

APPLICATION FORM FOR ENVIRONMENTAL AUTHORISATIONS IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 AND THE NATIONAL ENVIRONMENTAL MANAGEMENT WASTE ACT, 2008 IN RESPECT OF LISTED ACTIVITIES THAT HAVE BEEN TRIGGERED BY APPLICATIONS IN TERMS OF THE MINERAL AND PETROLEUM RESOURCES DEVELOPMENT ACT, 2002 (MPRDA) (AS AMENDED).

AND APPLICATION TO AMEND AN ENVIRONMENTAL MANAGEMENT PROGRAMME IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT NO 107 OF 1998, READ WITH THE NATIONAL ENVIRONMENTAL MANAGEMENT: WASTE ACT, 59 OF 2008 AND THE MINERAL AND PETROLEUM RESOURCES DEVELOPMENT ACT, 28 OF 2002

#### **TSHIPI BORWA MINE**

### IMPORTANT NOTICE

#### Kindly note that:

- 1. As from 8 December 2014, this document serves as the application form, and incorporates the requisite documents that are to be submitted together with the application for the necessary environmental authorisations in terms of the said Acts.
- 2. This application form is applicable while the Mineral and Petroleum Resources Development Amendment Act of 2008 is in effect, as the form may require amendment should the Act be further amended.
- Applicants are required to apply for the necessary water use licence and any other authorisations nor licences to the relevant competent authorities as required by the relevant legislation. Upon acceptance of an application for a right or permit in terms of the MPRDA, applicants will be required to provide evidence to the Regional Manager that a water use licence has been applied for.
- 4. The Regional Manager will respond to the application and provide the reference and correspondence details of the Competent Authority, and in the event that the application for a right or permit is accepted, together with the date by which the relevant environmental reports must be submitted. Notwithstanding anything that may appear to be stated to the contrary in the acceptance letter, the timeframes are in fact aligned and the prescribed timeframes for the submission of documents as regulated by the NEMA regulations must be strictly adhered to.
- 5. The application must be typed within the spaces provided in the form. The sizes of the spaces provided are not necessarily indicative of the amount of information to be provided. Spaces are provided in tabular format and will extend automatically when each space is filled with typing.
- 6. The failure to submit complete information as required in this application form may result in the refusal of the application for an environmental authorisation and consequently of the right or permit applied for.
- 7. This application must be submitted through the SAMRAD online application system of the Department of Mineral Resources under "Other documents to upload".
- 8. Unless protected by law, all information filled in on this application form will become public information on receipt by the competent authority. Any interested and affected party should and shall be provided with the information contained in this application on request, during any stage of the application process.
- 9. Please note that an application fee is payable in terms of the National Environmental Management Act and the National Waste Management Act, which fees must be paid upon lodgement of the application. Should the said application fees not be paid as prescribed the application for a right or permit in terms of the Mineral and Petroleum Resources Development Act cannot be considered to have been made in the prescribed manner and the said application for a right or permit will have to be rejected. In this regard the type of applications must be identified in the table below.

#### PLEASE STATE TYPE OF AUTHORISATIONS BEING APPLIED FOR.

APPLICATION TYPE	APPLICABLE FEE	Mark with an X where applicable
NEMA S&EIR application on its own	R10 000.00	
NEMA BAR application on its own	R 2 000.00	
NEMWA S&EIR application on its own	R10 000.00	
NEMWA BAR application on its own	R 2 000.00	
NEMA S&EIR application combined with NEMWA S&EIR application	R 15 000.00	Х
NEMA BAR application combined with NEMWA BAR application	R 3 000.00	
NEMA S&EIR application combined with NEMWA BAR application	R 11 000.00	

## 1. CONSULTATION BASIC ASSESSMENT AND / OR SCOPING REPORT

## 2. DETAILS OF THE APPLICANT

Project applicant:	Tshipi é Ntle Manganese Mining (Pty) Ltd					
Registration no (if any):	2008/003117/07					
Trading name (if any):	Tshipi é Ntle Manganese Mining (Pty) Ltd					
Responsible Person, (e.g. Director, CEO, etc).:	Chief Executive Office					
Contact person:	Ezekiel Lotlhare					
Physical address:	Farm Mamatwan 331, Portions 16, 17 and 18 Kuruman Magisterial District Northern Cape					
Postal address:	PO Box 652286, Benmore Kathu					
Postal code:	2010 Cell: 082 878 3056					
Telephone:	087 740 4967 Fax:					
E-mail:	office@tshipi.co.za					

## 3. ENVIRONMENTAL ASSESSMENT PRACTITIONER (EAP) INFORMATION

EAP:	Linda Munro					
Professional	Registered as a Professional Scientist with the South African Council for Natural Scientific					
affiliation/registration:	Professions					
Contact person (if different from EAP):	Linda Munro / Alex Pheiffer					
Company:	SLR Consulting (Africa) (Pty) Ltd					
Physical address:	SLR House (Block 7)					
	Fourways Manor Office Park					
	Cnr Roos and Macbeth Street					
	Fourways, Johannesburg, 2060					
Postal address:	PO Box 1596, Cramerview					
Postal code:	2060 Cell: 083 335 1871					
Telephone:	011 467 0945 Fax: 011 467 0978					
E-mail:	Imunro@slrconsulting.com apheiffer@slrconsulting.com					

If an EAP has not been appointed please ensure that an independent EAP is appointed as stipulated by the NEMA Regulations, prior to the commencement of the process.

The declaration of independence and the Curriculum Vitae (indicating the experience with environmental impact assessment and relevant application processes) of the EAP must also be attached as **Appendix 1**. A copy of the Curriculum Vitae, proof of professional affiliation and the EAP declaration are attached in Appendix 1.

## 4. PROJECT DESCRIPTION

Farm Name:	Portion 8 of the farm Mamatwan 331;
	Portion 16 (Portion of Portion 1) of the farm Mamatwan 331;
	Portion 17 (Portion of Portion 2) of the farm Mamatwan 331;
	Portion 18 (Portion of Portion 3) of the farm Mamatwan 331; and
	The Remaining Extent of the farm Moab 700.
	The proposed East Waste Rock Dump (WRD) extension area is approximately 13 ha;
	The proposed West WRD extension area is approximately 142 ha (including access
	roads);
	The proposed 11 kV powerline is approximately 2,3 km in length and will require a 22 m servitude; and
Application area (Ha)	The proposed conveyor falls within the existing mining area.
Magisterial district:	Located within Kuruman Magisterial District in the John Taolo Gaetsewe District
	Municipality
Distance and direction from nearest	The Tshipi Borwa Mine is located approximately 20km south west from the town of
town	Hotazel.
21 digit Surveyor General Code for	• TO0000000033100016
each farm portion	• TO0000000033100017
	• TO0000000033100018
	• TO0000000033100008
	• TO0000000000000000
Locality map	Regional map and locality map at a scale not smaller than 1:250000 are provided in
	Appendix 2.
Description of the overall activity.	Tshipi é Ntle Manganese Mining (Tshipi) currently operates the open cast manganese
(Indicate Mining Right, Mining Permit,	Tshipi Borwa Mine located on Portions of the farms Mamatwan 331 (mining right and
Prospecting right, Bulk Sampling,	surface use areas) and Moab 700 (surface use area), in the John Taolo Gaetsewe
Production Right, Exploration Right,	District Municipality and Joe Morolong Local Municipality in the Northern Cape
Reconnaissance permit, Technical co-	Province (Figure 1 and Figure 2 in Appendix 2).
operation permit, Additional listed activity)	Tabini surrently holds a mining right (NC/20/E/1/2/2/0206MB) (MB) and an
uouvity,	Tshipi currently holds a mining right (NC/30/5/1/2/2/0206MR) (MR) and an environmental management programme report (EMPr) approved by the Department of
	Mineral Resources (DMR). In terms of the National; Environmental Management Act
	107 of 1998 read with the Mineral and Petroleum Resources Development Act 28 of
	2002, the approved EMPr (SLR, August 2017) is now deemed to be an EA. In addition
	Tshipi holds the following authorisations:
	EA number NC/KGA/KATHU/37/2008 issued by the Department of Tourism,     Excitonement and Concentration in the Northern Concentration is the Northern Concentration in the Northern Co
	Environment and Conservation in the Northern Cape Province, as it was known then (currently the Department of Environment and Nature Conservation (DENC))
	authorising Listed Activities in terms of Section 24 of the National Environmental
	Management Act, 107 of 1998 (NEMA), as read with the Environmental Impact
	Assessment (EIA) Regulations (GN R982 of 4 December 2014 as amended);
	• EA number 30/5/1/2/2/206/0083M issued by the DMR on 31 January 2018
	authorising Listed Activities and amending the approved layout plan of Borwa
	Mine in terms of Section 24 of NEMA, as read with the EIA Regulations of 2014, as amended; and
	<ul> <li>Water Use licence (WUL) (10/D41K/AGJ/1735) issued by the Department of</li> </ul>
	• Water Ose licence (WOL) (10/D41K/AG3/1733) issued by the Department of Water Affairs (currently the Department of Water and Sanitation (DWS))
	authorising water uses in terms of Section 21 of the National Water Act (Act No.
	36 of 1998).
	Tshipi now proposes to:
	• extending the Tshipi East Waste Rock Dump (WRD) in a south-easterly direction
	towards the mining right boundary and finally to ultimately merge with the nearby
	Mamatwan WRD, essentially filling the narrow void between these two WRDs;
	<ul> <li>extending the Tshipi West WRD in a south-westerly direction onto a portion of Dection 8 of the form Manatuse 221 in order to provide additional storage</li> </ul>
	Portion 8 of the farm Mamatwan 331, in order to provide additional storage capacity for waste rock;
	capacity IUI waste IUCN,

• constructing an 11kV overhead powerline from an approved Eskom sub-station still to be built, along the southern boundary of Portion 8 onto the existing mining right area, and connecting this new line into the main distribution centre on the mine; and
• constructing an overland conveyor system between the existing crushed product ore stockpiles at the secondary crushing and screening plant, to the existing product ore stockpiles located in close proximity to the train load-out station.

## 5. ACTIVITIES TO BE AUTHORISED

(Please provide copies of Environmental Authorisations obtained for the same property as **Appendix 3**). The existing Tshipi EAs, MR and IWUL are included in Appendix 3.

(For an application for authorisation please indicate more than one listed activity that, together, make up one development proposal. All the listed activities pertaining to this application must be included. Please note that any authorisation that may result from this application will only cover activities specifically applied for). Attach a proposed site plan, drawn to a scale acceptable to the competent Authority, showing the location of all the activities to be applied for in **Appendix 4**). The infrastructure layout is included in Appendix 4.

NAME OF ACTIVITY (E.g. For prospecting - drill site, site camp, ablution facility, accommodation, equipment storage, sample storage, site office, access route etcetc E.g. for mining excavations, blasting, stockpiles, discard dumps or dams, Loading, hauling and transport, Water supply dams and boreholes, accommodation, offices, ablution, stores, workshops, processing plant, storm water control, berms, roads, pipelines, power lines, conveyors, etcetcetc.)	Aerial extent of the Activity Ha or m <sup>2</sup> (Will be verified during the EIA phase)	LISTED ACTIVITY (Mark with an X where applicable or affected).	APPLICABLE LISTING NOTICE GNR 983 (amended) GNR 984 (as amended) GNR 985 (as amended) GNR 921 (as amended)	WASTE MANAGEMENT AUTHORISATION (Indicate whether an authorisation is required in terms of the Waste Management Act). (Mark with an X)
Selective clearing of vegetation in areas designated for the proposed WRD extensions and supporting infrastructure. Stripping and stockpiling topsoil and sub-soil. Cleaning, grubbing and bulldozing activities. Digging trenches and foundations. Establishment of storm water controls (channels, berms) as per storm water management plan.	Approximately (~) 13 ha East WRD extension. Approximately ~142 ha West WRD extension. Powerline ~ 2,5 km in length with 22 m servitude	X	NEMA: GNR 983 (Activity 27). NEMA: GNR 983 (Activity 28). NEMA: GNR 983 (Activity 30). NEMA: GNR 984 (Activity 15). NEMA: GNR 984 (Activity 17).	n/a
Establishment of haul and maintenance roads and widening of certain existing haul and access roads.	This forms part of the overall ~13 ha of disturbance for the East WRD extension and ~142 ha of disturbance for the West WRD extension.	X	NEMA: GNR 983 (Activity 24). NEMA: GNR 983 (Activity 56). NEMA: GNR 984 (Activity 17).	n/a
Stockpiling waste rock on WRD extension areas and use of waste rock to establish haul roads and berms.	This forms part of the overall ~13 ha of disturbance for the East WRD extension and ~142 ha of disturbance for the West WRD extension.	X	NEMA: GNR 983 (Activity 34). NEMA: GNR 984 (Activity 6). NEMA: GNR 984 (Activity 17).	NEM:WA: GNR 921 (Category B Activity 10). NEM:WA: GNR 921 (Category B Activity 11).
Removal of waste by contractor for recycling, re-use and/or final disposal at an off-site licenced facility.	n/a	n/a	n/a	n/a
Establishment of 11kV overhead powerline.	Approximately 2,5 km in length with a 22 m servitude.	n/a	n/a	n/a
Construct an overland conveyor system between the existing crushed product ore stockpiles at the secondary crushing and screening plant, to the existing product ore stockpiles located in proximity of the train load-out station.	Approximately 1,2 km in length.	n/a	n/a	n/a
Establishment of supporting infrastructure: Fencing; Lighting; Topsoil stockpiles and berms; Security gate and office; Portable ablution facilities; Potable water tank.	This forms part of the overall ~13 ha of disturbance for the East WRD extension and ~ 142 ha of disturbance for the West WRD extension and powerline ~2,5 km in length with 22 m servitude	n/a	n/a	n/a

#### 6. PUBLIC PARTICIPATION

Provide details of the public participation process proposed for the application as required by Regulation.

#### Details of the Public Participation process to be followed.

### 6.1.1. IDENTIFICATION OF INTERESTED AND AFFECTED PARTIES TO BE CONSULTED

IDENTIFICATION CRITERIA		Mark with an X where applicable	
	YES	NO	
Will the landowner be specifically consulted?	Х		
Will the lawful occupier on the property other than the Landowner be consulted?	Х		
Will a tribal authority or host community that may be affected be consulted?	Х		
Will recipients of land claims in respect of the area be consulted?	Х		
Will the landowners or lawful occupiers of neighbouring properties been identified?	Х		
Will the local municipality be consulted?	Х		
Will the Authority responsible for power lines within 100 metres of the area be consulted?	Х		
Will Authorities responsible for public roads or railway lines within 100 metres of the area applied for be consulted?	X		
Will authorities responsible for any other infrastructure within 100 metres of the area applied for be consulted? (Specify)	X		
Will the Provincial Department responsible for the environment be consulted?	Х		
Will all of the parties identified above be provided with a description of the proposed mining /prospecting operation as referred above?	X		
Will all the parties identified above be requested in writing to provide information as to how their interests (whether it be socio-economic, cultural, heritage or environmental) will be affected by the proposed mining project?	X		
Other, Specify Not applicable		·	

#### 6.1.2. DETAILS OF THE ENGAGEMENT PROCESS TO BE FOLLOWED

Steps to be taken to notify interested and affected parties (Describe the process to be undertaken to consult interested and affected parties including public meetings and one on one consultations. NB the affected parties must be specifically consulted regardless of whether or not they attend public meetings. Photographs notice boards, and copies advertisements and noti notifying potentially interested affected parties of the propo application must be attached Appendix 5)

#### PROVIDE DESCRIPTION HERE

The proposed public consultation process is in accordance with the requirements of Part 6 of the NEMA EIA Regulations, 2014 (as amended) and is outlined in Table 1 below. The aim of the public consultation process is to co-ordinate a process through which interested and affected parties (I&APs) are informed of the environmental authorisation, waste management licence and other processes and are provided with an opportunity to provide input into the assessment and proposed mitigation measures.

#### Table 1: Proposed Public Participation Process

nded	Task	Description
s of	Notification - regulato	ry authorities and IAPs
of tices	DMR pre-application meetings	A pre-application meeting was held with the DMR in Kimberley on 11 April 2017. This was followed up with a meeting held on 8 August 2017.
and osed d as	DMR application	In addition to this application, Tshipi will submit an MPRDA Section 102, read with a NEMA EIA Regulations EMPr amendment application to amend the mine's approved EMPr.
	Department of Water and Sanitation (DWS)	A meeting will be held with DWS in due course to address the water use licence application.
	Land claims commissioner consultation	The Department of Rural Development and Land Reform has indicated that no land claims have been lodged on the farms Moab 700 and Mamatwan 331. The proof of correspondence is attached in Appendix 5.
	Background Information Document (BID)	A BID was compiled and distributed in August 2017 to inform I&APs and authorities about the proposed project and the means of submitting written comments and or objections in the environmental authorisation, waste management licence, EMPr amendment and WULA processes. A registration and response form was attached to the BID, which provided I&APs with an opportunity to submit their names, contact details and comments on the proposed project. This BID was translated into Afrikaans. A BID update was subsequently distributed in May 2018.
	Site notices	SLR placed laminated site notices (in English and Afrikaans) at key conspicuous positions in and around the Tshipi Borwa Mine, as well as in nearby towns. Notice of an update to the set of public participation notices was advertised in

		May 2019 Distagraphic practic included in Appendix 5						
	Newspaper	May 2018. Photographic proof is included in Appendix 5. Block advertisements were placed in two local newspapers in September 2017						
	advertisements	and an update was publicised in May 2018. The notices were placed in the						
		Kalahari Bulletin and the Kathu Gazette; copies of the adverts are included in						
		Appendix 5.						
	Information sharing n							
	General Public	A general public meeting was held on 14 September 2017. The purpose of the						
	Meeting	meeting was :						
		to provide an overview of the proposed project;						
		<ul> <li>to provide an overview of the environmental assessment processes that will be undertaken for the proposed project to support this application, including an MPDA Section 102 amendment application and a water use licence application;</li> </ul>						
		<ul> <li>to provide an overview and obtain input on the existing status of the environment;</li> </ul>						
		• to outline and obtain input on impacts identified for the proposed project;						
		• to record any comments and issues raised. These issues and concerns will be used to inform the Plan of Study for the EIA Phase; and						
		to agree on the way forward and the logistics for report distribution.						
	Regulatory	A copy of the general public meeting and associated attendance registers is included in Appendix 5. A regulatory authorities meeting was scheduled for 14 September 2017. The						
	authorities meeting	<ul> <li>A regulatory authorities meeting was scheduled for 14 September 2017. The purpose of the meeting was as follows:</li> <li>to provide an overview of the proposed project;</li> </ul>						
		<ul> <li>to provide an overview of the proposed project;</li> <li>to provide an overview of the environmental assessment process that will be</li> </ul>						
		undertaken for the proposed project;						
		<ul> <li>to provide an overview and obtain input on the existing status of the environment;</li> </ul>						
		to outline and obtain input on impacts identified for the proposed project;						
		<ul> <li>to record any comments and issues raised. These issues and concerns will be used to inform the Dian of Chudu for the DIA Deace and</li> </ul>						
		<ul> <li>be used to inform the Plan of Study for the EIA Phase; and</li> <li>to agree on the way forward and the logistics for report distribution.</li> </ul>						
		• to agree on the way forward and the logistics for report distribution.						
		None of the invited authorities were able to attend the meeting, despite receiving adequate notice. An additional meeting will be planned in due course should any regulatory authorities wish to attend.						
	Public and regulatory review of reports							
	Public review of the	These reports will be made available for public review and comment for a period						
	Scoping Report as	of (for 30 days) at designated venues that have been used in previous public						
	well as the EIA and EMPr amendment	consultation processes for the Tshipi Borwa Mine. Summaries of the reports will be made available to all I&APs registered on the public involvement database via						
	report	email, fax, post and hand delivery. I&APs will be notified when the reports become available for review via SMS. Electronic copies of the reports will be						
		made available on request. Further to this, a full copy of the report will also be						
		made available on hequest. Further to this, a full copy of the report will also be made available on the SLR website https://slrconsulting.com/za/slr-documents)						
	Regulatory authority	These reports will be made available for review to all regulatory authorities						
	review of the Scoping	registered on the public involvement database for a period of 30 days. In this						
	Report as well as the	regard, electronic (where possible) and hard copies of the reports will be						
	EIA and EMPr	delivered to each of the regulatory authorities included on the public involvement database.						
	amendment report Submission of the	These reports will be updated to include any comments received during the						
	Scoping Report and	review of the report by I&APs and regulatory authorities. The updated reports will						
	EIA and EMPr	be made available to the DMR thereafter for consideration.						
	amendment report							
Information to be	Compulsory							
provided to Interested								
and Affected Parties.	List of activities to be authorised							
	Scale and extent of activities to be authorised							
		f activities to be authorised (e.g. surface disturbance, dust, noise, drainage, fly						
	rock etc.)							
	The duration of th	-						
	<ul> <li>Sufficient detail o</li> </ul>	f the intended operation to enable them to assess what impact the activities						

	will have on them or on the use of their land)
	Other, specify: Not applicable
Information to be required	Compulsory
from Interested and Affected Parties.	<ul> <li>To provide information on how they consider that the proposed activities will impact on them or their socio-economic conditions</li> <li>To provide written responses stating their suggestions to mitigate the anticipated impacts of each activity</li> <li>To provide information on current land uses and their location within the area under consideration</li> <li>To provide information on the location of environmental features on site to make proposals as to how and to what standard the impacts on site can be remedied. requested to make written proposals</li> <li>To mitigate the potential impacts on their socio economic conditions to make proposals as to how the potential impacts on their infrastructure can be managed, avoided or remedied).</li> <li>Other, Specify: Not applicable</li> </ul>

# 7. Description of the assessment process to be undertaken

ITEM	DESCRIPTION					
Environmental attributes. Describe how the Environmental attributes associated with the development footprint will be determined.	The environmental attributes of the areas in which the proposed activities will be undertaken, will be determined through consideration of the site layout, site visits and specialist information (where required).					
	Input on the environmental attributes will be obtained from I&APs and regulatory authorities during the consultation process and as part of the review of the Scoping Report and EIA and EMPr amendment report.					
Identification of impacts	Environmental and social	impact	s associated with the development of the activities will be			
and risks. (Describe the process that will be used to	determined through site visit	ts, the s	ite layout and specialist studies (where relevant).			
identify impacts and risks.		Itation	social impacts will be obtained from I&APs and regulatory process and as part of the review of the Scoping report and EIA			
Consideration of	The main project alternative	s to be	considered include:			
alternatives. Describe how alternatives, and in particular the alternatives to the proposed site	<ul><li>Property or locality</li><li>The "no-go" altern</li></ul>					
layout and possible alternative methods or technology to be applied will be determined.	This will be detailed further i					
Process to assess and rank impacts. Describe the process to be undertaken to identify, assess and rank the impacts and risks each individual activity.	assessment methodology e impacts, the severity of imp may cause irreplaceable los	enables bacts (ir ss of re	ssment of environmental issues is set out in the table below. This the assessment of environmental issues including: cumulative including the nature of impacts and the degree to which impacts sources), the extent of the impacts, the duration and reversibility mpact occurring, and the degree to which the impacts can be			
	Note: Part A provides the defin duration) and impact significar	nition for nce (the The inte	sed using the following criteria: determining impact consequence (combining severity, spatial scale and overall rating of the impact). Impact consequence and significance are rpretation of the impact significance is given in Part D.			
	Definition of SIGNIFICANCE		Significance = consequence x probability			
	Definition of CONSEQUENC		Consequence is a function of severity, spatial extent and duration			
	Criteria for ranking of the SEVERITY of environmental impacts         H         Substantial deterioration (death, illness or injury). Reconsidered to the second sec					
		L	Minor deterioration (nuisance or minor deterioration). Change not measurable / will remain in the current range. Recommended level will never be violated. Sporadic complaints.			
		L+	Minor improvement. Change not measurable/ will remain in the current range. Recommended level will never be violated. Sporadic complaints.			

ITEM	DESCRIPTION							
			M+	Modera	ate in	provement. Will	be within or bett	ter than the
				recommended level. No observed reaction. + Substantial improvement. Will be within or better				
			H+					ter than the
			I			d level. Favourable		
	Criteria for ranki		L				project life. Short ter	
	DURATION of impa	acts	M H			ver time. Life of the p Beyond closure. Lor	project. Medium term	
	Criteria for ranki	ing the	L			/ithin the site bounda		
	SPATIAL SCAL					- Far beyond site boundary. Regional/ national		
	impacts		H					
				madd	Jiouu		andary. Rogionali na	
	PART B: DETERMINING CONSEQUENCE SEVERITY = L							
	DURATION	DURATION Long term H				Medium	Medium	Medium
		Mediun			М	Low	Low	Medium
		Short to			L	Low	Low	Medium
		<u> </u>		SEVERIT	<b>Y = M</b>			
	DURATION	Long te			Н	Medium	High	High
		Mediun	n term		М	Medium	Medium	High
		Short te			L	Low	Medium	Medium
				SEVERI				
	DURATION	Long te			H	High	High	High
		Mediun			М	Medium	Medium	High
		Short te	erm		L	Medium	Medium	High
		<u> </u>				L Langer I	M	H
						Localised	Fairly widespread	Widespread
						Within site boundary	Beyond site boundary	Far beyond site
						Site	Local	boundary
								Regional/ national
		PAR	SPATIAL SCALE PART C: DETERMINING SIGNIFICANCE					
	PROBABILITY		e/ Contin		Η	Medium	Medium	High
	(of exposure to	Possib	le/ freque	ent	М	Medium	Medium	High
	impacts)	Unlikel	y/ seldon	n	L	Low	Low	Medium
						L	М	H
						(	CONSEQUENCE	
			PART D	: INTERI	PRETA	TION OF SIGNIFIC	ANCE	
	Significance					ideline		
	High			lt wo	ould in		ion regardless of	any possible
	Medium			mitiga It sho		e an influence on th	e decision unless it is	mitigated
	Low					ve an influence on th		muyateu.
		um and l	= low or					
Contribution of anasialist	*H = high, M= mediu						sees the impacts of	the activities
Contribution of specialist	The results of the s							
reports Describe how specialist reports, if required,	The relevant informamendment report							
will be taken into consideration	impacts.	anu WI	11 DE US		σvei∪μ			environmental
and inform the impact	impuoto.							
identification, assessment and								
remediation process.								
Determination of impact	The EIA project te	am (inc	ludina t	he relev	ant s	pecialists) will det	ermine the impact	management
management objectives	objectives in cons							
and outcomes. Describe how	guidelines will also							
impact management objectives will	galaomioo wiii also	20 00113	uli					
be determined for each activity to								
address the potential impact at								
source, and how the impact								
management outcomes will be aligned with standards.								
	i							

## 8. OTHER AUTHORISATIONS REQUIRED

	Mark with an X where applicable				
LEGISLATION	AUTHORISATION REQUIRED		APPL	APPLICATION	
			SUBMITTED		
	YES	NO	YES	NO	
SEMAs					
National Environmental Management: Air Quality Act		Х			
National Environmental Management: Biodiversity Act	Х			Х	
National Environmental Management: Integrated Coastal		Х			
Management Act					
National Environmental Management: Protected Areas Act		Х			
National Environmental Management: Waste Act	Х		Х		
National legislation					
Minerals and Petroleum Development Resources Act	Х		Х		
National Water Act	X			Х	
National Heritage Resources Act		Х			
Others: Please specify Mine Health and Safety Act, Explosives		Х			
Act, National Roads Act, National Railway Safety Regulator Act.					

Please provide proof of submission of applications in **Appendix 5**. A Water Use Licence Application will be submitted in due course after the relevant specialist studies and design work have been completed.

In the event that an authorization in terms of the National Environmental Waste Management Act is required for any of the activities applied for please state so clearly in order for such an authorisation to be considered as part of this application. Yes. The waste management activities listed below must also be authorised:

NEM:WA LISTED ACTIVITIES GNR 921			
Category B4	The construction of a facility for a waste management activity listed in Category B of this Schedule (not in		
Activity 10	isolation to associated waste management activity).		
Category B4	The establishment or reclamation of a residue stockpile or residue deposit resulting from activities which		
Activity 11	require a mining right, exploration right or production right in terms of the Mineral and Petroleum		
	Resources Development Act, 2002 (Act No. 28 of 2002).		

### 9. DRAFT EMPr

For consultation purposes, provide a high level approach to the management of the potential environmental impacts of each of the activities applied for.

A high level approach to the management of environmental impacts is provided in the table below. More detail on the proposed management measures will be included in the EIA and EMPr amendment report.

ACTIVITIES (E.g. For prospecting - drill site, site camp, ablution facility, accommodation, equipment storage, sample storage, site office, access route etcetc. E.g. for mining,- excavations, blasting, stockpiles, discard dumps or dams, Loading, hauling and transport, Water supply dams and boreholes, accommodation, offices, ablution, stores, workshops, processing plant, storm water control, berms, roads, pipelines, power lines, conveyors, etcetc)	PHASE (of operation in which activity will take place). State; Planning and design, Pre-Construction' Construction, Operational, Rehabilitation, Closure, Post closure.	SIZE AND SCALE (of Disturbance) (volumes, tonnages and hectares or m <sup>2</sup> )	<b>TYPICAL MITIGATION MEASURES</b> (Eg, storm water control, dust control, noise control, access control, rehabilitation etc, etc,)*	COMPLIANCE WITH STANDARDS (A description of how each of the recommendations herein will comply with any prescribed environmental management standards or practices that have been identified by Competent Authorities)
Selective clearing of vegetation in areas designated for the proposed WRD extensions and supporting infrastructure. Stripping and stockpiling topsoil and sub-soil. Cleaning, grubbing and bulldozing activities. Digging trenches and foundations. Establishing stormwater controls (channels, berms) as per storm water management plan.	Operation Decommissioning Closure	This forms part of the overall 13 ha of disturbance for the East WRD extension and ~ 142 ha of disturbance for the West WRD extension and 2,5 km powerline with 22 m servitude.	<ul> <li>Access control</li> <li>Implementation of soil conservation management plan and waste management plans</li> <li>Biodiversity controls, management plan and monitoring</li> <li>Appropriate design and development of stormwater controls</li> <li>Appropriate design and development of groundwater controls, groundwater monitoring and compensation for loss</li> <li>Noise attenuation measures</li> </ul>	Comply with the conditions of the Water Use Licence for water uses in terms of Section 21 of the National Water Act No. 36 of 1998. Compliance with GNR 704 of 4 June 1998: Regulations on
Establishment of haul and maintenance roads and widening of some existing haul and access roads. Stockpiling waste rock on WRD extension areas and use of waste rock to establish haul roads and berms.	Operation Decommissioning Closure Operation Decommissioning Closure		<ul> <li>Note attendation measures</li> <li>Dust control and monitoring</li> <li>Visual controls</li> <li>Avoidance of heritage resources</li> <li>Implementation of procurement programme and skills development programme</li> <li>Implementation of a health policy, monitoring the development</li> </ul>	use of water for mining and related activities aimed at the protection of water resources, in respect of the proposed clean and dirty water separation system and the
Removal of waste by contractor for recycling, re-use and/or final disposal at an off-site licenced facility. Construction of an 11kV overhead powerline	Operation Decommissioning Closure Operation	Approximately 2,5 km in length	<ul> <li>Implementation of a health policy, monitoring the development of informal settlements</li> <li>Closure planning to incorporate measures to achieve future land use plans</li> </ul>	design of dirty water systems not to spill more than once in 50 years.
from an approved Eskom sub-station to the existing mine power distribution centre	Decommissioning Closure	with a 22 m servitude.	Implementation of an emergency response procedure	The National Atmospheric Emission Reporting
Construction of an overland conveyor network from the existing secondary crushing and screening plant to the existing manganese product stockpile	Operation Decommissioning Closure	Approximately 1,2 km in length.		Regulations (GN 275 of 2 April 2015) published in terms of the National Environmental Management: Air Quality Act
<ul> <li>Establishment of supporting infrastructure:</li> <li>Fencing;</li> <li>Lighting;</li> <li>Topsoil stockpiles and berms;</li> <li>Security gate and office;</li> </ul>	Operation Decommissioning Closure	This forms part of the overall 13 ha of disturbance for the East WRD extension and ~ 142 ha of disturbance for the West WRD extension and 2,5 km powerline with 22 m constitute		39 of 2004, require holders of mining rights to submit annual reports onto the National Atmospheric Emissions Inventory System (NAEIS).
<ul><li>Portable ablution facilities;</li><li>Potable water tank.</li></ul>		with 22 m servitude.		Comply with the Regulations Regarding the Planning and Management of Residue Stockpiles and Residue Deposits from a Prospecting,

ACTIVITIES	PHASE	SIZE AND SCALE	TYPICAL MITIGATION MEASURES	COMPLIANCE WITH
(E.g. For prospecting - drill site, site camp, ablution facility, accommodation, equipment storage, sample storage, site office, access route etcetcetc E.g. for mining excavations, blasting, stockpiles, discard dumps or dams, Loading, hauling and transport, Water supply dams and boreholes, accommodation, offices, ablution, stores, workshops, processing plant, storm water control, berms, roads, pipelines, power lines, conveyors, etcetcetc.)	(of operation in which activity will take place). State; Planning and design, Pre-Construction' Construction, Operational, Rehabilitation, Closure, Post closure.	(of Disturbance) (volumes, tonnages and hectares or m <sup>2</sup> )	(Eg, storm water control, dust control, noise control, access control, rehabilitation etc, etc)*	STANDARDS (A description of how each of the recommendations herein will comply with any prescribed environmental management standards or practices that have been identified by Competent Authorities)
				Mining, Exploration or Production Operations, GNR.632 of 2015.

## 10. CLOSURE PLAN

In the space provided under each heading below, please provide a high level description of the plan for closure and the information that will be provided in the draft EMPr accompanying draft basic assessment report or			
environmental impact reports of Baseline environment Describe how the baseline environment will be determined with the input of interested and affected parties and due cognizance of the current land uses and or existing biophysical environment	The baseline environment will be assessed and characterised by means of site observations and relevant specialist studies. I&APs will have an opportunity to provide input on the baseline environment assessment through the review of the EIA and EMPr amendment report.		
Closure objectives Describe the closure objectives and the extent to which they will be aligned to the baseline environment	<ul> <li>The closure objectives for the proposed project will be determined by taking into account the pre-mining characteristics of the environment in order to ensure that the closure objectives strive to achieve a condition approximating this initial natural state as far as possible. The preliminary closure objectives are to <ul> <li>maintain a relatively flat topography or a topography that emulates the existing ground lines;</li> <li>maintain a functioning ecosystem;</li> <li>moderate groundwater quality;</li> <li>preserve the quiet rural/urban environment;</li> <li>ensure that environmental damage is minimised to the extent that it is acceptable to all parties involved;</li> <li>ensure that the land is rehabilitated to achieve a condition approximating its natural state, or so that the envisaged end use of grazing is achieved;</li> <li>ensure that mine closure is achieved efficiently, cost effectively and in compliance with the law; and</li> <li>ensure that the social impacts resulting from mine closure are managed in such a way that negative socio-economic impacts are minimised.</li> </ul> </li> </ul>		
Rehabilitation Plan Describe the scale and aerial extent of the prospecting or mining listed activities to be authorised, including the anticipated prospecting or mining area at the time of closure, and confirm that a site rehabilitation plan drawn to a suitable scale will be provided in the draft EMPr to be submitted together with the draft EIR or Basic Assessment Report as the case may be.	The area of disturbance is estimated to be approximately 13 ha for the East WRD extension, approximately 142 ha for the West WRD extension and approximately 2,5 km powerline with 22 m servitude. A mine closure plan will be included in the EIA and EMPr amendment report.		
Rehabilitation Cost Describe how the rehabilitation cost will be determined and provide a preliminary estimate thereof	The rehabilitation and closure costing will be determined in line with the Financial Provision Regulations as amended (GN R1147 of 20 November 2015). At this stage of the process it is not possible to provide a preliminary estimate of the rehabilitation cost given that the site layout has not been finalised. The closure cost amount including the closure plan report will be provided in the EIA and EMPr report. <u>Note</u> : to the extent that the Proposed Financial Provision Regulations, as published in GN R1228 of 10 November 2017 have finally been Gazetted and have replaced GN R1147, the new regulations will be used.		
Decommissioning Considering that rehabilitation must take place upon cessation of an activity, describe when each of activities applied for will be rehabilitated in terms of either the cessation of the individual activity or the cessation of the overall prospecting or mining activity.	All activities will cease at the end of operation. The estimated life of mine is 25 years and Tshipi has been operating for approximately 7 years.		

Signature of the applicant / Signature on behalf of the applicant:

Tshipi é Ntle Manganese Mining (Pty) Ltd Name of company (if applicable):

2018 12 MHE .

Date:

## APPENDIX 1

## CURRICULA VITAE, REGISTRATION AND DECLARATION OF THE EAP

## DECLARATION

1, Linda Munro, declare that -

General declaration:

- I act as the independent environmental practitioner in this application
- I will perform the work relating to the application in an objective manner, even if this results in views and findings that are not favourable to the applicant
- I declare that there are no circumstances that may compromise my objectivity in performing such work;
- I have expertise in conducting environmental impact assessments, including knowledge of the Act, Regulations and any guidelines that have relevance to the proposed activity;
- I will comply with the Act, Regulations and all other applicable legislation;
- I will take into account, to the extent possible, the matters listed in regulation 8 of the Regulations when
  preparing the application and any report relating to the application;
- · I have no, and will not engage in, conflicting interests in the undertaking of the activity,
- I undertake to disclose to the applicant and the competent authority all material information in my
  possession that reasonably has or may have the potential of influencing any decision to be taken with
  respect to the application by the competent authority; and the objectivity of any report, plan or document to
  be prepared by myself for submission to the competent authority;
- I will ensure that information containing all relevant facts in respect of the application is distributed or made available to interested and affected parties and the public and that participation by interested and affected parties is facilitated in such a manner that all interested and affected parties will be provided with a reasonable opportunity to participate and to provide comments on documents that are produced to support the application.
- I will ensure that the comments of all interested and affected parties are considered and recorded in reports
  that are submitted to the competent authority in respect of the application, provided that comments that are
  made by interested and affected parties in respect of a final report that will be submitted to the competent
  authority may be attached to the report without further amendment to the report.
- I will keep a register of all interested and affected parties that participated in a public participation process, and
- I will provide the competent authority with access to all information at my disposal regarding the application, whether such information is favourable to the applicant or not
- · all the particulars furnished by me in this form are true and correct;
- will perform all other obligations as expected from an environmental assessment practitioner in terms of the Regulations; and
- I realise that a false declaration is an offence in terms of regulation 71 of the Regulations and is punishable in terms of section 24F of the Act.

## **Disclosure of Vested Interest**

I do not have and will not have any vested interest (either business, financial, personal or other) in the
proposed activity proceeding other than remuneration for work performed in terms of the Regulations;

Signature of the environmental assessment practitioner:

SLR Consulting (Africa) (Pty) Ltd

Name of company. 11-20-2105

Date

## **APPENDIX 2**

REGIONAL MAP (FIGURE 0-1) LOCALITY MAP (FIGURE 0-2)

## **APPENDIX 3**

## ENVIRONMENTAL AUTHORISATIONS AND MINING RIGHT

**INFRASTRUCTURE LAYOUT (FIGURE 2-1)** 

## **APPENDIX 5** PUBLIC CONSULTATION DOCUMENTS

- ٠
- Minutes of DMR pre-application meetings Land claims commissioner correspondence •
- Placement of site notices •
- Adverts placed •
- Distribution of IAP and regulatory authority BIDs
  Minutes of public meeting including attendance register.