guidelines that have been considered in the preparation of the Scoping Report;

(f) a description of environmental issues and potential impacts, including cumulative impacts, that have been identified;

(g) information on the methodology that will be adopted in assessing the potential impacts that have been identified, including any specialist studies or specialised processes that will be undertaken;

(h) details of the public participation processes conducted in terms of Regulation 28(a), including;

- (i) the steps that were taken to notify potentially I&APs of the application;
- (ii) proof that notice boards, advertisements and notices notifying potentially interested and affected parties of the application have been displayed, placed or given;
- (iii) a list of all persons or organisations that were identified and registered in terms of Regulation 57 as I&APs in relation to the application; and
- (iv) a summary of the issues raised by interested and affected parties, the date of receipt and response of the EAP to these issues;

(i) a Plan of Study for EIA which sets out the proposed approach to the environmental impact assessment of the application, which must include:

(i) a description of the tasks that will be undertaken as part of the EIA process, including any specialist reports or specialised processes, and the manner in which such tasks will be undertaken;

- (ii) an indication of the stages at which the competent authority will be consulted;
- (iii) a description of the proposed method of assessing the environmental issues and alternatives, including the option of not processing with the activity; and
- (iv) particulars of the public participation process that will be conducted during the EIA process; and
- (j) any specific information required by the competent authority.

Section 29(2) of Regulation 385

In addition, a scoping report must take into account any guidelines applicable to the kind of activity which is the subject of the application.

LIST OF ABBREVIATIONS

AMSL:	Above Mean Sea Level
BPG:	Best Practice Guidelines
CC:	Close Corporation
DENC:	Department of Environmental and Nature Conservation
DMR:	Department of Mineral Resources
DWA:	Department of Water Affairs
EAP:	Environment Assessment Practitioner
EIA-EMP:	Environmental Impact Assessment- Environmental Management Programme
EMP:	Environmental Management Programme
GDP:	Gross Domestic Product
Ha:	Hectares
IDP:	Integrated Development Plan
IWULA:	Integrated Water Use Licence Application
IWWMP:	Integrated Water and Waste Management Plan
LTD:	Limited
LV-WMA:	Lower Vaal Water Management Area
MAE:	Mean Annual Evaporation
MAP:	Mean Annual Precipitation
MAR:	Mean Annual Runoff
MRA:	Mining Right Application
MPRDA:	Mineral and Petroleum Resources Development Act
MWP:	Mine Work Programme
NWA:	National Water Act (Act No.36 of 1998)
NEMA:	National Environmental Management Act (Act No. 107 of 1998)
NEMAQA:	National Environmental Management: Air Quality Act (Act No. 39 of 2004)
NEMBA:	National Environmental Management Biodiversity Act (Act No. 10 of 2004)
NEMWA:	National Environmental Management: Waste Act (Act No.59 of 2008)
NHRA:	National Heritage Resources Agency
OHSA:	Occupational Health and Safety Act (Act No. 85 of 1993)
PR:	Prospecting Right
PTY:	Property
ROM:	Run of Mine
SAHRA:	South African Heritage Resources Agency

SCS-CN: Soil Conservation Service-Curve Number Model
SMP: Stormwater Management Plan
TWUA: Tshiping Water User Association
VGWS: Vaal Gamagara Water Scheme
WMA: Water Management Area
WUL: Water Use Licence

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