

**DMR pre-
application meeting
minutes (01
February 2019).**



MAMATWAN MINE

MERGING OF THE MAMATWAN SINTERFONTEIN WASTE ROCK DUMP AND THE TSHIPI EASTERN WASTE ROCK DUMP

DEPARTMENT OF MINERAL RESOURCES (DMR) PRE-APPLICATION MEETING MINUTES

DATE	01 February 2019
VENUE:	Department of Mineral Resources offices in Kimberley
SLR COMPANY:	SLR Consulting (South Africa) (Pty) Ltd (SLR)
PROJECT NUMBER:	720.19136.00001
PURPOSE:	<p>The purpose of the meeting was to:</p> <ul style="list-style-type: none"> • Provide an overview of the proposed project • Outline the motivation and project alternatives • Provide an overview of the environmental process • Provide an overview of the existing status of the environment • Provide a list of potential environmental/socio-economic impacts and specialist input (where relevant) • Provide an overview and obtain input into the public participation process.
ATTENDANCE:	An attendance register is presented in Appendix 1.

1. OPEN AND INTRODUCTION

Natasha Smyth commenced the meeting by welcoming everyone and introduced herself as an Environmental Assessment Practitioner from SLR Consulting (South Africa) (Pty) Ltd (SLR), appointed by Hotazel Manganese Mines (Pty) Ltd to undertake the environmental assessment process.

Representatives from both Mamatwan Mine and Tshipi é Ntle Manganese Mining (Pty) Ltd (Tshipi) were also present at the pre-application meeting. Refer to Appendix 1 for the list of attendees.

2. PRESENTATION

Natasha Smyth gave a presentation in order to provide an overview of the proposed project. A copy of the presentation is included in Appendix 2.

3. QUESTION SESSION

Comments raised during the meeting have been recorded and are included in Table 1 below. Where a response was provided the response has been included in the table.

Table 1: Issues raised

Issues raised	By whom	Response provided
The public participation process outlined in the presentation does not make provision for a public meeting. This needs to form part of the public participation process. In addition to this, the public meeting must take place after the submission of the application and during the review of the Basic Assessment Report.	Johannes Nematatani (DMR)	This will be arranged (Natasha Smyth (SLR)).
South32 needs to ensure that the Mine Works Programme and the Environmental Management Programme are aligned.	Ntsundeni Ravhugoni (DMR)	This will be done (Mase Rantsieng (South32)).
Due to the urgent nature of the project, is the DMR able to assist with shortening the internal DMR review period of 107 days.	Natasha Smyth (SLR)	This can be done; however, South32 needs to work closely with the department during the DMR internal review process (Ntsunden Ravhugoni (DMR)).
Will the same official that is dealing with the Tshipi EMP amendment process also process the Mamatwan BAR application?		Not necessarily. It is our opinion that it will most likely be a different official and this should work to the projects advantage as two people will be processing the reports and ideas can be shared (Ntsunden Ravhugoni (DMR)).
Due to the nature of the project and the close working relationship between the Mamatwan Mine and Tshipi, the DMR may investigate the viability of granting one authorisation for both South32 and Tshipi.	Ntsundeni Ravhugoni (DMR)	Noted (Mase Rantsieng (South32)).
Why does the waste rock need to be stored on surface and not backfilled into the pit?	Takalani Khorombi (DMR)	Placing waste rock back into the open pit is not deemed feasible due to space limitation within the open pit. If waste rock was placed in the pit, there would be insufficient space within the open pit for mining activities to take place (Tebogo Masuku (South32)).

4. CLOSE

Attendees were thanked for their input and for making the time to attend the meeting. The meeting was closed by NS.

APPENDIX 1: ATTENDANCE REGISTER

Name and Surname	Organisation	Contact numbers	E-mail
Mase Rantsieng	South32	083 764 2596	Mase.rantsieng@south32.net
Tebogo Masuku		082 338 9442	Tebogo.masuku@south32.net
Nthabeleng Paneng	Tshipi	082 633 5693	Nthabeleng@tshipi.co.za
James Manis		083 406 9775	James@tshipi.co.za
Livhuwani Malatjie	Department of Mineral Resources	053 807 1730	Livhuwani.malatjie@dmr.gov.za
Ntsundeni Ravhugoni		082 828 3904	Ntsundeni.ravhugoni@dmr.gov.za
Takalani Khorombi		053 807 1748	Takalani.khorombi@dmr.gov.za
Johannes Nematatani		053 807 1700	Johannes.nematatani@dmr.gov.za
Kgaudi Shapo		053 807 1778	Kgaudi.shapo@dmr.gov.za
Natasha Smyth	SLR	011 467 0645	nsmt@slrconsulting.com

APPENDIX 2: PRESENTATION

SOUTH32

MERGING OF THE MAMATWAN SINTERFONTEIN WASTE ROCK DUMP AND THE TSHIPI EASTERN WASTE ROCK DUMP

DMR PRE-APPLICATION MEETING

01 February 2019

global **environmental** and **advisory** solutions



AGENDA

- Welcome and opening
- Overview of the proposed project
- Motivation and alternatives
- Environmental process overview
- Overview of the existing status of the environment
- Potential environmental/socio-economic impacts and specialist input (where relevant)
- Proposed public participation process
- Close

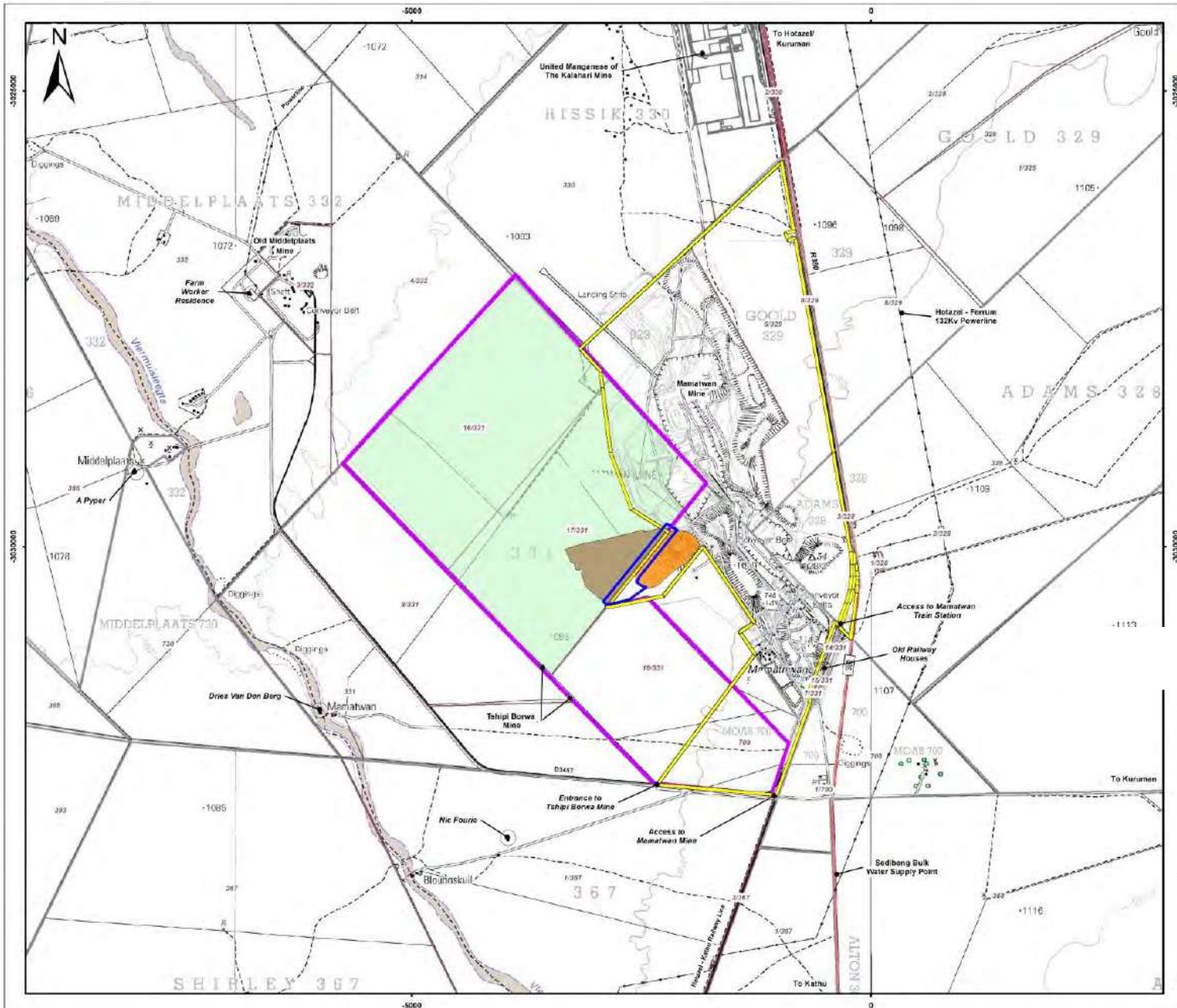
OVERVIEW OF PROPOSED PROJECT

- South32 operates the open pit manganese Mamatwan Mine (MMT) located on portion 5 of the farm Goold 329, the farm Sinterfontein 748, and portion 2 and the remaining portion of portion 3 of the farm Mamatwan 331 located to the east of the Tshipi Borwa Mine.
- MMT holds:
 - A Mining right (Reference number: NC 256 MR) issued and approved by the erstwhile Department of Minerals and Energy (DME) (currently the DMR)
 - An EMP (Reference number: NC 6/2/2/118) issued and approved by the erstwhile DMR (currently the DMR)
 - An AEL (Licence number: NC/AEL/NDM/ZRH01/2014) issued by DENC
 - An amended IWUL (License number: 10/D41K/KAGJ/1537) issued by the DWS
 - A Waste Permit (Permit number: B33/2/441/21/P157) for the development and operation of a decommissioned general waste disposal site issued by the erstwhile Department of Water Affairs and Forestry (currently DWS)
 - An EA (Reference number: NC/KGA/HOT3/07) for bulk fuel storage issued by erstwhile Department of Tourism, Environment and Conservation (currently DENC).

OVERVIEW OF PROPOSED PROJECT

- Tshipi é Ntle Manganese Mining (Pty) Ltd (Tshipi) operates the Tshipi Borwa Mine located on the farms Mamatwan 331 and Moab 700, located to the west of Mamatwan Mine.
- Tshipi is in the process of amending its approved EMP to cater for:
 - The extension of the West WRD onto Mamatwan portion 8 to create additional dumping capacity
 - The extension of the East WRD to the south-east, to merge with the Mamatwan Sinterfontein WRD, to provide capacity for the waste rock that will be mined when the boundary pillar is mined
 - Establishment of an overhead powerline and an overland conveyor system
- Mamatwan is planning on undertaking a basic assessment process to cater for the merging of the sinterfontein WRD with the Tshipi eastern WRD. In addition to this the existing WUL need to be amended.

LOCAL SETTING OF THE PROPOSED PROJECT



- Legend**
- Waste Rock Dump Void
 - Mamatwan Sinterfontein Waste Rock Dump
 - Tshipi Eastern Waste Rock Dump
 - Mamatwan Mining Right Boundary
 - Tshipi Surface Use Area
 - Tshipi Approved Mining Right
 - Main Roads
 - Power Line
 - Rivers and Streams
 - 20m Contour Lines
 - Farm Boundaries
 - Farm Portions

500 1 000
Meters
Scale 1:40 000 A3
Projection Transverse Mercator
Datum WGS1984, Lc23

HOTAZEL MANGANESE MINES (PTY) LTD

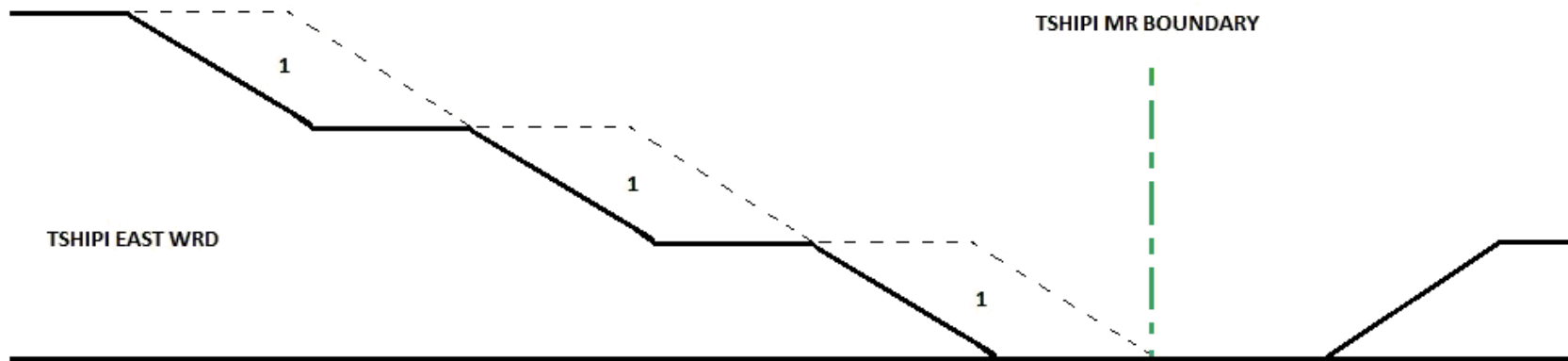
Local Setting



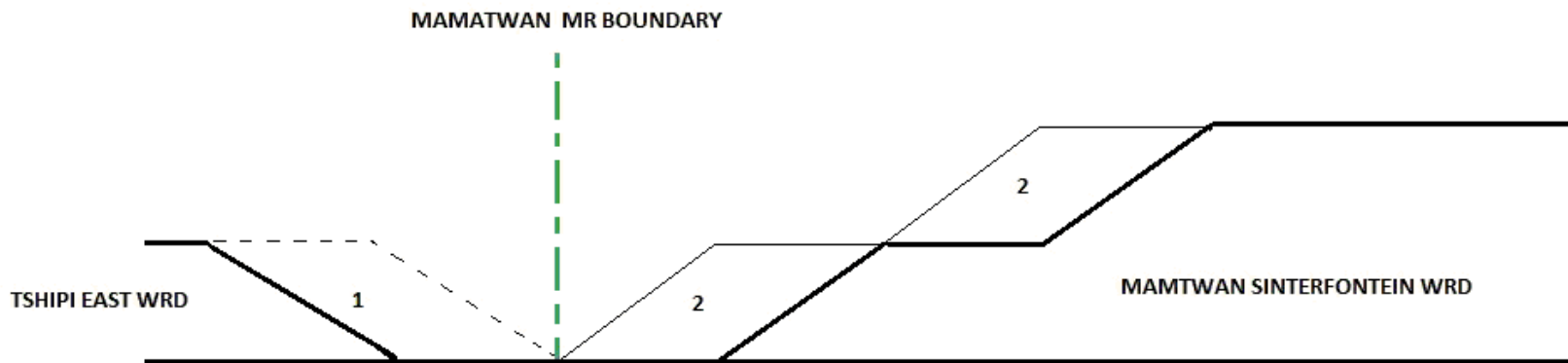
PHOTOS ILLUSTRATING THE VOID BETWEEN THE WRDs



OVERVIEW OF THE PROPOSED PROJECT

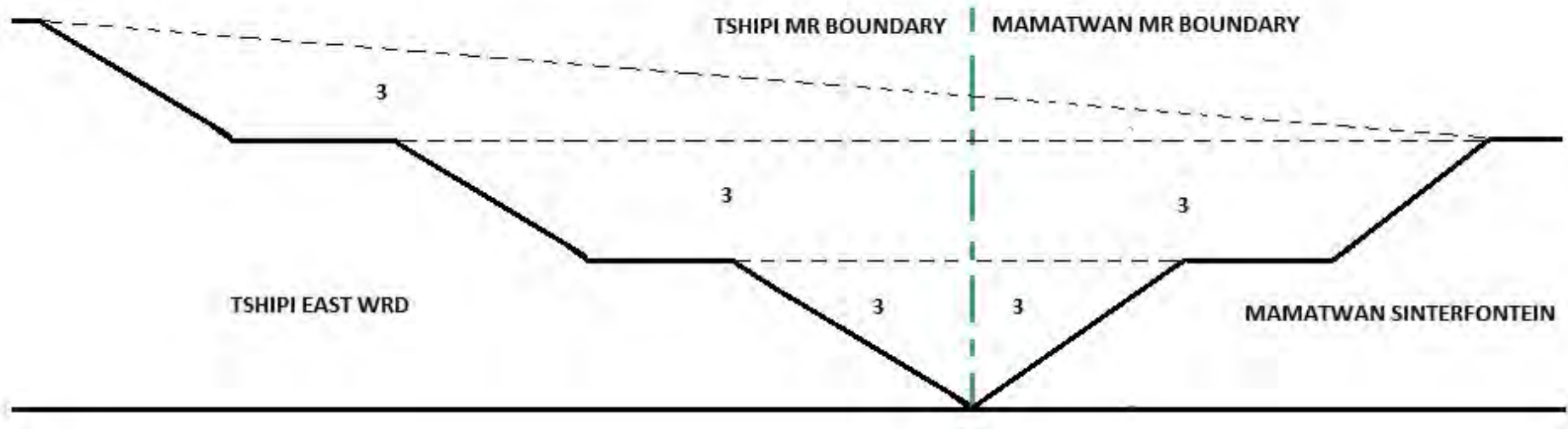


EXTENSION OF TSHIPi EAST WRD TO MINING RIGHT BOUNDARY



EXTENSION OF MAMATWAN WRD TO MINING RIGHT BOUNDARY

OVERVIEW OF THE PROPOSED PROJECT



MOTIVATION AND ALTERNATIVES

Motivation for the project

- The merging of the two waste rock dumps will provide capacity for the storage of waste rock when the boundary pillar is mined.
- The merging of the two waste rock dumps avoids the extension of the footprint of the mine into undisturbed area.

Alternatives

- No alternatives were considered for the following reasons:
 - Undisturbed areas at the MMT are planned for future infrastructure
 - The filling of the void will disturb vegetation that has already been impacted by mining facilities (WRDs on either side of the boundary fence)
 - The WRD is located in close proximity to the open pit to optimise haul distance.

ENVIRONMENTAL PROCESS

Permissions required for the proposed project:

Authorisation required	Applicable legislation	Key process elements	Competent authority
Environmental Authorisation (EA)	National Environmental Management Act No. 107 of 1998 and the Environmental Impact Assessment (EIA) Regulations, 2014 as amended	<ul style="list-style-type: none"> NEMA EA Application Stakeholder engagement BAR and supporting specialist studies 	DMR
Waste Management Licence	National Environmental Management: Waste Act (No. 59 of 2008)	<ul style="list-style-type: none"> NEM:WA WML application Stakeholder engagement BAR and supporting specialist studies 	DMR
Water Use Licence	National Water Act No. 36 of 1998 and Regulations Regarding the Procedural Requirements for Water Use Licence Applications WULAs (GNR 267 of 2017)	<ul style="list-style-type: none"> WUL application Stakeholder engagement WULA forms IWWMP and supporting specialist studies 	DWS

ENVIRONMENTAL PROCESS

Permissions required for the proposed project:

Authorisation required	Applicable legislation	Key process elements	Competent authority
Amend EMP	Mineral and Petroleum Resources Development Act (No. 28 of 2002)	Section 102 application	DMR

ENVIRONMENTAL PROCESS

Relevant listed activities:

Applicable legislation	Relevant activity	Description
NEMA listing Notice 1	Activity 27: Clearance of indigenous vegetation of more than 1ha but less than 20ha	As part of filling the void, indigenous vegetation will be removed.
NEMA listing Notice 1	Activity 34: The expansion of a facility that requires an amendment to an existing licence in terms of national or provincial legislation governing the release of emissions, effluent or pollution.	The existing IWUL will need to be amended to cater for the increase in WRD capacity.

ENVIRONMENTAL PROCESS

Relevant listed activities:

Applicable legislation	Relevant activity	Description
NEM:WA Category A	Activity 13: The expansion of a waste management activity Listed in Category A or B of this Schedule, which does not trigger an additional waste management activity of this Schedule.	The filling of the void with waste material requires a waste management licence.
Section 21 of the NWA	21(g): Disposal of waste that may detrimentally impact the environment	The existing IWUL will need to be amended to cater for the increase in WRD capacity.

ENVIRONMENTAL PROCESS

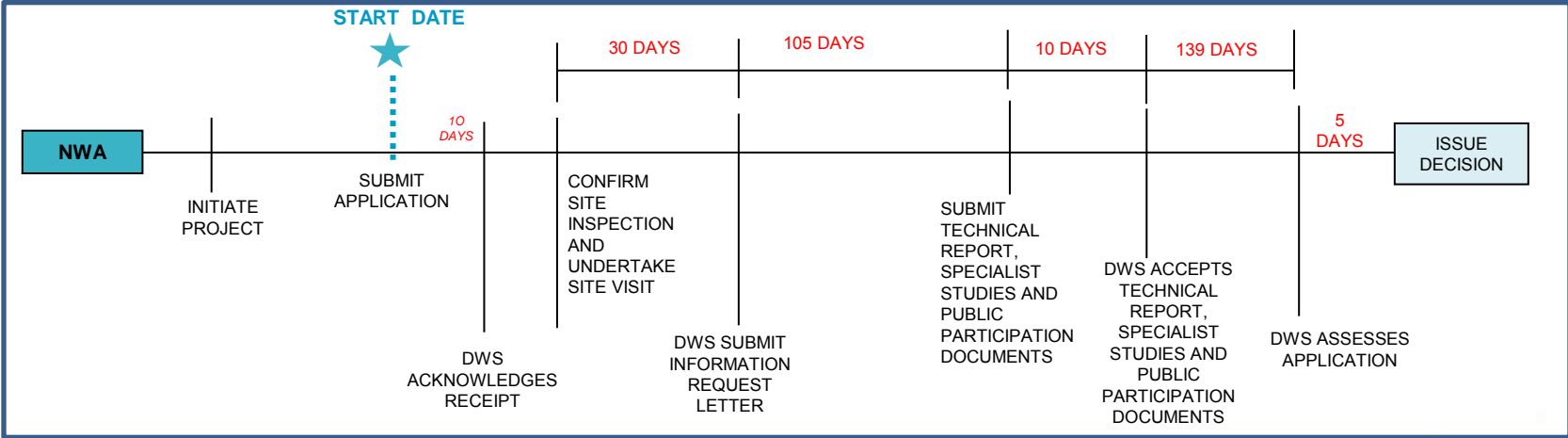
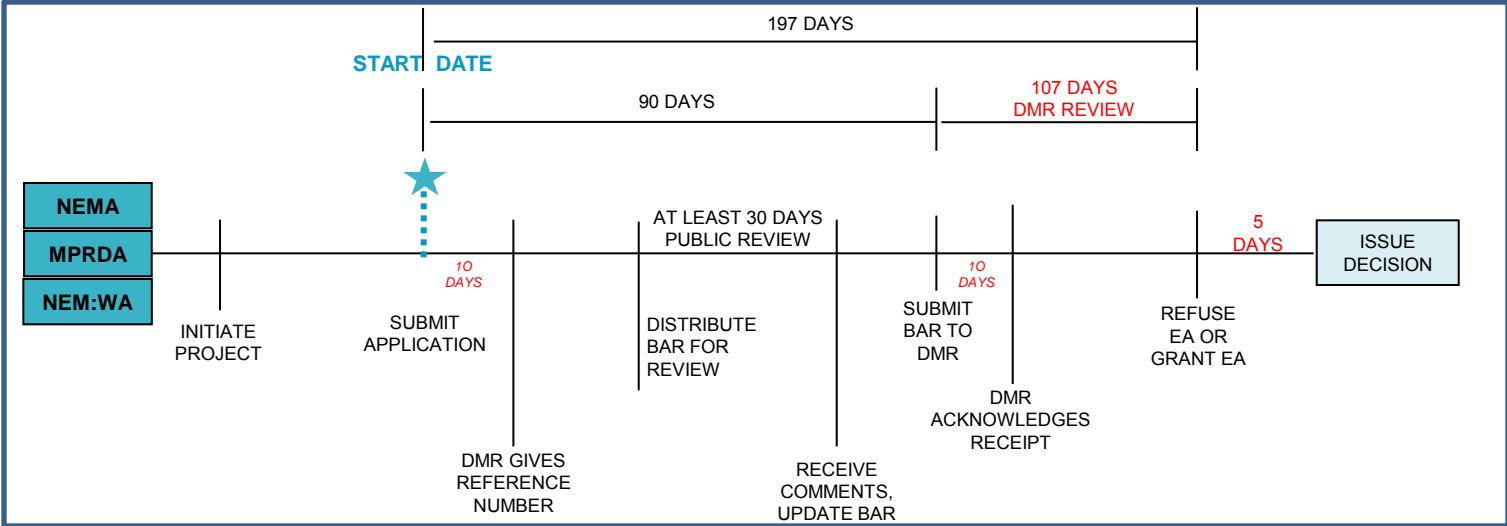
Commenting authorities

- Department of Environment and Nature Conservation
- Department of Agriculture, Forestry and Fisheries
- Department of Rural Development and Land Reform
- Provincial South Africa Heritage Resource Agency

Local authorities

- John Taolo Gaetsewe District Municipality
- Joe Morolong Local Municipality and applicable ward councillor

ENVIRONMENTAL PROCESS



EXISTING STATUS OF THE ENVIRONMENT

- Geology: MMT falls in the Kalahari Manganese Field and is covered by gravels, clays, calcretes and aeolian sands of the Kalahari Group.
- Climate: MMT falls within the Northern Steppe Climatic Zone. It is a semi-arid region characterised by seasonal rainfall, hot temperatures in summer, and colder temperatures in winter. Rainfall ranges from 1.3 mm to 72.3 mm per month and winds from the north, north-east are dominant in the area.
- Topography: The natural surrounding and on-site topography has been influenced largely through surrounding mining activities
- Soils and land capability: Kalahari sand of the Hutton soil are present between the WRDs. Its agricultural potential is low but has potential for supporting grazing.
- Plant life: The small pocket of vegetation between the WRDs, has been subjected to the daily functioning of the MMT and has been subjected to increased levels of dust and dumping of excavated material. This areas has no significant biodiversity present.

EXISTING STATUS OF THE ENVIRONMENT

- Animal life: The animal population in the area has been disturbed due to existing mining and agricultural activities. Several bird and mammal species are expected in the area and protected or endangered species that are likely to occur in the area and include the Honey Badger, Pangolin, Southern African Hedgehog, Dent's Horseshoe Bat, Schreibers' Bat, various endemic desert birds and raptors e.g. Ludwig's Bustard, Martial Eagle and Secretary Bird.
- Surface water: MMT falls within the catchment of the Ga-Mogara River, a tributary of the Kuruman River which joins the Molopo River and flows into the Orange River. MMT is located in the D41K quaternary catchment which has a gross total catchment area of 4 216 km², with a MAR of 6.53 mcm. There is no third party reliance on surface water. No wetlands are located within the area.
- Groundwater: The site is in a poor/minor aquifer region with a shallow aquifer with low yield and a deeper fractured bedrock aquifer with a higher yield. The groundwater levels at the mine range between 30 to 45 mbgl. Groundwater quality is primarily used for livestock watering.

EXISTING STATUS OF THE ENVIRONMENT

- Air quality: Ambient air quality has been influenced by mines, household fuel combustion, vehicle tailpipe emissions and agricultural activities.
- Noise: Existing noise in the area is mainly caused by farming activities, localised traffic movements and nearby mining operations and existing mining operations.
- Visual: The visual value of the project area is very low due to the presence of the Tshipi eastern WRD and the MMT sinterfontein WRD.
- Heritage/cultural resources: No heritage/cultural sites are expected and there is a low possibility of palaeontological resources occurring at the MMT. This will be verified as part of the BA process.
- Socio-economic: There are communities, mines, private landowners and farm occupants around the MMT. Unemployment and education levels in the area are higher than the provincial and municipal average. Water and sanitation provision is very good.
- Land use: Land uses around the MMT include agriculture, isolated residences, infrastructure/servitudes, solar plant and mining activities. Land uses on-site have already been influenced by MMT activities.

POTENTIAL ENVIRONMENTAL/SOCIO-ECONOMIC IMPACTS AND SPECIALIST INPUT

Aspect	Potential Environmental/Cultural/Socio-economic impacts	Specialist input (where applicable)
Geology	Loss and sterilisation of mineral resources	Qualitatively assessed
Topography	Altering topography	Qualitatively assessed
Soils & land capability	Loss of soil and land capability through contamination and physical disturbance	Soil & land capability specialist study*
Biodiversity	Physical destruction and general disturbance of biodiversity	Biodiversity specialist study*
Surface water	Alteration of natural drainage patterns and contamination of surface water resources	Hydrological Study*

* Reference will be made to specialist studies undertaken for the Tshipi EMP project that catered for the filling of the WRD void.

POTENTIAL ENVIRONMENTAL/SOCIO-ECONOMIC IMPACTS AND SPECIALIST INPUT

Aspect	Potential Environmental/Cultural/Socio-economic impacts	Specialist input (where applicable)
Groundwater	Reduction in groundwater quantity and quality affecting third party users	Groundwater Study and Waste Assessment Study*
Air	Air pollution through an increase in ambient dust and PM concentrations	Air Quality Study*
Noise	Increase in disturbing noise levels due to the operation of vehicles	Qualitatively assessed
Visual	Negative visual views (WRD)	Qualitatively assessed
Traffic	General road and traffic disturbance and safety within the mine boundary	Qualitatively assessed

* Reference will be made to specialist studies undertaken for the Tshipi EMP project that catered for the filling of the WRD void.

POTENTIAL ENVIRONMENTAL/SOCIO-ECONOMIC IMPACTS AND SPECIALIST INPUT

Aspect	Potential Environmental/Cultural/Socio-economic impacts	Specialist input (where applicable)
Heritage/cultural and palaeontological	Destruction of heritage/cultural and palaeontological resources	Heritage/cultural and palaeontological study

* Reference will be made to specialist studies undertaken for the Tshipi EMP project that catered for the filling of the WRD void.

PUBLIC PARTICIPATION

I&AP and authority notification and consultation

- Hold pre-application meetings (DMR and DWS)
- The public consultation for the BA and IWULA amendment processes will be run in parallel.
- The public participation will cater for both the NEMA 2014 EIA regulations and the NWA Regulations pertaining to procedural requirements for WULAs
- The public consultation proposed includes the following:
 - Placement of an advert in two local papers (Kathu Gazette and Kalahari Bulletin)
 - Distribute BID informing I&APs and regulatory authorities about the proposed project and related processes
 - Placement of site notices in two languages (English and Afrikaans)
 - Review of the BAR and IWULA and/or summary

Note: The merging of the waste rock dumps formed part of the public participation process for Tshipi. It follows is there a need to hold public meetings again?

PUBLIC PARTICIPATION

Review of the BAR and IWULA:

- Hard copies left at designated venues for review for 30 days. Suggested venues include:
 - John Taolo Gaetsewe District Municipality
 - Joe Morolong Local Municipality
 - Hotazel and Black Rock community public libraries
 - Kuruman and Kathu town libraries.
- Distribution of a summary (English and Afrikaans) of the BAR and IWWMP via fax, email or post
- SMS notifications
- Electronic copies will be made available on the SLR website.

THANK YOU AND CLOSE



Project: Merging of the Tshipi and Manatwan WRPD

SLR Company: SLR SA

Date: 01/02/2019

Meeting: DMR Re-application meeting



Name and Surname	Interest in project	Postal address	Contact numbers	E-mail
NTSUNDENI RAVHUGONI	Regulatory (DMR)	41 schmidtsdriif RD TELKOM BUILDING KIMBERLEY 8301	082 828 3904 053 8071745	Ntsundeni.ravhugoni@ dmr.gov.za.
Mase Rantsing	South 32		083 764 2596	mase.rantsing@ south32.net
Kgantsi Shayo	DMR	41 Sch. Schmidtsdriif Telkom Buid Kimberley 8301	053 8071778	Kgantsi-Shayo@ dmr.gov.za
Li'Ohwani MALASSIE	DMR-Regulatory	"	053 8071730	liohwani.malassie@dmr. gov.za
TAKALANI KHOROMBI	DMR - MNG - REGULATION	"	053 8071700 EXT.1748	takalani.khorombi@ dmr.gov.za
Johannes Nematani	Mineral Regulation (DMR)	"	053 807 1700	Johannes.Nematani@ dmr.gov.za
Nthabekeng Poneng	Tshipi Borwa Mine	Farms Manatwan 3318 Moab P.O. Box 2098, Kathu 8446	087 8451381 082 633 5693	nthabekeng@tshipi. co.za.
James Manis	Tshipi Borwa Mine	"	083 406 9715	james@tshipi.co. za.
TEBOFO MASUKU	South 32	At Se PO Box 402 KATHU 8446	0823389042	tebofo.masuku@ south32.net.

**Proof of pre-
application liaison
with the DWS.**

Clive Phashe

From: Msimango Philani (KBY) <MsimangoP@dws.gov.za>
Sent: 13 February 2019 09:07 AM
To: Natasha Smyth
Subject: RE: Mamatwan - South32 - Request for pre-application meeting

Good Day

Based on the information provided and the attached presentation, the following information would be required for a water use licence application:

- Fully completed Application forms: DW755, DW758, DW760 (my assumption is that an expansion would trigger additional abstraction requirements, unless I am mistaken), DW784, DW788, DW767, DW905, DW901, DW902 (If any infrastructure would be on the Regulated area of a watercourse (a defined in Regulation) then DW763, DW768, DW781 forms need to be submitted as well;
- Proof of payment of processing fee: R115;
- Company registration certificate, tax clearance certificate, company shareholders breakdown;
- Power of attorney;
- Copy (certified) of id (company representative who signs the forms);
- Property Zoning documents;
- Copy of title deed;
- Letter of consent if applicant is not the land owner;
- Updated Integrated Water and Waste Management Plan (as per relevant Regulation) with waste assessment, Water Balance and stormwater management plan;
- Geohydrological Assessment (as per relevant Regulation);
- Request for Exemption from complying with GN704 Regulation (with scientific motivation);
- Clearance Letter from Land Claims;
- Mining Right from Department of Mineral Resources;
- Social and Labour Plan;
- Section 27 Motivation;
- Signed Design Drawings and Engineers Report(Pollution control dam, storm water trenches, waste rock dumps, slimes dam, etc), designed by ECSA registered Engineer (also waste classification);
- Environmental Impact Assessment Report as per legislative requirements;
- Public Participation and Report;
- Service Level Agreement for waste collection, sewage handling, provision of water services, etc;
- Closure Rehabilitation Plan
- A copy of 1:50 000 topographic map / 1:10 000 indicating map name number of farm boundaries;
- Wetland Delineation Report (if there are any section 21 c & l water use triggered).

Kindly refer to the attached for the Procedural Requirements for water use licence applications for ease of reference. My advice would be to submit the application via EWULAAS (Electronic Water Use Licence Application and Authorisation System) and hard copy (with a cd) just to avoid any unnecessary delays due to system challenges. My advice is to also refrain from addressing the application to me personally but rather, Attention: Water Quality Management or Attention Setshego Thebe (administrative support for water use licence applications). This is because if I am not in the office, the document will not be opened and it will wait for my return which could unfairly prejudice you.

This correspondence can form part of the pre-application enquiry as per your request.

Should there any clarity required, you are most welcome to liaise with me.

I hope that clarifies your query.

My sincere apologies for the delayed response.

Regards

Mr. Philani P. Msimango

BSc - Geological Sciences (UKZN); **BSc Hons - Geohydrology** (UFS-IGS)

Control Scientific Technician

Water Quality Management - Lower Vaal

Northern Cape Provincial Operations

E: msimangop@dws.gov.za

T: +27 53 836 7649

Private Bag X61011 28 Central Road | Beaconsfield | Kimberley | 8301

"The man that once did sell the lion's skin, While the beast lived was killed with hunting him" - William Shakespeare



From: Natasha Smyth [mailto:nsmyth@slrconsulting.com]

Sent: Friday, February 01, 2019 5:19 AM

To: Msimango Philani (KBY)

Subject: Mamatwan - South32 - Request for pre-application meeting

Hi Philani

South32 operates the open pit manganese Mamatwan Mine (MMT) located on portion 5 of the farm Goold 329, the farm Sinterfontein 748, and portion 2 and the remaining portion of portion 3 of the farm Mamatwan 331 located to the east of the Tshipi Borwa Mine.

Tshipi é Ntle Manganese Mining (Pty) Ltd (Tshipi) operates the Tshipi Borwa Mine located on the farms Mamatwan 331 and Moab 700, located to the west of Mamatwan Mine. Tshipi is in the process of amending its approved EMP to cater for:

- The extension of the West WRD onto Mamatwan portion 8 to create additional dumping capacity
- The extension of the East WRD to the south-east, to merge with the Mamatwan Sinterfontein WRD, to provide capacity for the waste rock that will be mined when the boundary pillar is mined
- Establishment of an overhead powerline and an overland conveyor system.

In October 2018, a pre-application meeting was held with you, Tshipi and SLR to discuss the Tshipi EMP amendment and associated amendment of the IWUL process.

With particular focus on the Tshipi East WRD merge with the Mamatwan Sinterfontein WRD, South32 is also required to undertake an environmental assessment process and associated IWUL amendment. In this regard we would like to arrange a pre-application meeting with your Department to discuss the amendment of the South32 IWUL. The presentation has been attached for your consideration.

Please advise on your availability next week (if possible) and please let me know if you would like us to come through to your offices in Kimberly for the meeting or if a conference call will suffice.

If you have any queries please give me a call.

Kind regards

Natasha



Natasha Smyth

Environmental Assessment Practitioner

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 +27 11 467 0945

 2029

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**Copy of the
NEMA/NEM:WA
application form**



mineral resources

Department:
Mineral Resources
REPUBLIC OF SOUTH AFRICA

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).

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.
3. 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	<input type="checkbox"/>
NEMA BAR application on its own	R 2 000.00	<input type="checkbox"/>
NEMWA S&EIR application on its own	R10 000.00	<input type="checkbox"/>
NEMWA BAR application on its own	R 2 000.00	<input type="checkbox"/>
NEMA S&EIR application combined with NEMWA S&EIR application	R 15 000.00	<input type="checkbox"/>
NEMA BAR application combined with NEMWA BAR application	R 3 000.00	<input checked="" type="checkbox"/>
NEMA S&EIR application combined with NEMWA BAR application	R 11 000.00	<input type="checkbox"/>

1. CONSULTATION BASIC ASSESSMENT AND/OR SCOPING REPORT

2. DETAILS OF THE APPLICANT

Project applicant:	Mamatwan Mine (Hotazel Manganese Mines (Pty) Ltd is the legal entity)		
Registration no (if any):	2007/004878/07		
Trading name (if any):	Hotazel Manganese Mines (Pty) Ltd is the legal entity		
Responsible Person, (e.g. Director, CEO, etc).:	HSE Lead Mamatwan		
Contact person:	Abram Bodiba		
Physical address:	1 Peperboom Avenue, Hotazel, 8490		
Postal address:	PO Box 61820, Marshalltown		
Postal code:	2107	Cell:	072 184 9849
Telephone:	053 742 2300	Fax:	086 664 8458
E-mail:	abram.bodiba@south32.net		

3. ENVIRONMENTAL ASSESSMENT PRACTITIONER (EAP) INFORMATION

EAP:	Natasha Smyth and Alex Pheiffer		
Professional affiliation/registration:	Member: International Association for Impact Assessment (Natasha Smyth and Alex Pheiffer) Professional Natural Scientist (Environmental Management) with the South African Council for Natural Scientific Professions (SACNASP) (Alex Pheiffer)		
Contact person (if different from EAP):	Natasha Smyth		
Company:	SLR Consulting (South 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:	083 226 8570
Telephone:	011 467 0945	Fax:	011 467 0978
E-mail:	nsmyth@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 (included in [Appendix 5](#)) 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 is attached in Appendix 1.](#)

4. PROJECT DESCRIPTION

Farm Name:	The farm Sinterfontein 748 (Application area)
Application area (Ha)	Approximately 4ha will be disturbed as part of the proposed project.
Magisterial district:	John Taolo Gaetsewe District Municipality
Distance and direction from nearest town	The proposed project site is located approximately 25km south of Hotazel
21 digit Surveyor General Code for each farm portion	The farm Sinterfontein 748 - C0410000000074800000
Locality map	The Regional and Local Setting are included in Appendix 2.
Description of the overall activity. (Indicate Mining Right, Mining Permit, Prospecting right, Bulk Sampling, Production Right, Exploration Right, Reconnaissance permit, Technical co-operation permit, Additional listed activity)	<p>South32 operates the open pit manganese Mamatwan Mine (MMT) (forms part of the legal entity Hotazel Manganese Mines (Pty) Ltd) located approximately 25km south of the town Hotazel in the John Taolo Gaetsewe District Municipality in the Northern Cape Province. The MMT is located on the following farms:</p> <ul style="list-style-type: none"> • Portion 5 and 6 of the farm Goold 329 • The farm Sinterfontein 748 • Portion of portion 2 (Currently Portion 17) and portion of portion 1 (Currently Portion 16) of the farm Mamatwan 331 • Portion 3 of the farm Moab 700 • Portion 4 of the farm Adams 328. <p>MMT holds an Environmental Management Programme (EMP) approved by and a Mining Right, issued by the former Department of Minerals and Energy (currently the Department of Mineral Resources (DMR)). In addition to this, the MMT also holds an Integrated Water Use Licence (IWUL) issued by the Department of Water and Sanitation (DWS).</p> <p>Tshipi é Ntle Manganese Mining (Pty) Ltd (Tshipi) operates the Tshipi Borwa Mine located on the farms Mamatwan 331 and Moab 700, located to the west of MMT.</p> <p>An 18m wide (on surface) boundary is located between the MMT and the Tshipi Borwa Mine (Figure 2 in Appendix 2). Tshipi and MMT have approval to mine the 18m wide boundary pillar. Additional capacity is required to store waste rock generated as part of mining the boundary pillar. To cater for the additional storage, it is proposed that the Mamatwan Sinterfontein and the Tshipi eastern waste rock dumps are merged to fill the void between the two dumps (Figure 2 in Appendix 2). In this regard, the Mamatwan Sinterfontein waste rock dump would be extended in a north-westerly direction to merge with the Tshipi eastern waste rock dump in order to fill the narrow void between these two waste rock dumps. The Sinterfontein waste rock dump extension will cover an area of approximately 4ha. Water management infrastructure such as berms around the existing waste rock dump would be adapted as required to manage run-off from the waste rock dump once the void is filled. Rehabilitation of the waste rock dump will be in line with current practises.</p> <p>MMT is proposing on amending their approved EMP to cater for the merging of the waste rock dumps (referred to as the proposed project).</p>

5. ACTIVITIES TO BE AUTHORISED

(Please provide copies of Environmental Authorisations obtained for the same property as **Appendix 3**). The MMT mining right 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**)

NAME OF ACTIVITY (E.g. For prospecting - drill site, site camp, ablution facility, accommodation, equipment storage, sample storage, site office, access route etc...etc...etc 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, etc...etc...etc.)	Aerial extent of the Activity Ha or m²	LISTED ACTIVITY (Mark with an X where applicable or affected).	APPLICABLE LISTING NOTICE (GNR 983, GNR 984 or GNR 985)	WASTE MANAGEMENT AUTHORISATION (Indicate whether an authorisation is required in terms of the Waste Management Act). (Mark with an X)
Clearing of vegetation in areas designated for the merging of the waste rock dumps.	Approximately 4ha	X	NEMA: GNR 983 (Activity 27): The clearance of an area of 1 hectares or more, but less than 20 hectares of indigenous vegetation, except where such clearance of indigenous vegetation is required for - i. The undertaking of a linear activity; or ii. Maintenance purposes undertaken in accordance with a maintenance management plan. <i>This activity is triggered as more than 1ha but less than 20ha of indigenous vegetation will be disturbed as part of the proposed project.</i>	Not applicable
Stripping of topsoil and sub-soil. Adaptation of stormwater management infrastructure such as establishment of berms.	This forms part of the overall 4 ha area of disturbance			
Stockpiling of waste rock in the void between the Mamatwan Sinterfontein and the Tshipi Eastern Waste Rock dump.	This forms part of the overall 4 ha area of disturbance	X	NEMA: GNR 983 (Activity 34): The expansion of existing facilities or infrastructure for any process or activity where such expansion will result in the need for a permit or licence or an amended permit or licence in terms of national or provincial legislation governing the release of emissions, effluent or pollution , excluding - i. Where the facility, infrastructure, process or activity is included in the list of waste management activities published in terms of section 19 of the National Environmental Management: Waste Act , 2008 (Act No. 59 of 2008) in which case the National Environmental Management: Waste Act, 2008 applies; ii. The expansion of existing facilities or infrastructure for the treatment of effluent, wastewater, polluted water or sewage where the capacity will be increased by less than 15 000 cubic metres per day; or iii. The expansion is directly related to aquaculture facilities or infrastructure where the wastewater discharge capacity will be increased by 50 cubic meters or less per day. <i>The proposed project requires the amendment of the existing IWUL to cater for the increase in waste rock dump capacity.</i>	NEM:WA: GNR 921 (Category A Activity 13) – Refer to Section 8 of this application for information pertaining to the applicability of this waste activity.
Continued use of approved facilities and services.	Not applicable as this forms part of the current approved mining footprint.	Not applicable	Not applicable	Not applicable

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?	X	
Will the lawful occupier on the property other than the Landowner be consulted?	X	
Will a tribal authority or host community that may be affected be consulted?	N/A	
Will recipients of land claims in respect of the area be consulted?	X	
Will the landowners or lawful occupiers of neighbouring properties been identified?	X	
Will the local municipality be consulted?	X	
Will the Authority responsible for power lines within 100 metres of the area be consulted?	N/A	
Will Authorities responsible for public roads or railway lines within 100 metres of the area applied for be consulted?	N/A	
Will authorities responsible for any other infrastructure within 100 metres of the area applied for be consulted? (Specify)	N/A	
Will the Provincial Department responsible for the environment be consulted?	X	
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	PROVIDE DESCRIPTION HERE								
(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 attended public meetings. Photographs of notice boards, and copies of advertisements and notices notifying potentially interested and affected parties of the proposed application must be attached as Appendix 6)	<p>The proposed public consultation process is in accordance with the requirements of Chapter 6 of the Environmental Impact Assessment Regulations (GNR 982 of 2017) 2014, as amended, and is outlined in Table 1 below. The public participation process will also cater for legal requirements as set out in the Regulations Regarding the Procedural Requirements for Water Use Licence Applications WULAs (GNR 267 of 2017).</p> <p>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 proposed project and environmental assessment process and are provided with an opportunity to provide input into the project plan, the assessment and proposed mitigation measures.</p> <p>Table 1: Proposed Public Participation Process</p> <table border="1"> <thead> <tr> <th>Task</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td colspan="2">Pre-application and application phase</td> </tr> <tr> <td>DMR pre-application meeting</td> <td> <p>A pre-application meeting was held with the DMR in Kimberly on 01 February 2019. The purpose of this meeting was:</p> <ul style="list-style-type: none"> To provide information pertaining to the proposed project To outline the motivation for the proposed project To outline the alternatives considered as part of the proposed project To provide an overview of the environmental process relevant to the project To provide an overview of the existing status of the environment To outline and obtain input on the potential environmental/cultural impacts To outline and obtain input on the planned public participation process. <p>A copy of the pre-application meeting minutes is included in Appendix 6.</p> </td> </tr> <tr> <td>DWS pre-application liaison</td> <td> <p>The DWS was contacted telephonically and via email liaison to discuss the proposed project. The purpose of the interaction with the DWS was:</p> <ul style="list-style-type: none"> To provide information pertaining to the proposed project To outline the motivation for the proposed project To outline the alternatives considered as part of the proposed project </td> </tr> </tbody> </table>	Task	Description	Pre-application and application phase		DMR pre-application meeting	<p>A pre-application meeting was held with the DMR in Kimberly on 01 February 2019. The purpose of this meeting was:</p> <ul style="list-style-type: none"> To provide information pertaining to the proposed project To outline the motivation for the proposed project To outline the alternatives considered as part of the proposed project To provide an overview of the environmental process relevant to the project To provide an overview of the existing status of the environment To outline and obtain input on the potential environmental/cultural impacts To outline and obtain input on the planned public participation process. <p>A copy of the pre-application meeting minutes is included in Appendix 6.</p>	DWS pre-application liaison	<p>The DWS was contacted telephonically and via email liaison to discuss the proposed project. The purpose of the interaction with the DWS was:</p> <ul style="list-style-type: none"> To provide information pertaining to the proposed project To outline the motivation for the proposed project To outline the alternatives considered as part of the proposed project
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Environmental authorisation and waste management licence application	Submission of this integrated NEMA environmental authorisation and NEM:WA waste management licence application to the DMR.
Notification of commenting authorities and I&APs	
Notification of the land claims commissioner	The land claims commissioner was consulted in order to verify if any land claims have been lodged on the farm Sinterfontein 748. The proof of correspondence is attached in Appendix 6.
Background Information Document (BID)	<p>A BID was compiled by SLR and distributed to I&APs and commenting authorities registered on the project database. The BID provides:</p> <ul style="list-style-type: none"> Information about the proposed project Information about the baseline environment of the proposed project area Information about the environmental assessment process (Basic Assessment Process) Information regarding possible environmental/cultural impacts Details pertaining to the public meeting Information on how I&APs and commenting authorities can have input into the environmental assessment process. <p>A registration and response form was attached to the BID, which provided I&APs with an opportunity to register as an I&AP and submit comments on the proposed project. Copies of the BID in English and Afrikaans are included in Appendix 6.</p>
Site notices	SLR placed laminated site notices (in English and Afrikaans) at key conspicuous positions in and around the MMT, as well as in nearby towns. Photographic proof is included in Appendix 6. A map illustrating the location of the site notices is also included.
Newspaper advertisements	Block advertisements were placed in the Kalahari Bulletin and the Kathu Gazette on 28 March 2019 and 30 March 2019, respectively. Copies of the adverts are included in Appendix 6.
Planned public meetings	
Public meeting	<p>A public meeting is planned for 16 April 2019. The purpose of the meeting is as follows:</p> <ul style="list-style-type: none"> To provide an overview of the proposed project To provide an overview of the environmental assessment process that will be undertaken for the proposed project To provide an overview and obtain input on the existing status of the environment To outline and obtain input on environmental/cultural impacts identified for the proposed project To record any comments and issues raised. These issues and concerns will be used to inform the Basic Assessment Report. <p><i>The public meeting has been scheduled to take place after the submission of the integrated NEMA/NEM:WA application to the DMR and during the 30 day review period of the BAR. This is in line with recommendations made by the DMR at the pre-application meeting held on 01 February 2019.</i></p>
Commenting authority meeting	<p>A commenting authorities meeting will be held on 16 April 2019. The purpose of the meeting is as follows:</p> <ul style="list-style-type: none"> To provide an overview of the proposed project To provide an overview of the environmental assessment process that will be undertaken for the proposed project To provide an overview and obtain input on the existing status of the environment To outline and obtain input on environmental/cultural impacts identified for the proposed project To record any comments and issues raised. These issues and concerns will be used to inform the Basic Assessment Report. <p><i>The commenting authority meeting has been scheduled to take place after the</i></p>

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	Review of the Basic Assessment Report	
	Public review and commenting authority Review of Basic Assessment Report	The Basic Assessment Report will be made available for public review and comment for 30 days. Summaries of the Basic Assessment Report will be made available to all I&APs registered on the I&AP database via email, fax and post. In addition, I&APs will be notified when the Basic Assessment Report will be available for review via SMS. In addition to this, electronic copies will be made available on the SLR website. Commenting authorities will either receive an electronic copy or a hard copy of the Basic Assessment Report depending on the commenting authorities' preference. The Basic Assessment Report will be updated to include all comments received during the public review and commenting period. Comments will be recorded and responded to in a Comments and Response Report. This updated report will be submitted to the DMR for decision making purposes.
	Following review of the Basic Assessment Report	The Basic Assessment Report will be updated to include all comment received during the review and commenting period. This updated report will be made available to the DMR for decision making purposes.
Information to be provided to Interested and Affected Parties.	<p>Compulsory</p> <ul style="list-style-type: none"> • The site plan • List of activities to be authorised • Scale and extent of activities to be authorised • Typical impacts of activities to be authorised (e.g. surface disturbance, dust, noise, drainage, fly rock etc.) • The duration of the activity. • Sufficient detail of the intended operation to enable them to assess what impact the activities will have on them or on the use of their land) <p>Other, specify: Not applicable</p>	
Information to be required from Interested and Affected Parties.	<p>Compulsory</p> <ul style="list-style-type: none"> • To provide information on how they consider that the proposed activities will impact on them or their socio-economic conditions • To provide written responses stating their suggestions to mitigate the anticipated impacts of each activity • To provide information on current land uses and their location within the area under consideration • 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 • 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). <p>Other, Specify: Not applicable</p>	

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.	<p>Environmental attributes associated with the proposed project will be determined through a site visit, consideration of the project description, site layout and specialist studies.</p> <p>The potential environmental attributes have been outlined in the BID that has been distributed to I&APs and commenting authorities. In addition to this, potential identified environmental attributes will be discussed at the public and commenting authorities meetings. Input on the environmental attributes will continue to be obtained from I&APs and commenting authorities during the environmental assessment process.</p>

<p>Identification of impacts and risks. (Describe the process that will be used to identify impacts and risks.</p>	<p>Potential environmental/cultural impacts associated with the proposed project will be determined through a site visit, consideration of the project description, the site layout and specialist studies.</p> <p>Potential environmental/cultural impacts identified to date have been outlined in the BID that was distributed to I&APs and commenting authorities. In addition to this, potential identified environmental/cultural impacts will be discussed at the public and commenting authorities meetings. Input on the environmental/cultural impacts will continue to be obtained from I&APs and commenting authorities during the environmental assessment process.</p>																																																																																																						
<p>Consideration of alternatives. Describe how alternatives, and in particular the alternatives to the proposed site layout and possible alternative methods or technology to be applied will be determined.</p>	<p>No feasible alternatives exist for the proposed project. The merging of the waste rock dumps would disturb vegetation that has already been impacted by mining activities thereby minimising the mine's footprint. In addition to this, undisturbed areas within MMT are earmarked for future infrastructure limiting the availability of space for additional waste rock storage. The merged waste rock dump would allow for optimised haulage distance due to its location in close proximity to the open pit.</p>																																																																																																						
<p>Process to assess and rank impacts. Describe the process to be undertaken to identify, assess and rank the impacts and risks each individual activity.</p>	<p>The proposed method for the assessment of environmental/cultural issues is set out in the table below. This assessment methodology enables the assessment of issues including: cumulative impacts, the severity of impacts (including the nature of impacts and the degree to which impacts may cause irreplaceable loss of resources), the extent of the impacts, the duration and reversibility of impacts, the probability of the impact occurring, and the degree to which the impacts can be mitigated.</p> <p>Each potential impact will be assessed using the following criteria: <i>Note: Part A provides the definition for determining impact consequence (combining severity, spatial scale and duration) and impact significance (the overall rating of the impact). Impact consequence and significance are determined from Part B and C. The interpretation of the impact significance is given in Part D.</i></p> <table border="1"> <thead> <tr> <th colspan="3">PART A: DEFINITION AND CRITERIA*</th> </tr> </thead> <tbody> <tr> <td>Definition of SIGNIFICANCE</td> <td colspan="2">Significance = consequence x probability</td> </tr> <tr> <td>Definition of CONSEQUENCE</td> <td colspan="2">Consequence is a function of severity, spatial extent and duration</td> </tr> <tr> <td rowspan="6">Criteria for ranking of the SEVERITY of environmental impacts</td> <td>H</td> <td>Substantial deterioration (death, illness or injury). Recommended level will often be violated. Vigorous community action.</td> </tr> <tr> <td>M</td> <td>Moderate/ measurable deterioration (discomfort). Recommended level will occasionally be violated. Widespread complaints.</td> </tr> <tr> <td>L</td> <td>Minor deterioration (nuisance or minor deterioration). Change not measurable/ will remain in the current range. 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DURATION	Long term	H	Medium	High	High																																																																																																		
	Medium term	M	Medium	Medium	High																																																																																																		
	Short term	L	Low	Medium	Medium																																																																																																		
SEVERITY = H																																																																																																							
DURATION	Long term	H	High	High	High																																																																																																		

	Medium term	M	Medium	Medium	High
	Short term	L	Medium	Medium	High
			L	M	H
			Localised Within site boundary Site	Fairly widespread Beyond site boundary Local	Widespread Far beyond site boundary Regional/ national
			SPATIAL SCALE		
PART C: DETERMINING SIGNIFICANCE					
PROBABILITY (of exposure to impacts)	Definite/ Continuous	H	Medium	Medium	High
	Possible/ frequent	M	Medium	Medium	High
	Unlikely/ seldom	L	Low	Low	Medium
			L	M	H
CONSEQUENCE					
PART D: INTERPRETATION OF SIGNIFICANCE					
Significance		Decision guideline			
High		It would influence the decision regardless of any possible mitigation.			
Medium		It should have an influence on the decision unless it is mitigated.			
Low		It will not have an influence on the decision.			
*H = high, M= medium and L= low and + denotes a positive impact.					
Contribution of specialist reports Describe how specialist reports, if required, will be taken into consideration and inform the impact identification, assessment and remediation process.	<p>Specialist studies (where relevant) are undertaken in order to understand the potential impacts and how to mitigate these potential impacts. The results of specialist studies will be summarised in the Basic Assessment Report and will be used to develop the environmental management programme (EMP).</p> <p>In general, specialist reports include the following information:</p> <ul style="list-style-type: none"> • The characterisation of the baseline environment • The identification and assessment of potential impacts • The development of mitigation measures and monitoring requirements (where relevant). <p>Tshipi has commenced with their Environmental Management Programme (EMP) amendment process to cater for the merging of the waste rock dumps. As part of the Tshipi EMP amendment process, specialist studies were undertaken. The majority of the specialist studies undertaken as part of the Tshipi EMP amendment process also cater for the proposed project footprint area. For the proposed project, reference will be made to specialist studies undertaken by Tshipi that adequately cater for the proposed project area.</p> <p>Where specialist investigations are required for the proposed project (i.e proposed project footprint area was not adequately covered in Tshipi specialist reports), this will be included as an attachment to the Basic Assessment Report.</p>				
Determination of impact management objectives and outcomes. Describe how impact management objectives will be determined for each activity to address the potential impact at source, and how the impact management outcomes will be aligned with standards.	The project team (including the relevant specialists) will determine the impact management objectives with consideration to relevant Standards and guidelines.				

8. OTHER AUTHORISATIONS REQUIRED

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

Please provide proof of submission of applications in **Appendix 5**. [Proof that the Water Use Licence Application has been submitted to the DWS will be forwarded to the DMR.](#)

In the event that an authorisation 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.

The proposed project will trigger listed activities in terms of the National Environmental Management Waste Act No. 59 of 2008, (GNR 921 of 2013), as amended. Further detail is provided in the table below.

Listed activity in terms of the NEM:WA	Description
GNR 921, Category A, Activity 13	The expansion of a waste management activity Listed in Category A or B of this Schedule, which does not trigger an additional waste management activity of this Schedule.

The NEM:WA listed activity is applicable as the proposed project requires a waste management licence for the extension and increase in capacity of MMT's Sinterfontein waste rock dump.

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 potential environmental/cultural impacts is provided in the table below. It is important to note that management measures provided in the table below will be refined during the Basic Assessment Process.

ACTIVITIES (E.g. For prospecting - drill site, site camp, ablution facility, accommodation, equipment storage, sample storage, site office, access route etc...etc...etc 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, etc...etc...etc.)	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 ²)	TYPICAL MITIGATION MEASURES (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)
Clearing of vegetation in areas designated for the merging of the waste rock dumps.	Construction	Approximately 4ha	<ul style="list-style-type: none"> • Implement best mining practices to ensure that mineral sterilisation is minimised as far as possible • Continued use of access control • Continued implementation of soil conservation management plan and waste management plan • Continued implementation of biodiversity controls and management plan • Appropriate design and development of adaptive stormwater controls • Continued implementation of surface water and groundwater monitoring programmes • Continued implementation of dust monitoring programme • Continued use of noise controls • Rehabilitation in line with current practices • Avoidance of heritage/cultural resources • Implementation of an emergency response procedure 	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 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. The National Atmospheric Emission Reporting Regulations (GN 275 of 2 April 2015) published in terms of the National Environmental Management: Air Quality Act 39 of 2004, require holders of mining rights to submit annual reports onto the National Atmospheric Emissions Inventory System (NAEIS). Comply with the Regulations Regarding the Planning and Management of Residue Stockpiles and Residue Deposits from a Prospecting, Mining, Exploration or Production Operations, GNR.632 of 2015.
Stripping of topsoil and sub-soil.	Construction			
Adaptation of stormwater management infrastructure such as establishment of berms.	Construction Operation Decommissioning Closure	This forms part of the overall 4ha area of disturbance		
Stockpiling of waste rock in the void between the Mamatwan Sinterfontein and the Tshipi Eastern Waste Rock dump.	Construction Operation Decommissioning Closure	This forms part of the overall 4ha area of disturbance		
Continued use of approved facilities and services.	Construction Operation Decommissioning Closure	Not applicable		

10. CLOSURE PLAN

<p>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 going forward.</p>	
<p>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</p>	<p>The baseline environment will be characterised by site observations and relevant specialist studies. I&APs had an opportunity to provide input on the baseline environment through the review and comment on the BID. I&APs will have a further opportunity to provide input on the baseline environment through the review of the Basic Assessment Report.</p>
<p>Closure objectives Describe the closure objectives and the extent to which they will be aligned to the baseline environment</p>	<p>Rehabilitation closure objectives and principles include the following:</p> <ul style="list-style-type: none"> • Environmental damages are minimised to the extent that they are acceptable to all parties involved. • Mine closure is achieved efficiently, cost effectively and in compliance with the law. • The social impacts resulting from mine closure are managed in such a way that establishment of a socially stable community in line with the principles of sustainable development is facilitated.
<p>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.</p>	<p>The anticipated total area of disturbance of the proposed project is estimated to be 4ha. The rehabilitation plan for the proposed project will form part of the overall rehabilitation plan for MMT and will be included in the Basic Assessment Report.</p>
<p>Rehabilitation Cost Describe how the rehabilitation cost will be determined and provide a preliminary estimate thereof</p>	<p>The rehabilitation cost will be determined as part of the overall MMT's financial provision and will be included in the Basic Assessment Report.</p>
<p>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.</p>	<p>All listed activities will cease at the end of operation. The estimated life of the proposed project is 2 years.</p>


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

Mamatwan Mine

Name of company (if applicable):

2019/04/01
Date:

APPENDIX 1: CURRICULA VITAE AND EAP REGISTRATION

- Alex Pheiffer – CV and SACNASP registration
- Natasha Smyth - CV

CURRICULUM VITAE



ALESSANDRA (ALEX) PHEIFFER

SENIOR ENVIRONMENTAL CONSULTANT

Environmental Management, Planning and Approvals, Africa

QUALIFICATIONS

BSc	1998	Biological Sciences
BSc (Hons)	1999	Zoology
MSc	2004	Environmental Management

EXPERTISE

- Permitting and Licensing Processes
- Stakeholder Engagement
- Compliance Auditing
- Due Diligence and Reviews
- Screening and Risk Assessments
- Financial Provision and Closure Planning

Alex has 16 years' experience in the field of Environmental Management. She has managed a wide range of permitting and licensing projects including environmental, water, waste and air licensing and assessment processes mainly in the exploration, mining and industrial sectors. These included project management and co-ordination; specialist and engineering team management; co-ordination, facilitation and undertaking of stakeholder engagement processes including for contentious projects, and environmental assessment. She has experience in addressing both in-country legislation and Equator Principles and International Finance Corporation (IFC) requirements.

Alex has provided environmental specialist input on a number of pre-feasibility studies linked to the exploration/development/expansion of mining operations. She has also been involved in policy drafting, environmental due diligence processes, environmental reviews for financing institutions (in the mining, industrial and alternative energy sectors), compliance auditing, general environmental management support to operating sites, site screening exercises, risk assessments and financial provisioning and closure planning.

In her early career years, Alex held a position within Anglo Platinum's Waterval Smelter as Assistant to the Chief Environmental Officer. During the period March 2015 to October 2016, Alex held the position of Operations Manager: Environmental Management, Planning and Approvals (EMPA) within SLR Africa and was responsible for co-ordinating SLR's environmental management team.

PROJECTS

CHROME	
2007	Project Manager: EMPs (including an EIA) for prospecting on the farms Beestekraal 290 JQ, Boschpoort 284JQ, Nooitgedacht 289JQ and Nooitgedacht 287JQ near Rustenburg in the North West Province: Bakgatla Ba Kgafela Tribal Authority
2005	Project Manager: EMPs (including EIA) for two prospecting projects on the town and town lands of Rustenburg 272JQ in Rustenburg Magisterial District, North West Province: Xstrata South Africa (Pty) Ltd
2003-2004	Project Assistant: EIA/EMP for a chrome mine and concentrator in the Rustenburg / Boshhoek region: SA Ferrochrome and Mining (Pty) Ltd

COAL	
Current	Project Manager: EIA/EMP for a greenfields coal mine in northern Kwa-Zulu Natal: Commissiekraal Coal (Pty) Ltd
COPPER	
Current	Project Reviewer: ESIA for the Kitwe tailings retreatment and mineral processing project in Zambia: Horizon Mining
2014	Project Reviewer: EIA/EMP amendment for the Kinsenda operations in the DRC.
2013	Project Reviewer: EIA for a greenfields copper oxide project (Omitiomire project) (Namibia): Craton Mining and Exploration (Pty) Ltd
FERROCHROME	
2013	Project Manager: EIA/EMP amendment for the exclusion of smelter activities at Bokfontein Chrome Mine: HERNIC Ferrochrome
2012	Project Manager: EIA/EMP amendment for a concentrator and smelter complex at Bokfontein Chrome Mine: HERNIC Ferrochrome
2003-2004	Project Assistant: EIA for Project Lion, a new smelter complex near Steelpoort: Xstrata South Africa (Pty) Ltd
2002-2003	Project Assistant: EIA/EMP for Transvaal Ferrochrome Project (a ferrochrome smelter complex in the Rustenburg/Brits region):
2002-2003	Project Manager: EIA/EMP amendment for a pelletizing plant at Xstrata Wonderkop: Xstrata South Africa (Pty) Ltd
GOLD	
Current	Project Reviewer: EIA for the refurbishment of an existing shaft and related mineral processing and residue disposal facilities: Taung Gold
2016	Project Reviewer: Annual update of the Damang EMP and reclamation plan: Abosso Goldfields Limited
2012	Project Manager: EIA for a filtration plant at Navachab Gold Mine (Namibia): AngloGold Ashanti Namibia (Pty) Ltd
2011	Project Reviewer: Basic Assessment for Diesel storage facilities at its South Deep Mine Operations: Gold Fields (South Africa) (Pty) Ltd
2009	Part of a peer review delegation for an ongoing EIA: Participation in an integrated environmental management review – technical workshop for new projects at Gold Fields: Gold Fields (South Africa) (Pty) Ltd
2005-2007	Project Manager: Consolidating South Deep Min’s various EMPR documents into one document and in turn bringing the mine’s EMPR in line with the requirements of the Mineral and Petroleum Resources Development Act and supporting

	regulations : Placer Dome Westonaria Joint Venture – South Deep Mine
2005-2007	Project Manager: EIA and EMP amendment for a new tailings dam development: Placer Dome Westonaria Joint Venture – South Deep Mine
IRON	
2016	Project Reviewer: EIA and EMP for the Jenkins and Driehoekspan greenfields mining operations in the Northern Cape: Coza Iron Ore
2012	Project Manager: EIA/EMP for greenfield iron ore mine development near Lephalale (Ellisras) (Moonlight iron ore project) in the Limpopo Province: Turquoise Moon Trading (Pty) Ltd
2010	Project Manager and Reviewer: Amendment to existing prospecting EMP to cater for changes in prospecting operations: Nelesco 684 (Pty) Ltd
2010	Project Manager and Reviewer: Amendments to existing prospecting EMPs (Cascade 442IT and Delft 22HU) to cater for changes in prospecting operations: Mkhombi Mining (Pty) Ltd
2009	Project Manager and Reviewer: Management of the consultation process for a prospecting EMP on the farms Sterkfontein 419IT and Wolvernkop 427IT, near Piet Retief in Mpumalanga Province: Mkhombi Mining (Pty) Ltd
2009	Project Manager: EMP (including EIA) for prospecting on the farms Moabsvelden 248IR and Rietkuil 249IR, near Delmas in Mpumalanga Province: Spirapix Mining (Pty)
MANGANESE	
Current	Project Reviewer: a number of EMP amendment and rectification processes for Tshipi é Ntle Manganese Mining operations in the Northern Cape
Current	Project Reviewer: EMP amendment and rectification processes for UMK Manganese Mine in the Northern Cape
2017	Project Reviewer: EIA and EMP for a greenfields mining right application in the Northern Cape: Khwara Mining
2016	Project Reviewer: EIA and EMP for a greenfields mining right application in the Northern Cape: Ntsimbintle Mining (Pty) Ltd
2008 and 2016	Project Reviewer: EMP performance assessment and financial provision re-assessment for prospecting right in the Northern Cape: Ntsimbintle Mining (Pty) Ltd
PLATINUM	
Ongoing	Project Manager and Reviewer: Various EMP performance assessments and financial provision re-assessments for prospecting rights held by Impala in the North West, Mpumalanga and Limpopo Province: Impala Platinum Limited (Impala)
Ongoing	Project Manager: Various amendments to existing prospecting EMPs to cater for

	the changes in prospecting operations: Impala Platinum Limited (Impala)
Ongoing	Project Manager and Reviewer: Various EMP performance assessments and financial provision re-assessments for prospecting rights held by Afplats, Inkosi and Imbasa in the North West Province
Current	Project Reviewer: EIA and EMP for the relocation of a security perimeter and infrastructure footprint expansion at a BMR and Smelter complex in the Limpopo Province: Northam Platinum
2015-2016	Project Reviewer: EIA and EMP amendment including WML for changes to surface infrastructure and operations at Bakubung Platinum Mine, North West Province
2012-2015	Project Reviewer: EIA and EMP amendment for changes to surface infrastructure and operations at Tharisa Mine, North West Province
2014	Project Reviewer: EMP Compliance Audit for Leeuwkop Mine
2013	Project Manager and Reviewer: EIA/EMP amendment for changes to surface infrastructure at Marula Platinum Mine: Marula Platinum (Pty) Ltd
2013	Project Reviewer: EIA/EMP for the extension of underground mining activities at Everest Platinum Mine (Fairway project): Aquarius Platinum (South Africa) (Pty) Ltd
2013	Project Manager: EIA/EMP for the extension of mining activities at Everest Platinum Mine (Hoogland project): Aquarius Platinum (South Africa) (Pty) Ltd
2011	Project Co-ordinator: Supply and co-ordination of interim on-site environmental manager to assist with general management of environmental aspects at Everest Platinum Mine: Aquarius Platinum (SA) (Pty) Ltd
2010	Project Reviewer: Compilation of environmental documents (including a public consultation process) in support of a closure application for the Turffontein 263JQ and Kookfontein 265JQ prospecting right and Reinkoyalskraal 278JQ and Elandsheuwel prospecting right: Impala Platinum Limited (Impala)
2010	Project Reviewer and Auditing: 2010 Annual Re-Assessments of Everest Platinum Mine's closure cost estimate: Aquarius Platinum (SA) (Pty) Ltd
2010	Project Reviewer: EMP (including EIA) for prospecting on the farm Rooikraal 118JS in the Limpopo Province: Braggite Resource (Pty) Ltd
2009	Project Manager: 2009 Annual Re-Assessments of Everest Platinum Mine's closure cost estimate: Aquarius Platinum (SA) (Pty) Ltd
2009	Project Manager and Closure: EIA/EMP amendment for the north and south boxcuts at Everest Platinum Mine: Aquarius Platinum (SA) (Pty) Ltd
2009	Project Reviewer: EIA/EMP amendment for the production expansion of Eland Platinum Mine: Xstrata South Africa (Pty) Ltd
2008-2009	Project Manager: Assistance with the consultation with landowners to input into closure of a prospecting right: Impala Platinum Limited (Impala)

2008	Project Manager: Compilation of environmental posters linked to the seismic EMP for the use in environmental awareness training: Impala Platinum Limited (Impala)
2008	Project Manager and Reviewer: EMP performance assessment of Marula Platinum Mine's EMP report: Marula Platinum (Pty) Ltd
2007-2008	Project Manager: EIA/EMP for a new platinum mine and concentrator Plant (Mphahlele Project) in the Limpopo Province: Tameng Mining and Exploration (Pty) Ltd
2006-2009	Project Manager: EIA/EMP amendment for additional infrastructure at Everest Platinum Mine: Aquarius Platinum (SA) (Pty) Ltd
2006-2008	Project Manager: EIA/EMP for seismic survey activities near Impala's Rustenburg operations: Impala Platinum Limited (Impala)
2006-2008	Project Manager: EIA/EMP amendment for a new shaft and associated facilities and Marula Platinum Mine. This project also included the consolidation and updating of the mine's EMP to cater for the changes in mining legislation: Marula Platinum (Pty) Ltd
2005	Project Manager: EMP (including an EIA) for prospecting on the farms Turffontein 263JQ, near Impala's Rustenburg Operations: Impala Platinum Limited (Impala)
2005	Project Manager: EMP (including an EIA) for prospecting on the farm Reinkoyalskraal 278JQ, near Impala's Rustenburg Operations: Impala Platinum Limited (Impala)
2005	Project Manager: EMP (including and EIA) for prospecting on the farms Klipgatkop 115JQ, near Impala's Rustenburg Operations: Impala Platinum Limited (Impala)
2005	Project Manager: EMP (including and EIA) for prospecting on the farms, Doornspruit 84JQ and Roodekraalspruit 113JQ near Impala's Rustenburg Operations: Impala Platinum Limited (Impala)
2005	Project Manager: EIA/EMP for a mining right application (The Fingers Project) at Marikana Platinum Mine: Aquarius Platinum (SA) (Pty) Ltd
2004	Project Manager: Assisted in the facilitation of the public involvement process for the Shaft 20 EMP amendment: Impala Platinum Limited (Impala)
2003-2004	Project Manager: EMP amendment for the Maandagshoek Winze Project (re-establishment of an underground shaft): Modikwa Platinum Mine
2002-2005	Project Manager: EIA/EMP amendment for the Opencast Mining Project at the Rustenburg operations: Impala Platinum Limited (Impala)
2002-2003	Project Manager: EMP amendment for The Hills Project (establishment of additional infrastructure for mining purposes): Modikwa Platinum Mine
2002-2003	Project Assistant: EIA and EMP for a greenfields mine – Everest South Platinum Mine: Aquarius Platinum (SA) (Pty) Ltd

2002	Project Assistant: Drilling and bulk sampling EMPs for the Everest South Project: Aquarius Platinum (SA) (Pty) Ltd
2002	Project Assistant: Revised bulk sampling EMP for the Everest South Project: Aquarius Platinum (SA) (Pty) Ltd
2001	Project Manager: EMP amendments for re-positioning of infrastructure for Marikana Platinum Mine: Aquarius Platinum (SA)
RESIDENTIAL, FOOD and BEVERAGE	
2017	Technical E&S Lead: Fatal flaw analysis/site selection screening for a food and beverage developments in Gauteng
2016	Project Manager: Provision of environmental management support to Kumba Iron Ore for the relocation of Dingleton town
2015	Project Reviewer: Basic Environmental process for the Pilanesburg Platinum Mine Housing Development, in the North West Province
2001-2002	Project Assistant: EIA for a village and cemetery for non-landowners to be relocated from the site of Marikana Platinum Mine: Aquarius Platinum (SA) (Pty) Ltd
SILICA AND SAND	
Current	Project Reviewer: EIA/EMP for a mining right application for sand quarry along the Vaal River, in the Free State: Goosebay (Pty) Ltd
2005-2006	Project Manager: EIA/EMP for mining right application at Rietvly Silica Mine: Xstrata South Africa (Pty) Ltd
URANIUM	
2009-2016	Project Manager: ESIA for a greenfields Uranium and Coal Mine in Botswana (Letlhakane Project): A-Cap Resources Limited
ALTERNATIVE ENERGY	
2012	Project Manager: EIA/EMP amendment for the use of alternative fuels at its Lichtenburg Cement Plant: Lafarge Industries SA (Pty) Ltd
2008-On-hold	Project Manager: EIA for cogeneration power plants at Xstrata's operations in the North West and Mpumalanga Provinces: Power Tech IST/ Xstrata South Africa (Pty) Ltd
INDUSTRY	
2016	Project Reviewer: Basic assessment and Air Emission License for a minerals siding in Bloemfontein: Three clients
BIOREMEDIATION	
2017	Facilitation of DEA bioremediation process for a residential area in the Northern

	Cape
2013-2015	Project Manager: EIA for a waste management license for the bioremediation operation at TransHex Baken Diamond mine in the Northern Cape
CLOSURE PLANNING	
2017	Completion of the environmental and social aspects of the Closure Plan for B2Gold’s mine in Namibia: B2Gold Namibia
OTHER: EXPERT CONSULTANT, DUE DILIGENCE, REVIEWS, RISK ASSESSMENT	
2016-2017	Environmental Specialist: Environmental management services in fulfilment of the environmental legal obligations for the Dingleton Resettlement Project, near Kathu in the Northern Cape
2016	Environmental Specialist: Environmental and Social Due Diligence Review of two wind farm assets located in South Africa
On-going	Environmental Specialist: Environmental input into various pre-feasibility studies linked to the exploration/development/expansion of mining operations.
2015	Environmental Specialist: Legal compliance review of Everest Platinum Mine (Mpumalanga) in support of re-commencing operations
2015 & 2016	Environmental Specialist: Update to Tharisa Mine’s Competent Persons Report
2015	Project Manager: Alfred Knight Lab Due Diligence
2012 and 2013	Environmental Specialist: Due diligence on compliance, water, waste and air related aspects as part of an investment investigation at Silicon Technology (Pty) Ltd
2013	Environmental Specialist: A number of due diligences of gold exploration projects in Tanzania: New African Mining Fund
2012	Environmental Specialist: Input to a legal environmental register for African Barrick Gold’s operations in Tanzania
2012	Environmental Specialist: Peer Review of baseline specialist studies for Gold Fields Damang Gold Mine
2011	Environmental Specialist: Afplats Shaft Risk Assessment Update for Inkosi - Imbasa
2011	Environmental Specialist: Review of Barrick Tulawaka Tailings EIA
2010	Expert Consultant: Environmental input into the ESIA for the expansion of the Morupule Colliery in Botswana: Ecosurv Environmental Consultants
POLICY DRAFTING	
2008	Project Manager: Assistance with drafting a policy, guideline document and procedure for stakeholder participation during explorations operations for the Implats Group: Impala Platinum Limited (Impala)

WATER	
On-going	Project Reviewer: Of a number of water use license applications for mining operations across South Africa
2013	Project Manager: Assistance in compilation of water use license application (WULA) and integrated water and waste management plan (IWWMP) for a new platinum mine and concentrator plant (Mphahlele Project) in the Limpopo Province: Tameng Mining and Exploration (Pty) Ltd
2012	Project Reviewer: Co-ordination of integrated water and waste at Everest Platinum Mine: Aquarius Platinum (South Africa) (Pty) Ltd
2011	Project Manager: Water Supply Study for the Moonlight Iron Ore Project: Turquoise Moon Trading (Pty) Ltd
2011	Project Manager: ESIA for a greenfields wellfield development in Botswana (to supply the Letlhakane Project): A-Cap Resources Limited
2010	Project Reviewer: Re-registration of waste-related water uses at Everest Platinum Mine: Aquarius Platinum (South Africa) (Pty) Ltd
2010	Project Reviewer: Assistance with addressing water use license related issues: Marula Platinum (Pty) Ltd
2010	Project Manager: Water use license application (WULA) for the South Deep Doornpoort tailings dam
2006	Project Manager: Compilation of water use license application (WULA) and integrated water and waste management plan (IWWMP) for South Deep Mine:
Cancelled	Project Reviewer: Basic assessment for a water supply project to the Pilanesberg Platinum Mine Operations: Pilanesberg Platinum Mines (Pty) Ltd
MEMBERSHIPS	
PrSciNat	Registered with the South African Council for Natural Scientific Professions as a Professional Natural Scientist (PrSciNat) in Environmental Science (Reg. No. 400183/05)
EAPAN	Registered with the Environmental Assessment Professionals of Namibia (EAPAN) as a Lead Practitioner (Membership No. 121)
IAIA	Member of the International Association for Impact Assessments (IAIA), South African Affiliate since 2005
PUBLICATIONS	
As part of Masters Dissertation	Onderstepoort Journal of Veterinary Science, 2005. "Aspects of the ecology of the Asian tapeworm <i>Bothriocephalus acheilognathi</i> Yamaguti, 1934 in yellow fish in the Vaal dam, South Africa"



herewith certifies that

Alessandra Pheiffer

Registration number: 400183/05

is registered as a

Professional Natural Scientist

in terms of section 20(3) of the Natural Scientific Professions Act, 2003
(Act 27 of 2003)

in the following field(s) of practice (Schedule 1 of the Act)

Environmental Science

Effective 26 July 2005

Expires 31 March 2019



A handwritten signature in black ink, appearing to read 'Botha'.

President

A handwritten signature in black ink, appearing to read 'M. J. ...'.

Executive Director

CURRICULUM VITAE



NATASHA SMYTH

ENVIRONMENTAL ASSESSMENT PRACTITIONER

EMPA, South Africa

QUALIFICATIONS

BSc Hons 2008

Geography and Environmental Management

BSc 2007

Environmental and Biological Sciences

EXPERTISE

- Management and facilitation of permitting and licensing processes
- Management of stakeholder engagement processes
- Overall Project Management

Natasha is an environmental practitioner with SLR's South Africa office and is responsible for various environmental assessment projects. Natasha has ten years of experience within the Minerals sector, both as a project manager and assistant to various projects in South Africa and Africa.

Natasha has managed and assisted in a wide range of Environmental Impact Assessment projects for major and small scale minerals developments throughout South Africa as well as in Namibia for many of the major operators within the minerals industry.

Since 2009 Natasha has been involved in over 40 projects of which she has project managed 8 major and numerous small scale Environmental Impact Assessments for minerals extraction operations

PROJECTS

Key aspects of Natasha's recent project experience are summarised below.

Minimum Air Quality Emissions Standard Postponement Application for Anglo American Platinum's Polokwane (Limpopo Province), Waterval (North West Province) and Mortimer Smelter (Limpopo Province) operations (2018 to 2019)

Project Manager. Management of Stakeholder Engagement Process as part of an Air Quality Minimum Emissions Standards Postponement Application Process for the Waterval, Polokwane and Mortimer Smelter Complexes.

Minimum Air Quality Emissions Standard Postponement Application for the Zondereinde Northam Platinum Mine in the Limpopo Province in the Limpopo Province (2018 to 2019)

Project Manager. Management of Stakeholder Engagement Process as part of an Air Quality Minimum Emissions Standards Postponement Application Process for the Zondereinde Smelter Complex.

Integrated Water Use Licence Application for the Lehating manganese mine in the Northern Cape Province (2018 - 2019)	Project Manager. Compilation of the Integrated Water and Waste Management Plan, Water Use Licence Application forms and the management of specialists in support of the Lehating Integrated Water Use Licence Application.
Integrated Water Use Licence Application for the new Khwara manganese mine in the Northern Cape Province (2018 - 2019)	Project Manager. Compilation of the Integrated Water and Waste Management Plan, Water Use Licence Application forms, the management of specialists and authority liaison in support of the Khwara Integrated Water Use Licence Application.
Monthly environmental support for the Tshipi Borwa Mine (2018 – 2019)	Project Manager. Off-site environmental support work.
Financial Provision for Infrastructure Changes at the Zondereinde Northam Platinum Mine in the Limpopo Province (2018)	Project Manager. Compilation of the financial provision report for infrastructure changes at the Zondereinde Smelter Complex as part of a basic assessment process for changes to infrastructure at the smelter.
EMP commitments consolidation of the Tshipi and Mamatwan Mine for the mining of the barrier pillar in the Northern Cape Province (2018)	Project Manager. Compilation of a barrier pillar mining commitments report to outline the collective environmental management programme, integrated water use licence and environmental authorisation commitments for both Tshipi and South32 specifically for the mining of the barrier pillar.
ESIA for the retreatment of copper tailings dams in the town of Kitwe in Zambia (2017 - 2018)	Project Manager. Compilation of scoping report and terms of reference. Compilation of the environmental and social impact assessment report to meet IFC requirements. Management of multi-disciplinary specialist studies. Co-ordination of specialist teams within Zambia and South Africa. Management of stakeholder engagement process.
Environmental compliance audit for the Sishen Dingelton resettlement site in the Northern Cape Province (2017)	Project Manager. Assess compliance with the conditions outlined in the environmental authorisation and the approved environmental management programme.
Environmental compliance audit for the Sishen Dingelton decommissioning site in the Northern Cape Province (2017)	Project Manager. Assess compliance with the conditions outlined in the environmental authorisation and the approved environmental management programme.
Atmospheric Emissions Compliance Audit for the Zondereinde Northam Platinum Mine in the Limpopo Province (2017)	Project Manager. Assess compliance with the conditions of the atmospheric emissions licence for the Zondereinde Mine and report compilation.
Environmental compliance audit for the Northam Platinum Mine in the Limpopo Province (2017)	Project Manager. Undertake an environmental compliance audit of the Zondereinde Mine in terms of applicable legislation and report compilation.
Independent Peer Review of the Vaal Gamagara Water Supply Scheme in the Northern Cape Province (2017)	Project co-ordinate. Management of specialists and review of environmental permitting aspects and assistance with report compilation.

<p>Due diligence for a smelter complex and associated mine located in the North West Province (2016- 2017)</p>	<p>Project Manager. Team co-ordination and compilation of due diligence report</p>
<p>EIA and EMP for the development of the new Khwara underground mine in the Northern Cape Province (2016-2017)</p>	<p>Project Manager. Compilation of scoping and environmental impact assessment and environmental management programme reports. Management of specialists and stakeholder engagement process and compilation of the financial provision report.</p>
<p>Environmental assessment process to cater for changes to the approved infrastructure layout at the Tshipi Borwa Mine in the Northern Cape Province (2012-2017)</p>	<p>Project Manager. Compilation of scoping and environmental impact assessment and environmental management programme reports. The management of the stakeholder engagement process and specialists.</p>
<p>Preliminary close out audit for the Sishen Mine Dingleton Resettlement site near Kathu in the Northern Cape Province (2016)</p>	<p>Project Manager. Assess compliance with the conditions outlined in the environmental authorisation and the approved environmental management programme.</p>
<p>Update of the basic assessment report for the establishment of a diesel generator as part of dewatering infrastructure at the Evander No. 6 Shaft complex in the Mpumalanga Province (2016)</p>	<p>Project Manager. Update the basic assessment report to comply with the DMR report template</p>
<p>Environmental assessment process and air emissions license process for the establishment of the new Jeanette Mine in the Free State Province (2015-2016)</p>	<p>Project Manager. Compilation of scoping and environmental impact assessment and environmental management programme reports. Compilation of the technical supporting information required for a waste management license application and an air emissions license application. The management of the stakeholder engagement process and specialists.</p>
<p>Water Use License Compliance Audit for the UMK Mine in the Northern Cape Province (2015 - 2016)</p>	<p>Project Manager. Assess compliance with the commitments included in the water use licenses issued and make recommendations for rectifying non-compliances and partial compliances identified during the audit.</p>
<p>Basic Assessment for undertaking prospecting related activities for Impala Platinum Mine in the North West Province (2015 -2016)</p>	<p>Project Manager. Compilation of basic assessment report, management of specialists, management of stakeholder engagement process.</p>
<p>Environmental compliance audit for the UMK Mine in the Northern Cape Province (2015 -2016)</p>	<p>Project Manager. Assess compliance with the conditions outlined in the environmental authorisation and the approved environmental management programme.</p>

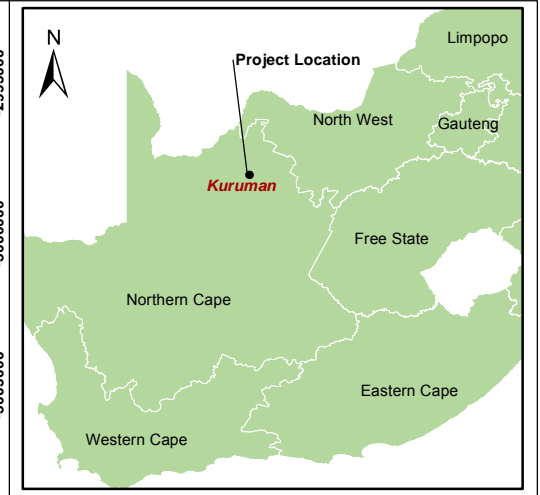
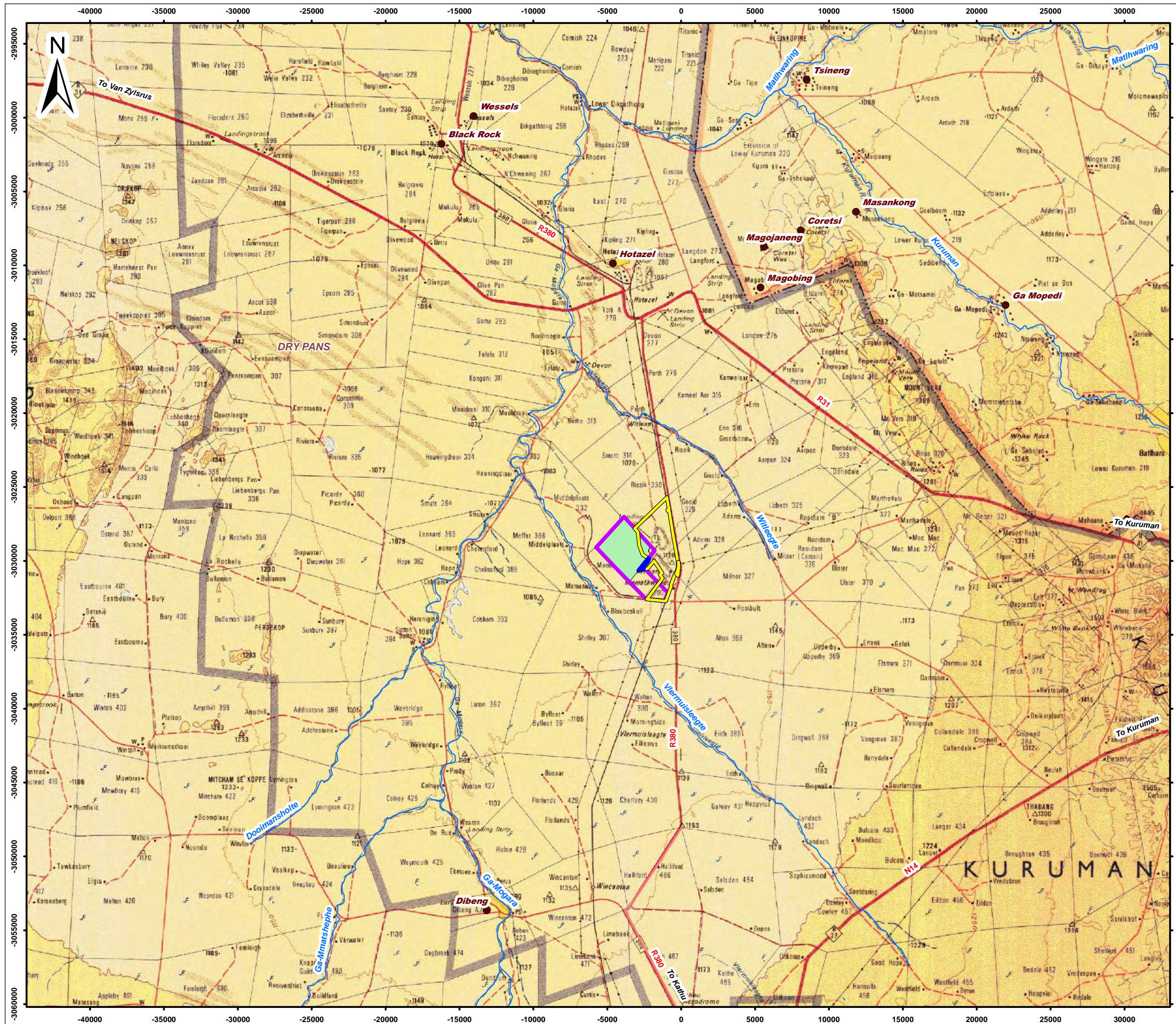
<p>Environmental assessment process, waste management license process and water use license process for the establishment of a new Mokala Manganese Mine in the Northern Cape Province (2014-2016)</p>	<p>Project Manager. Compilation of scoping and environmental impact assessment and environmental management programme reports. Compilation of the technical supporting information required for a water use license application process and submission of the waste management license application. The management of the stakeholder engagement process and specialists.</p>
<p>Environmental assessment process for the proposed construction of dewatering infrastructure and the development of a decant water pipeline in support of the proposed Evander Shaft 6 Gold in the Mpumalanga Province (2014)</p>	<p>Project Manager. Compilation of a basic assessment report, the management of the stakeholder engagement process and the management of specialists.</p>
<p>Environmental legal gap analysis for Rappa Resources in the Gauteng Province (2014)</p>	<p>Project Manager. Compilation of an environmental legal gap analysis report to identify any inadequacies in existing approvals and to identify outstanding approvals in terms of the National Environmental Management Act 107 of 1998, the National Environmental Management: Waste Act 59 of 2008, the National Environmental Management: Air Quality Act 39 of 2004, and the National Water Act 36 of 1998 (NWA).</p>
<p>Environmental support work to meet the requirements of the approved environmental management programme and updating the water use license application for the UMK Mine in the Northern Cape Province (2009-2014)</p>	<p>Project Manager. Environmental support with regards to assistance to the UMK Mine in implementing its environmental management programme commitments. This also includes quarterly stakeholder engagement processes, EMP performance assessments and quarterly audits. Updating the water use license and supporting documentation including a new integrated water and waste management plan and specialist management</p>
<p>Environmental Management Programme amendment for the Nooitgedacht Sand Quarry Mine in the Gauteng Province (2013)</p>	<p>Project Manager. Compilation environmental impact assessment and environmental management programme amendment report.</p>
<p>Proposed Kinsenda project amendment: underground mine and surface infrastructure for Meterox, Kinsenda Copper mine in the DRC (2013)</p>	<p>Project assistant. Assistance with the compilation of the environmental impact assessment and environmental management programme report.</p>
<p>The environmental assessment process to amend the existing environmental impact assessment report and environmental management programme report to cater for infrastructure changes as the Leeuwkop Platinum Mine in the North West Province (2012-2013)</p>	<p>Project Manager. Compilation of scoping and environmental impact assessment and environmental management programme amendment reports. Submission of the waste management license application. The management of the stakeholder engagement process and specialists.</p>

<p>Environmental and social impact overview of the proposed development of a new training centre at the Impala Platinum Rustenburg Operation in the North West Province (2013)</p>	<p>Project Manager. Compilation of a report to provide an overview of the potential environment and social impacts associated with the development of the proposed training centre.</p>
<p>Environmental Management Programme performance assessment of the Impala Rustenburg Operation in the North West Province (2012)</p>	<p>Project assistant. Assistance with the on-site auditing and report writing required for the environmental management programme performance assessment</p>
<p>Prospecting environmental management plan renewal and amendment Afplats in the North West Province (2012)</p>	<p>Project Manager. Compilation of the reports required for the renewal of a prospecting right, the amendment of an approved prospecting environmental management plan including the update of the financial provision and the management of the stakeholder engagement process.</p>
<p>Prospecting environmental management plan renewal and amendment (Impala Platinum Limited on behalf of Inkosi Platinum in the North West Province (2012)</p>	<p>Project Manager. Compilation of the reports required for the renewal of a prospecting right, the amendment of an approved prospecting environmental management plan including the update of the financial provision and the management of the stakeholder engagement process.</p>
<p>Prospecting environmental management plan amendment Ntsimbintle Mining (Pty) Ltd in the Northern Cape Province (2012)</p>	<p>Project Manager. Compilation of the prospecting environmental management plan amendment report and specialist management.</p>
<p>The consolidation of Impala’s fourteen existing approved environmental management programme reports into one consolidated report in the North West Province (2012)</p>	<p>Project Manager. Compilation of a consolidated environmental impact assessment and environmental management programme report include the management of the stakeholder engagement process</p>
<p>Environmental evaluation of Pit8C at Impala Platinum in the North West Province (2012)</p>	<p>Project Manager. Compilation of a report to evaluate if the approved EIA and EMP amendment report adequately caters for the proposed Pit8C conventional opencast mining area, in terms of the baseline environment, the impact assessment and the mitigation/management measures.</p>

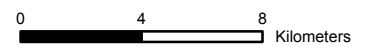
<p>Environmental assessment process for the environmental impact assessment and environmental management programme amendment for a proposed new tailings dam, re-processing of an old tailings dam, rehabilitation of the old tailings and waste disposal site, and open pit expansion for Impala Platinum Limited (Rustenburg Operation) in the North West Province (2011-2012)</p>	<p>Project Manager. Compilation of scoping and environmental impact assessment and environmental management programme reports. Compilation of the technical supporting information required for a water use license application process. The management of the stakeholder engagement process and specialists</p>
<p>EIA and EMP for the establishment of the Swakop Uranium Mine in Namibia (2011)</p>	<p>Project assistant. Project assistant with stakeholder engagement and managing specialists.</p>
<p>EIA and EMP for the establishment of the new Husab Uranium Mine in Namibia (2011)</p>	<p>Project assistant. Project assistant with stakeholder engagement and managing specialists.</p>
<p>EIA and EMP for the linear infrastructure associated with the Swakop Uranium Mine in Namibia (2010-2011)</p>	<p>Project assistant. Project assistant with stakeholder engagement and managing specialists.</p>
<p>Environmental assessment process for the establishment of the new Turquoise iron ore mine in the Limpopo Province (2010-2011)</p>	<p>Project assistant. Assistance with the stakeholder engagement process.</p>
<p>Environmental assessment process (2010)</p>	<p>Project assistant. Assistance with the compilation of the environmental impact assessment and environmental management programme report.</p>
<p>Environmental assessment process for the establishment of the new Kalkfontein Platinum Mine in the Limpopo Province (2010)</p>	<p>Project assistant. Assistance with the stakeholder engagement process.</p>
<p>Prospecting EMP for platinum group metals for Braggite Resources in the Mpumalanga Province (2010)</p>	<p>Project manager. Compilation of a prospecting EMP and stakeholder management process.</p>
<p>Compilation of the EIA and EMP reports for the Lonshi Copper Mine located in the DRC (2009-02010)</p>	<p>Project Assistant. Assistance with the compilation of the EIA and EMP reports for the Lonshi Copper Mine</p>
<p>Licensing of various water uses at the South Deep Mine in the North West Province (2009)</p>	<p>Project assistant. Assistant with water use licensing application.</p>

<p>Stakeholder engagement process for the Everest Platinum Mine as part of an EMP amendment to the extension of mining activities and changes to surface infrastructure in the Mpumalanga Province (2009)</p>	<p>Project assistant. Assistance with the stakeholder engagement process.</p>
<p>Stakeholder engagement process for the EIA and EMP amendment process for the new Northern Cape Manganese Company Mine (2009)</p>	<p>Project assistant. Assistance with the stakeholder engagement process.</p>

APPENDIX 2: REGIONAL MAP (FIGURE 1) AND LOCALITY MAP (FIGURE 2)



- Legend**
- Waste Rock Dump Void
 - Tshipi Surface Use Area
 - Tshipi Mining Right Area
 - Mamatwan Mining Right Area
 - Towns / Villages
 - Main Roads
 - Rivers



Scale: 1:250 000 @ A3

Projection: Transverse Mercator
Datum: Hartbeeshoek, Lo 23

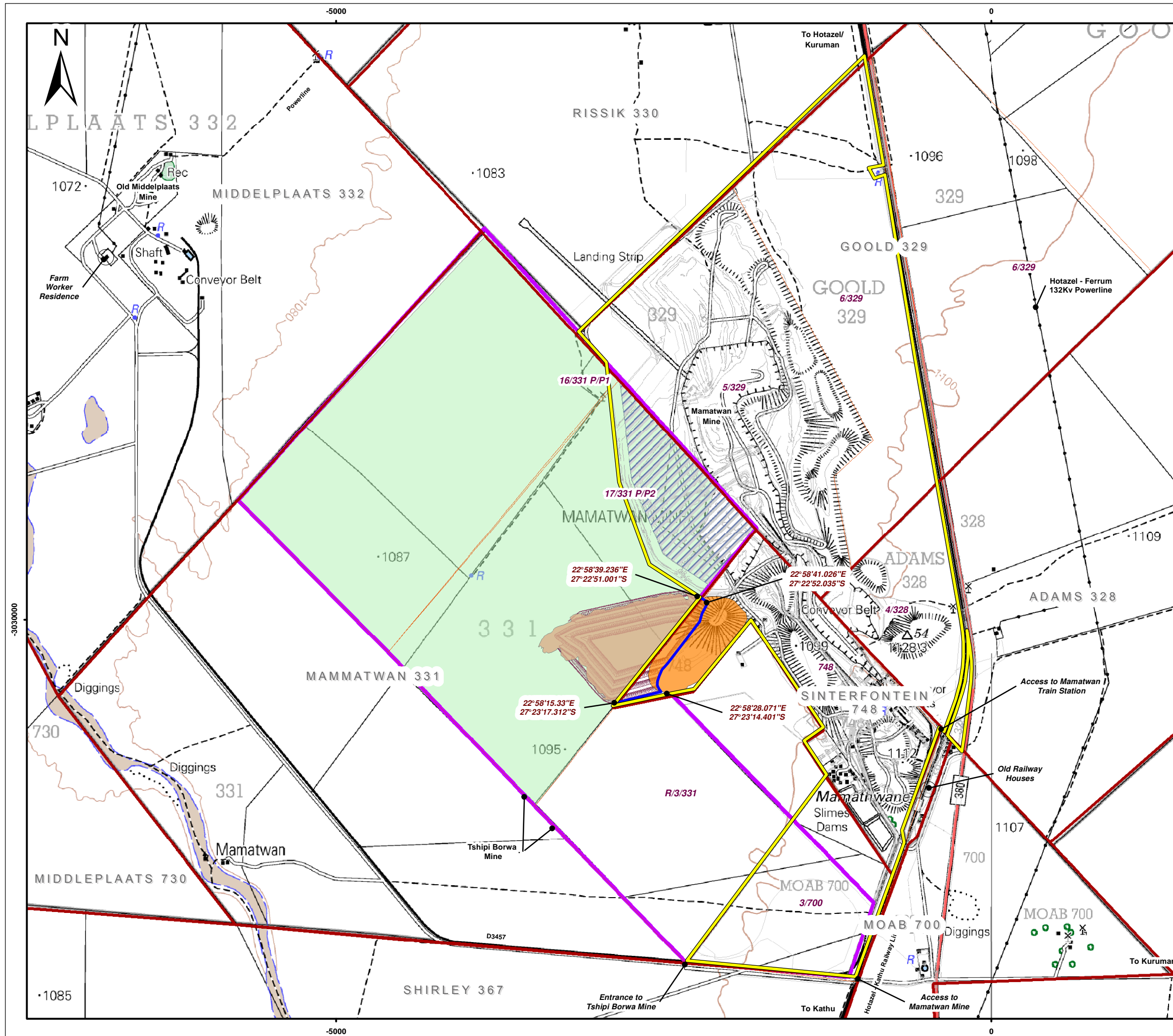
South32

Figure 1

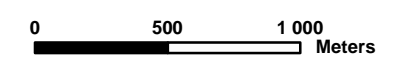
Regional Setting



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



- Legend**
- Final Merged Waste Rock Dump
 - Waste Rock Dump Void
 - Mamatwan Mining Right Area
 - Mamatwan Sinterfontein Waste Rock Dump
 - Tshipi Eastern Waste Rock Dump
 - Boundary Pillar
 - Tshipi Surface Use Area
 - Tshipi Mining Right Area
 - Main Roads
 - Power Line
 - Rivers and Streams
 - 20m Contour Lines
 - Farm Boundaries
 - Farm Portions



Scale: 1:28 500 @ A3
 Projection: Transverse Mercator
 Datum: WGS1984, Lo23

South32

Figure 2
Local Setting



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APPENDIX 3: ENVIRONMENTAL AUTHORISATIONS

- Mining Right
- Integrated Water Use Licence

(Note: MMT does operate with other environmental authorisations. Only those relevant to the property on which the extended WRD will be located are included here)

MINING RIGHT

in favour of

SAMANCOR LIMITED

(Mamatwan Mine)

TABACKS

Converted into a Mining right under MPT
 No. 04/2006 by application No. 105/312/629
 Date: 16/01 2006
 PP Director-General
 Mineral and Petroleum Titles Registration Office:
 PRETORIA

Registered in the MINERAL & PETROLEUM TITLES
 REGISTRATION OFFICE: PRETORIA
 in the Register of Mining Rights
 on this 16th day of Jan 2006
 under 04/2006 (MPT)
 PP DIRECTOR-GENERAL
 DEPT. OF MINERALS AND ENERGY

Cession: 25/2006
SAMANCOR LTD
 in favour of
SAMANCOR MANGANESE (Pty)
LD
 registered on the 30 day of Nov 2006
 PP DIREKTEUR-GENERAAL MINERALE EN ENERGIE
 DIRECTOR GENERAL MINERALS AND ENERGY

Protocol No. 931

DEPARTMENT: MINERALS AND ENERGY
REPUBLIC OF SOUTH AFRICA

MINING RIGHT
[CONVERTED OLD ORDER MINING RIGHT]

[Converted In terms of item 7(3) of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002)]

LET IT HEREBY BE MADE KNOWN:

THAT on this the 21 day of November in the year 2005, before me, a notary public, duly sworn and admitted, residing and practising at Kimberley, in the Northern Cape Province of South Africa, and in the presence of the subscribing competent witnesses, personally came and appeared:

WALEWA JERRY
 (1) WALEWA JERRY Mndaweni Regional Manager, Northern Cape Region of the Department of Minerals and Energy, and as such in his capacity as the duly authorised representative of:

THE MINISTER OF MINERALS AND ENERGY

(Hereafter together with his or her successors in title and assigns referred to as "the Minister")

Handwritten signatures and initials:
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DEPARTMENT: MINERALS AND ENERGY
REPUBLIC OF SOUTH AFRICA

MINING RIGHT

[Converted in terms of Item 7 of Schedule II of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002)]

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Mortgage, Cession, Transfer, Alienation	8
Protection of Boreholes, Shafts, etc.	9
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Cancellation or Suspension [section 47 of the Act]	12
Records and Returns	13
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Preserved terms and conditions of the old order Mining Right	16
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Domicilia citandi et executandi	19
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He, the said Regional Manager, being duly authorised thereto under and by virtue of a power of attorney granted to him or her by Jacinto Ferreira dos Santos Rocha in his capacity as Acting Director-General :
Mineral Regulation of the Department of Minerals and Energy of the Republic of South Africa

On the 6th day of, October 2005 acting under and by virtue of the powers conferred upon him in terms of section 103 of the of the Mineral and Petroleum Resources Development Act, 2002(Act no.28 of 2002), by the Minister of Minerals and Energy;

AND

(2) Quintus Roux, an authorised representative of :

SAMANCOR LIMITED
(Registration no. 1926/008883/06)

(Hereinafter together with its successors in title and assigns referred to as" the Holder"), he, the said Appearer, being duly authorised thereto under and by virtue of a resolution of directors of the Holder, passed at Johannesburg on the 11th day November of 2004

which power of attorney and a certified copy of which resolution have this day been exhibited to me, the notary, remain filed of record in my protocol with the minute hereof.

AND THE MINISTER AND HOLDER DECLARED THAT:

WHEREAS the State is the custodian of the National Mineral and Petroleum Resources;

AND WHEREAS the Holder has lodged its old order mining right for conversion in terms of item 7(2) of Schedule II of the Act and it has conducted mining operations in respect of the area which is the subject of the old order mining right conversion;

AND WHEREAS the Minister has converted the old order mining right in terms of item 7(3) of Schedule II of the Act;

NOW THEREFORE THE MINISTER HAS CONVERTED THE OLD ORDER MINING RIGHT SUBJECT TO THE FOLLOWING TERMS AND CONDITIONS:

1. Definitions

In this mining right the following words and expressions shall have the meanings assigned to them:

- 1.1. "Act" means the Mineral and Petroleum Resources Development Act, 2002 (Act 28 of 2002) and includes the regulations made in terms of this Act;

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- 1.2. "*Mineral*" means manganese ores;
- 1.3. "*Mining Work Programme*" as indicated in Annexure "A" to this mining right;
- 1.4. "*Social and Labour Plan*", as indicated in Annexure "B" to this mining right;
- 1.5. "*environmental management programme*" see definition in section 1 of the Act;
- 1.6. "*Minister*" means the Minister of Minerals and Energy in her capacity as the representative of the State, in its capacity as the custodian of the nation's mineral resources shall include the successors in title and assigns of the Minister, and wherever appropriate (in particular where the provisions of this mining right require the prior consent of the Minister) the references in this mining right to the Minister shall be as meaning the Minister or any person duly authorised by the Minister to act in the Minister's place and stead;
- 1.7. "*Holder*" means Samancor Limited, Registration No 1926/008883/06 and shall include the assigns or successors in title of the Holder or any syndicate or juristic or natural person which in any manner takes over or otherwise acquires the rights of the Holder under this Mining Right;
- 1.8. "*mining operations*" as defined in section 1 of the Act;
- 1.9. "*Mining Right Area*" means the portion or portions of the land referred to in clause 2;
- 1.10. "*Manager*" shall mean the Regional Manager for the Northern Cape Region of the Department of Minerals and Energy;
- 1.11. "*Effective date*" means 6 October 2005.

2. Description of the Mining Right Area

The mining right area shall comprise the following:

Certain: - portions of portion 5 of the farm GOULD NO. 329, SINTERFONTEIN NO. 748 and PORTION 2 of the farm MAMATWAN 331

Situate: In the Region and Province of the Northern Cape

Measuring: 316,7736 (THREE HUNDRED AND SIXTEEN comma SEVEN SEVEN THREE SIX) hectares in extent.

TO


Which Mining Right Area is depicted by the figure ABCDEFGHJKLMNPQ on the attached Diagram MPT No. OM/2005 (SG 1053/2005) marked Annexure "C" and registered in the Mineral and Petroleum Titles Registration Office on 16-01-2006

Conversion to Mining Right

Without detracting from the provisions of section 5 of the Act, the Minister grants to the Holder the sole and exclusive right to continue mining, and recover the Mineral in, on and under the Mining Right Area for the Holder's own benefit and account, and to deal with, remove and sell or otherwise dispose of the Mineral, subject to the terms and conditions of this mining right, the provisions of the Act and any other relevant law in force for the time being.

4. Commencement, duration and renewal

- 4.1 This mining right shall commence on 6 October 2005 and, unless cancelled or suspended in terms of section 47 of the Acts will continue in force for a period of 30 years ending on 5 October 2035.
- 4.2 Any application for renewal shall be submitted to the Minister not later than 90 days prior to the date of expiry of the initial period.

5. Amendment, variation

- 5.1 The provisions of section 102 of the Act applies to this mining right.
- 5.2 With effect from the date the Holder has so abandoned or relinquished a portion or portions of the Mining Right Area, the Minister shall be entitled to grant any prospecting rights or mining rights or any right or permit referred to in the Act in, on, or under the portion or portions, so abandoned or relinquished, to any person or persons.
- 5.3 Upon abandonment or relinquishment of the Mining Right Area or any portion thereof, the Holder will furnish the Minister with all mining results and/or information, as well as its general evaluation of, the geological, geophysical and borehole data in respect of such abandoned area in so far as it applies to the Mineral or any other mineral or minerals referred to in clause 10 such results and/or information may be made available to third parties.

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Mining fees and royalties

The provisions of section 71 of Schedule 3 of the Taxation Laws Amendment Act, 2004 (Act 16 of 2004) apply to this Mining Right.]

The Holder shall pay to the Minister throughout the duration of this mining right any levy, fee, royalty or consideration payable in terms of any relevant Act of Parliament. All payments required in terms of this Act shall be made by the Holder to the South African Revenue Services (SARS) at the relevant time-periods determined by the said Act.

Restrictions and Obligations imposed on the Holder

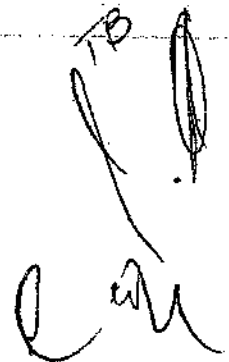
- 7.1 The Holder is entitled to the rights referred to in section 5(2) and (3) or any other relevant provisions of the Act, such other rights as may be contained in this mining right or such other right as may be granted to, acquired by or conferred upon it by any other applicable law.
- 7.2 Mining operations in the Mining Right Area must be conducted in accordance with the Mining Work Programme.
- 7.3 The Holder shall not trespass or enter into any homestead, house or its curtilage nor interfere with or prejudice the interests of the occupiers and/or owners of the surface of the Mining Right Area except to the extent to which such interference or prejudice is necessary for the purposes of enabling the Holder to properly exercise the Holder's rights under this mining right.

8. Mortgage, Cession, Transfer, Alienation

The provisions of section 11 of the Act apply to any cession, letting, subletting, assignment alienation or disposal of this right or an interest therein.

9. Protection of Boreholes, Shafts, etc.

No boreholes sunk by the Holder during the currency of this mining right shall be sealed or closed up by the Holder without the prior written approval of the Minister, but the Holder shall fence and render safe all boreholes, shafts, openings and excavations in accordance with the provisions of the Act, the Mine Health and Safety Act, 1996 and any other applicable laws and regulations.

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10. Indemnity and Insurance

10.1 The Holder, its successors and/or assigns, during the tenure of this mining right will take all such necessary and reasonable steps while carrying out their mining operations in such a manner as will adequately safeguard and protect the environment, the Mining Right Area and any person or persons using or entitled to use the surface of the Mining Right Area from any damage caused by or through or in consequence of the exercise by the Holder of its aforesaid right to conduct mining operations under this mining right, of any activity or activities associated with the Holder's operations in the Mining Right Area, and will in so far as there is a legal liability, compensate such person or persons for any damage or losses, including but not limited to damage to the surface, to any crops or improvements, which such person or persons may suffer as a result of, arising from or in connection with the exercise of his/her rights under this mining right or of any act or omission in connection therewith.

10.2 The Minister is not or will not be deemed to be a partner in any mining operations carried out in terms of this mining right.

11. Inspection of Mining Right Area

The Minister and any person duly authorised thereto in writing by the Minister shall be entitled to inspect the Mining Right Area, the Holder's mining operations and the execution of the approved EMP on the Mining Right Area at any time, and any instruction conveyed in writing by the Minister to the Holder requiring the proper performance by the Holder of the Holder's obligations under this mining right shall be put into effect by the Holder in terms of the Act.

12. Cancellation or suspension [section 47 of the Act]

12.1 Subject to section 47 of the Act, this mining right may be cancelled or suspended if:

12.1.1 the Holder conducts mining operations in contravention of the provisions of the Act;

12.1.2 the Holder breaches any material terms and condition of this mining right;

12.1.3 the Holder contravenes the requirements of the approved Environmental Management Programme; or

12.1.4 the Holder submits inaccurate, incorrect or misleading information with any matter which is required to be submitted under the Act.

12.2 Before the Minister acts under section 47(1) of the Act, the Minister shall:

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- 12.2.1. Give written notice to the Holder indicating the intention to suspend or cancel this mining right;
 - 12.2.2 Give reason why the Minister is considering the suspension or cancellation of this mining right;
 - 12.2.3 Give the Holder 30 days to show why the mining right should not be suspended;
 - 12.2.4 Notify, the mortgagor, if any, of this mining right of the Minister's intention to suspend or cancel this mining right; and
 - 12.2.5 Direct the Holder to take specified measures to remedy any contravention, breach or failure to comply.
- 12.3 If the Holder does not comply with the directions referred to in sub-clause 12.2.5, the Minister may act under section 47(1), after:
- 12.3.1 giving the Holder a reasonable opportunity to make representations; and
 - 12.3.2 having considered such representation.

13. Records and Returns

- 13.1. The Holder shall maintain all such books, plans and records in regard to mining on the Mining Right Area as may be required by the Act and shall furnish to the Minister such reports and documents as may be relevant to the rights of the Minister under this mining right.
- 13.2. The Holder shall furnish to the Regional Manager all such returns as may from time to time be required under the Act.
- 13.3. The Holder shall on a quarterly basis, calculated from the commencement of this mining right, furnish the Regional Manager or his or her nominee with a return reflecting the particulars of any geological exploration undertaken by the Holder on the Mining Right Area.
- 13.4. The Holder shall furthermore at the end of each year following commencement of this mining right, inform the Manager in writing of any new developments and of the future prospecting and mining activities planned in connection with the exploitation/mining of the Mineral on the Mining Right Area.

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14. Payment of Compensation

The Minister shall not at any time be liable or responsible for the payment of compensation of whatsoever nature to the Holder, the Holder's successors-in-title or assigns, except for compensation for which the Minister is liable in consequence of the breach by the Minister of any of the provisions of this mining right or on account of any wrongful act or omission by or attributable to the Minister, without derogating from the provisions of item 12 of Schedule II to the Act or section 25 of the Constitution of the Republic of South Africa 1996.

15. Comply with laws of the Republic

The Holder and its successors and/or assigns must comply with all the provisions of the Mine Health and Safety Act, (Act no.29 of 1996) and any other law in force in the republic

16. Preserved terms and conditions of the old order mining right

Notwithstanding the cessation of the old order mining right in terms of item 7 of Schedule II of the Act, the following terms and conditions of the said old order mining right have been preserved, namely :

16.1 the provisions of the Minerals Act, 1991, applicable thereto, including but not limited to :

16.1.1 the provisions of section 5(3) of the Minerals Act, 1991 whereby the Holder may, while mining Minerals, also mine and dispose of any other minerals in respect whereof the Holder is not the holder of the right thereto, but which must of necessity be mined together with Minerals, subject to the proviso to the said section 5(3);

16.1.2 the provisions thereof read with the common law whereby Temporary Mining Authorisation T52/93 also extends to Minerals mined by virtue of the said Temporary Mining Authorisation T52/93 and stockpiled or otherwise retained by the Holder;

16.2 the provisions of Mining Leases No. 822/1968, 4/1968 and 3/1987;

provided that no terms and conditions remain in force if they are contrary to the provisions of the Constitution of the Republic of South Africa, 1996 or the Act.

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17. **Provision relating to section 2(d) and (f) of the Act**

The Holder is required by the provisions of Section 2(d) and (f) of the Act, and has made the undertakings as detailed in Attachment L of its application for the conversion of an Old Order Mining Right dated 3rd December 2004:

17.1 to substantially and meaningfully expand opportunities for historically disadvantaged persons, including women, to enter the mineral industries and to benefit from the exploitation of the nation's mineral resources available to the Holder through:

17.1.1 the transfer of at least 26% ownership to a historically disadvantaged South African owned or controlled entity;

17.1.2 implementation of employee participation schemes;

17.1.3 implementation of community participation schemes;

17.1.4 compliance with the commitments contained in the Mining Charter contemplated in Section 100 of the Act;

17.1.5 providing historically disadvantaged South Africans with preferred supplier status where possible, in all three levels of procurement namely, capital goods, services and consumables. In order to provide historically disadvantaged South Africans with preferred supplier status, the Holder is required to identify levels of procurement and to progress procurement, in accordance with the commitments provided in the Social and Labour Plan;

17.2 to promote employment and advance the social and economic welfare of all South Africans by:

17.2.1 complying with the requirements and principles contained in the Holder's human resource development policy, employment equity policy and plan, skills development plan, mentorship plan, and career progression plan;

17.2.2 complying with the commitments set out in its Housing and Living Conditions Policy and through continued corporate social investment.

18. **Severability**

Notwithstanding anything to the contrary, any provision of this mining right which is contrary to any provision of the Act or which is otherwise ultra vires, void, voidable, or unenforceable, shall be severable from the rest of this Right, such rest thus being and remaining of full force, effect and enforceability.

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19. Domicilia citandi et executandi

19.1. The parties hereto choose the under mentioned addresses as their *domicilia citandi et executandi* and for all purposes arising from this mining right, in particular for the purposes of serving of any notice in terms of this mining right, and any notice properly addressed to the under mentioned postal addresses of the parties shall be deemed to have been received by the addressee within 5 days if given in writing and posted by prepaid registered post addressed to the addressee at the relevant postal address:

19.1.1. In the case of the Minister

Business Address: 29 Currie Street
KIMBERLEY
8301

Postal Address: Private Bag X6093
KIMBERLEY
8300

Tel: (053) 830-0800
Fax: (053) 832-5631

19.1.2. In the case of the Holder

Business Address: 6 Hollar Street
JOHANNESBURG
2001

Postal Address: P O Box 61075
MARSHALLTOWN
2107

Tel: (011) 376-3504
Fax: (011) 376-2160

19.2. Notwithstanding anything to the contrary herein contained, a written notice or communication actually received by a party at any place other than the chosen *domicilium citandi et executandi* shall constitute adequate notice or communication to the party notwithstanding that it was not sent to or delivered at such party's chosen *domicilium citandi et executandi*.

19.3. Either party shall be entitled from time to time to change the *domicilium citandi et executandi* or postal address furnished above after giving at least 14 days prior written

TO
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notice of such change to the other party, failing which the above mentioned addresses shall remain in force.

19.4. Any written notice or communication contemplated in this clause which is forwarded by one party to the other by registered post will be rebuttably presumed to have been received by the addressee on the fourteenth day following the date of posting from an address within the Republic of South Africa to the addressee at the postal address of the addressee for the time being as determined in accordance with the provisions of this clause.

20. Costs

The Holder shall pay all costs and charges incurred by the Holder in connection with the negotiation, preparation, execution and registration of this mining right.

This done and signed at Kimberley on the 21 day of November 2005 in the presence of the undersigned witnesses:

AS WITNESSES:

1. [Signature]
2. _____

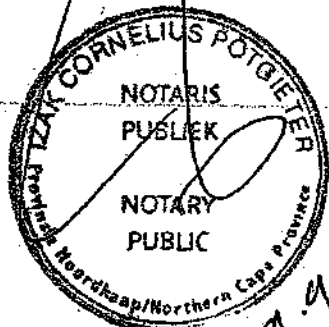
For and on behalf of the Minister

This done and signed at Kimberley on the 21 day of November 2005 in the presence of the undersigned witnesses:

AS WITNESSES:

1. [Signature]
2. _____

For and on behalf of the Holder



[Handwritten mark]

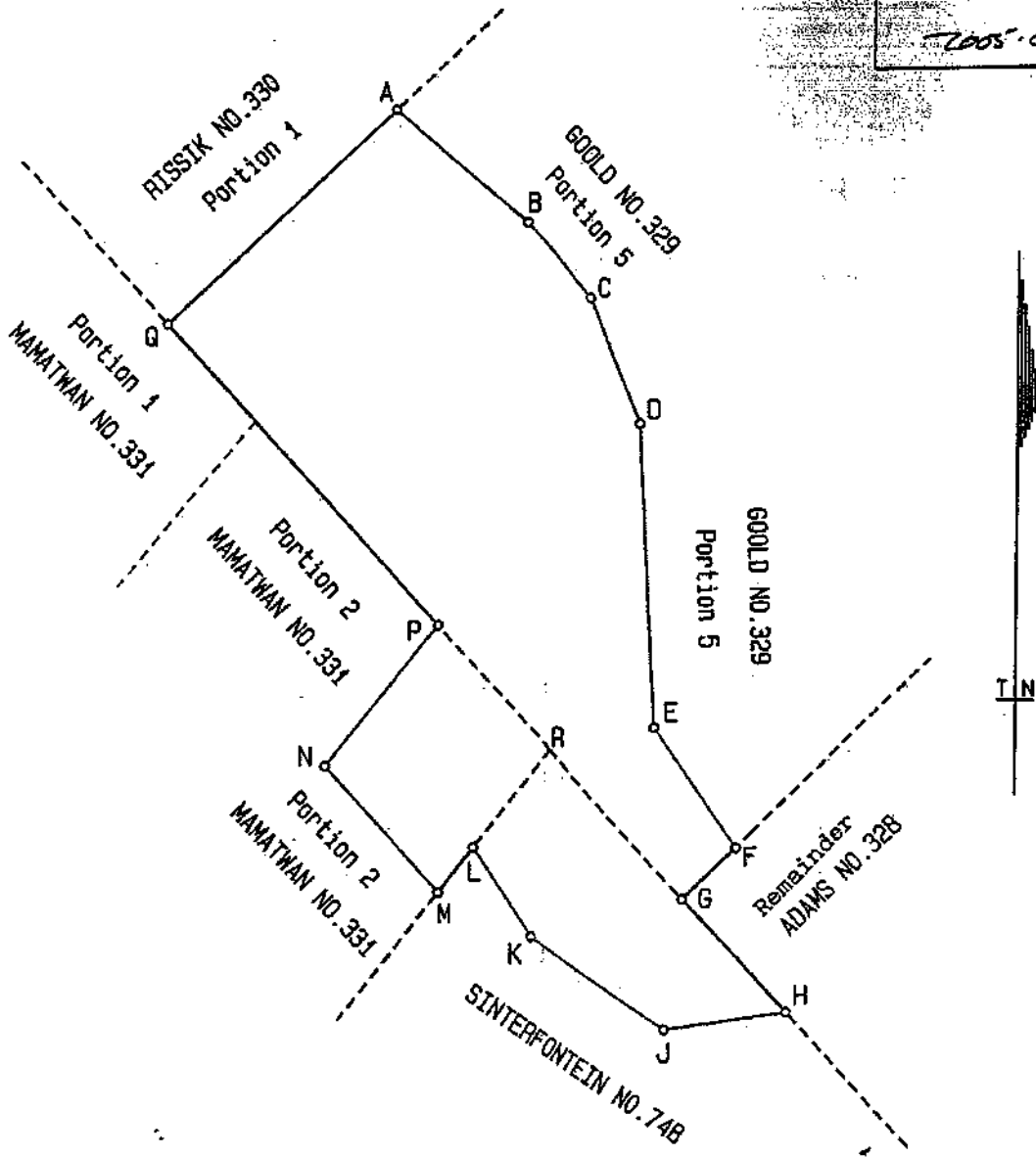
S. G. No.
1053/2005

Approved

TH

Surveyor - General

2005.09.22



Scale. 1 : 25 000

Description of Beacons

- A, B, C, D, E, F, H, J, K. : 1,8m Iron standard 500mm high.
- G, L. : 1,8m Iron standard 500mm high with 3 witness marks at 4,72m.
- M, N, P. : 50mm Iron pipe in concrete beacon.
- Q. : Planted stone with 3 witness marks at 4,72m.
- R. : Not beaconsed.

Paul
TH

SIDES Metres	ANGLES OF DIRECTION	CO-ORDINATES System: WG.23°	
		Y	X
	Constant	+	0,00 +3000 000,00
(1) The figure A B C D E F G Q represents 231, 4893 hectares over Portion 5 of the farm GOULD NO. 329			
AB	616,96 309 52 10	A	+ 2 364,37 + 27 071,71
BC	349,73 316 52 00	B	+ 1 890,85 + 27 467,21
CD	472,18 336 52 00	C	+ 1 651,74 + 27 722,44
DE	1 076,40 356 57 50	D	+ 1 466,24 + 28 156,65
EF	513,97 325 43 00	E	+ 1 409,23 + 29 231,54
FG	259,55 45 45 00	F	+ 1 119,72 + 29 655,22
GQ	2 742,72 137 12 30	G	+ 1 305,63 + 29 837,33
QA	1 101,87 226 53 44	Q	+ 3 168,86 + 27 824,65
(2) The figure R G H J K L represents 47, 4043 hectares over the farm SINTERFONTEIN NO. 748			
RG	717,92 317 12 30	R	+ 1 793,34 + 29 310,50
GH	545,75 317 13 08	G	+ 1 305,63 + 29 837,33
HJ	434,41 82 13 10	H	+ 934,96 + 30 237,89
JK	594,83 124 13 10	J	+ 1 365,37 + 30 296,71
KL	374,64 146 05 40	K	+ 1 857,22 + 29 962,19
LR	436,53 218 41 13	L	+ 2 066,20 + 29 651,25
(3) The figure P R M N represents 37, 8800 hectares over Portion 2 of the farm MAMATWAN NO. 331			
PR	600,02 317 12 30	P	+ 2 200,95 + 28 870,19
RM	638,38 38 41 13	R	+ 1 793,34 + 29 310,50
MN	600,02 137 12 30	M	+ 2 192,38 + 29 808,81
NP	638,40 218 41 15	N	+ 2 600,00 + 29 368,50
(45) Cobham		Δ	+ 9 497,77 + 32 555,05
(54) Adams		Δ	+ 645,72 + 30 134,69

R230-00

The figure A B C D E F G H J K L M N P Q represents in extent 316,7736 hectares, being a Mining Right to be issued in favour of Samancor Limited No.1926/008883/06 situated on (1) Portion 5 of the farm GOULD NO.329 (2) The farm SINTERFONTEIN NO.748 (3) Portion 2 of the farm MAMATWAN NO.331

Administrative District Kuruman Mining Region Northern-Cape Province Northern-Cape.

Framed by me in September 2005 in terms of Section 16 of the Land Survey Act No.8 of 1997

PL
C.P. Nel.
PLS 0438
Pr. Land Surveyor.

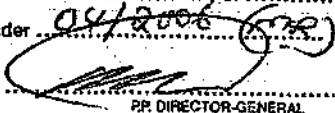
FRAMED FOR THE PURPOSE OF A MINING RIGHT IN TERMS OF THE MINING TITLES REGISTRATION ACT NO.16 OF 1967

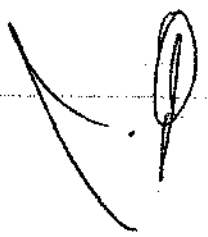
This diagram belongs to No. dated i.f.o Registrar of Mining Titles	The Original Diagram are as quoted above	File No. KURM 329 S.R. No. 592/2005 Comp. HL-4 (5727) HLNU-4(M2034)
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MPT NO. 04/2006

MINERAL & PETROLEUM TITLES
REGISTRATION OFFICE: PRETORIA

Registered in the
in the Register of MINING RIGHTS
on this 16th day of July 2006
under 04/2006 (M)


PP. DIRECTOR-GENERAL
DEPT. OF MINERALS AND ENERGY


u TB
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**DEPARTMENT: MINERAL RESOURCES
REPUBLIC OF SOUTH AFRICA**

AMENDMENT/VARIATION OF A MINING RIGHT

Granted in terms of section 102 of the Mineral and Petroleum Resources Development Act,
2002
(Act No. 28 of 2002)

MK J
[Handwritten signature]
[Handwritten initials]

Protocol No: 1465 /2011
File Ref No NC 252 MR
Application No G05/05/04/002

NOTARIAL DEED OF AMENDMENT/VARIATION OF A MINING RIGHT

BE IT HEREBY MADE KNOWN:

That on this the 21st day of November in the year 2011 before me, Christopher Ian Stevents, Notary Public, duly sworn and admitted, residing and practising at Johannesburg, in the Gauteng Province of South Africa, and in the presence of the undersigned witnesses personally came and appeared;

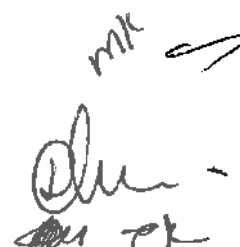
Khotso Mokoatle Acting Regional Manager, Northern Cape Region of the Department of Minerals and Energy, and as such in his/her capacity as the duly representative of:

THE MINISTER OF MINERALS AND ENERGY

The said Regional Manager, being duly authorised thereto under and by virtue of a Power of Attorney granted by the Director-General or Deputy Director-General: Mineral Regulation of the Department of Minerals and Energy on the 14th day of the September in the year 2011 in terms of the powers delegated by the Minister in terms of section 103 (1) of the Mineral and Petroleum Resources Development Act, No 28 of 2002 ("the Act"),

And

Amendment/ Variation Mining Right: Granted in terms of section 102 of the Mineral and Petroleum Resources Development Act, No 28 of 2002

mk


Mr David Mamphitha in his/her personal capacity or as the company's representative or a Close Corporation's member, and as such, the duly authorised representative of **Hozatel Manganese Mines (Pty) Ltd**, Identification /Registration number:

2	0	0	7	/	0	0	4	8	7	8	/	0	7	
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(hereinafter together with his/her/its successors in title and assigns referred to as "the Holder"), the said representative, being duly authorised thereto under and by virtue of a Power of Attorney/resolution of directors/members of the Holder, signed or passed at Johannesburg on the 23rd day of June in the year 2011, which power of attorney or certified copy of the resolution has this day been exhibited to me, the notary, and remain filed on record in my protocol with the minutes hereof.

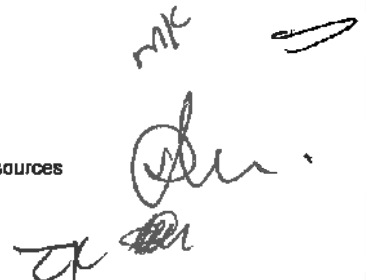
THE MINISTER AND THE HOLDER DECLARED THAT:

WHEREAS The State is the custodian of the nation's mineral and petroleum resources in terms of section 3 of the Act,

AND WHEREAS In terms of clause 4 of the principal right, the terms of the right may not be amended/varied without the written consent of the Minister,

AND WHEREAS the Holder has applied for the amendment of the existing mining right by adding Portion of Portion 1 and Portion of Portion 2 of the farm Mamatwan No 331 as well as Portion of the farm Sinterfontein No 748, in extent of 972.7737 hecatres, properties held in terms of prospecting right issued under reference number NC 014 PR on the 4th October 2006 which is now abandoned by the Notarial Deed of abandonment signed on the 21st November 2011 and further include Portion 3 of the farm Moab No 700, Portion 4 of the farm Adams No 328, Portion 6 of the farm Goud No 329 and the Remaining part of the farm Sinterfontein 748 ,

AND WHEREAS The Minister has granted consent for the amendment/variation to the Holder, in terms of section 102 of the Act.

mik


NOW THEREFORE THESE PRESENTS WITNESS:

The Minister hereby grants the variation/amendment of the mining right executed on the 21st day of November in the year 2005, under Protocol 931/2005, registered at the Mineral and Petroleum Titles Registration Office under 04/2006, in respect of;

Certain: Portions of Portion 5 of the farm Goold No 329, Sinterfontein No 748 and Portion 2 of the farm Mamatwan No 331.

Situated: in the Magisterial/Administrative District of Kuruman

Measuring: 316, 7736 hectares

(In case of various farms involved, a list must be attached and referred to as ANNEXURE n/a);

Is hereby amended/ varied by the addition of Portion of Portion 1 and Portion of Portion 2 of the farm Mamatwan No 331 as well as Portion of the farm Sinterfontein No 748, in extent of 972.7737 hectares, properties held in terms of prospecting right issued under reference number NC 014 PR on the 4th October 2006 which is now abandoned by the Notarial Deed of abandonment signed on the 21st November 2011 and further include Portion 3 of the farm Moab No 700, Portion 4 of the farm Adams No 328, Portion 8 of the farm Goold 329 and the Remaining part of the farm Sinterfontein No 748.

Now the mining right will be comprised of the following properties: Portion 4 of the farm Adams No 328, Portion 5 of the farm Portions 5 and 6 of the farm Goold No 329, Portion of Portion 1 and Portion of Portion 2 of the farm Mamatwan 331, farm Sinterfontein No 748 and Portion 3 of the farm Moab No 700.

Situated: in the Administrative District of Kuruman

Measuring: 1102, 5498 hectares as depicted on the S.G Diagram No 1131/2009, attached hereto as Annexure C.

Now therefore the Minister grants the amendment/ variation of the principal right.

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Thus done and signed at Kimberley on the 21st day of November in the year 2011 in the presence of the undersigned witnesses:

AS WITNESS:

MK Mufson

[Signature]

For and on behalf of the Minister

AS WITNESS:

[Signature]

[Signature]
For and on behalf of the Holder

[Signature]

NOTARY PUBLIC

[Signature]



water affairs

Department:
Water Affairs
REPUBLIC OF SOUTH AFRICA

Private Bag X6101 Kimberley 8300
Tel: (053) 830 8800, Fax: (053) 831 6450, (053) 831 5682 email:www@dwaf.gov.za

FAX COVER SHEET

DATE: 13/02/2011

TO:	Rhudzani		
ORGANISATION:	Hotzel Manganese Mine (Pty) Ltd: Mamatwan		
FAX:	086 5608510		
FROM:	Dawn		
TEL:	0538308822	ROOM NO:	2.5
FAX:	053 8316450		
E-MAIL:	lefeurd@dwa.gov.za		
NO PAGES:	1+1B		

SUBJECT: Licences – Hotazel

MESSAGE: Good Morning

Please find attach your order number for your perusal!

Thank You

Dawn le Fleur



water affairs

Department:
Water Affairs
REPUBLIC OF SOUTH AFRICA

Private Bag X313, Pretoria, 0001, Sedibeng Building, 185 Schoeman Street, Pretoria, Tel: (012) 336-7500, Fax: (012) 326-4472/ (012) 326-2715

LICENCE IN TERMS OF CHAPTER 4 OF THE NATIONAL WATER ACT, 1998 (ACT NO 36 OF 1998) (THE ACT)

I, **Maxwell Sirenya**, in my capacity as Director-General in the Department of Water Affairs and acting under authority of the powers delegated to me by the Minister of Water and Environmental Affairs, hereby authorise the following water uses in respect of this licence.

SIGNED: Maxwell Sirenya

DATE: 26/01/2012

LICENCE NO: 10/D41K/AGJ/1537

FILE NO: 27/2/2/D1141/105/1

1. Licensee **Hotazel Manganese Mines (Pty) Ltd: Mamatwan mine**
Postal address **P O Box 1
Hotazel
8490**
2. Water Uses
 - 2.1 Section 21(a) of the Act: Taking of water from a water resource, subject to the conditions set out in Appendices I and II.
 - 2.2 Section 21(g) of the Act: Disposing of waste in a manner which may detrimentally impact on a water resource, subject to the conditions as set out in Appendices I and III.
 - 2.3 Section 21(j) of the Act: 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, subject to the conditions set out in Appendices I and IV.

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3. The Properties on which the water use will be exercised

- Section 21(a) Portion 1 and 2 of the farm Mamatwan 331
- Section 21(g) Portion 4 of the farm Adams 328
- Section 21(g) Portion 0 of the farm Sinterfontein 748
- Section 21(g) Portion 1 and 2 of the farm Mamatwan 331 and Portion 5 of the farm Goold 329
- Section 21(g) Portion 5 of the farm Goold 329 and Portion 4 of the farm Adams 328
- Section 21(j) Portion 0 of the farm Sinterfontein 748
- Section 21(j) Portion 1 and 2 of the farm Mamatwan 331

4. Registered owner of the Property

- 4.1 Hotazel Manganese Mines (Pty) Ltd

5. Licence and Review Period

- 5.1 This licence is valid for a period of 20 (twenty) years from the date of issuance, and may be reviewed at intervals not exceeding 5 (five) years.

6. Definitions

"Any word or term defined under the Act shall have the same meaning as defined in the Act, unless otherwise specifically stated."

"The Regional Head" Means the Regional Head: Northern Cape, Department of Water Affairs, Private Bag X6101, Kimberly, 8300.

"Report" refers to the report entitled "bhpbilliton Water Use Licence Application report dated October 2009 for Hotazel Manganese Mine (Pty) Ltd as compiled by Bemani Sustainability Training as well as all other related documentations and communication (emails, letters, verbal, etc) related thereto.

7. Description of the activity

The licence is for Section 21(a), (g) and (j) water uses for mining purposes on portion 1 and 2 of the farm Mamatwan 331. Mamatwan Manganese Mine consists of open pit operations that started in 1963. This pit is still operational and is being extended to the North and West. The mining area is approximately 644ha and extends across the farm of Mamatwan 331, Goold 329 and Sinterfontein 748.

APPENDIX I**General conditions for the licence**

1. This licence is subject to all applicable provisions of the National Water Act, 1998 (Act 36 of 1998).
2. The responsibility for complying with the provisions of the licence is vested in the Licensee and not any other person or body.
3. The Licensee must immediately inform the Regional Head of any change of name, address, premises and/or legal status.
4. If the property in respect of which this licence is issued is subdivided or consolidated, the Licensee must provide full details of all changes in respect of the properties to the Regional Head of the Department within 60 days of the said change taking place.
5. If a water user association is established in the area to manage the resource, membership of the Licensee to this association is compulsory.
6. The Licensee shall be responsible for any water use charges or levies imposed by a responsible authority.
7. While effect must be given to the Reserve as determined in terms of the Act, where a desktop determination of the Reserve has been used in issuance of a licence, when a comprehensive determination of the Reserve has finally been made; it shall be given effect to.
8. The licence shall not be construed as exempting the Licensee from compliance with the provisions of any other applicable Act, Ordinance, Regulation or By-law.
9. The licence and amendment of this licence are also subject to all the applicable procedural requirements and other applicable provisions of the Act, as amended from time to time.
10. The Licensee shall conduct an annual internal audit on compliance with the conditions of licence. A report on the audit shall be submitted to the Regional Head within one month of the finalisation of the audit.
11. The Licensee shall appoint an independent external auditor to conduct an annual audit on compliance with the conditions of this licence. The first audit must be conducted within 6 (six) months of the date this licence was issued and a report on the audit shall be submitted to the Regional Head within one month of finalisation of the report.
12. Flow metering, recording and integrating devices shall be maintained in a sound state of repair and calibrated by a competent person at intervals of not more than two years. Calibration certificates shall be available for inspection by the Regional Head or his representative upon request.
13. Any incident that causes or may cause water pollution shall be reported to the Regional Head or his/her designated representative within 24 hours

APPENDIX II**Section 21(a) of the Act: Taking water from a water resource**

1. This licence authorises the abstraction of a maximum quantity of six hundred thousand cubic metres (**600 000 m³/a**) of water per annum from the mine open pit workings at Mamatwan mine on portion 1 and 2 of the Farm Mamatwan 331 based on an average of one thousand six hundred and forty three cubic metres per day (1 643 m³/d). The abstraction point is located at the position S 27°23'17 " E 22°59'31.4" in D41K catchment.
2. The quantity of water authorised to be taken in terms of this licence may not be exceeded without prior authorisation by the Minister.
3. This licence does not imply any guarantee that the said quantities and qualities of water will be available at present or at any time in the future.
4. The above-mentioned volume may be reduced when the licence is reviewed.
5. The Licensee shall continually investigate new and emerging technologies and put into practice water efficient devices or apply technique for the re-use of water containing waste, in an endeavour to conserve water at all times.
6. All water taken from the resource shall be measured as follows:
 - 6.1 The daily quantity of water taken must be metered or gauged and the total recorded at the last day of each month; and
 - 6.2 The Licensee shall keep record of all water taken and a copy of the records shall be forwarded to the Regional Head on or before 25 January and 25 July of each year.
7. No water taken may be pumped, stored, diverted, or alienated for purposes other than intended in this licence, without written approval by the Minister or his/her delegated nominee.
8. The Licensee shall install and monitor appropriate water measuring devices to measure the amount of water abstracted, received and/or consumed, as applicable to the infrastructure.
9. The Licensee shall ensure that all measuring devices are properly maintained and in good working order and must be easily accessible. This shall include a programme of checking, calibration, and/ or renewal of measuring devices.
10. Notices prohibiting unauthorised persons from entering the certain areas, as well as internationally acceptable signs indicating the risks involved in case of an unauthorised entry must be displayed along the boundary fence of these areas.
11. The Department accepts no liability for any damage, loss or inconvenience, of whatever nature, suffered as a result of:
 - 11.1 shortage of water;
 - 11.2 inundations or flood;
 - 11.3 siltation of the resource; and
 - 11.4 required reserve releases.

Licence no: 10/D41K/AGJ/1537
File No. 27/2/2/D1141/105/1

- 12 The Licensee shall establish a programme of formal Information Management System, which maintains a database on water supply, distribution and delivery infrastructure.

- 13 The Licensee shall establish and implement a continual process of raising awareness amongst itself, its workers and stakeholders with respect to Water Conservation and Water Demand Management initiatives.

APPENDIX III**Section 21 (g) of the Act: Disposing of waste in a manner which may detrimentally impact on a water resource****1. CONSTRUCTION AND OPERATION**

1.1 The Licensee shall carry out and complete all the activities, including the construction and operation of the dirty water Dams below, according to the Report and according to the final plans submitted with the Integrated Water Use Licence Application as approved by the Regional Head.

Table 1: Geographical positions of all the waste and water containing waste management facilities

Activities	Purpose	Properties	Total Water	Capacity	Area of Facility	Co-ordinate
Section 21(g)	Disposal of coarse low grade manganese into Adams pit	Portion 4 of the farm Adams 328	75 200 t/a	n/a	4ha	S27°22'59" E22°59'19"
Section 21(g)	Operation of the thickener at Mamatwan (existing)	Portion 0 of the farm Sinterfontein 748	514 194 m ³ /a	n/a	0.1ha	S27°23'19" E22°59'33"
Section 21(g)	Operation of the clarifier at Mamatwan (existing)	Portion 0 of the farm Sinterfontein 748	688 317 m ³ /a	n/a	0.2 ha	S27°23'17" E22°59'31"
Section 21(g)	Disposal of water pumped from the open pit into the Process Water tank (existing)	Portion 0 of the farm Sinterfontein 748	197 944 m ³ /a	456 m ³	0.1ha	S27°23'20" E22°59'28"
Section 21(g)	Disposal of water pumped from the open pit into proposed new Process Water Reservoir (proposed)	Portion 0 of the farm Sinterfontein 748	967 250 m ³ /a	5 200 m ³	0.1ha	S27°23'21.3" E22°59'30.2"
Section 21(g)	Operation of the slime dam at Mamatwan (proposed)	Portion 1 and 2 of the farm Mamatwan 331 and Portion 5 of the farm Goold 329	752 000 tons/a	600 000 m ³ over LoM	4ha	S27°23'17" E22°59'31.4"
Section 21(g)	Operation of the slime	Portion 5 of the farm	912 500 m ³ /a	27 600 m ³	1.2 ha	S27°21'46" E22°58'43"

2012 -01- 2 6

Director-General

	return water dam at Mamatwan	Goold 329 and Portion 4 of the farm Adams 328				
Section 21(g)	Operation of the proposed evaporation ponds at Mamatwan	Portion 0 of the farm Sinterfontein 748	8 517 m ³ /a	1 200 m ³	0.1ha	S27°23'26" E22°59' 14"
Section 21(g)	Mamatwan sludge drying bed	Portion 0 of the farm Sinterfontein 748	0.573 t/a		0.1ha	S27°06'49" E22°50'54"

- 1.2 The construction of the dams listed in table 1 must be carried out under the supervision of a professional Civil Engineer, registered under the Engineering Profession of South Africa Act, 1990 (Act 114 of 1990), as approved by the designer.
- 1.3 All the designs of the raw and dirty water storage dams must be submitted to the department within six months of the date of issue of this licence and the Licensee shall submit that to the Regional Head
- 1.4 All sewage sludge from the sewage treatment plant must be stockpile on concrete and on bunded area. The sludge must also be classified according to the Department of Water Affairs sludge guideline
- 1.5 The Licensee must submit the information on the sludge classification and utilization, as well as technical drawings of the sludge drying beds. to the department within six months of the date of issue of this licence and the Licensee shall submit that to the Regional Head
- 1.6 The Licensee must submit the Water Quality Management Reports (WQMR) for wastewater treatment plants within six months of the date of issue of this licence
- 1.7 Within 30 days after the completion of the activities referred here in accordance with the relevant provisions of this licence, the Licensee shall in writing, under reference 27/2/2/D1141/105/1, inform the Regional Head thereof. This shall be accompanied by a signature of approval from the designer referred to above that the construction was done according to the design plans referred to in the Report.
- 1.8 The Licensee must ensure that the disposal of the waste water and the operation and maintenance of the system are done according to the provisions in the Report.
- 1.9 The Licensee shall submit a set of as-built drawings to the Regional Head after the completion of the waste facilities listed in table 1.
- 1.10 The waste facilities listed in table 1 shall be operated and maintained to have a minimum freeboard of 0.8 metres above full supply level and all other water systems related thereto shall be operated in such a manner that it is at all times capable of handling the 1:50 year flood-event on top of its mean operating level.
- 1.11 The Licensee shall use acknowledged methods for sampling and the date, time and sampler must be indicated for each sample.

1.12 Monitoring Requirements

1.12.1 Suitable measuring structures must be constructed to measure the quantity of water entering and leaving the pollution control as well as water levels in the dams

1.12.2 The quantity of water stored shall be recorded as at the last day of each month.

1.12.3 The groundwater water quality monitoring frequency must be on a monthly basis for the first 12 months of the licence and changed to quarterly thereafter.

2. STORAGE OF WATER CONTAINING WASTE

2.1 The Licensee is authorised to dispose of a maximum quantity in cubic metres (m³) of waste per annum into the waste management facility on the farm described below in table 2.

Table 2: Volumes of waste to be disposed at the waste disposal facilities

Activities	Purpose	Properties	Total Water	Capacity	Area of Facility	Co-ordinate
Section 21(g)	Disposal of coarse low grade manganese into Adams pit	Portion 4 of the farm Adams 328	75 200 t/a	n/a	4ha	S27°22'59" E22°59'19"
Section 21(g)	Operation of the thickener at Mamatwan (existing)	Portion 0 of the farm Sinterfontein 748	514 194 m ³ /a	n/a	0.1ha	S27°23'19" E22°59'33"
Section 21(g)	Operation of the clarifier at Mamatwan (existing)	Portion 0 of the farm Sinterfontein 748	688 317 m ³ /a	n/a	0.2 ha	S27°23'17" E22°59'31"
Section 21(g)	Disposal of water pumped from the open pit into the Process Water tank (existing)	Portion 0 of the farm Sinterfontein 748	197 944 m ³ /a	456 m ³	0.1ha	S27°23'20" E22°59'28"
Section 21(g)	Disposal of water pumped from the open pit into proposed new Process Water Reservoir (proposed)	Portion 0 of the farm Sinterfontein 748	967 250 m ³ /a	5 200 m ³	0.1ha	S27°23'21.3" E22°59'30.2"
Section 21(g)	Operation of the slime	Portion 1 and 2 of the farm	752 000 tons/a	600 000 m ³ over	4ha	S27°23'17" E22°59'31.4"

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	dam at Mamatwan (proposed)	Mamatwan 331 and Portion 5 of the farm Goold 329		LoM		
Section 21(g)	Operation of the slime return water dam at Mamatwan	Portion 5 of the farm Goold 329 and Portion 4 of the farm Adams 328	912 500 m ³ /a	27 600 m ³	1.2 ha	S27°21'46" E22°58'43"
Section 21(g)	Operation of the proposed evaporation ponds at Mamatwan	Portion 0 of the farm Sinterfontein 748	8 517 m ³ /a	1 200 m ³	0.1ha	S27°23'26" E22°59' 14"
Section 21(g)	Mamatwan sludge drying bed	Portion 0 of the farm Sinterfontein 748	0.573 t/a		0.1ha	S27°06'49" E22°50'53.8"

3. QUALITY OF WASTE WATER TO BE DISPOSED

- 3.1 The quality of waste water disposed of into the dams specified above shall not exceed the following limits as specified in table 3 (below).

Table 3: Quality of waste water to be disposed into waste water facility
Quaternary catchment D41K

Substance/parameter	Limit
pH	7.78
Total Dissolved Solids (TDS) in mg/l	1605.5
Chlorides (Cl) in mg/l	342.70
Sulphate (SO ₄) in mg/l	53.50
Sodium (Na) in mg/l	140.80
Calcium (Ca) in mg/l	118.80
Fluoride (F) in mg/l	0.71
Potassium (K) in mg/l	2.27
Magnesium (Mg) in mg/l	160.50
Manganese in mg/l	0.38

4. MONITORING

- 4.1 The Licensee shall monitor on monthly basis the water resources at surface water monitoring point and Ground water monitoring point to determine the impact of the facility and other activities on the water quality by taking samples at the monitoring points described in Table 4 and 5 below.

Table 4: Surface Water monitoring points for Mamatwan Mine

Locality	Description	X co-ordinate	Y co-ordinate
C(MMT)01	At plant run-off canal to Adams pit	22° 59' 30.12"	27° 23' 12.48"
K(MMT)01	sewage treatment works	22° 59' 13.92"	27° 23' 25.80"
O(ADM)01	Adams pit	22° 59' 15.36"	27° 22' 56.64"

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O(MMT)02	South pit	22° 58' 51.6"	27° 22' 34.32"
O(MMT)03	North pit	22° 58' 48.36"	27° 21' 56.16"
Z(MMT)01	Solid waste site	22° 59' 19.68"	27° 23' 21.84"
Z(MMT)02	Furnace tank near sinter tank	22° 59' 43.44"	27° 23' 27.96"
Z(MMT)03	Old oil skimmer	22° 58' 50.1594"	27° 21' 56.52"
Z(MMT)04	New oil skimmer	22° 59' 23.9994"	27° 23' 9.60"
X(MMT)01	Incoming water from Mamatwan Reservoir	22° 59' 26.52"	27° 23' 20.76"
Z(MMT)05	Drinking water from the Offices, plant or change house	22° 59' 21.12"	27° 23' 27.24"

Table 5: Ground Water monitoring points for Mamatwan Mine

Locality	Description	X co-ordinate	Y co-ordinate
JB(RIS)04	North West of Mamatwan Pit	22° 58' 5.5194"	27° 21' 44.64"
JB(GLD)05	North of Mamatwan Pit	22° 58' 39.100"	27° 21' 28.8"
JB(MMT)17	Adjacent to furnace oil tanks	22° 59' 43.80"	27° 23' 26.52"
JB(MMT)18	Adjacent to DMS discards, southern corner	22° 59' 31.56"	27° 23' 45.6"
JB(MMT)19	Adjacent to the laboratory & electrical workshop	22° 59' 28.68"	27° 23' 8.88"
JB(MMT)20	Adjacent to Barlows mechanical workshop	22° 59' 22.92"	27° 23' 11.04"
JB(MMT)21	Behind old explosive magazine	22° 58' 54.84"	27° 22' 58.44"
JB(MMT)22	Adjacent to waste dump shed near Adams pit	22° 59' 12.48"	27° 22' 41.52"
JB(MMT)23	Adjacent sewage treatment works	22° 59' 11.76"	27° 23' 25.08"
JB(MMT)24	Northern side of old slimes dams next to leveled slimes dam	22° 59' 21.12"	27° 23' 40.92"

- 4.2 The date, time and monitoring point in respect of each sample taken shall be recorded together with the results of the analysis.
- 4.3 Monitoring points shall not be changed prior to notification to and written approval by the Regional Head.
- 4.4 An Aquatic Scientist approved by the Regional Head must establish a monitoring programme for the following indices: Invertebrate Habitat Assessment System (IHAS) and the latest SASS (South African Scoring System). Sampling must be done once during the summer season and once during the winter season, annually, to reflect the status of the river upstream and downstream of the mining activities.
- 4.5 Water quality testing to be performed on all pollution control dams on a quarterly basis in order to determine the risks to the receiving environment. The data gathered in the investigation must be reported annually to the Regional Head. If any concentrations levels as specified above are exceeded, the Licensee must institute an investigation to determine the cause of poor water quality.

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Director-General

- 4.6 The Licensee shall participate in any initiative such as Direct Estimation of Ecological Effect Potential (DEEEP) to determine the toxicity of complex tailings waste discharges. Both acute and chronic toxicity must be addressed and at least three taxonomic groups must be present when toxicity tests are performed.
- 4.7 Analysis shall be carried out in accordance with methods prescribed by and obtainable from the South African Bureau of Standards (SABS), in terms of the Standards Act, 1982 (Act 30 of 1982).
- 4.8 The methods of analysis shall not be changed without prior notification to and written approval by the Minister.
- 4.9 Water quality testing must be performed on the monitoring points in table 4 and 5 on a quarterly basis in order to determine the risks to the receiving environment. The data gathered in the investigation must be reported annually to the Regional Head. If any concentrations levels as specified above in table 3 are exceeded, the Licensee must institute an investigation to determine the cause of pollution.

5. WATER RESOURCE PROTECTION

- 5.1 The impact of the activities of the mine on the ground water shall not exceed the following water quality levels as indicated on table 6 below.

Table 6: Water resource quality objectives
Water resource quality objectives (quaternary catchment D41K)

Parameter (mg/l unless otherwise stated)	RQO
Electrical conductivity (mS/m)	96.75
Sodium (mg/l)	24.70
PH	7.90
Magnesium (mg/l)	60.20
Calcium (mg/l)	82.40
Chloride (mg/l)	107.40
Sulphate (mg/l)	32.86
Nitrate (mg/l)	9.79
fluoride(mg/l)	0.35
Total Alkalinity(mg/l)	269.85

6. REPORTING

- 6.1 The Licensee shall update the water balance annually and calculate the loads of waste emanating from the activities. The Licensee shall determine the contribution of their activities to the mass balance for the water resource and must furthermore co-operate with other water users in the catchment to determine the mass balance for the water resource reserve compliance point.
- 6.2 The Licensee shall submit the results of analysis for the monitoring requirements to the Regional Head on a quarterly basis under Reference number 27/2/2/D1141/105/1

7. STORM WATER MANAGEMENT

- 7.1 Storm water leaving the Licensee's premises shall in no way be contaminated by any substance, whether such substance is a solid, liquid, vapour or gas or a combination thereof which is produced, used, stored, dumped or spilled on the premises.
- 7.2 Increase runoff due to vegetation clearance and/or soil compaction must be managed, and steps must be taken to ensure that storm water does not lead to bank instability and excessive levels of silt entering the stream.
- 7.3 Storm water shall be diverted from the mine complex site and roads and shall be managed in such a manner as to disperse runoff and concentrating the storm water flow.
- 7.4 Where necessary works must be constructed to attenuate the velocity of any storm water discharge and to protect the banks of the affected watercourses.
- 7.5 Storm water control works must be constructed, operated and maintained in a sustainable manner throughout the impacted area.
- 7.6 All storm water that would naturally run across the pollution areas shall be diverted via channels and trapezoidal drains designed to contain the 1:50 year flood.
- 7.7 The polluted storm water system shall be designed and implemented to provide suitable routing and pumping capacity for contaminated storm water from the individual facilities to the respective storm water dams in accordance with the design specifications as contained in the Integrated Water Use Licence Application report.
- 7.8 The polluted storm water captured in the storm water control dams shall be pumped to the process water treatment plant for reuse and recycling.

8. PLANT AREAS AND CONVEYANCES

- 8.1 Pollution caused by spills from the conveyances must be prevented through proper maintenance and effective protective measures especially near all stream crossings.
- 8.2 All reagent storage tanks and reaction units must be supplied with a bunded area built to the capacity of the facility and provided with sumps and pumps to return the spilled material back into the system. The system shall be maintained in a state of good repair and standby pumps must be provided.
- 8.3 Any hazardous substances must be handled according to the relevant legislation relating to the transport, storage and use of the substance.
- 8.4 Any access roads or temporary crossings must be:
- 8.4.1 non-erosive, structurally stable and shall not induce any flooding or safety hazard and
 - 8.4.2 be repaired immediately to prevent further damage.

9. ACCESS CONTROL

- 9.1 Strict access procedures must be followed in order to gain access to the property. Access to the pollution control dams, Coal slurry discard dumps, storm water dam and Return water dam must be limited to authorised employees of the Licensee and their Contractors only.

- 9.2 Notices prohibiting unauthorised persons from entering the controlled access areas as well as internationally acceptable signs indicating the risks involved in case of an unauthorised entry must be displayed along the boundary fence of these areas.

10. CONTINGENCIES

- 10.1 Accurate and up-to-date records shall be kept of all system malfunctions resulting in non-compliance with the requirements of this licence. The records shall be available for inspection by the Regional Head upon request. Such malfunctions shall be tabulated under the following headings with a full explanation of all the contributory circumstances:

- 10.1.1 operating errors
- 10.1.2 mechanical failures (including design, installation or maintenance)
- 10.1.3 environmental factors (e.g. flood)
- 10.1.4 loss of supply services (e.g. power failure) and
- 10.1.5 Other causes.

- 10.2 The Licensee must, within 24 hours, notify the Regional Head of the occurrence or potential occurrence of any incident which has the potential to cause, or has caused water pollution, pollution of the environment, health risks or which is a contravention of the licence conditions.

- 10.3 The Licensee must, within 14 days, or a shorter period of time, as specified by the Regional Head, from the occurrence or detection of any incident referred above, submit an action plan, which must include a detailed time schedule, to the satisfaction of the Regional Head of measures taken to:

- 10.3.1 correct the impacts resulting from the incident
- 10.3.2 prevent the incident from causing any further impacts and
- 10.3.3 prevent a recurrence of a similar incident.

11. AUDITING

- 11.1 The Licensee shall conduct an annual internal audit on compliance with the conditions of this licence. A report on the audit shall be submitted to the Regional Head within one month of finalisation of the report, and shall be made available to an external auditor should the need arise.

- 11.2 The Licensee shall appoint an independent external auditor to conduct an annual audit on compliance with the conditions of this licence. The first audit must be conducted within 6 (six) months of the date this licence was issued and a report on the audit shall be submitted to the Regional Head within one month of finalisation of the report.

12. INTEGRATED WATER AND WASTE MANAGEMENT

- 12.1 The Licensee must update an *Integrated Water and Waste Management Plan (IWWMP)*, which must together with the updated *Rehabilitation Strategy and Implementation Programme (RSIP)*, be submitted to the Regional Head for approval within one (1) year from the date of issuance of this licence.

- 12.2 The Licensee shall at all times maintain the negative water balance, during the mining operation and after the mining operation

- 12.3 The IWWMP and RSIP shall thereafter be updated and submitted to the Regional Head for approval, annually.

- 12.4 The Licensee must, at least 180 days prior to the intended closure of any facility, or any portion thereof, notify the Regional Head of such intention and submit any final amendments to the IWWMP and RSIP as well as a final *Closure Plan*, for approval.
- 12.5 The Licensee shall make full financial provision for all investigations, designs, construction, operation and maintenance for a water treatment plant should it become a requirement as a long-term water management strategy.

13. SITE SPECIFIC CONDITIONS

- 13.1 Water samples must be taken from all the monitoring boreholes by using approved sampling techniques and adhering to recognized sampling procedures. Samples should be analyzed for both organic as well as inorganic pollutants, as mining activity often lead to hydrocarbon spills in the form of diesel and oil. At least the following water quality parameters should be analyzed for:

- Major ions (Ca, K, Mg, Na, SO₄, NO₃, Cl, F)
- pH
- Electrical Conductivity (EC)
- Total Petroleum hydrocarbon (TPH)
- Total Alkalinity

These should be recorded on a data sheet. It is proposed that the data should be entered into an appropriate computer database and reported to the Department of Water Affairs.

- 13.2 The mining areas should be flooded as soon as possible to prevent oxygen from reacting with remaining pyrite.
- 13.3 The Licensee should remove all coal from the opencast and as little as possible should be left.
- 13.4 The final backfilled opencast topography should be engineered such that runoff is directed away from the opencast areas.
- 13.5 The final layer should be as clayey as possible and compacted if feasible, to reduce recharge to the opencasts.
- 13.6 A safety pillar of at least 30 m should be left between the underground and opencast areas.
- 13.7 Quarterly groundwater sampling must be done to establish a database of plume movement trends, to aid eventual mine closure.
- 13.8 The Licensee must ensure in advance that alternative water supply for external water users is provided to these users should groundwater resources be impacted
- 13.9 A proper ground and surface water monitoring network should be established to monitor the quality and quantity of water resources as per the report recommendation and ensuring that water used by other water users are safeguarded in accordance with the National Act.
- 13.10 The pollution control dam must be designed in such a manner that any spillage can be contained and reclaimed without any impact on the surrounding environment, a plan must be in place to stop overflowing in a dam in case of rainy seasons.

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- 13.11 Geochemical assessment should be done on the discard material during the mining operation.
- 13.12 The Licensee shall at all times together with the conditions of this licence adhere to the Regulations on use of water for mining and related activities aimed at the protection of water resources (GN 704, 4 June 1999).
- 13.13 The Licensee shall consider other alternatives rather than using clean water for dust suppression in order to conserve clean water.

APPENDIX IV**Section 21 (j) of the Act: Removing of water found underground**

1. The Licensee is authorised to remove a volume not exceeding six hundred thousand cubic metres (600 000 m³/a) of water per annum from the mine open pit workings at Mamatwan mine on portion 1 and 2 of the Farm Mamatwan 331 based on an average of one thousand six hundred and forty three cubic metres per day (1 643 m³/d). The removal point shall be located at the position S 27° 04' 49" E 22° 51' 10".
2. The quantity of groundwater authorised to be extracted in terms of this licence may not be exceeded without prior approval by the responsible authority.
3. The water removed from underground in terms of this licence shall be detained in appropriate facilities authorized in Appendix IV of this licence, and may be used in terms of provisions in Appendix II.
4. The Licensee is prohibited from abstraction of groundwater from any property not described in the tabulation under Clause 3 of this licence.
5. This licence does not guarantee that the said amount to be abstracted will always be available whenever needed by the Licensee.
6. No water taken may be pumped, stored, diverted, or alienated for purposes other than intended in this licence, without written approval by the Regional Head or his/her delegated nominee.
7. Water management aspects for opencast operations at Mamatwan must be in accordance with the Department's BPG A5 for Water Management in Surface Mines.
8. The Licensee shall plan, design, operate and close the underground mining operations in a manner that reduces the ingress of clean water into the mine, minimizes the volume of water used in mining operations, maximizes water reuse, minimizes the water quality deterioration within the mine and minimizes the impacts on the water resource.
9. The Licensee shall undertake the mine planning and development, active mining operations and mine decommissioning in a manner that minimizes disturbance to existing hydrological and geohydrological systems and minimizes water ingress into the mine workings.
10. Where appropriate, the Licensee shall undertake dewatering operations ahead of the mine to keep the mine dry and minimise the potential for water quality deterioration.
11. The Licensee shall submit to the Regional Head for approval, a post-closure water flow and quality model considering water flow control upon mine closure, no closer than 5 (five) years before the intended mine closure.
12. The Licensee must provide any water user whose supply is impacted by the groundwater extraction activities by Hotazel Manganese Mines with potable water or any form of acceptable relief, subject to a written agreement or compensation protocol signed with the affected water users upon scrutiny by the Regional Head.

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13. The Licensee shall keep a record of and swiftly address any complaints, concerns and comments of neighboring land owners or water users regarding alleged negative impact on their water sources due to Hotazel Manganese Mines' groundwater extraction. Such records must be made available to the Regional Head upon request.
14. The Licensee shall implement measures to protect surface and groundwater quality and minimise potential negative impacts on groundwater quantity and levels during operation.
15. The Licensee must implement the groundwater monitoring programme recommended in the report, which programme shall include monitoring of groundwater levels and extraction volumes from both production and monitoring boreholes.
16. Groundwater levels shall be monitored and the Licensee shall continue monitoring these boreholes for a period not less than 10 (ten) years from mine closure (or any period as the Regional Head may determine) to assess the full scale impact of dewatering on the groundwater regime; in line with the approved closure plan.
17. A post closure water management programme must be developed and submitted to the Regional Head within 24 months from the date of issuance of this licence. Details on financial provision and an operational plan for implementation of the post closure management programme must be outlined.
18. The post closure water management programme required in this licence must include considerations and strategies for extraction/abstraction, storage (impoundment), treatment and use or discharge of water from the mine workings areas due to decant or other effects.
19. The Licensee must commission a strategy for the management of polluted water and / or any potential acid mine drainage within 24 months from the date of this licence, taking into consideration aspects such as the separation, collection, containment, pumping, treatment and disposal, discharge or use of such treated water. The Licensee must apply for the relevant authorisation for discharge and/or disposal of the mine water.
20. The Licensee shall consult with Interested and Affected Parties (I & APs) on closure objectives and closure plans, and ongoing review of post-closure impacts and plans.
21. The Licensee must assess the impact that it will have on the water found underground in the mine, on surface water as well as on all neighboring mines and water users, prior to the cessation of any of the Licensee's operations.
22. The Licensee shall initiate an investigation and develop a water management strategy to manage the abstraction of underground compartment water and the disposal to the evaporation facilities effectively.
23. The Licensee shall provide the Department with a management plan to effectively maintain all dams, pollution control systems, toe paddocks, etc. and including regularly removing sludge, silt, plants, etc.
24. The Licensee shall provide any water user whose water supply is impacted by the water use with alternative sources of water.

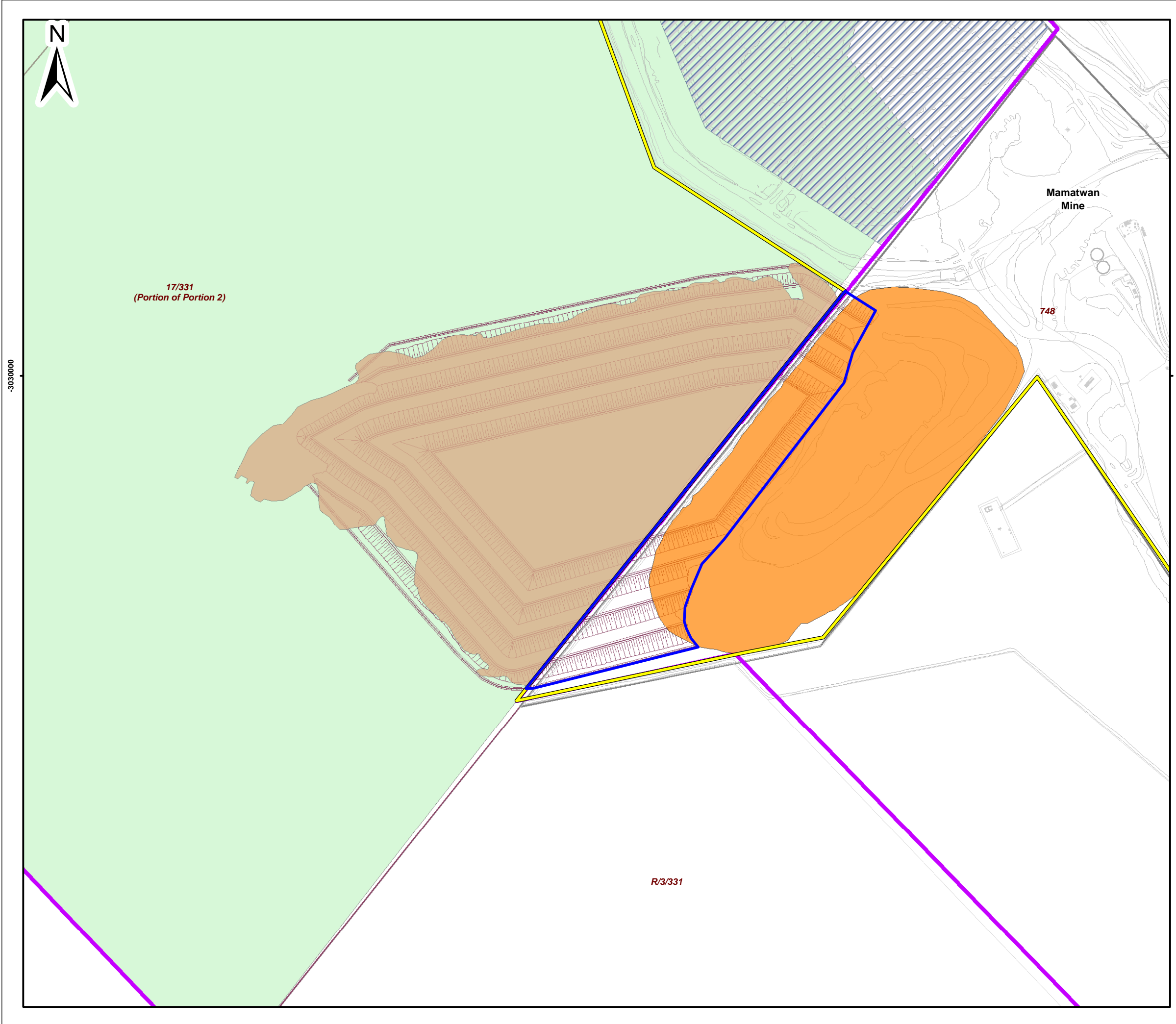
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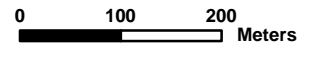
25. The Regional Head must be informed of any incident that may lead to groundwater being disposed of contrary to the provisions of this license, by submitting a report containing the following information:
- 25.1 nature of the incident (e.g. operating malfunctions, mechanical failures, environmental factors, loss of supply services, etc)
 - 25.2 actions taken to rectify the situation and to prevent pollution or any other damage to the environment and
 - 25.3 measures to be taken to prevent re-occurrence of any similar incident.
26. The Licensee shall investigate options to re-use and minimize any discharges of water found underground to minimize the raw water abstractions from freshwater systems. Such water may be used for amongst others secondary uses including dust suppression, lawn irrigation, sports facilities and pre-treatment for small scale community gardens.
27. The Licensee shall within 1 year of issuance determine and delineate the area of dewatering and the area of possible impact of dewatering, map this area and notify any landowners in writing of possible impacts.
28. The quantity of water removed from underground must be measured as follows:
- 28.1 The quantity of water removed must be metered or gauged, the daily quantity must be recorded and the total recorded on the last day of each month; and
 - 28.2 The licence shall keep record of all water removed and a copy of the records shall be forwarded to the Regional Head on a quarterly basis.

END OF LICENCE

APPENDIX 4: PROPOSED SITE PLAN (FIGURE 3)



- Legend**
- Waste Rock Dump Void
 - Final Merged Waste Rock Dump
 - Tshipi Eastern Waste Rock Dump
 - Mamatwan Sinterfontein Waste Rock Dump
 - Tshipi Surface Use Area
 - Tshipi Mining Right Area
 - Mamatwan Mining Right Area
 - Boundary Pillar
 - Farm Boundaries
 - Farm Portions



Scale: 1:7 500 @ A3
 Projection: Transverse Mercator
 Datum: WGS1984, Lo23

South32

Figure 3
Site Layout



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

APPENDIX 5: DECLARATION OF THE EAP UNDER OATH

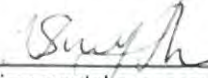
I, **Natasha Smyth**, declare that –

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;
- I 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 (delete whichever is not applicable)

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 (South Africa) (Pty) Ltd

 Name of company:

02/04/2019

 Date:



APPENDIX 6: PROOF OF PUBLIC CONSULTATION

- Meeting minutes of pre-application meeting held with the DMR on 01 February 2019
- DWS correspondence
- Proof of consultation with the Land Claims Commissioner
- Site notices, photos of site notices and map illustrating the location of the site notices
- Copies of advertisements placed in the Kalahari Bulletin and Kathu Gazette
- BID in English and Afrikaans and proof of distribution

**Meeting minutes
of pre-application
meeting held
with the DMR on
01 February 2019**



MAMATWAN MINE

MERGING OF THE MAMATWAN SINTERFONTEIN WASTE ROCK DUMP AND THE TSHIPI EASTERN WASTE ROCK DUMP

DEPARTMENT OF MINERAL RESOURCES (DMR) PRE-APPLICATION MEETING MINUTES

DATE	01 February 2019
VENUE:	Department of Mineral Resources offices in Kimberley
SLR COMPANY:	SLR Consulting (South Africa) (Pty) Ltd (SLR)
PROJECT NUMBER:	720.19136.00001
PURPOSE:	The purpose of the meeting was to: <ul style="list-style-type: none">• Provide an overview of the proposed project• Outline the motivation and project alternatives• Provide an overview of the environmental process• Provide an overview of the existing status of the environment• Provide a list of potential environmental/socio-economic impacts and specialist input (where relevant)• Provide an overview and obtain input into the public participation process.
ATTENDANCE:	An attendance register is presented in Appendix 1.

1. OPEN AND INTRODUCTION

Natasha Smyth commenced the meeting by welcoming everyone and introduced herself as an Environmental Assessment Practitioner from SLR Consulting (South Africa) (Pty) Ltd (SLR), appointed by Hotazel Manganese Mines (Pty) Ltd to undertake the environmental assessment process.

Representatives from both Mamatwan Mine and Tshipi é Ntle Manganese Mining (Pty) Ltd (Tshipi) were also present at the pre-application meeting. Refer to Appendix 1 for the list of attendees.

2. PRESENTATION

Natasha Smyth gave a presentation in order to provide an overview of the proposed project. A copy of the presentation is included in Appendix 2.

3. QUESTION SESSION

Comments raised during the meeting have been recorded and are included in Table 1 below. Where a response was provided the response has been included in the table.

Table 1: Issues raised

Issues raised	By whom	Response provided
The public participation process outlined in the presentation does not make provision for a public meeting. This needs to form part of the public participation process. In addition to this, the public meeting must take place after the submission of the application and during the review of the Basic Assessment Report.	Johannes Nematatani (DMR)	This will be arranged (Natasha Smyth (SLR)).
South32 needs to ensure that the Mine Works Programme and the Environmental Management Programme are aligned.	Ntsundeni Ravhugoni (DMR)	This will be done (Mase Rantsieng (South32)).
Due to the urgent nature of the project, is the DMR able to assist with shortening the internal DMR review period of 107 days.	Natasha Smyth (SLR)	This can be done; however, South32 needs to work closely with the department during the DMR internal review process (Ntsunden Ravhugoni (DMR)).
Will the same official that is dealing with the Tshipi EMP amendment process also process the Mamatwan BAR application?		Not necessarily. It is our opinion that it will most likely be a different official and this should work to the projects advantage as two people will be processing the reports and ideas can be shared (Ntsunden Ravhugoni (DMR)).
Due to the nature of the project and the close working relationship between the Mamatwan Mine and Tshipi, the DMR may investigate the viability of granting one authorisation for both South32 and Tshipi.	Ntsundeni Ravhugoni (DMR)	Noted (Mase Rantsieng (South32)).
Why does the waste rock need to be stored on surface and not backfilled into the pit?	Takalani Khorombi (DMR)	Placing waste rock back into the open pit is not deemed feasible due to space limitation within the open pit. If waste rock was placed in the pit, there would be insufficient space within the open pit for mining activities to take place (Tebogo Masuku (South32)).

4. CLOSE

Attendees were thanked for their input and for making the time to attend the meeting. The meeting was closed by NS.

APPENDIX 1: ATTENDANCE REGISTER

Name and Surname	Organisation	Contact numbers	E-mail
Mase Rantsieng	South32	083 764 2596	Mase.rantsieng@south32.net
Tebogo Masuku		082 338 9442	Tebogo.masuku@south32.net
Nthabeleng Paneng	Tshipi	082 633 5693	Nthabeleng@tshipi.co.za
James Manis		083 406 9775	James@tshipi.co.za
Livhuwani Malatjie	Department of Mineral Resources	053 807 1730	Livhuwani.malatjie@dmr.gov.za
Ntsundeni Ravhugoni		082 828 3904	Ntsundeni.ravhugoni@dmr.gov.za
Takalani Khorombi		053 807 1748	Takalani.khorombi@dmr.gov.za
Johannes Nematatani		053 807 1700	Johannes.nematatani@dmr.gov.za
Kgaudi Shapo		053 807 1778	Kgaudi.shapo@dmr.gov.za
Natasha Smyth	SLR	011 467 0645	nsmt@slrconsulting.com

Project: Merging of the Tshipi and Manatwan WRPD

SLR Company: SLR SA

Date: 01/02/2009

Meeting: DMR Re-application meeting



Name and Surname	Interest in project	Postal address	Contact numbers	E-mail
NTSUNDENI RAVHUGONI	Regulatory (DMR)	41 schmidtsdrieff RD TELKOM BUILDING KIMBERLEY 8301	082 828 3904 053 8071745	Ntsundeni.ravhugoni@ dmr.gov.za.
Mase Rantseng	South 32		083 764 2596	mase.rantseng@ south32.net
Kgantsi Shayo	DMR	41 Schm. A. Drieff Telkom Buid Kimberley 8301	053 8071778	kgantsi-shayo@ dmr.gov.za
Li'Ohuwani MALASSIE	DMR-Regulatory	"	053 8071730	liohuwani.malassie@dmr. gov.za
TAKALANI KHOROMBI	DMR - MNG - REGULATION	"	053 8071700 EXT.1748	takalani.khorombi@ dmr.gov.za
Johannes Nematani	Mineral Regulation (DMR)	"	053 807 1700	Johannes.Nematani@ dmr.gov.za
Nthabekeng Poneng	Tshipi Borwa Mine	Farms Manatwan 3318 Moab P.O. Box 2098, Kathu 8446	087 8451381 082 633 5693	nthabekeng@tshipi. co.za.
James Manis	Tshipi Borwa Mine	"	083 406 9715	james@tshipi.co. za.
TEBOFO MASUKU	South 32	41 Se PO Box 402 KATHU 8446	0823389042	tebofo.masuku@ south32.net.

APPENDIX 2: PRESENTATION

SOUTH32

**MERGING OF THE MAMATWAN SINTERFONTEIN WASTE
ROCK DUMP AND THE TSHIPI EASTERN WASTE ROCK DUMP**

DMR PRE-APPLICATION MEETING

01 February 2019

global **environmental** and **advisory** solutions



AGENDA

- Welcome and opening
- Overview of the proposed project
- Motivation and alternatives
- Environmental process overview
- Overview of the existing status of the environment
- Potential environmental/socio-economic impacts and specialist input (where relevant)
- Proposed public participation process
- Close

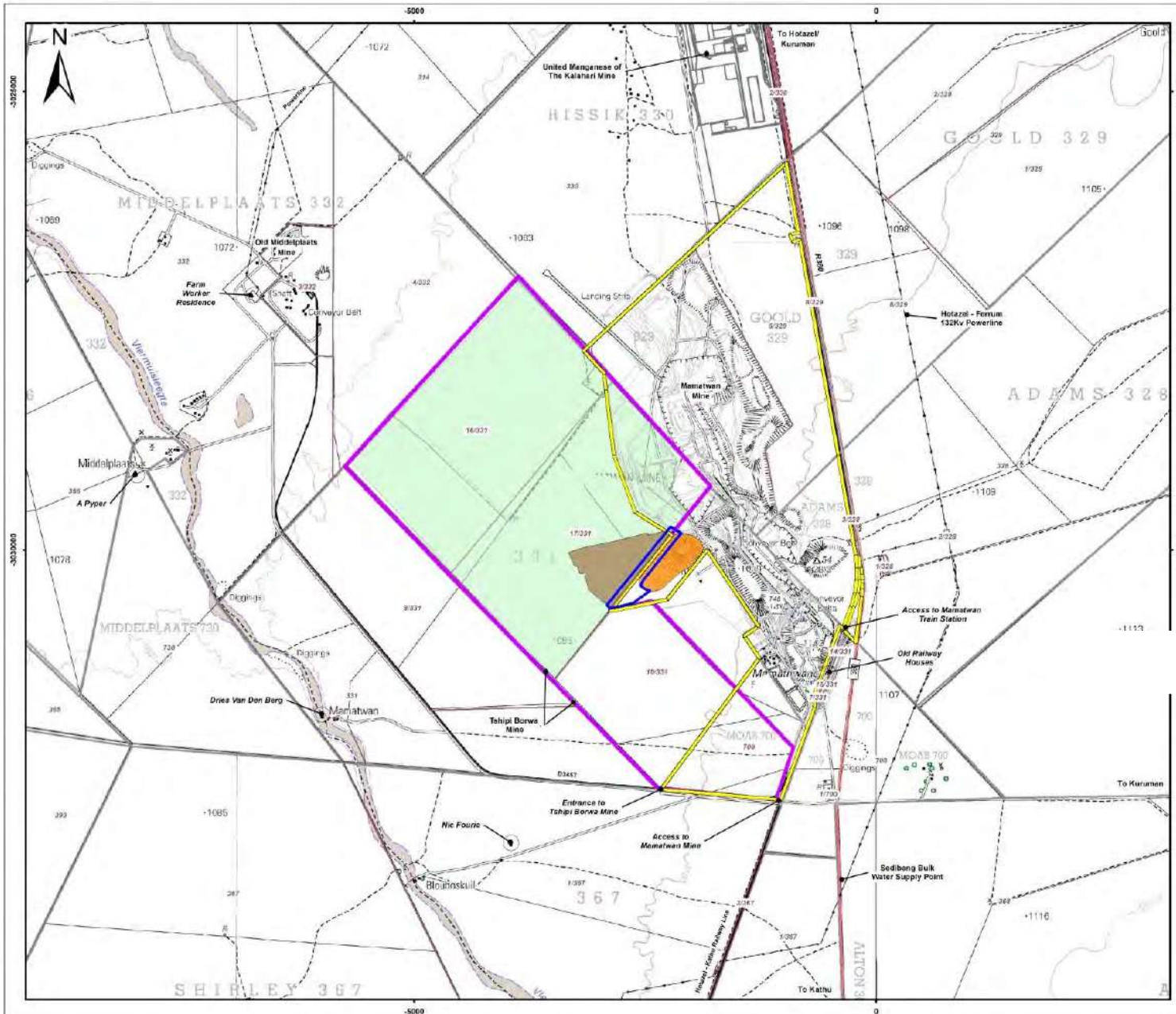
OVERVIEW OF PROPOSED PROJECT

- South32 operates the open pit manganese Mamatwan Mine (MMT) located on portion 5 of the farm Goold 329, the farm Sinterfontein 748, and portion 2 and the remaining portion of portion 3 of the farm Mamatwan 331 located to the east of the Tshipi Borwa Mine.
- MMT holds:
 - A Mining right (Reference number: NC 256 MR) issued and approved by the erstwhile Department of Minerals and Energy (DME) (currently the DMR)
 - An EMP (Reference number: NC 6/2/2/118) issued and approved by the erstwhile DMR (currently the DMR)
 - An AEL (Licence number: NC/AEL/NDM/ZRH01/2014) issued by DENC
 - An amended IWUL (License number: 10/D41K/KAGJ/1537) issued by the DWS
 - A Waste Permit (Permit number: B33/2/441/21/P157) for the development and operation of a decommissioned general waste disposal site issued by the erstwhile Department of Water Affairs and Forestry (currently DWS)
 - An EA (Reference number: NC/KGA/HOT3/07) for bulk fuel storage issued by erstwhile Department of Tourism, Environment and Conservation (currently DENC).

OVERVIEW OF PROPOSED PROJECT

- Tshipi é Ntle Manganese Mining (Pty) Ltd (Tshipi) operates the Tshipi Borwa Mine located on the farms Mamatwan 331 and Moab 700, located to the west of Mamatwan Mine.
- Tshipi is in the process of amending its approved EMP to cater for:
 - The extension of the West WRD onto Mamatwan portion 8 to create additional dumping capacity
 - The extension of the East WRD to the south-east, to merge with the Mamatwan Sinterfontein WRD, to provide capacity for the waste rock that will be mined when the boundary pillar is mined
 - Establishment of an overhead powerline and an overland conveyor system
- Mamatwan is planning on undertaking a basic assessment process to cater for the merging of the sinterfontein WRD with the Tshipi eastern WRD. In addition to this the existing WUL need to be amended.

LOCAL SETTING OF THE PROPOSED PROJECT



- Legend**
- Waste Rock Dump Void
 - Mamatwan Sinterfontein Waste Rock Dump
 - Tshipi Eastern Waste Rock Dump
 - Mamatwan Mining Right Boundary
 - Tshipi Surface Use Area
 - Tshipi Approved Mining Right
 - Main Roads
 - Power Line
 - Rivers and Streams
 - 20m Contour Lines
 - Farm Boundaries
 - Farm Portions

500 1 000
Meters

Scale: 1:40 000 A3
Projection: Transverse Mercator
Datum: WGS1984, UTM32S

HOTAZEL MANGANESE MINES (PTY) LTD

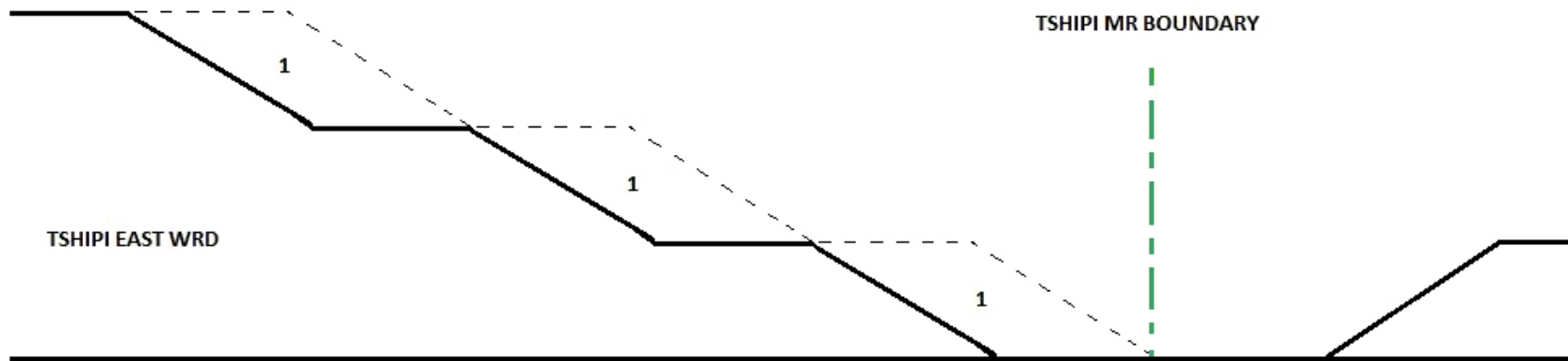
Local Setting

SLR Consulting (Africa) (Pty) Ltd
P O Box 1699, Crairivier, 2360 South Africa
Tel: +27 (11) 467-0046 Fax: +27 (11) 467-0078

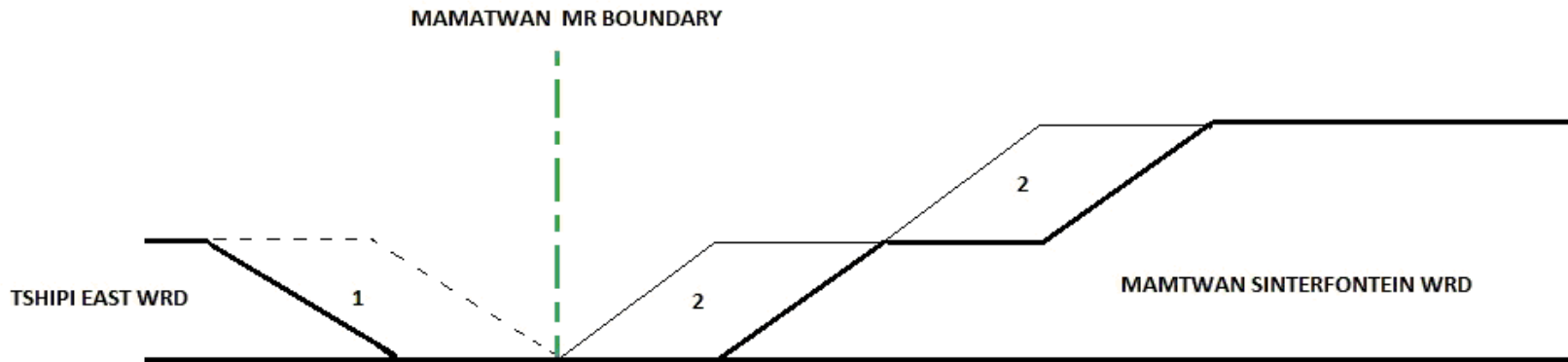
PHOTOS ILLUSTRATING THE VOID BETWEEN THE WRDs



OVERVIEW OF THE PROPOSED PROJECT

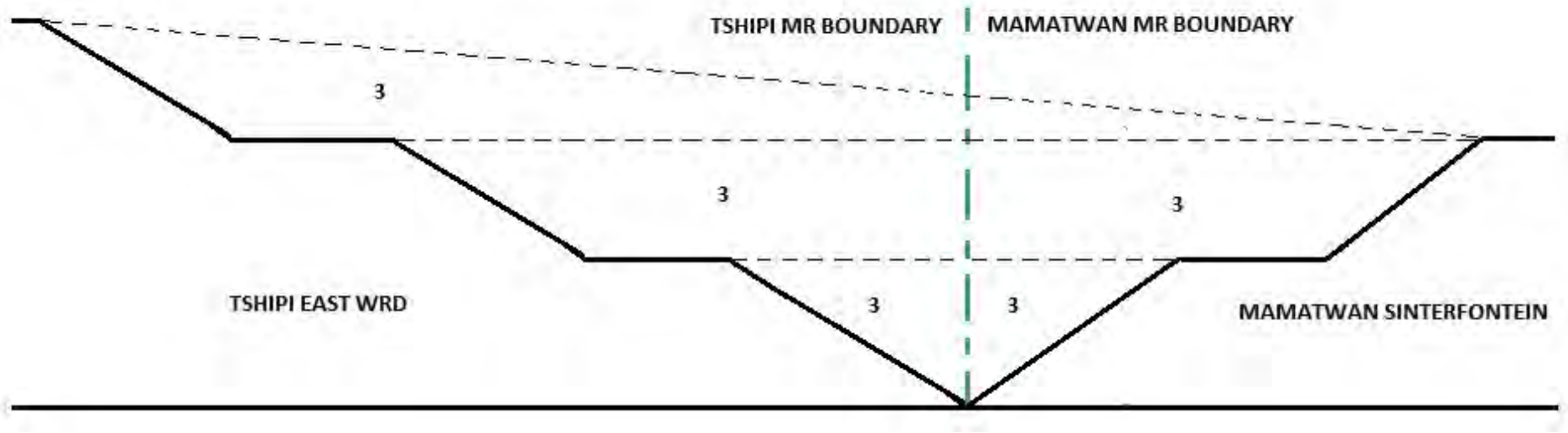


EXTENSION OF TSHIPi EAST WRD TO MINING RIGHT BOUNDARY



EXTENSION OF MAMATWAN WRD TO MINING RIGHT BOUNDARY

OVERVIEW OF THE PROPOSED PROJECT



MOTIVATION AND ALTERNATIVES

Motivation for the project

- The merging of the two waste rock dumps will provide capacity for the storage of waste rock when the boundary pillar is mined.
- The merging of the two waste rock dumps avoids the extension of the footprint of the mine into undisturbed area.

Alternatives

- No alternatives were considered for the following reasons:
 - Undisturbed areas at the MMT are planned for future infrastructure
 - The filling of the void will disturb vegetation that has already been impacted by mining facilities (WRDs on either side of the boundary fence)
 - The WRD is located in close proximity to the open pit to optimise haul distance.

ENVIRONMENTAL PROCESS

Permissions required for the proposed project:

Authorisation required	Applicable legislation	Key process elements	Competent authority
Environmental Authorisation (EA)	National Environmental Management Act No. 107 of 1998 and the Environmental Impact Assessment (EIA) Regulations, 2014 as amended	<ul style="list-style-type: none"> NEMA EA Application Stakeholder engagement BAR and supporting specialist studies 	DMR
Waste Management Licence	National Environmental Management: Waste Act (No. 59 of 2008)	<ul style="list-style-type: none"> NEM:WA WML application Stakeholder engagement BAR and supporting specialist studies 	DMR
Water Use Licence	National Water Act No. 36 of 1998 and Regulations Regarding the Procedural Requirements for Water Use Licence Applications WULAs (GNR 267 of 2017)	<ul style="list-style-type: none"> WUL application Stakeholder engagement WULA forms IWWMP and supporting specialist studies 	DWS

ENVIRONMENTAL PROCESS

Permissions required for the proposed project:

Authorisation required	Applicable legislation	Key process elements	Competent authority
Amend EMP	Mineral and Petroleum Resources Development Act (No. 28 of 2002)	Section 102 application	DMR

ENVIRONMENTAL PROCESS

Relevant listed activities:

Applicable legislation	Relevant activity	Description
NEMA listing Notice 1	Activity 27: Clearance of indigenous vegetation of more than 1ha but less than 20ha	As part of filling the void, indigenous vegetation will be removed.
NEMA listing Notice 1	Activity 34: The expansion of a facility that requires an amendment to an existing licence in terms of national or provincial legislation governing the release of emissions, effluent or pollution.	The existing IWUL will need to be amended to cater for the increase in WRD capacity.

ENVIRONMENTAL PROCESS

Relevant listed activities:

Applicable legislation	Relevant activity	Description
NEM:WA Category A	Activity 13: The expansion of a waste management activity Listed in Category A or B of this Schedule, which does not trigger an additional waste management activity of this Schedule.	The filling of the void with waste material requires a waste management licence.
Section 21 of the NWA	21(g): Disposal of waste that may detrimentally impact the environment	The existing IWUL will need to be amended to cater for the increase in WRD capacity.

ENVIRONMENTAL PROCESS

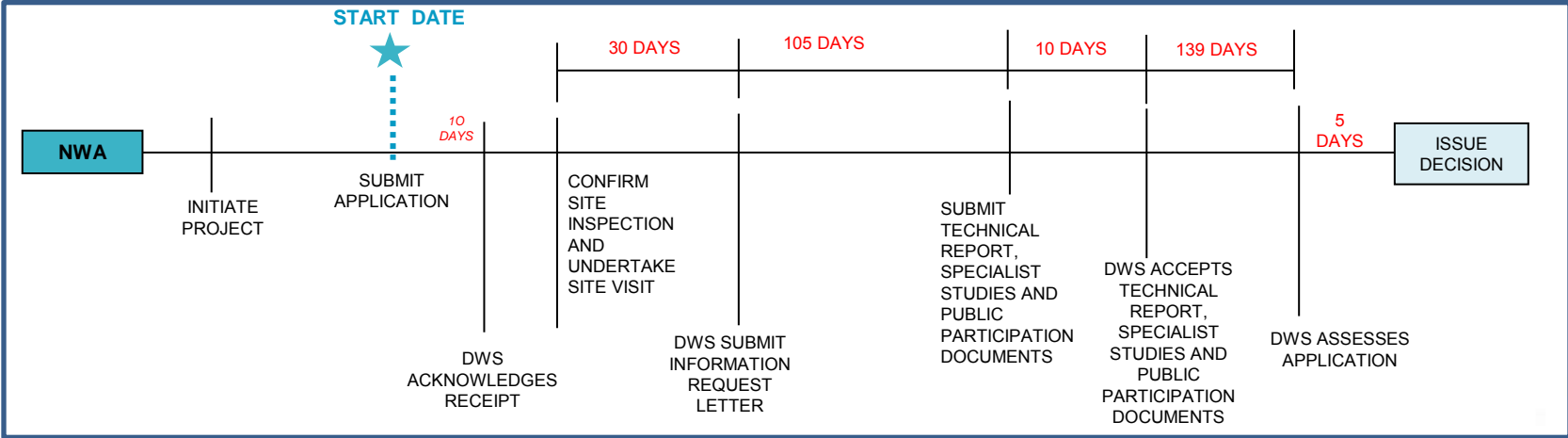
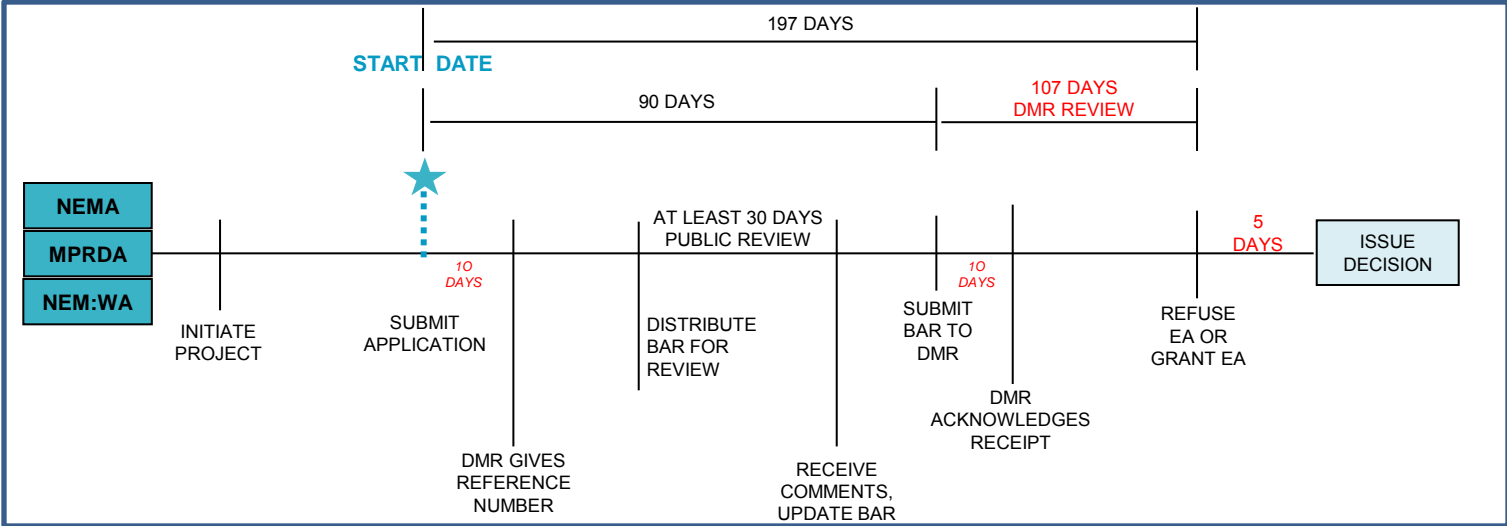
Commenting authorities

- Department of Environment and Nature Conservation
- Department of Agriculture, Forestry and Fisheries
- Department of Rural Development and Land Reform
- Provincial South Africa Heritage Resource Agency

Local authorities

- John Taolo Gaetsewe District Municipality
- Joe Morolong Local Municipality and applicable ward councillor

ENVIRONMENTAL PROCESS



EXISTING STATUS OF THE ENVIRONMENT

- Geology: MMT falls in the Kalahari Manganese Field and is covered by gravels, clays, calcretes and aeolian sands of the Kalahari Group.
- Climate: MMT falls within the Northern Steppe Climatic Zone. It is a semi-arid region characterised by seasonal rainfall, hot temperatures in summer, and colder temperatures in winter. Rainfall ranges from 1.3 mm to 72.3 mm per month and winds from the north, north-east are dominant in the area.
- Topography: The natural surrounding and on-site topography has been influenced largely through surrounding mining activities
- Soils and land capability: Kalahari sand of the Hutton soil are present between the WRDs. Its agricultural potential is low but has potential for supporting grazing.
- Plant life: The small pocket of vegetation between the WRDs, has been subjected to the daily functioning of the MMT and has been subjected to increased levels of dust and dumping of excavated material. This areas has no significant biodiversity present.

EXISTING STATUS OF THE ENVIRONMENT

- Animal life: The animal population in the area has been disturbed due to existing mining and agricultural activities. Several bird and mammal species are expected in the area and protected or endangered species that are likely to occur in the area and include the Honey Badger, Pangolin, Southern African Hedgehog, Dent's Horseshoe Bat, Schreibers' Bat, various endemic desert birds and raptors e.g. Ludwig's Bustard, Martial Eagle and Secretary Bird.
- Surface water: MMT falls within the catchment of the Ga-Mogara River, a tributary of the Kuruman River which joins the Molopo River and flows into the Orange River. MMT is located in the D41K quaternary catchment which has a gross total catchment area of 4 216 km², with a MAR of 6.53 mcm. There is no third party reliance on surface water. No wetlands are located within the area.
- Groundwater: The site is in a poor/minor aquifer region with a shallow aquifer with low yield and a deeper fractured bedrock aquifer with a higher yield. The groundwater levels at the mine range between 30 to 45 mbgl. Groundwater quality is primarily used for livestock watering.

EXISTING STATUS OF THE ENVIRONMENT

- Air quality: Ambient air quality has been influenced by mines, household fuel combustion, vehicle tailpipe emissions and agricultural activities.
- Noise: Existing noise in the area is mainly caused by farming activities, localised traffic movements and nearby mining operations and existing mining operations.
- Visual: The visual value of the project area is very low due to the presence of the Tshipi eastern WRD and the MMT sinterfontein WRD.
- Heritage/cultural resources: No heritage/cultural sites are expected and there is a low possibility of palaeontological resources occurring at the MMT. This will be verified as part of the BA process.
- Socio-economic: There are communities, mines, private landowners and farm occupants around the MMT. Unemployment and education levels in the area are higher than the provincial and municipal average. Water and sanitation provision is very good.
- Land use: Land uses around the MMT include agriculture, isolated residences, infrastructure/servitudes, solar plant and mining activities. Land uses on-site have already been influenced by MMT activities.

POTENTIAL ENVIRONMENTAL/SOCIO-ECONOMIC IMPACTS AND SPECIALIST INPUT

Aspect	Potential Environmental/Cultural/Socio-economic impacts	Specialist input (where applicable)
Geology	Loss and sterilisation of mineral resources	Qualitatively assessed
Topography	Altering topography	Qualitatively assessed
Soils & land capability	Loss of soil and land capability through contamination and physical disturbance	Soil & land capability specialist study*
Biodiversity	Physical destruction and general disturbance of biodiversity	Biodiversity specialist study*
Surface water	Alteration of natural drainage patterns and contamination of surface water resources	Hydrological Study*

* Reference will be made to specialist studies undertaken for the Tshipi EMP project that catered for the filling of the WRD void.

POTENTIAL ENVIRONMENTAL/SOCIO-ECONOMIC IMPACTS AND SPECIALIST INPUT

Aspect	Potential Environmental/Cultural/Socio-economic impacts	Specialist input (where applicable)
Groundwater	Reduction in groundwater quantity and quality affecting third party users	Groundwater Study and Waste Assessment Study*
Air	Air pollution through an increase in ambient dust and PM concentrations	Air Quality Study*
Noise	Increase in disturbing noise levels due to the operation of vehicles	Qualitatively assessed
Visual	Negative visual views (WRD)	Qualitatively assessed
Traffic	General road and traffic disturbance and safety within the mine boundary	Qualitatively assessed

* Reference will be made to specialist studies undertaken for the Tshipi EMP project that catered for the filling of the WRD void.

POTENTIAL ENVIRONMENTAL/SOCIO-ECONOMIC IMPACTS AND SPECIALIST INPUT

Aspect	Potential Environmental/Cultural/Socio-economic impacts	Specialist input (where applicable)
Heritage/cultural and palaeontological	Destruction of heritage/cultural and palaeontological resources	Heritage/cultural and palaeontological study

* Reference will be made to specialist studies undertaken for the Tshipi EMP project that catered for the filling of the WRD void.

PUBLIC PARTICIPATION

I&AP and authority notification and consultation

- Hold pre-application meetings (DMR and DWS)
- The public consultation for the BA and IWULA amendment processes will be run in parallel.
- The public participation will cater for both the NEMA 2014 EIA regulations and the NWA Regulations pertaining to procedural requirements for WULAs
- The public consultation proposed includes the following:
 - Placement of an advert in two local papers (Kathu Gazette and Kalahari Bulletin)
 - Distribute BID informing I&APs and regulatory authorities about the proposed project and related processes
 - Placement of site notices in two languages (English and Afrikaans)
 - Review of the BAR and IWULA and/or summary

Note: The merging of the waste rock dumps formed part of the public participation process for Tshipi. It follows is there a need to hold public meetings again?

PUBLIC PARTICIPATION

Review of the BAR and IWULA:

- Hard copies left at designated venues for review for 30 days. Suggested venues include:
 - John Taolo Gaetsewe District Municipality
 - Joe Morolong Local Municipality
 - Hotazel and Black Rock community public libraries
 - Kuruman and Kathu town libraries.
- Distribution of a summary (English and Afrikaans) of the BAR and IWWMP via fax, email or post
- SMS notifications
- Electronic copies will be made available on the SLR website.

THANK YOU AND CLOSE



DWS

correspondence

Clive Phashe

From: Msimango Philani (KBY) <MsimangoP@dws.gov.za>
Sent: 13 February 2019 09:07 AM
To: Natasha Smyth
Subject: RE: Mamatwan - South32 - Request for pre-application meeting

Good Day

Based on the information provided and the attached presentation, the following information would be required for a water use licence application:

- Fully completed Application forms: DW755, DW758, DW760 (my assumption is that an expansion would trigger additional abstraction requirements, unless I am mistaken), DW784, DW788, DW767, DW905, DW901, DW902 (If any infrastructure would be on the Regulated area of a watercourse (a defined in Regulation) then DW763, DW768, DW781 forms need to be submitted as well;
- Proof of payment of processing fee: R115;
- Company registration certificate, tax clearance certificate, company shareholders breakdown;
- Power of attorney;
- Copy (certified) of id (company representative who signs the forms);
- Property Zoning documents;
- Copy of title deed;
- Letter of consent if applicant is not the land owner;
- Updated Integrated Water and Waste Management Plan (as per relevant Regulation) with waste assessment, Water Balance and stormwater management plan;
- Geohydrological Assessment (as per relevant Regulation);
- Request for Exemption from complying with GN704 Regulation (with scientific motivation);
- Clearance Letter from Land Claims;
- Mining Right from Department of Mineral Resources;
- Social and Labour Plan;
- Section 27 Motivation;
- Signed Design Drawings and Engineers Report(Pollution control dam, storm water trenches, waste rock dumps, slimes dam, etc), designed by ECSA registered Engineer (also waste classification);
- Environmental Impact Assessment Report as per legislative requirements;
- Public Participation and Report;
- Service Level Agreement for waste collection, sewage handling, provision of water services, etc;
- Closure Rehabilitation Plan
- A copy of 1:50 000 topographic map / 1:10 000 indicating map name number of farm boundaries;
- Wetland Delineation Report (if there are any section 21 c & l water use triggered).

Kindly refer to the attached for the Procedural Requirements for water use licence applications for ease of reference. My advice would be to submit the application via EWULAAS (Electronic Water Use Licence Application and Authorisation System) and hard copy (with a cd) just to avoid any unnecessary delays due to system challenges. My advice is to also refrain from addressing the application to me personally but rather, Attention: Water Quality Management or Attention Setshego Thebe (administrative support for water use licence applications). This is because if I am not in the office, the document will not be opened and it will wait for my return which could unfairly prejudice you.

This correspondence can form part of the pre-application enquiry as per your request.

Should there any clarity required, you are most welcome to liaise with me.

I hope that clarifies your query.

My sincere apologies for the delayed response.

Regards

Mr. Philani P. Msimango

BSc - Geological Sciences (UKZN); **BSc Hons - Geohydrology** (UFS-IGS)

Control Scientific Technician

Water Quality Management - Lower Vaal

Northern Cape Provincial Operations

E: msimangop@dws.gov.za

T: +27 53 836 7649

Private Bag X61011 28 Central Road | Beaconsfield | Kimberley | 8301

"The man that once did sell the lion's skin, While the beast lived was killed with hunting him" - William Shakespeare



From: Natasha Smyth [<mailto:nsmyth@slrconsulting.com>]
Sent: Friday, February 01, 2019 5:19 AM
To: Msimango Philani (KBY)
Subject: Mamatwan - South32 - Request for pre-application meeting

Hi Philani

South32 operates the open pit manganese Mamatwan Mine (MMT) located on portion 5 of the farm Goold 329, the farm Sinterfontein 748, and portion 2 and the remaining portion of portion 3 of the farm Mamatwan 331 located to the east of the Tshipi Borwa Mine.

Tshipi é Ntle Manganese Mining (Pty) Ltd (Tshipi) operates the Tshipi Borwa Mine located on the farms Mamatwan 331 and Moab 700, located to the west of Mamatwan Mine. Tshipi is in the process of amending its approved EMP to cater for:

- The extension of the West WRD onto Mamatwan portion 8 to create additional dumping capacity
- The extension of the East WRD to the south-east, to merge with the Mamatwan Sinterfontein WRD, to provide capacity for the waste rock that will be mined when the boundary pillar is mined
- Establishment of an overhead powerline and an overland conveyor system.

In October 2018, a pre-application meeting was held with you, Tshipi and SLR to discuss the Tshipi EMP amendment and associated amendment of the IWUL process.

With particular focus on the Tshipi East WRD merge with the Mamatwan Sinterfontein WRD, South32 is also required to undertake an environmental assessment process and associated IWUL amendment. In this regard we would like to arrange a pre-application meeting with your Department to discuss the amendment of the South32 IWUL. The presentation has been attached for your consideration.

Please advise on your availability next week (if possible) and please let me know if you would like us to come through to your offices in Kimberly for the meeting or if a conference call will suffice.

If you have any queries please give me a call.

Kind regards

Natasha



Natasha Smyth

Environmental Assessment Practitioner

 +27 83 226 8570

 +27 11 467 0945

 2029

 nsmyth@slrconsulting.com

SLR Consulting (Africa) (Pty) Ltd
Unit 7
Fourways Manor Office Park
1 MacBeth Avenue
Fourways, Johannesburg, Gauteng, 2191



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Proof of consultation with the Land Claims Commissioner



Enquiries: Ryan Oliver

SLR

Dear Sir/ Madam

LAND CLAIMS ENQUIRY –

- 1. Farm Sinterfontein No. 748, Joe Morolong Local Municipality, Province Northern Cape.**

We refer to your email dated 26/03/2019.

We confirm that as at the date of this letter no land claims appear on our database in respect of the Property. This includes the database for claims lodged by 31 December 1998; and those lodged between 1 July 2014 and 27 July 2016 in terms of the Restitution of Land Rights Amendment Act, 2014.

Whilst the Commission takes reasonable care to ensure the accuracy of the information it provides, there are various factors that are beyond the Commission's control, particularly relating to claims that have lodged but not yet been gazetted such as:

1. Some Claimants referred to properties they claim dispossession of rights in land against using historical property descriptions which may not match the current property description; and
2. Some Claimants provided the geographic descriptions of the land they claim without mentioning the particular actual property description they claim dispossession of rights in land against.

The Commission therefore does not accept any liability whatsoever if through the process of further investigation of claims it is found that there is in fact a land claim in respect of the above property.

If you are aware of any change in the description of the above property after 19 June 1913 kindly supply us with such description so as to enable us to do a further search.

Yours faithfully

A handwritten signature in black ink, appearing to read 'M. Du Toit', with a large, stylized flourish at the end.

Ms. M. Du Toit

Chief Director: Land Restitution Support-Northern Cape

Date: 28.03.2019

**Site notices,
photos of site
notices and map
illustrating the
location of the
site notices**

SOUTH32

WATER USE LICENSE APPLICATION

Project: The merging of the Mamatwan Mine Sinterfontein and the Tshipi Borwa Mine eastern waste rock dumps

Farm (water use location): The farm Sinterfontein 748

Location: Mamatwan Mine located approximately 25km south of the town Hotazel in the Northern Cape Province.

Legislation	Applicable water use	Competent authority
National Water Act (36 of 1998) and Regulations Regarding the Procedural Requirements for Water Use Licence Applications and Appeals (GNR. 267 of 2017)	Section 21(g): Disposal of waste in a manner which may detrimentally impact on a water resource	Department of Water and Sanitation

Further information queries, comments and/or objections to the application are to be submitted in writing to the person listed below by no later than 29 April 2019.

Contact Details: Natasha Smyth

Email: nsmyth@slrconsulting.com

Fax: (011) 467 0978

Post: P O Box 1596, Cramerview, 2060

Queries Tel: (011) 467 0945.



PROPOSED BASIC ASSESSMENT PROCESS ASSOCIATED WITH THE MERGING OF THE MAMATWAN SINTERFONTEIN WASTE ROCK DUMP AND THE TSHIPI EASTERN WASTE ROCK DUMP

South32 operates the open pit manganese Mamatwan Mine (MMT) (forms part of the legal entity Hotazel Manganese Mines (Pty) Ltd) located approximately 25km south of the town Hotazel in the John Taolo Gaetsewe District Municipality in the Northern Cape Province. The MMT is located on portion 5 and 6 of the farm Goold 329, the farm Sinterfontein 748, portion of portion 2 (Currently Portion 17) and portion of portion 1 (Currently Portion 16) of the farm Mamatwan 331, portion 3 of the farm Moab 700 and portion 4 of the farm Adams 328. MMT holds an Environmental Management Programme (EMP) and a Mining right, issued and approved by the former Department of Minerals and Energy (currently the Department of Mineral Resources). In addition to this, the MMT also holds an Integrated Water Use Licence issued by the Department of Water and Sanitation (DWS).

An 18m wide (on surface) boundary is located between the MMT and the Tshipi Borwa Mine (which is located adjacent to the MMT). Tshipi and MMT have approval to mine the 18m wide boundary pillar. Additional capacity is required to store waste rock generated as part of mining the boundary pillar. To cater for the additional storage it is proposed that the Mamatwan Sinterfontein waste rock dump and the Tshipi eastern waste rock dump are merged. MMT is proposing on amending their approved EMP to cater for the merging of the waste rock dumps.

Notice is hereby given of the applications to be made for authorisation of the proposed project in terms of the environmental legislation listed below:

Legislation	Listed Activities	Key Process Elements	Competent Authority
National Environmental Management Act (No. 107 of 1998) and Environmental Impact Assessment Regulations, 2014 as amended.	GNR 983. Listing Notice 1: <ul style="list-style-type: none"> Activity 27: The clearance of an area of 1 hectares or more, but less than 20 hectares of indigenous vegetation (<i>indigenous vegetation to be removed as part of the waste rock dump merge</i>) Activity 34: The expansion of existing facilities or infrastructure for any process or activity where such expansion will result in the need for an amended permit or licence in terms of national or provincial legislation governing the release of emissions, effluent or pollution (<i>Existing IWUL will need to be amended to cater for an increase in waste rock dump capacity</i>) 	<ul style="list-style-type: none"> Environmental Authorisation Application Basic Assessment Report, including Environmental Management Programme and supporting specialist studies Stakeholder engagement 	Northern Cape Department of Mineral Resources
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In addition, MMT will apply for a Section 102 EMP amendment from the DMR in terms of the Mineral and Petroleum Resources Development Act (No. 28 of 2002) (MPRDA), which will be supported by the EMP included in the Basic Assessment report.

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All stakeholders are invited to register as Interested and Affected Parties (I&AP) and submit any initial comments to SLR by 29 April 2019. All registered I&APs will continue to be given the opportunity to participate and comment for the full duration of the Basic Assessment and Water Use Licence Application processes. Registered I&APs will be notified when the Basic Assessment Report and Water Use Licence Application will be available for public review. To register or to check that you are registered and/or to submit any comment on the proposed project and process contact SLR at the contact details below:

Natasha Smyth
 Email: nsmyth@slrconsulting.com
 Tel: 011 467 0945
 Fax: 011 467 0978
 Post: PO Box 1596, Cramerview, 2060
 (Note: If using post, please also contact us telephonically to notify us of your submission).

VOORGESTELDE BASIESE ASSESSERINGSPROSES GEASSOSIEERD MET DIE SAMESMELTING VAN DIE MAMATWAN SINTERFONTEIN AFVALROTS MYNHOOP EN DIE TSHIPI OOSTELIKE AFVALROTS MYNHOOP

South32 bedryf die oopgroef Mamatwan Mangaanmyn (MMT) (vorm deel van die regsenteit Hotazel Manganese Mines (Edms) Bpk) sowat 25 km suid van die dorp Hotazel in die Noord-Kaaprovinsie geleë in die John Taolo Gaetsewe Distriksmunisipaliteit. MMT is geleë op gedeelte 5 en 6 van die plaas Goold 329, die plaas Sinterfontein 748, n' gedeelte van gedeelte 2 (Huidiglik gedeelte 17) en n' gedeelte van gedeelte 1 (Huidiglik Portion 16) van die plaas Mamatwan 331, gedeelte 3 van die plaas Moab 700 en gedeelte 4 van die plaas Adams 328. MMT het 'n Omgewingsbestuursprogram (OBPr) en 'n Mynreg, uitgereik en goedgekeur deur die voormalige Departement van Minerale en Energie (tans die Departement van Minerale Hulpbronne (DMR)). Daarbenewens het die MMT ook 'n geïntegreerde watergebruikslisensie (IWUL) uitgereik deur die Departement van Water en Sanitasie (DWS).

'n 18m breë grens (op die oppervlak) is geleë tussen die MMT en die Tshipi Borwa-myn (wat langs die MMT geleë is). Tshipi en MMT het goedkeuring om die 18m wye grenspilaar te myn. Bykomende bergingskapasiteit word benodig om afvalrots wat gegeneer word as deel van die ontginning van die grenspilaar, te berg. Om voorsiening te maak vir die bykomende berging word voorgestel dat die Mamatwan Sinterfontein-afvalrots mynhoop (ARM) en die Tshipi-Oostelike ARM saamgevoeg word. MMT stel voor om hul goedgekeurde OBPr te wysig om voorsiening te maak vir die samesmelting van die ARMe.

Hiermee word kennis gegee van die aansoek om goedkeuring van die voorgestelde projek ingevolge die omgewingswetgewing wat hieronder gelys word:

Wetgewing	Gelyste Aktiwiteite	Sleutel Proses Elemente	Bevoegde Owerheid
Nasionale Omgewingsbestuurswet (Nr. 107 van 1998) en Regulasies vir Omgewingsimpakbepalings, 2014 soos gewysig.	GNR 983. Lyskenningsgewing 1: <ul style="list-style-type: none"> Aktiwiteit 27: Die skoonmaak van 'n gebied van 1 hektaar of meer, maar minder as 20 hektaar van inheemse plantegroei (<i>verwydering van inheemse plantegroei as deel van die samesmelting van die twee ARMe</i>) Aktiwiteit 34: Die uitbreiding van bestaande fasiliteite of infrastruktuur vir enige proses of aktiwiteit waar sodanige uitbreiding sal lei tot die noodsaaklikheid van 'n gewysigde permit of lisensie ingevolge nasionale of provinsiale wetgewing wat die vrystelling van emissies, uitvloei of besoedeling beheer. (<i>Bestaande IWUL sal gewysig moet word om voorsiening te maak vir 'n toename in ARM kapasiteit</i>) 	<ul style="list-style-type: none"> Omgewingsmagtigingsaansoek Basiese Asseseringsverslag (BAV), insluitende OBPr en ondersteunende spesialisstudies Skakeling met belanghebbendes 	Noord-Kaapse Departement van Minerale Hulpbronne
Nasionale Omgewingsbestuur: Afvalwet (No. 59 van 2008)	GNR 921. Kategorie A: <ul style="list-style-type: none"> Die uitbreiding van 'n afvalbestuursaktiwiteit wat in Kategorie A voorkom (<i>die samesmelting van die ARMe vereis 'n afvalbestuurslisensie</i>) 	<ul style="list-style-type: none"> Afvalbestuurslisensie aansoek BAV, insluitende OBPr en ondersteunende spesialisstudies Skakeling met belanghebbendes 	
Nasionale Waterwet (Nr 36 van 1998) en Regulasies aangaande die Prosesvereistes vir Aansoek en Appelle vir Watergebruikslisensies (GNR 267 van 2017)	Artikel 21 (g): Wegdoening van afval op 'n wyse wat 'n nadelige uitwerking op 'n waterhulpbron kan hê (<i>Bestaande IWUL sal gewysig moet word om voorsiening te maak vir 'n toename in ARM kapasiteit</i>)	<ul style="list-style-type: none"> Watergebruikslisensie aansoek (WULA) Geïntegreerde Water- en Afvalbestuursplan en ondersteunende spesialisstudies Skakeling met belanghebbendes 	Noord-Kaapse Departement van Water en Sanitasie

Daarbenewens sal MMT aansoek doen vir 'n Artikel 102-OBPr-wysiging van die DMR ingevolge die Wet op die Ontwikkeling van Minerale- en Petroleumhulpbronne (No. 28 van 2002) (MPRDA), wat deur die OBPr ondersteun sal word in die BAV.

SLR Consulting (South Africa) (Edms) Bpk, 'n onafhanklike firma van omgewingskonsultante, is deur Hotazel Manganese Mines (Edms) Bpk aangestel om die BA- en WULA prosesse te bestuur. 'n Publieke vergadering is soos volg as deel van die openbare deelnameproses gereël:

Date	Venue	Time
16 April 2019	Hotazel Ontspanningsklub	15:00 – 17:00

Alle belanghebbendes word uitgenooi om as Belanghebbende en Geaffekteerde Partye (B&GP) te registreer en enige aanvanklike kommentaar aan SLR teen 29 April 2019 in te dien. Alle geregistreerde B&GPe sal steeds die geleentheid kry om deel te neem en kommentaar te lewer vir die volle duur van die BA en WULA prosesse. Geregistreerde B&GPe sal in kennis gestel word wanneer die BAV en WULA beskikbaar sal wees vir publieke hersiening. Om te registreer of om te bevestig dat u geregistreer is en/of om enige kommentaar op die voorgestelde projek en proses te maak, kontak SLR by die kontakbesonderhede hieronder:

Natasha Smyth
 E-pos: nsmyth@slrconsulting.com
 Tel: 011 467 0945
 Faks: 011 467 0978
 Pos: Posbus 1596, Cramerview, 2060
 (Nota: As u voorleggings per pos stuur, kontak ons ook telefonies om ons in kennis te stel van u voorlegging).

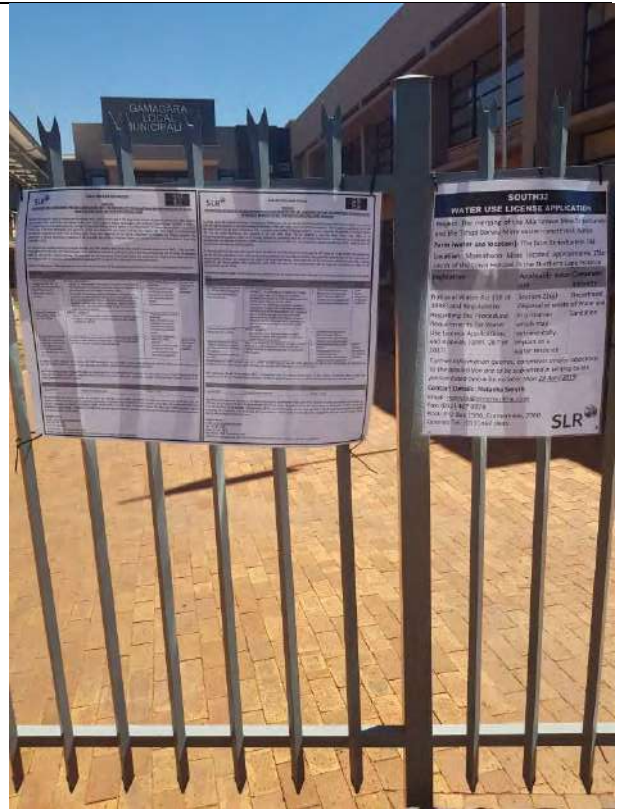


Photo 1: Gamagara Local Municipality



Photo 2: Hotazel Public Library

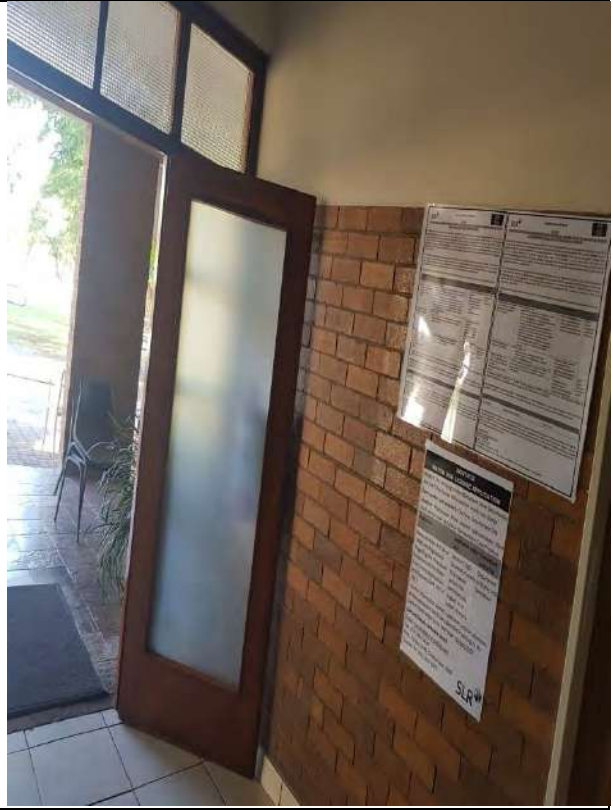
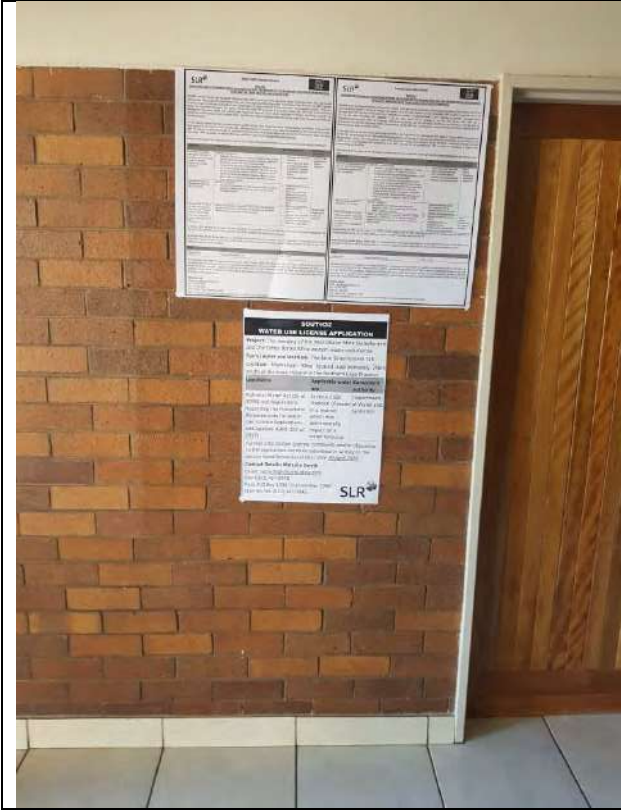


Photo 3: Hotazel Recreational Club

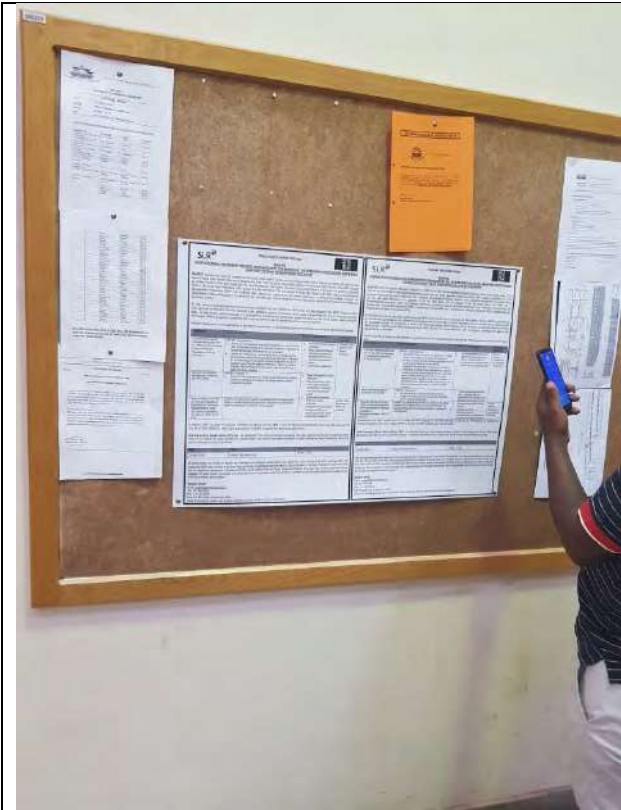


Photo 4: Joe Morolong Local Municipality



Photo 5: Ga-Segonyane Local Municipality



Photo 6: Black Rock Community Library



Photo 7: South32 Hotazel Manganese Mine Site Entrance



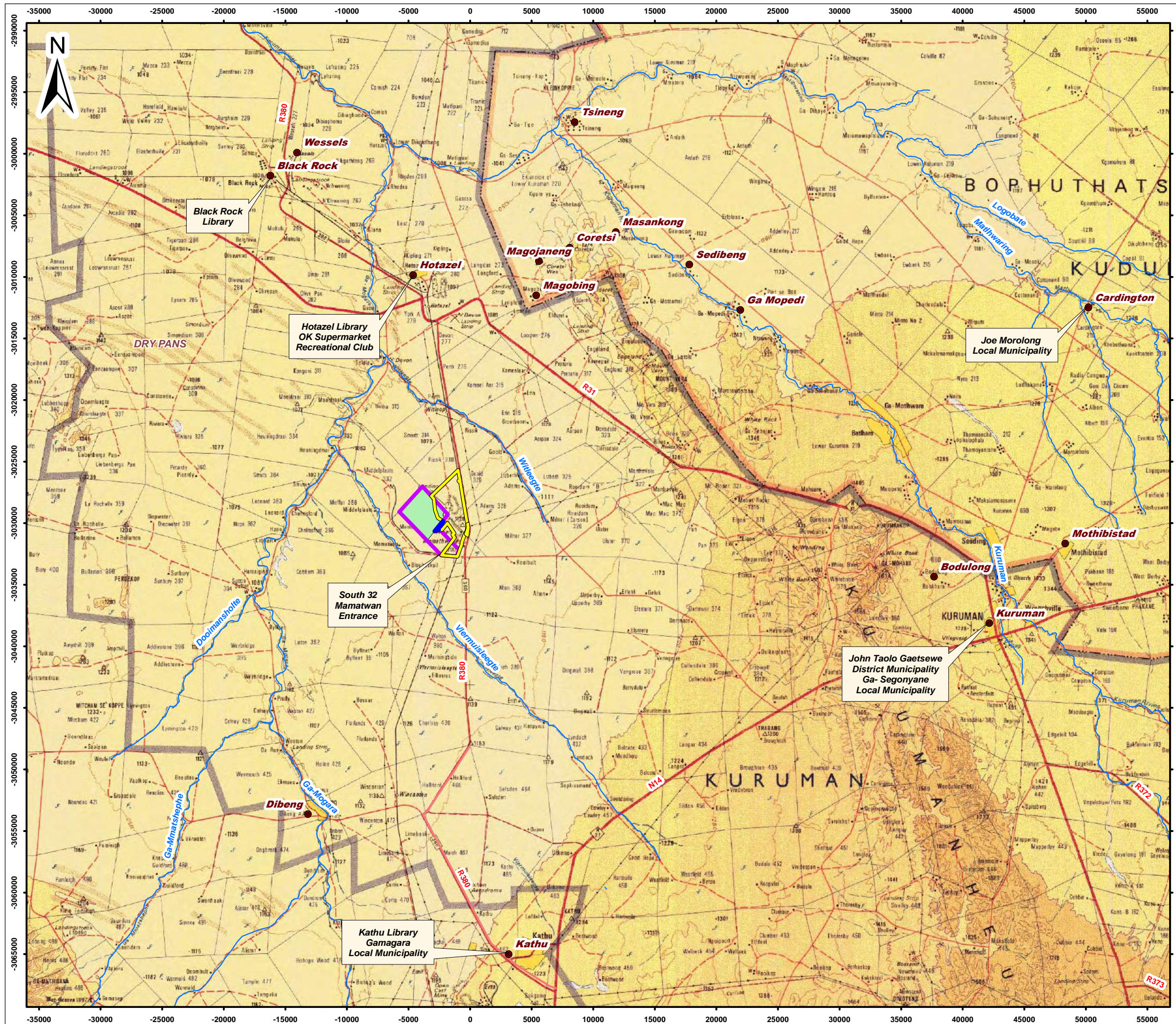
Photo 8: Hotazel OK Supermarket



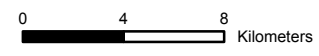
Photo 9: Kathu Public Library



Photo 10: John Taolo Gaetsewe District Municipality



- Legend**
- Mamatwan Mining Right Area
 - Tshipi Mining Right Area
 - Tshipi Surface Use Area
 - Waste Rock Dump Void
 - Towns / Villages
 - Main Roads
 - Rivers



Scale: 1:250 000 @ A3
 Projection: Transverse Mercator
 Datum: Hartbeeshoek, Lo 23

South32

Figure 4

Site Notices



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

**Copies of
advertisements
placed in the
Kalahari Bulletin
and Kathu
Gazette**

POSTMASBURG

Skoolhoof lê tuig neer

Mimi Swart



Skoolhoof Mev Marianne Coetzee

Mev Marianne Coetzee, die skoolhoof wat pas afgetree het, het in 2005 'n aansoek gekry om Engels Huistaal as vak by Postmasburg Hoërskool aan te bied; dit nadat sy op dié stadium reeds 28-jaar aan die Hoërskool Kathu verbonde was.

Op 2 Februarie 2006 is die oorplasing bevestig. Haar gedagtes begin ver in trurat versit: Haar eerste matriekklas van ses leerders was vir haar 'n aangenome ervaring weens die individuele aandag aan die min leerders asook hulle gedissiplineerdheid. Met die groter juniorklasse was dit 'n redelike verandering om hulle op standaard te kry, maar

die wiele het bly draai met behulp van 'n ondersteunende personeel.

Die skoolhoof, Mnr Monk, aanvaar 'n pos as hoof by Springbok Hoërskool en mnr. Steven Carsten neem in sy plek waar. Daarna besluit die Departement om Mnr Kobus Naude, 'n afgetrede hoof, wat toe in 'n tydelike pos was, aan te stel as waarnemende hoof. Ongelukkig was Mnr Naude toe na drie maande in 'n motorongeluk betrokke toe hy met 'n sportspan op pad was en is hy noodlottig beseer. Hierna word Mev Coetzee vanaf Julie 2011 deur die SBL aangestel om as skoolhoof waar te neem.

Gedurende haar termyn het die skool op verskeie terreine vorentoe beweeg. Die onderwysbehuising het, met Kolomela se

hulp, 'n welkome hupstoot gekry deur die bou van vier huise en twee woonstelle waarvoor die SBL besluit het om 'n bekostigbare huur te vra.

Na verskeie fondsinsamelings kon die skool 'n jaar later, nog vier klaskamers met die nodige ameublement oprig. Weens toenemende getalle is vanjaar nog 2 nuwe opslaanklaskamers van Kolomela gekry omdat onderrigruimte 'n probleem bly. Weens die toename in getalle is die skool se departementele onderwystoekenning van 12 in 2011 opgeskuif na 17 in 2019. Die SBL betaal ook ongeveer 9 SBL-poste om te veel leerders in 'n klas die hoof te bied.

'n Rustige aftrede in Kathu word jou toegewens.

POSTMASBURG

Lief & Leed



Mimi Swart

Siektes / Behandeling

Munisipale werker oorlede

Mnr Thabong Francis Mthibedi (38) van Haakbosdraai Maranteng wat die afgelope 11 jaar 'n werknemer van die Tsantsabane munisipaliteit was, is na 'n siekbed oorlede. Hy laat sy ma, Malefo, en suster, Lucia, saam met wie hy gewoon het, agter. Na verneem word sal hy op 06 April 2019 begrawe word. Ons diepe meegevoel aan die familie.

Aan diegene wat sukkel met hul gesondheid en wat ons weer aan dink: Mev Marie van Niekerk van Vleistraat, Mev Connie Burger van Gagianostraat, Mev Anna Bester van Erasmusstraat, Mev Anna van Zyl van Casper Venterstraat. Ook aan Mnr Jimmy Young, wat 'n nuwe inwoner van Huis Jan Vorster is, wat sukkel met 'n beenwond. Mag Hy altyd naby u almal wees. Sterkte.

Van die plaas na die tafel

From the farm to the table

KONTAK NR: 053 723 2531 EMAIL: kekkelenkraai@gmail.com

WINKEL URE MA-VRY: 08:00-17:30 SATERDAE: 08:00-13:30

Koop vir meer as **R200** en staan 'n kans om 'n prys te WEN !!!
1 - 30 April 2019

KATHU
Eienaar Verandering

4KG IQF FROZEN BREAST	R 119-90
1 KG NECKS	R11-90
1 KG BREAST BONES	R14-90

Spesiale pryse
Geldig
29 - 30 Maart 2019

KOM BESOEK ONS GERUS BY KATHU SENTRUM RIETBOK ST 13

KLK Landbou Beperk is 'n diverse publieke maatskappy in die Landbou sektor met belange in kleinhandel, brandstof, abattoirs, lewendehawe en motorhandelaarskappe

VAKATURE

BEMARKER- KLK PETROLEUMVERSPREIDERS KURUMAN EN OMGEWING

Die posbekleër rapporteer aan die Bestuurder: Brandstof en sal verantwoordelik wees vir die bemerking van alle Petroleum produkte, met die fokus op brandstof, olie en gas.

Vir hierdie doel word daar gesoek na aansoekers wat beskik oor:

- 'n Minimum Graad 12 met naskoolse bemarkings kwalifikasie sal as aanbeveling dien.
- Goeie kennis van bemerking en moet goed tegnies aangelê wees.
- Goeie kommunikasie- en onderhandelingsvaardighede
- Die vermoë om voorraadvlakke doeltreffend en koste-effektief te kan bestuur.
- Die vermoë om produkte te kan verkoop aan kliënte en die besigheid winsgewend te kan bedryf.
- Moet risikobestuur ten opsigte van verkope en veral krediet verkope effektief kan bestuur.
- Geldige rybewys

Rig asseblief jou aansoek aan: **Die Bestuurder, KLK Petroleum, Upington : faks dit na 054 3322623 of epos: phillip@klk.co.za**

KLK Landbou Beperk is 'n gelyke geleentheid werkgewer en aanstellings word gedoen ooreenkomstig die maatskappy se Gelyke Geleentheids Plan

Sluitingsdatum: **05 April 2019**

Aansoekers wat nie binne 14 dae na die sluitingsdatum van ons verneem nie, moet asseblief aanvaar dat die aansoek onsuksesvol was.

PUBLIC PARTICIPATION PROCESS

SOUTH32

PROPOSED BASIC ASSESSMENT PROCESS ASSOCIATED WITH THE MERGING OF THE MAMATWAN SINTERFONTEIN WASTE ROCK DUMP AND THE TSHIPI EASTERN WASTE ROCK DUMP

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An 18m wide (on surface) boundary is located between the MMT and the Tshipi Borwa Mine (which is located adjacent to the MMT). Tshipi and MMT have approval to mine the 18m wide boundary pillar. Additional capacity is required to store waste rock generated as part of mining the boundary pillar. To cater for the additional storage it is proposed that the Mamatwan Sinterfontein waste rock dump and the Tshipi eastern waste rock dump are merged. MMT is proposing on amending their approved EMP to cater for the merging of the waste rock dumps.

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

ons dink dat die Here ons vergeet het. In die woord van die Here kry ons die versekering dat ons gebede voor God gebring word.

Ons lees in Openbaring 5:8 "en toe Hy die boek neem, val die vier lewende wesens en die vier-en-twintig ouderlinge voor die Lam neer, elkeen met siters en goue skale vol reukwerk, wat die gebede van die heiliges is." Daarom moet ons nie moedeloos word nie, maar volhard in gebed met smeking en danksegging voor die Here. Wag geduldig op 'n antwoord. Soms antwoord die Here gou, soms moet ons wag, en soms antwoord die Here ons gebede anders as wat ons dit wil hê. Die Here weet wat die heel beste vir elkeen van ons is.

Ps 40:2 "Ek het die HERE lank verwag, en Hy het Hom na my toe neergebuig en my hulpgeroep gehoor;"

Bid teen die plafon?

Ps 13:2 "Hoe lank, HERE, sal U my altyddeur vergeet? Hoe lank sal U vir my U aangesig verberg?"

Soms voel dit vir ons asof ons teen die plafon vas bid. Hoor die Here ons gebede – is dikwels ons wanhoopskreet. Ons raak moedeloos, moeg en hartseer en wil tou opgooi omdat

Sanger bekoor met stem

Die vrou van die Vrouelandbouvereniging (VLV) Sirkel Kalahari het aan plaaslike sanger Edna Brink se lippe gehang toe sy op 7 Maart tydens die 86ste konferensie van dié VLV-sirkel, by die NG kerk Moedergemeente in Kuruman, opgetree het.

Brink is in Kuruman gebore en het skoolgegaan in Bloemfontein waar sy sanglesse by Alida van der Walt van die Sentraal-musiek-akademie ontvang het. Daar het sy 'n passie vir klassieke musiek ontwikkel.

Ná skool het Brink vir vier jaar opera aan die Universiteit van Kaapstad (UK) studeer.

Brink het 'n jaar lank in die filmbedryf gewerk.

Sy en haar man, Stephan, bestuur tans die koffiewinkel Meercup in Kuruman.

Hulle het 'n seuntjie Benjamin en sy is swanger met hul tweede kind.



Edna Brink, sanger van Kuruman, bring vreugde met haar stem op die Vrouelandbouvereniging se geselligheid. Foto: Verskaf



health

Department Health
NORTHERN CAPE

MEC for Health
Ms Fufe Makatong



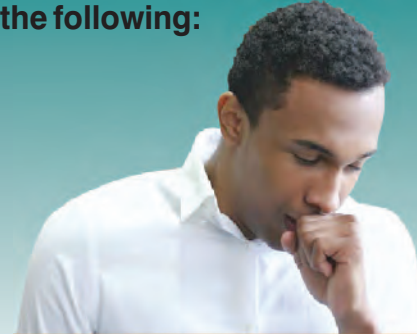
STOP TUBERCULOSIS!

World TB Day is commemorated worldwide on 24 March annually. The South African theme for this year is "It's time!"

Everybody is encouraged to seek medical assistance at the nearest clinic if you experience any of the following:

Signs and symptoms


- Drenching night sweats
- Fever
- Cough for two (2) weeks or more
- Unexplained weight loss
- Chest pain and shortness of breath



What do you need to do?

- Visit nearest clinic for TB screening and testing
- If you have TB, ensure that your close family/contacts, especially children are screened for TB as well
- Always cover your mouth or nose when you cough or sneeze
- If you have TB, complete your medication as instructed by the health practitioner
- If you are on TB treatment, inform your nurse/doctor if you will move to another area
- You will be encouraged to have an HIV Test as well






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Notice is hereby given of the applications to be made for authorisation of the proposed project in terms of the environmental legislation listed below:

Legislation	Listed Activities	Key Process Elements	Competent Authority
National Environmental Management Act (No. 107 of 1998) and Environmental Impact Assessment Regulations, 2014 as amended.	GNR 983. Listing Notice 1: <input type="checkbox"/> Activity 27: The clearance of an area of 1 hectares or more, but less than 20 hectares of indigenous vegetation (<i>indigenous vegetation to be removed as part of the waste rock dump merge</i>) <input type="checkbox"/> Activity 34: The expansion of existing facilities or infrastructure for any process or activity where such expansion will result in the need for an amended permit or licence in terms of national or provincial legislation governing the release of emissions, effluent or pollution (<i>Existing IWUL will need to be amended to cater for an increase in waste rock dump capacity</i>)	<input type="checkbox"/> Environmental Authorisation Application <input type="checkbox"/> Basic Assessment Report, including Environmental Management Programme and supporting specialist studies <input type="checkbox"/> Stakeholder engagement	Northern Cape Department of Mineral Resources
National Environmental Management: Waste Act (No. 59 of 2008)	GNR 921. Category A: <input type="checkbox"/> Activity 13: The expansion of a waste management activity Listed in Category A (<i>Merging of the waste rock dumps requires a waste management licence</i>)	<input type="checkbox"/> Waste Management Licence Application <input type="checkbox"/> Basic Assessment report, including Environmental Management Programme and supporting specialist studies <input type="checkbox"/> Stakeholder engagement	
National Water Act (No 36 of 1998) and Regulations Regarding the Procedural Requirements for Water Use Licence Applications and Appeals (GNR. 267 of 2017)	Section 21(g): Disposing of waste in a manner which may detrimentally impact on a water resource (<i>Existing IWUL will need to be amended to cater for an increase in waste rock dump capacity</i>)	<input type="checkbox"/> Water Use Licence Application <input type="checkbox"/> Integrated Water and Waste Management Plan and supporting specialist studies <input type="checkbox"/> Stakeholder engagement	Northern Cape Department of Water and Sanitation

In addition, MMT will apply for a Section 102 EMP amendment from the DMR in terms of the Mineral and Petroleum Resources Development Act (No. 28 of 2002) (MPRDA), which will be supported by the EMP included in the Basic Assessment report.

SLR Consulting (South Africa) (Pty) Ltd, an independent firm of environmental consultants, has been appointed by Hotazel Manganese Mine (Pty) Ltd to manage the Basic Assessment and the Water Use Licence Application processes. A public meeting has been arranged as part of the public participation process as follows:

Date	Venue	Time
16 April 2019	Hotazel Recreation Club	15:00 – 17:00

All stakeholders are invited to register as Interested and Affected Parties (I&AP) and submit any initial comments to SLR by 29 April 2019. All registered I&APs will continue to be given the opportunity to participate and comment for the full duration of the Basic Assessment and Water Use Licence Application processes. Registered I&APs will be notified when the Basic Assessment Report and Water Use Licence Application will be available for public review. To register or to check that you are registered and/or to submit any comment on the proposed project and process contact SLR at the contact details below:

Natasha Smyth
 Email: nsmlyth@slrconsulting.com
 Tel: 011 467 0945
 Fax: 011 467 0978
 Post: PO Box 1596, Cramerview, 2060
 (Note: If using post, please also contact us telephonically to notify us of your submission).



17^{DE} TOWTON BONSMARAS PRODUKSIEVEILING

AANBOD: 32 BULLE (2-3 JAAR OUD) EN 150 VROULIKE DIERE





17 APRIL 2019 | 13:00

BESIGTING VANAF 11:00 | GWK VEILINGSKOMPLEKS, KURUMAN

Verkoopsvoorwaardes: Slegs kontant of bankgewaarborgde tjeks. Elektroniese fasiliteite beskikbaar. Aanbod onderhewig aan verandering. Diere word slegs gelaai indien betaling afgehandel is.
Let wel: FICA nakoming is 'n vereiste om deel te neem in alle veilinge.

GWK Veilingskompleks Kuruman | 053 712 1171
Chris Hendriks | 083 449 0852
Philip Williams | 082 780 4218



gwk.co.za




BID in English and Afrikaans and proof of distribution

SOUTH32

AGTERGRONDINLIGTINGSDOKUMENT VIR DIE SAMESMELTING VAN DIE MAMATWAN SINTERFONTEIN AFVALKLIPHOOP EN DIE TSHIPI OOSTELIKE AFVALKLIPHOOP

MARCH 2019

INLEIDING

South32 bedryf die oopgroef Mamatwan Manganemyn (MMT) (vorm deel van die regsentiteit Hotazel Manganese Mines (Edms) Bpk)) wat geleë is op gedeelte 5 en 6 van die plaas Goold 329, die plaas Sinterfontein 748, n' gedeelte van gedeelte 2 (Huidiglik gedeelte 17) en n' gedeelte van gedeelte 1 (Huidiglik Portion 16) van die plaas Mamatwan 331, gedeelte 3 van die plaas Moab 700 en gedeelte 4 van die plaas Adams 328. MMT is sowat 25 km suid van die dorp Hotazel in die Noord-Kaapprovinsie geleë. MMT beskik oor 'n Omgewingsbestuursprogram (OBP) en 'n Mynreg wat uitgereik is deur die eertydse Departement van Minerale en Energie (tans die Departement van Minerale Hulpbronne (DMH)). MMT beskik voorts ook oor 'n Geïntegreerde Watergebruiklisensie (IWUL) wat uitgereik is deur die Departement van Water en Sanitasie (DWS).

Daar is 'n 18 m-wye grens (op die oppervlak) tussen MMT en the Tshipi Borwa-myn (Figuur 1). Tshipi en MMT het goedkeuring om die 18 m-wye grenspilaar te ontgin. Bykomende vermoë word benodig om afvalklip wat as deel van die ontginning van die grenspilaar gegenerer sal word, te berg. Om voorsiening te maak vir die bykomende berging, word aan die hand gedoen dat die Mamatwan Sinterfontein en die Tshipi oostelike afvalkliphope saamsmelt om die gaping tussen die twee afvalhope te vul (Figuur 1). MMT beoog om hul goedgekeurde OBP te wysig om voorsiening te maak vir die samesmelting van die afvalkliphope.

OMGEWINGSMAGTIGINGSPROSES

Voor die aanvang van die beoogde projek, word die volgende benodig:

- 'n Goedgekeurde gewysigde OBP deur die DMH ingevolge Artikel 102 van die Wet op die Ontwikkeling van Minerale en Petroleum Hulpbronne (Wet 28 van 2002).
- 'n Omgewingsmagtiging deur die DMH ingevolge die Nasionale Wet op Omgewingsbestuur (Wet 107 van 1998). Die Regulasies op Omgewingsimpak-evaluerings wat gevolg word, is Staatskennisgewing R982 van 4 Desember 2014, soos gewysig.
- 'n Wysiging van die IWUL deur die DWS ingevolge Artikel 21 van die Nasionale Waterwet (Wet 36 van 1998). Die Regulasies wat vir hierdie projek gevolg word, is Staatskennisgewing R267 van 2017 vir die Prosedurele Vereistes vir Aansoek om Watergebruiklisensies.
- 'n Afvalbestuurlisensie deur die DMH ingevolge die Nasionale Wet op Omgewingsbestuur: Afval (Wet 59 van 2008).

DOEL VAN HIERDIE DOKUMENT

Hierdie dokument is opgestel deur SLR om u toe te lig oor:

- die beoogde projek;
- die huidige (grondlyn-) omgewing van die projekgebied;
- die omgewingsevalueringsproses wat gevolg word (Basiese Evalueringsproses);
- moontlike omgewings-/kultuur-/sosio-ekonomiese impakte;
- hoe u insette oor die omgewingsevalueringsproses kan lewer.

SLR Consulting (South Africa) (Edms.) Bpk. (SLR), 'n onafhanklike firma van omgewingskonsultante, is deur Hotazel Manganese Mines (Edms) (Bpk) aangestel om die omgewingsevalueringsproses te bestuur.

U ROL

U is as 'n belangstellende en/of geaffekteerde party (B&GP) geïdentifiseer wat moontlik ingelig wil word oor die beoogde projek en insae in die omgewingsproses en -verslag wil hê.

U het 'n geleentheid om insae tot hierdie dokument te hê en om u aanvanklike kommentaar aan SLR te stuur vir insluiting in die omgewingsevalueringsproses. U sal ook die geleentheid kry om insette by die openbare vergadering (besonderhede hieronder) te lewer en om insae te hê in en kommentaar te lewer op die Basiese Evalueringsverslag (BEV).

Alle kommentaar sal aangeteken en ingesluit word in die verslae wat by die DMH ingedien gaan word vir besluitneming.

HOE OM TE REAGEER

Reaksie op hierdie dokument kan by wyse van die aangehegte kommentaarvorm en/of deur kommunikasie met die persoon wat hieronder genoem word, ingedien word.

WIE OM TE KONTAK

Natasha Smyth

011 467 0945 (tel) of

011 467 0978 (faks) of

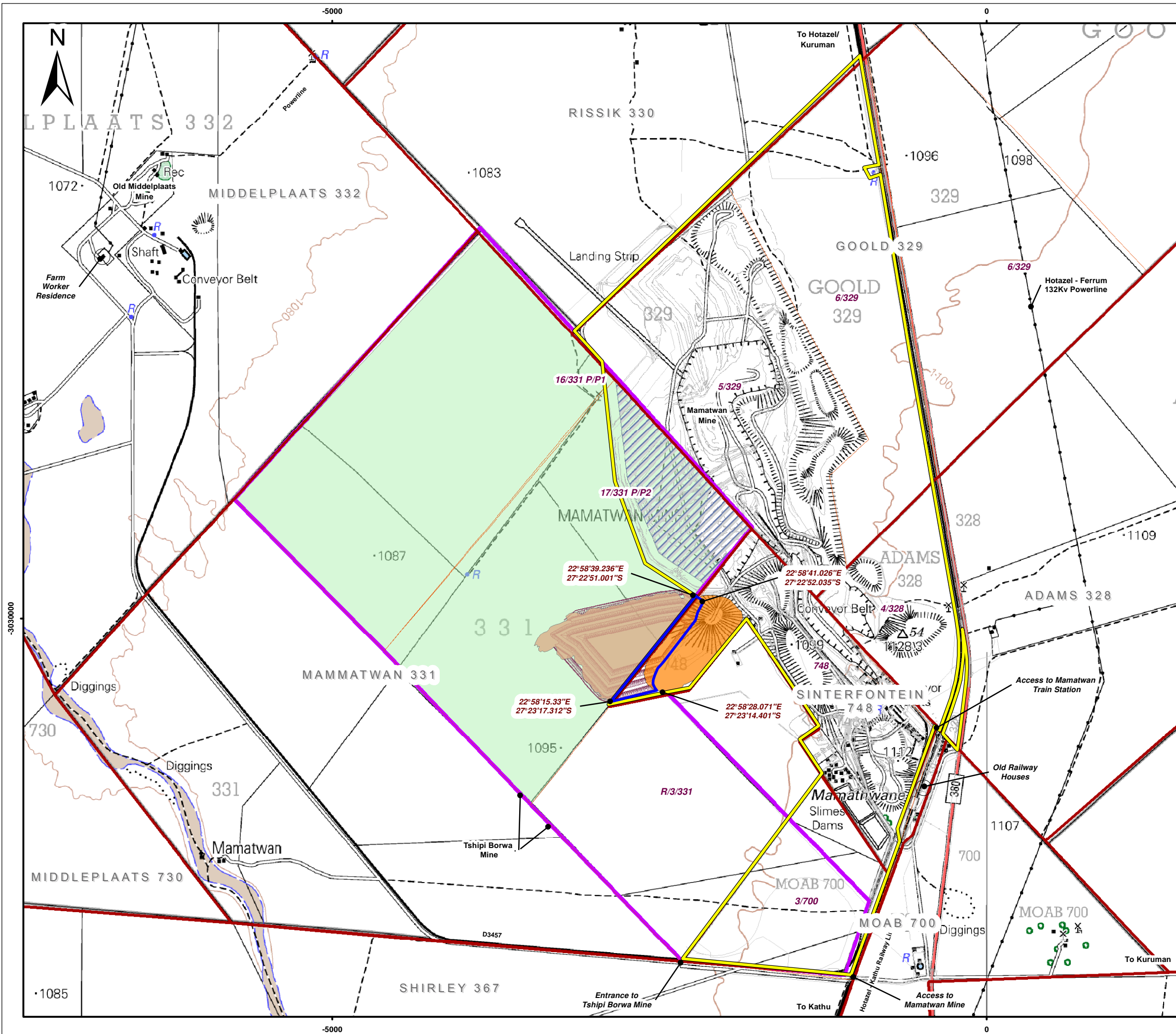
nsmyth@slrconsulting.com

OPENBARE VERGADERING

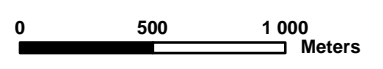
Plek: Hotazel Ontspanningsklub

Tyd: 15:00 to 17:00

Datum: 16 April 2019



- Legend**
- Finale Saamgesmelt
 - ▭ Afvalkloof Gaping
 - ▭ Mamatwan Mynreg Gebied
 - ▭ Mamatwan Sinterfontein
 - ▭ Tshipi Oostelike Afvalkloof
 - ▨ Boundary Pillar
 - ▭ Tshipi Surface Use Area
 - ▭ Tshipi Mining Right Area
 - Hoofpaapie
 - Kraglyn
 - Riviere en Strome
 - 20m Kontoorlyne
 - ▭ Plaasgrens
 - ▭ Plaasgedeelte



Scale: 1:28 500 @ A3
 Projection: Transverse Mercator
 Datum: WGS1984, Lo23

South32

Figuur 1

Plaaslike Ligging



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

OORSIG

Daar is 'n 18 m-wye grens (op die oppervlak) tussen MMT en the Tshipi Borwa-myn (Figuur 1). Tshipi en South32 het goedkeuring om die 18 m-wye grenspilaar te ontgin. Tshipi sal verantwoordelik wees om afval weg te stroop en die erts namens beide partye te boor en te skiet. Afvalklip sal op elke party (Tshipi oostelike en Mamatwan Sinterfontein) se afvalkliphoope gestort word. Erts sal deur elke party opgelaa en by hul onderskeie voorraadstapelgebiede afgelewer word.

Die Mamatwan Sinterfontein afvalkliphoope sal in 'n noordwestelike rigting uitgebrei word om saam te smelt met die Tshipi oostelike afvalkliphoope ten einde die smal gaping tussen die twee afvalkliphoope te vul. Die Sinterfontein afvalkliphoope se uitbreiding sal 'n gebied van sowat 4 ha beslaan. Waterbestuursinfrastruktuur, soos berms rondom die bestaande afvalkliphoope, sal aangepas word soos nodig om afloop van die afvalkliphoope af te bestuur wanneer die gaping eers gevul is. Rehabilitasie van die afvalkliphoope sal in lyn met huidige praktyke geskied.



Huidige gaping tussen die Mamatwan Sinterfontein afvalkliphoope (regs) en die Tshipi oostelike afvalkliphoope (links)

MOTIVERING VIR DIE BEOOGDE PROJEK

Die samesmelting van die twee afvalkliphoope sal kapasiteit bied vir die berging van afvalklip wanneer die grenspilaar ontgin word. Die samesmelting van die twee afvalkliphoope voorkom die uitbreiding van die myn se voetspoor na onversteurde gebiede.

PROJEKALTERNATIEWE

Daar is geen uitvoerbare alternatiewe vir die beoogde projek nie. Die samesmelting van die afvalkliphoope sal plantegroei versteur wat reeds geraak is deur mynboubedrywighede, wat die myn se voetspoor gevolglik minimaliseer. Daarbenewens is onversteurde gebiede in MMT geormerk vir toekomstige infrastruktuur, wat die beskikbaarheid van spasie vir die berging van bykomende afvalklip beperk. Die saamgesmelte afvalkliphoope sal sorg vir 'n optimale vervoerafstand danksy sy nabyheid aan die oopgroef.

Hierdie afdeling bied 'n basiese beskrywing van die beoogde projekgebied se huidige status.

Geologie: Mamatwan is geleë in die Kalahari Manganveld en is bedek deur gruis, klei, kalkkreet en eoliese sand van die Kalaharigröep.

Klimaat: Mamatwan is geleë in die Noordelike Steppe Klimaatzone. Dit is 'n semi-ariëde streek, gekenmerk deur seisoenale reënval, warm temperature in die somer en kouer temperature in die winter. Reënval wissel tussen 1,3 mm en 72,3 mm per maand en heersende winde in die gebied is vanuit die noorde en noordooste.

Topografie: Die beoogde projekgebied is geleë in 'n betreklik plat gebied met geleidelike hellings. Die natuurlike omgewing en interne topografie is grootliks beïnvloed deur omliggende mynboubedrywighede.

Grondsoorte en grondvermoë: Grond op die terrein bestaan uit struktuurlose, diep (>1 200 mm), sanderige, rooi en geel grondsoorte van die Huttonvorm. Weens die hoë infiltrasietempo's wat verband hou met sanderige grond, het die beoogde projekgebied se grondsoorte 'n lae verbouingspotensiaal. Weens die fyn, sanderige aard van die grondvorme en die lae klei-inhoud en beperkte organiese stowwe, is die grondsoorte hoogs erodeerbaar, veral waar plantegroei verwyder is.

Plantlewe: Die beoogde projekgebied is in die Kathu-bosveld geleë. Die Kathu-bosveld word gekenmerk deur die oop savanna met *Vachellia erioloba* (kameeldoringboom) en *Boscia albitrunca* (witgatboom) as die prominente bome. Die strokie plantegroei tussen die afvalkliphoope is blootgestel aan die daaglikse werking van MMT en aan verhoogde stofvlakke en die storting van materiaal wat uitgegrawe is. Daar is geen wesenlike biodiversiteit in die gapinggebied nie.

Dierelewe: Weens die teenwoordigheid van mynbou, prosperiteitswerke en boerderybedrywighede, is daar baie min bewyse van wilde dierbevolkings wat met die algemene gebied en die beoogde projekgebied geassosieer word. Voëlspesies op die rooidatalys wat waarskynlik in die beoogde projekgebied voorkom, sluit in die Breëkoparend, Sekretarisvoël en die Afrika Witruigaasvoël. Dierspesies op die rooidatalys wat waarskynlik voorkom, sluit in die ratel en die Suid-Afrikaanse krimpvarkie.

Oppervlakwater: MMT is geleë in die opvangsgebied van die Ga-Moragarivier, 'n sytak van die Kurumanrivier wat by die Moloporivier aansluit en in die Oranjerivier invloei. MMT is geleë in die D41K kwarternêre opvangsgebied. Daar is geen waterlope in die projekgebied nie. Die naaste waterloop is die efemere Vlermuisleegterivier (sowat 10 km wes) van MMT. Daar is geen derdeparty-afhanklikheid van oppervlakwater nie.

Grondwater: Die projekgebied word onderlê deur 'n vlak, onbegrensde Kalahari-akwifereer en die dieper, gefrakteerde Hotazelakwifereer. Die beoogde projekgebied se gemiddelde grondwatervlak wissel tussen 30 m en 45 m onder grondvlak. Die gehalte van die grondwater is oor die algemeen swak, weens verhoogde konsentrasies chloor, natrium en magnesium. Die meeste van die derdeparty-boorgate rondom die beoogde projekgebied word vir huishoudelike gebruik en veesuipings gebruik.

Luggehalte: Die omringende luggehalte is beïnvloed deur naburige myne, die verbranding van huishoudelike brandstof en voertuie se uitlaatgasse.

Geraas: Die breër gebied word algemeen gekenmerk deur landelike eienskappe en is nie blootgestel aan verhoogde geraasvlakke nie. Geraasvlakke in die beoogde projekgebied word hoofsaaklik deur omliggende boerderybedrywighede, plaaslike verkeer en mynboubedrywighede veroorsaak.

Visueel: MMT is in die plat oop vlaktes van die Kalahari geleë en die algemene gebied rondom MMT is landelik van aard. Die visuele waarde van die beoogde projekgebied is baie laag, weens die teenwoordigheid van die Tshipi oostelike afvalkliphoope en die MMT Sinterfontein afvalkliphoope en gepaardgaande myninfrastruktuur.

Erfenis-/Kultuur- en paleontologiese hulpbronne: Die myn is geleë in 'n gebied wat in geheel betreklik lae menslike teenwoordigheid het weens die droogheid van die streek, met die gevolg dat as daar menslike nedersettings was, hulle eerder op of naby waterlope sou wees. Dit is onwaarskynlik dat daar erfenis-/kultuurhulpbronne in die beoogde projekterrein is. Die terrein se paleontologiese sensitiwiteit is laag, hoewel daar 'n moontlikheid van aanwesige Stromatoliete in die projekgebied is.

Sosio-ekonomies: Die dorp Hotazel is sowat 25 km noord van die beoogde projekgebied geleë. Die opvoedingsvlakke in die gebied is betreklik laag met 'n hoë werkloosheidsvlak en 'n afhanklikheid van bestaansboerdery, die openbare sektor, seisoenswerkers en emplojering in die mynbousektor. Watervoorsiening en sanitasie bly 'n uitdaging, veral in die landelike gebiede. Daar was 'n toename in die aantal huishoudings in die gebied wat elektrisiteit as kragbron ontvang het. Mynbou en staatsdienste is die primêre ekonomiese sektore.

Grondgebruik: Grondgebruik rondom MMT sluit in 'n kombinasie van weiding vir lewendehawe, wildsboerdery, mynbou, 'n sonkragplaas en ylgesaaide wonings. Grondgebruik in die beoogde projekgebied is geraak deur bestaande mynboubedrywighede (teenwoordigheid van die afvalkliphoope).

POTENSIEËLE OMGEWINGS-/KULTUUR-/SOSIO-EKONOMIESE IMPAKTE

Potensiële impakte wat geïdentifiseer is en as deel van die omgewingsimpakevalueringproses ondersoek sal word, verskyn in die tabel hieronder. Waar spesialisinstette benodig word, is dit ook aangedui in die tabel hieronder.

Aspek	Potensiële omgewings-/kultuur-/sosio-ekonomiese impak	Spesialisinstette (waar nodig)
Geologie	Die sterilisasie van minerale hulpbronne deur die storting van minerale hulpbronne op gemineraliseerde afvalaanlegte (Sinterfontein afvalkliphoope).	Kwalitatief geëvalueer
Topografie	Potensiaal om topografie verder te verander deur 'n vergroting van die afvalkliphoope se voetspooroppervlak.	Kwalitatief geëvalueer
Grondsoorte en grondvermoë*	Potensiaal om grondhulpbronne verder nadelig te beïnvloed deur erosie, kompaksie en/of besoedeling en die gepaardgaande natuurlike vermoë van die grond deur 'n vergroting van die afvalkliphoope se voetspooroppervlak.	Studie van grond en grondvermoë
Biodiversiteit*	Potensiaal om plantegroei, habitateenhede en gepaardgaande ekosistefunksionaliteit verder te versteur en/of te vernietig deur 'n vergroting van die afvalkliphoope se voetspooroppervlak.	Ter plaatse biodiversiteitsstudie
Oppervlakwater*	Potensiële toename in afloopindamming wat die natuurlike dreineringspatrone kan verander en die toename in besoedelingsbronne wat oppervlakwaterhulpbronne kan besoedel.	Hidrologiese studie
Grondwater*	Potensiële toename van bestaande besoedelingsbronne deur die vergroting van die afvalkliphoope se voetspooroppervlak wat grondwaterhulpbronne kan besoedel, wat 'n impak op die beskikbaarheid aan omliggende gebruikers van grondwater kan hê.	Grondwaterstudie en afvalevaluering
Lug*	Toename in emissies wat potensieel 'n negatiewe impak op omringende luggehalte kan hê.	Luggehaltestudie
Geraas	Potensiële toename in steurende geraasvlakke weens voertuigbedrywighede.	Kwalitatief geëvalueer
Visueel	Potensiële bydrae tot die bestaande negatiewe visuele uitsig.	Kwalitatief geëvalueer
Erfenis-/Kultuur- en paleontologiese hulpbronne	Die potensiaal om erfenis-/kultuur- en paleontologiese hulpbronne te beskadig.	Erfenis-/Kultuur- en paleontologiese studie

* Daar sal verwys word na spesialisinstudies wat Tshipi as deel van hul OBP-wysigingsproses onderneem om voorsiening te maak vir die samesmelting van die afvalkliphoope.

AANSOEKPROSES VIR OMGEWINGSMAGTIGING EN WATERGEBRUIKLISENSIE

Die omgewingsevalueringproses:

- Bied inligting oor die projek en die omgewing waarin dit onderneem word;
- Identifiseer die potensiele negatiewe en positiewe omgewings-/kultuur-/socio-ekonomiese impakte van die beoogde projek in ooreenstemming met B&GP's;
- Doen verslag oor bestuursmaatreëls wat benodig word om impakte tot op 'n aanvaarbare vlak te versag en inkorporeer vereistes vir moniteringsprogramme (waar nodig).

Die proses se waarskynlike stappe en tydsraamwerke word hieronder uiteengesit.

STAPPE IN DIE MAGTIGINGSPROSES

FASE I – Voor-aansoekfase (Januarie tot Mei 2019)

- Voor-aansoekvergadering met die DMH en DWS
- Stel ander owerhede wat kommentaar lewer en B&GP's in kennis van die beoogde projek en omgewingsevaluering (deur koerantadvertensies, terreinkennisgewings en hierdie dokument)
- Hou 'n openbare vergadering

FASE II – BEV- en IWUL-fase (April tot Junie 2019)

- Indiening van aansoek om geïntegreerde omgewingsmagtiging (NEMA/NEM:WA) by die DMH
- Indiening van die IWULA by die DWS
- Opstel van BEV en opsomming en verspreiding aan B&GP's en owerhede wat kommentaar lewer vir 30-dae insaetydperk
- Stel tegniese dokumentasie op ter staving van die IWULA (spesialisstudies en die Geïntegreerde Water- en Afvalbestuursplan) en lê voor aan B&GP's en owerhede wat kommentaar lewer vir 30-dae insaetydperk
- Werk die BEV en IWULA tegniese dokumentasie by met enige kommentaar wat tydens die openbare insaetydperk ontvang is

FASE III – Bevoegde owerheid insaefase (Junie tot Oktober 2019)

- Dien BEV (met insluiting van kommentaar wat tydens die insaetydperk geopper is) in by die DMH vir besluitneming (107-dae afgekondigde besluitnemingstydperk)
- Dien die IWULA tegniese dokumentasie (met insluiting van kommentaar wat tydens die insaetydperk geopper is) in by die DWS vir besluitneming (139-dae afgekondigde insaetydperk)
- Sirkuleer besluite aan B&GP's wat op die projek se databasis geregistreer is

PARTYE BETROKKE BY DIE OMGEWINGSEVALUERINGSPROSES

B&GP's

- * Omliggende grondeienaars, grondgebruikers en gemeenskapsforums
- * Omliggende myne en nywerhede
- * Semi-staatsinstellings

BEVOEGDE OWERHEDE

- * Noord-Kaapse Departement van Minerale Hulpbronne (DMH)
- * Noord-Kaapse Departement van Water en Sanitasie (DWS)

OWERHEDE WAT KOMMENTAAR LEWER

- * Noord-Kaapse Departement van Omgewingsake en Natuurbewaring (DENC)
- * Noord-Kaapse Departement van Landbou, Bosbou en Visserye (DAFF)
- * Suid-Afrikaanse Provinsiale Erfenishulpbronagentskap (SAHRA)
- * Noord-Kaapse Departement van Landelike Ontwikkeling en Grondhervorming (DRDLR) – met insluiting van die Kommissaris van Grondeise

PLAASLIKE OWERHEDE

- * Joe Morolong Plaaslike Munisipaliteit (met insluiting van wyksraadslid)
- * John Taolo Gaetsewe Distriksmunisipaliteit

Stel ons asseblief in kennis indien daar enige verdere partye is wat betrokke moet wees.

SOUTH32

AGTERGRONDINLIGTINGSDOKUMENT VIR DIE SAMESMELTING VAN DIE MAMATWAN SINTERFONTEIN
AFVALKLIPOOP EN DIE TSHIPI OOSTELIKE AFVALKLIPOOP

REGISTRASIE- EN ANTWOORDVORM VIR BELANGSTELLEDE EN GEAFFEKTEERDE PARTYE

DATUM		TYD	
BESONDERHEDE VAN DIE BELANGSTELLEDE EN GEAFFEKTEERDE PARTY			
NAAM			
POSADRES			
		POSKODE	
STRAATADRES			
		POSKODE	
TELEFOONNOMMER BY DIE WERK/BEDAGS		FAKSNOMMER BY DIE WERK/BEDAGS	
SELFOONNOMMER		E-POSADRES	

MAAK ASSEBLIEF U BELANG BY DIE BEOOGDE PROJEK BEKEND

SKRYF U KOMMENTAAR EN VRAE ASSEBLIEF HIER NEER

Stuur ingevulde vorms asseblief terug aan:

Natasha Smyth

SLR Consulting (South Africa) (Edms.) Bpk.
011 467 0945 (tel) en/of 011 467 0978 (faks)

nsmyth@slrconsulting.com

SOUTH32

BACKGROUND INFORMATION DOCUMENT FOR THE MERGING OF THE MAMATWAN SINTERFONTEIN WASTE ROCK DUMP AND THE TSHIPI EASTERN WASTE ROCK DUMP

MARCH 2019

INTRODUCTION

South32 operates the open pit manganese Mamatwan Mine (MMT) (forms part of the legal entity Hotazel Manganese Mines (Pty) Ltd) located on portion 5 and 6 of the farm Goold 329, the farm Sinterfontein 748, portion of portion 2 (Currently Portion 17) and portion of portion 1 (Currently Portion 16) of the farm Mamatwan 331, portion 3 of the farm Moab 700 and portion 4 of the farm Adams 328. The MMT is located approximately 25km to the south of the town Hotazel in the Northern Cape Province. MMT holds an Environmental Management Programme (EMP) and a Mining Right, issued and approved by the former Department of Minerals and Energy (currently the Department of Mineral Resources (DMR)). In addition to this, the MMT also holds an Integrated Water Use Licence (IWUL) issued by the Department of Water and Sanitation (DWS).

An 18m wide (on surface) boundary is located between the MMT and the Tshipi Borwa Mine (Figure 1). Tshipi and MMT have approval to mine the 18m wide boundary pillar. Additional capacity is required to store waste rock generated as part of mining the boundary pillar. To cater for the additional storage, it is proposed that the Mamatwan Sinterfontein and the Tshipi eastern waste rock dumps are merged to fill the void between the two dumps (Figure 1). MMT is proposing on amending their approved EMP to cater for the merging of the waste rock dumps.

ENVIRONMENTAL AUTHORISATION PROCESS

Prior to the commencement of the proposed project, the following is required:

- An approved amended EMP from the DMR in terms of Section 102 of the Mineral and Petroleum Resources Development Act (No. 28 of 2002)
- An environmental authorisation from the DMR in terms of the National Environmental Management Act No. 107 of 1998. The Environmental Impact Assessment Regulations being followed are Government Notice Regulation (GNR) 982 of 4 December 2014, as amended
- An amendment of the IWUL from the DWS in terms of Section 21 of the National Water Act (No. 36 of 1998). The Regulations being followed for this project are GNR 267 of 2017 for the Procedural Requirements for Water Use Licence Applications.
- A Waste Management Licence from the DMR in terms of the National Environmental Management: Waste Act (No. 59 of 2008).

PURPOSE OF THIS DOCUMENT

This document has been prepared by SLR to inform you about:

- The proposed project
- The baseline environment of the project area
- The environmental assessment process being followed (Basic Assessment Process)
- Possible environmental/cultural/socio-economic impacts
- How you can have input into the environmental assessment process.

SLR Consulting (South Africa) (Pty) Ltd (SLR), an independent firm of environmental consultants, has been appointed by Hotazel Manganese Mines (Pty) Ltd to manage the environmental assessment process.

YOUR ROLE

You have been identified as an interested and/or affected party (I&AP) who may want to be informed about the proposed project and have input into the environmental process and report.

You have an opportunity to review this document and to provide your initial comments to SLR for incorporation in the environmental assessment process. You will also be given the opportunity to provide input at the public meeting (details below), and to review and comment on the Basic Assessment Report (BAR)

All comments will be recorded and included in the reports submitted to the DMR for decision-making.

HOW TO RESPOND

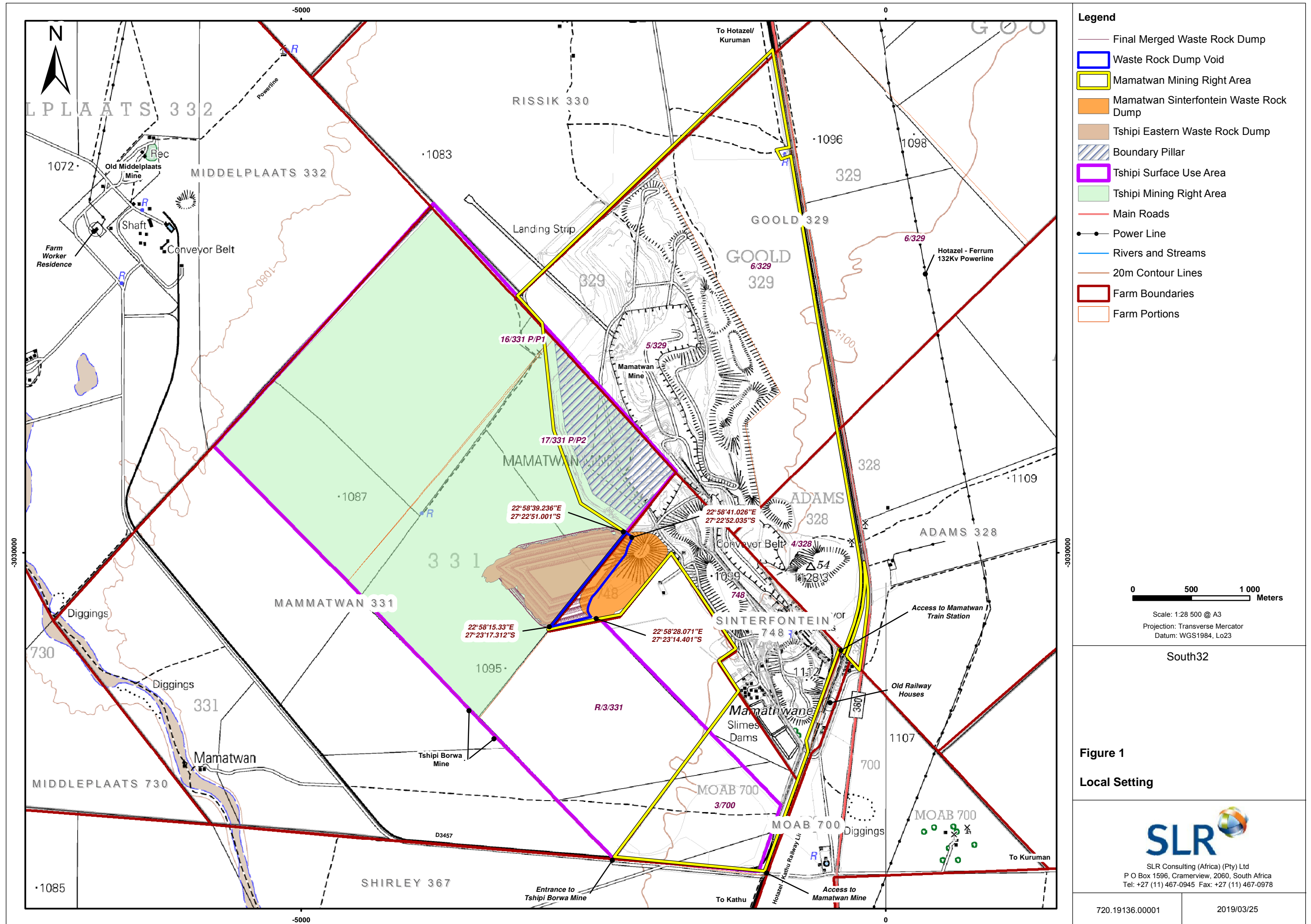
Responses to this document can be submitted by means of the attached comments sheet and/or through communication with the person listed below.

WHO TO CONTACT

Natasha Smyth
(011) 467 0945 (Tel) or
(011) 467 0978 (Fax) or
nsmyth@slrconsulting.com

PUBLIC MEETING

Venue: Hotazel recreational club
Time: 15:00 to 17:00
Date: 16 April 2019



- Legend**
- Final Merged Waste Rock Dump
 - Waste Rock Dump Void
 - Mamatwan Mining Right Area
 - Mamatwan Sinterfontein Waste Rock Dump
 - Tshipi Eastern Waste Rock Dump
 - Boundary Pillar
 - Tshipi Surface Use Area
 - Tshipi Mining Right Area
 - Main Roads
 - Power Line
 - Rivers and Streams
 - 20m Contour Lines
 - Farm Boundaries
 - Farm Portions

0 500 1 000 Meters

Scale: 1:28 500 @ A3
 Projection: Transverse Mercator
 Datum: WGS1984, Lo23

South32

Figure 1
Local Setting



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 Tel: +27 (11) 467-0945 Fax: +27 (11) 467-0978

720.19136.00001

2019/03/25

OVERVIEW

An 18m wide (on surface) boundary is located between the MMT and the Tshipi Borwa Mine (Figure 1). Tshipi and South32 have approval to mine the 18m wide boundary pillar. Tshipi would be responsible for stripping waste, drilling and blasting the ore on behalf of both parties. Waste rock would be deposited onto each party's waste rock dump (Tshipi eastern and Mamatwan Sinterfontein). Ore would be loaded by each party and delivered to their respective stockpile areas.

The Mamatwan Sinterfontein waste rock dump would be extended in a north-westerly direction to merge with the Tshipi eastern waste rock dump in order to fill the narrow void between these two waste rock dumps. The Sinterfontein waste rock dump extension would cover an area of approximately 4 ha. Water management infrastructure such as berms around the existing waste rock dump would be adapted as required to manage run-off from the waste rock dump once the void is filled. Rehabilitation of the waste rock dump will be in line with current practises.



Current void between Mamatwan Sinterfontein waste rock dump (right) and the Tshipi eastern waste rock dump (left)

MOTIVATION FOR THE PROPOSED PROJECT

The merging of the two waste rock dumps will provide capacity for the storage of waste rock when the boundary pillar is mined. The merging of the two waste rock dumps avoids the extension of the footprint of the mine into undisturbed area.

PROJECT ALTERNATIVES

No feasible alternatives exist for the proposed project. The merging of the waste rock dumps would disturb vegetation that has already been impacted by mining activities thereby minimising the mine's footprint. In addition to this, undisturbed areas within MMT are earmarked for future infrastructure limiting the availability of space for additional waste rock storage. The merged waste rock dump would allow for optimised haulage distance due to its location in close proximity to the open pit.

This section provides a basic description of the existing status of the proposed project area.

Geology: Mamatwan falls in the Kalahari Manganese Field and is covered by gravels, clays, calcretes and aeolian sands of the Kalahari Group.

Climate: Mamatwan falls within the Northern Steppe Climatic Zone. It is a semi-arid region characterised by seasonal rainfall, hot temperatures in summer, and colder temperatures in winter. Rainfall ranges from 1.3 mm to 72.3 mm per month and winds from the north and north-east are dominant in the area.

Topography: The proposed project area is located in a relatively flat area with gentle slopes. The natural surrounding and on-site topography has been influenced largely through surrounding mining activities

Soils and land capability: Soils on site comprise structureless, deep (>1 200 mm), sandy, red and yellow soils of the Hutton form. Soils at the proposed project area have a low cultivation potential due to the high infiltration rates associated with sandy soils. Due to the fine sandy nature of the soil forms and the low clay content and limited organic matter, the soils are highly erodible, particularly where vegetation is removed.

Plant life: The proposed project area falls within the Kathu Bushveld. The Kathu Bushveld is characterised by open savannah with *Vachellia erioloba* (Camel thorn) and *Boscia albitrunca* (Shepherd's tree) as the prominent trees. The small pocket of vegetation between the waste rock dumps has been subjected to the daily functioning of the MMT and has been subjected to increased levels of dust and dumping of excavated material. No significant biodiversity is present within the void area.

Animal life: Very little evidence of wild faunal populations is associated with the general area and the proposed project area due to the presence of mining, prospecting and farming activities. Red data bird species that are likely to occur within the proposed project area include the Martial Eagle, Secretary bird and the African Whitebacked Vulture. Red data mammal species likely to occur include the honey badger and the South African Hedgehog.

Surface water: The MMT falls within the catchment of the Ga-Mogara River, a tributary of the Kuruman River which joins the Molopo River and flows into the Orange River. The MMT is located in the D41K quaternary catchment. There are no watercourses within the project area. The nearest watercourse is the ephemeral Vlermuisleegte River (approximately 10 km west) from the MMT. There is no third party reliance on surface water.

Groundwater: The project area is underlain by a shallow unconfined Kalahari Aquifer and the deeper fractured Hotazel Aquifer. The average ground water level at the proposed project site ranges from 30 to 45 metres below ground level. Groundwater quality is generally poor due to elevated concentrations of chloride, sodium and magnesium. The majority of third party boreholes surrounding the proposed project area are used for domestic use and livestock watering purposes.

Air quality: The surrounding ambient air quality has been influenced by neighbouring mines, household fuel combustion and vehicle tailpipe emissions.

Noise: The greater area is generally defined by rural features and is not subjected to elevated noise levels. Noise levels in the proposed project area are mainly as a result of surrounding farming activities, localised traffic and mining operations.

Visual: The MMT is located within the flat open plains of the Kalahari and the general area surrounding the MMT is rural in nature. The visual value of the proposed project area is very low due to the presence of the Tshipi eastern waste rock dump and the MMT Sinterfontein waste rock dump and associated mine infrastructure.

Heritage/cultural and palaeontological resources: The mine is situated in an area that as a whole has a relatively low human presence due to the dryness of the region, and as such if there were human settlements they tended to be located on or near watercourses. It is unlikely that heritage/cultural resources occur within the proposed project site. The palaeontological sensitivity of the site is low, although there is a possibility of Stromatolites being present in the project area.

Socio-economic: The town of Hotazel is located approximately 25km north of the proposed project area. The educational levels in the area are relatively low with a high level of unemployment and a dependency on subsistence agriculture, the public sector, seasonal workers and employment in the mining sector. Water provision and sanitation remains a challenge, mostly in the rural areas. There has been an increase in the number of households that were provided with electricity as a source of energy in the area. Mining and government services are the main economic sectors.

Land use: Land uses surrounding the MMT include a combination of livestock grazing, game farming, mining, a solar farm and sparsely situated residences. Land use within the proposed project area has been influenced by existing mining activities (presence of the waste rock dumps).

POTENTIAL ENVIRONMENTAL/CULTURAL/SOCIO-ECONOMIC IMPACTS

Potential impacts that have been identified and will be investigated as part of the environmental impact assessment process are tabulated below. Where specialist input is required this has been indicated in the table below.

Aspect	Potential environmental/cultural/socio-economic impact	Specialist input (where required)
Geology	The sterilisation of mineral resources through the disposal of mineral resources onto mineralised waste facilities (Sinterfontein waste rock dump).	Qualitatively assessed
Topography	Potential to further alter topography through an increase of the waste rock dump footprint area.	Qualitatively assessed
Soils and land capability*	Potential to further compromise soil resources through erosion, compaction and/or pollution and the related natural capability of the land through an increased waste rock dump footprint area.	Soil and land capability study
Biodiversity*	Potential to further disturb and/or destroy vegetation, habitat units and related ecosystem functionality through an increased waste rock dump footprint area.	Terrestrial biodiversity study
Surface water*	Potential increase of run-off containment that can alter natural drainage patterns and the increase of pollution sources that can pollute surface water resources.	Hydrological study
Groundwater*	Potential increase of existing pollution sources through the increase in the waste rock dump footprint area that can contaminate groundwater resources which could impact availability to surrounding groundwater users.	Groundwater study and waste assessment
Air*	Increase in emissions which could potentially have a negative impact on ambient air quality.	Air quality study
Noise	Potential increase in disturbing noise levels due to operations of vehicles.	Qualitatively assessed
Visual	Potential contribution to existing negative visual views.	Qualitatively assessed
Heritage/cultural and palaeontological	The potential to damage heritage/cultural and palaeontological resources.	Heritage/cultural and palaeontological study

* Reference will be made to specialist studies undertaken by Tshipi as part of their EMP amendment process to cater for the merging of the waste rock dumps.

ENVIRONMENTAL AUTHORISATION AND WATER USE LICENCE APPLICATION PROCESS

The environmental assessment process provides:

- Information on the project and environment in which it is being undertaken
- Identifies, in consultation with I&APs the potential negative as well as positive environmental/cultural/socio-economic impacts of the proposed project
- Reports on management measures required to mitigate impacts to an acceptable level and incorporates requirements for monitoring programmes (where required).

The likely process steps and timeframes are provided below.

STEPS IN THE AUTHORISATION PROCESS

PHASE I - Pre-application phase

(January to May 2019)

- Pre-application meeting with the DMR and DWS
- Notify other commenting authorities and I&APs of proposed project and environmental assessment (via newspaper advertisements, site notices and this document)
- Hold a public meeting

PHASE II – BAR and IWUL phase

(April to June 2019)

- Submission of integrated environmental authorisation (NEMA/NEM:WA) application to the DMR
- Submission of the IWULA to the DWS
- Compile BAR and summary and distribute to I&APs and commenting authorities for review for 30 days
- Compile technical documentation in support of the IWULA (specialist studies and the Integrated Water and Waste Management Plan) and submit to I&APs and commenting authorities for review for 30 days
- Update the BAR and IWULA technical documentation with any comments received during the public review period

PHASE III – Competent authority review phase

(June to October 2019)

- Submit BAR (inclusive of comments raised during the review period) to the DMR for decision making (107 days legislated decision making period)
- Submit the IWULA technical documentation (inclusive of comments raised during the review period) to the DWS for decision making (139 day legislated review period)
- Circulate decisions to I&APs registered on the project database.

PARTIES INVOLVED IN THE ENVIRONMENTAL ASSESSMENT PROCESS

IAPs

- * Surrounding landowners, land users and community forums
- * Surrounding mines and industries
- * Parastatals

COMPETENT AUTHORITIES

- * Northern Cape Department of Mineral Resources (DMR)
- * Northern Cape Department of Water and Sanitation (DWS)

COMMENTING AUTHORITIES

- * Northern Cape Department of Environment and Nature Conservation (DENC)
- * Northern Cape Department of Agriculture, Forestry and Fisheries (DAFF)
- * Provincial South Africa Heritage Resource Agency (SAHRA)
- * Northern Cape Department of Rural Development and Land Reform (DRDLR) – inclusive of the Land Claims Commissioner

LOCAL AUTHORITIES

- * Joe Morolong Local Municipality (includes ward councillor)
- * John Taolo Gaetsewe District Municipality

Please let us know if there are any additional parties that should be involved.

SOUTH32

BACKGROUND INFORMATION DOCUMENT FOR THE MERGING OF THE MAMATWAN SINTERFONTEIN WASTE ROCK DUMP AND THE TSHIPI EASTERN WASTE ROCK DUMP

REGISTRATION AND RESPONSE FORM FOR INTERESTED AND AFFECTED PARTIES

DATE		TIME	
PARTICULARS OF THE INTERESTED AND AFFECTED PARTY			
NAME			
POSTAL ADDRESS			
		POSTAL CODE	
STREET ADDRESS			
		POSTAL CODE	
WORK/ DAY TELEPHONE NUMBER		WORK/ DAY FAX NUMBER	
CELL PHONE NUMBER		E-MAIL ADDRESS	

PLEASE IDENTIFY YOUR INTEREST IN THE PROPOSED PROJECT

PLEASE WRITE YOUR COMMENTS AND QUESTIONS HERE

Please return completed forms to:

Natasha Smyth

SLR Consulting (South Africa) (Pty) Ltd
(011) 467 0945 (Tel) and/or (011) 467 0978 (Fax)
nsmyth@slrconsulting.com

Clive Phashe

From: Natasha Smyth
Sent: 27 March 2019 03:22 PM
To: JacolineMa@daff.gov.za
Subject: South32: Mamatwan Mine - Merging the Sinterfontein and Tshipi Waste Rock Dumps
Attachments: 2019-BID- Mamatwan (Afrikaans) Final.pdf; 2019-BID- Mamatwan Final.pdf

SOUTH32

THE MERGING OF THE MAMATWAN SINTERFONTEIN WASTE ROCK DUMP AND THE TSHIPI EASTERN WASTE ROCK DUMP

Attention: Department of Agriculture, Forestry and Fisheries

South32 operates the open pit manganese Mamatwan Mine (MMT) (forms part of the legal entity Hotazel Manganese Mines (Pty) Ltd) located on portion 5 and 6 of the farm Goold 329, the farm Sinterfontein 748, portion of portion 2 (Currently Portion 17) and portion of portion 1 (Currently Portion 16) of the farm Mamatwan 331, portion 3 of the farm Moab 700 and portion 4 of the farm Adams 328.

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This email also serves to invite you to a commenting authorities meeting that has been arranged as part of the public participation process. Meeting particulars are tabulated below. *It is important to note that a general public meeting has also been arranged for the same day at the same venue at 15h00. Please feel free to attend the later meeting should this be more suitable. Please note that the same material will be presented at both the general public and commenting authorities meetings.*

Date:	16 April 2019
Time:	10h00 to 12h00
Venue:	Hotazel Recreational Club

For any queries please do not hesitate to contact me.

Kind regards

Natasha



Natasha Smyth

Environmental Assessment Practitioner

+27 83 226 8570

+27 11 467 0945

2029

nsmyth@slrconsulting.com

SLR Consulting (Africa) (Pty) Ltd
Unit 7
Fourways Manor Office Park
1 MacBeth Avenue
Fourways, Johannesburg, Gauteng, 2191



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Clive Phashe

From: Natasha Smyth
Sent: 27 March 2019 03:27 PM
To: fortune@ncpg.gov.za; fortunec@agri.ncpg.gov.za
Subject: South32: Mamatwan Mine - Merging the Mamatwan Sinterfontein and Tshipi Waste Rock Dumps
Attachments: 2019-BID- Mamatwan (Afrikaans) Final.pdf; 2019-BID- Mamatwan Final.pdf

SOUTH32

THE MERGING OF THE MAMATWAN SINTERFONTEIN WASTE ROCK DUMP AND THE TSHIPI EASTERN WASTE ROCK DUMP

Attention: Department of Agriculture and Land Reform

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Clive Phashe

From: Natasha Smyth
Sent: 27 March 2019 03:23 PM
To: tmtho@webmail.co.za; Tmthombeni@ncpg.gov.za; mokonopin@gmail.com
Subject: South32: Mamatwan Mine - Merging the Sinterfontein and Tshipi Waste Rock Dumps
Attachments: 2019-BID- Mamatwan (Afrikaans) Final.pdf; 2019-BID- Mamatwan Final.pdf

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Attention: Department of Environment and Nature Conservation

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From: Natasha Smyth
Sent: 27 March 2019 03:30 PM
To: Johannes Nematatani
Subject: South32: Mamatwan Mine - Merging the Sinterfontein and Tshipi Waste Rock Dumps
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Attention: Department of Mineral Resources

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Clive Phashe

From: Natasha Smyth
Sent: 27 March 2019 03:24 PM
To: livhuwani.malatjie@dmr.gov.za; Ntsundeni.Ravhugoni@dmr.gov.za; takalani.khorombi@dmr.gov.za; johannes.nematadani@dmr.gov.za; kgaudi.shapo@dmr.gov.za
Subject: South32: Mamatwan Mine - Merging the Sinterfontein and Tshipi Waste Rock Dumps
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SLR Consulting (South Africa) (Pty) Ltd (SLR) has been appointed by Hotazel Manganese Mines (Pty) Ltd, to undertake the environmental assessment process.

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Date:	16 April 2019
Time:	10h00 to 12h00
Venue:	Hotazel Recreational Club

For any queries please do not hesitate to contact me.

Kind regards

Natasha



Natasha Smyth

Environmental Assessment Practitioner

☎ +27 83 226 8570

☎ +27 11 467 0945

📄 2029

✉ nsmyth@slrconsulting.com

SLR Consulting (Africa) (Pty) Ltd
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Clive Phashe

From: Natasha Smyth
Sent: 27 March 2019 03:27 PM
To: Ryan Oliver
Subject: South32: Mamatwan Mine - Merging the Mamatwan Sinterfontein and Tshipi Waste Rock Dumps
Attachments: 2019-BID- Mamatwan (Afrikaans) Final.pdf; 2019-BID- Mamatwan Final.pdf

SOUTH32

THE MERGING OF THE MAMATWAN SINTERFONTEIN WASTE ROCK DUMP AND THE TSHIPI EASTERN WASTE ROCK DUMP

Attention: Department of Rural Development and Land Reform

South32 operates the open pit manganese Mamatwan Mine (MMT) (forms part of the legal entity Hotazel Manganese Mines (Pty) Ltd) located on portion 5 and 6 of the farm Goid 329, the farm Sinterfontein 748, portion of portion 2 (Currently Portion 17) and portion of portion 1 (Currently Portion 16) of the farm Mamatwan 331, portion 3 of the farm Moab 700 and portion 4 of the farm Adams 328.

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Clive Phashe

From: Natasha Smyth
Sent: 27 March 2019 03:22 PM
To: Msimango Philani (KBY)
Subject: South32: Mamatwan Mine - Merging the Sinterfontein and Tshipi Waste Rock Dumps
Attachments: 2019-BID- Mamatwan (Afrikaans) Final.pdf; 2019-BID- Mamatwan Final.pdf

SOUTH32

THE MERGING OF THE MAMATWAN SINTERFONTEIN WASTE ROCK DUMP AND THE TSHIPI EASTERN WASTE ROCK DUMP

Attention: Department of Water Sanitation

South32 operates the open pit manganese Mamatwan Mine (MMT) (forms part of the legal entity Hotazel Manganese Mines (Pty) Ltd) located on portion 5 and 6 of the farm Goold 329, the farm Sinterfontein 748, portion of portion 2 (Currently Portion 17) and portion of portion 1 (Currently Portion 16) of the farm Mamatwan 331, portion 3 of the farm Moab 700 and portion 4 of the farm Adams 328.

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Clive Phashe

From: Natasha Smyth
Sent: 27 March 2019 03:25 PM
To: juliakatong2@gmail.com; Jmmasela66@gmail.com; mm@joemorolong.gov.za; mmorwagae@joemorolong.gov.za; leutlwetsed@joemorolong.gov.za; sseleka@webmail.co.za; sseleka@joemorolong.gov.za
Subject: South32: Mamatwan Mine - Merging the Sinterfontein and Tshipi Waste Rock Dumps
Attachments: 2019-BID- Mamatwan (Afrikaans) Final.pdf; 2019-BID- Mamatwan Final.pdf

SOUTH32

THE MERGING OF THE MAMATWAN SINTERFONTEIN WASTE ROCK DUMP AND THE TSHIPI EASTERN WASTE ROCK DUMP

Attention: Joe Morolong Local Municipality and Ward Councillor

South32 operates the open pit manganese Mamatwan Mine (MMT) (forms part of the legal entity Hotazel Manganese Mines (Pty) Ltd) located on portion 5 and 6 of the farm Goold 329, the farm Sinterfontein 748, portion of portion 2 (Currently Portion 17) and portion of portion 1 (Currently Portion 16) of the farm Mamatwan 331, portion 3 of the farm Moab 700 and portion 4 of the farm Adams 328.

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Clive Phashe

From: Natasha Smyth
Sent: 27 March 2019 03:26 PM
To: mmsec@taologaetsewe.gov.za; matlhareTH@taologaetsewe.gov.za
Subject: South32: Mamatwan Mine - Merging the Mamatwan Sinterfontein and Tshipi Waste Rock Dumps
Attachments: 2019-BID- Mamatwan (Afrikaans) Final.pdf; 2019-BID- Mamatwan Final.pdf

SOUTH32

THE MERGING OF THE MAMATWAN SINTERFONTEIN WASTE ROCK DUMP AND THE TSHIPI EASTERN WASTE ROCK DUMP

Attention: John Taolo Gaetsewe District Municipality

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Venue:	Hotazel Recreational Club

For any queries please do not hesitate to contact me.

Kind regards

Natasha



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Natasha Smyth

From: Natasha Smyth
Sent: 27 March 2019 03:33 PM
Subject: South32: Mamatwan Mine - Merging the Mamatwan Sinterfontein and Tshipi Waste Rock Dumps
Attachments: 2019-BID- Mamatwan (Afrikaans) Final.pdf; 2019-BID- Mamatwan Final.pdf

Bcc: tsteyn@lantic.net; james@tshipi.co.za; nthabeleng@tshipi.co.za; ndarap@eskom.co.za; Gerrie.vanschalkwyk@eskom.co.za; Benito.williams@eskom.co.za; khanyen@eskom.co.za; ludekefj@eskom.co.za; vgenseal@eskom.co.za; dbruiner@eskom.co.za; Sam.fiff@transnet.net; cabangile.zulu@transnet.net; 4409NDENBERG@ABSAMAIL.CO.ZA; andriesmvdb@gmail.com; anfour@absamail.co.za; krugersoret@yahoo.com; mmvanwyk10@gmail.com; camel@vodamail.co.za; Cupido.Love@UMK.co.za; daniel@solafuture.co.za; siphawe@kalagadi.co.za; Tshepo@kalagadi.co.za; henneyrc@telkom.co.za; info@sebiloresources.co.za; didi@sebiloresources.co.za; voorsitter@agrikur.co.za; info@tshiping.co.za; wessanc@yahoo.com; juriekr@gmail.com; louis@soetvlakte.co.za; hendrik.arangies@kmr.co.za; conri.moolman@asia-minerals.com; bonolol@brmo.co.za; Rethabile.Mboya@arm.co.za; AshleyG.Mcleod@arm.co.za; info@afribits.co.za; Wezi.banda@ergafrica.com; Gert.theart@vodamail.co.za; ebenanthonissen@hotmail.com; ebena@absamail.co.za; Carel.reyneke@absamail.co.za; josephmatshidiso@yahoo.com; Tshivhangwaho.Mudau@umk.co.za

SOUTH32

THE MERGING OF THE MAMATWAN SINTERFONTEIN WASTE ROCK DUMP AND THE TSHIPI EASTERN WASTE ROCK DUMP

Dear Interested and/or Affected Party

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You have been identified as an Interested and Affected Party who may be interested in the proposed project and the environmental assessment process. In this regard, please find attached a copy of the Background Information Document that has been prepared to provide you with more information. The BID is available in both English and Afrikaans.

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Date:	16 April 2019
Time:	15h00 to 17h00
Venue:	Hotazel Recreational Club

For any queries please do not hesitate to contact me.

Kind regards

Natasha



Natasha Smyth

Environmental Assessment Practitioner

c +27 83 226 8570

o +27 11 467 0945

d 2029

e nsmyth@slrconsulting.com

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Clive Phashe

From: Natasha Smyth
Sent: 27 March 2019 03:28 PM
To: nhiggitt@sahra.org.za
Subject: South32: Mamatwan Mine - Merging the Mamatwan Sinterfontein and Tshipi Waste Rock Dumps
Attachments: 2019-BID- Mamatwan (Afrikaans) Final.pdf; 2019-BID- Mamatwan Final.pdf

SOUTH32

THE MERGING OF THE MAMATWAN SINTERFONTEIN WASTE ROCK DUMP AND THE TSHIPI EASTERN WASTE ROCK DUMP

Attention: South African Heritage Resources Agency

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Time:	10h00 to 12h00
Venue:	Hotazel Recreational Club

Please note that we will create a case file and upload the BID onto the SAHRIS website. This email just serves as a record for our internal purposes.

For any queries please do not hesitate to contact me.

Kind regards

Natasha



Natasha Smyth

Environmental Assessment Practitioner

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 +27 11 467 0945

 2029

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**Correspondence
with the land
claims
commissioner.**



Enquiries: Ryan Oliver

SLR

Dear Sir/ Madam

LAND CLAIMS ENQUIRY –

- 1. Farm Sinterfontein No. 748, Joe Morolong Local Municipality, Province Northern Cape.**

We refer to your email dated 26/03/2019.

We confirm that as at the date of this letter no land claims appear on our database in respect of the Property. This includes the database for claims lodged by 31 December 1998; and those lodged between 1 July 2014 and 27 July 2016 in terms of the Restitution of Land Rights Amendment Act, 2014.

Whilst the Commission takes reasonable care to ensure the accuracy of the information it provides, there are various factors that are beyond the Commission's control, particularly relating to claims that have lodged but not yet been gazetted such as:

1. Some Claimants referred to properties they claim dispossession of rights in land against using historical property descriptions which may not match the current property description; and
2. Some Claimants provided the geographic descriptions of the land they claim without mentioning the particular actual property description they claim dispossession of rights in land against.

The Commission therefore does not accept any liability whatsoever if through the process of further investigation of claims it is found that there is in fact a land claim in respect of the above property.

If you are aware of any change in the description of the above property after 19 June 1913 kindly supply us with such description so as to enable us to do a further search.

Yours faithfully

A handwritten signature in black ink, appearing to read 'M. Du Toit', with a large, stylized flourish extending to the right.

Ms. M. Du Toit

Chief Director: Land Restitution Support-Northern Cape

Date: 28.03.2019

**Background
Information
Document (BID)
and proof of
distribution.**

SOUTH32

AGTERGRONDINLIGTINGSDOKUMENT VIR DIE SAMESMELTING VAN DIE MAMATWAN SINTERFONTEIN AFVALKLIPHOOP EN DIE TSHIPI OOSTELIKE AFVALKLIPHOOP

MARCH 2019

INLEIDING

South32 bedryf die oopgroef Mamatwan Manganemyn (MMT) (vorm deel van die regsentiteit Hotazel Manganese Mines (Edms) Bpk)) wat geleë is op gedeelte 5 en 6 van die plaas Goold 329, die plaas Sinterfontein 748, n' gedeelte van gedeelte 2 (Huidiglik gedeelte 17) en n' gedeelte van gedeelte 1 (Huidiglik Portion 16) van die plaas Mamatwan 331, gedeelte 3 van die plaas Moab 700 en gedeelte 4 van die plaas Adams 328. MMT is sowat 25 km suid van die dorp Hotazel in die Noord-Kaapprovinsie geleë. MMT beskik oor 'n Omgewingsbestuursprogram (OBP) en 'n Mynreg wat uitgereik is deur die eertydse Departement van Minerale en Energie (tans die Departement van Minerale Hulpbronne (DMH)). MMT beskik voorts ook oor 'n Geïntegreerde Watergebruiklisensie (IWUL) wat uitgereik is deur die Departement van Water en Sanitasie (DWS).

Daar is 'n 18 m-wye grens (op die oppervlak) tussen MMT en the Tshipi Borwa-myn (Figuur 1). Tshipi en MMT het goedkeuring om die 18 m-wye grenspilaar te ontgin. Bykomende vermoë word benodig om afvalklip wat as deel van die ontginning van die grenspilaar gegenerer sal word, te berg. Om voorsiening te maak vir die bykomende berging, word aan die hand gedoen dat die Mamatwan Sinterfontein en die Tshipi oostelike afvalkliphope saamsmelt om die gaping tussen die twee afvalhope te vul (Figuur 1). MMT beoog om hul goedgekeurde OBP te wysig om voorsiening te maak vir die samesmelting van die afvalkliphope.

OMGEWINGSMAGTIGINGSPROSES

Voor die aanvang van die beoogde projek, word die volgende benodig:

- 'n Goedgekeurde gewysigde OBP deur die DMH ingevolge Artikel 102 van die Wet op die Ontwikkeling van Minerale en Petroleum Hulpbronne (Wet 28 van 2002).
- 'n Omgewingsmagtiging deur die DMH ingevolge die Nasionale Wet op Omgewingsbestuur (Wet 107 van 1998). Die Regulasies op Omgewingsimpak-evaluerings wat gevolg word, is Staatskennisgewing R982 van 4 Desember 2014, soos gewysig.
- 'n Wysiging van die IWUL deur die DWS ingevolge Artikel 21 van die Nasionale Waterwet (Wet 36 van 1998). Die Regulasies wat vir hierdie projek gevolg word, is Staatskennisgewing R267 van 2017 vir die Prosedurele Vereistes vir Aansoek om Watergebruiklisensies.
- 'n Afvalbestuurlisensie deur die DMH ingevolge die Nasionale Wet op Omgewingsbestuur: Afval (Wet 59 van 2008).

DOEL VAN HIERDIE DOKUMENT

Hierdie dokument is opgestel deur SLR om u toe te lig oor:

- die beoogde projek;
- die huidige (grondlyn-) omgewing van die projekgebied;
- die omgewingsevalueringsproses wat gevolg word (Basiese Evalueringsproses);
- moontlike omgewings-/kultuur-/sosio-ekonomiese impakte;
- hoe u insette oor die omgewingsevalueringsproses kan lewer.

SLR Consulting (South Africa) (Edms.) Bpk. (SLR), 'n onafhanklike firma van omgewingskonsultante, is deur Hotazel Manganese Mines (Edms) (Bpk) aangestel om die omgewingsevalueringsproses te bestuur.

U ROL

U is as 'n belangstellende en/of geaffekteerde party (B&GP) geïdentifiseer wat moontlik ingelig wil word oor die beoogde projek en insae in die omgewingsproses en -verslag wil hê.

U het 'n geleentheid om insae tot hierdie dokument te hê en om u aanvanklike kommentaar aan SLR te stuur vir insluiting in die omgewingsevalueringsproses. U sal ook die geleentheid kry om insette by die openbare vergadering (besonderhede hieronder) te lewer en om insae te hê in en kommentaar te lewer op die Basiese Evalueringsverslag (BEV).

Alle kommentaar sal aangeteken en ingesluit word in die verslae wat by die DMH ingedien gaan word vir besluitneming.

HOE OM TE REAGEER

Reaksie op hierdie dokument kan by wyse van die aangehegte kommentaarvorm en/of deur kommunikasie met die persoon wat hieronder genoem word, ingedien word.

WIE OM TE KONTAK

Natasha Smyth

011 467 0945 (tel) of

011 467 0978 (faks) of

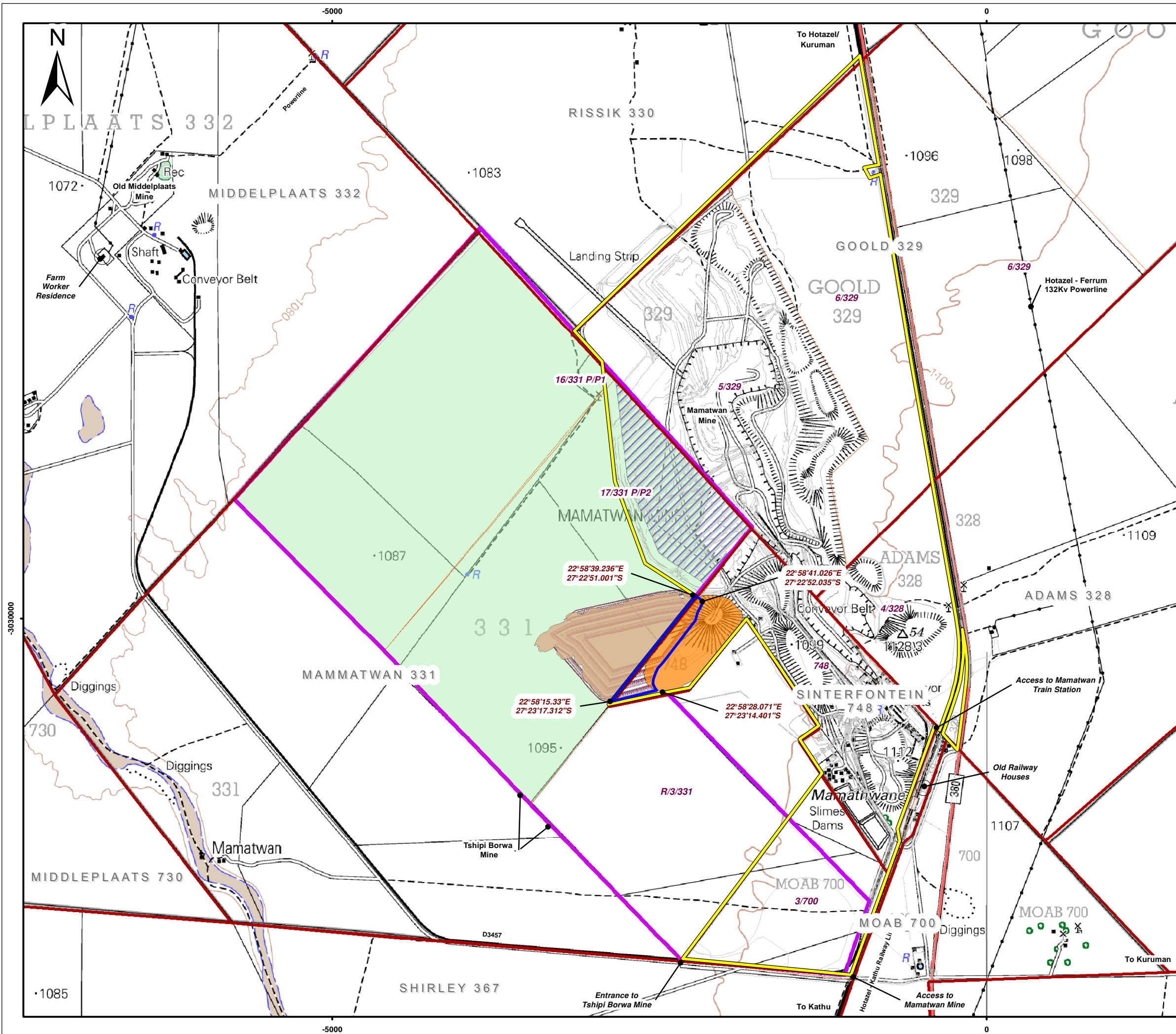
nsmyth@slrconsulting.com

OPENBARE VERGADERING

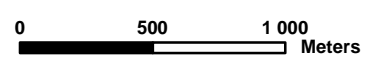
Plek: Hotazel Ontspanningsklub

Tyd: 15:00 to 17:00

Datum: 16 April 2019



- Legend**
- Finale Saamgesmelt
 - ▭ Afvalkloof Gaping
 - ▭ Mamatwan Mynreg Gebied
 - ▭ Mamatwan Sinterfontein
 - ▭ Tshipi Oostelike Afvalkloof
 - ▨ Boundary Pillar
 - ▭ Tshipi Surface Use Area
 - ▭ Tshipi Mining Right Area
 - Hoofpaapie
 - Kraglyn
 - Riviere en Strome
 - 20m Kontoorlyne
 - ▭ Plaasgrens
 - ▭ Plaasgedeelte



Scale: 1:28 500 @ A3
 Projection: Transverse Mercator
 Datum: WGS1984, Lo23

South32

Figuur 1

Plaaslike Ligging



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OORSIG

Daar is 'n 18 m-wye grens (op die oppervlak) tussen MMT en the Tshipi Borwa-myn (Figuur 1). Tshipi en South32 het goedkeuring om die 18 m-wye grenspilaar te ontgin. Tshipi sal verantwoordelik wees om afval weg te stroop en die erts namens beide partye te boor en te skiet. Afvalklip sal op elke party (Tshipi oostelike en Mamatwan Sinterfontein) se afvalkliphoope gestort word. Erts sal deur elke party opgelaa en by hul onderskeie voorraadstapelgebiede afgelewer word.

Die Mamatwan Sinterfontein afvalkliphoope sal in 'n noordwestelike rigting uitgebrei word om saam te smelt met die Tshipi oostelike afvalkliphoope ten einde die smal gaping tussen die twee afvalkliphoope te vul. Die Sinterfontein afvalkliphoope se uitbreiding sal 'n gebied van sowat 4 ha beslaan. Waterbestuursinfrastruktuur, soos berms rondom die bestaande afvalkliphoope, sal aangepas word soos nodig om afloop van die afvalkliphoope af te bestuur wanneer die gaping eers gevul is. Rehabilitasie van die afvalkliphoope sal in lyn met huidige praktyke geskied.



Huidige gaping tussen die Mamatwan Sinterfontein afvalkliphoope (regs) en die Tshipi oostelike afvalkliphoope (links)

MOTIVERING VIR DIE BEOOGDE PROJEK

Die samesmelting van die twee afvalkliphoope sal kapasiteit bied vir die berging van afvalklip wanneer die grenspilaar ontgin word. Die samesmelting van die twee afvalkliphoope voorkom die uitbreiding van die myn se voetspoor na onversteurde gebiede.

PROJEKALTERNATIEWE

Daar is geen uitvoerbare alternatiewe vir die beoogde projek nie. Die samesmelting van die afvalkliphoope sal plantegroei versteur wat reeds geraak is deur mynboubedrywighede, wat die myn se voetspoor gevolglik minimaliseer. Daarbenewens is onversteurde gebiede in MMT geormerk vir toekomstige infrastruktuur, wat die beskikbaarheid van spasie vir die berging van bykomende afvalklip beperk. Die saamgesmelte afvalkliphoope sal sorg vir 'n optimale vervoerafstand danksy sy nabyheid aan die oopgroef.

Hierdie afdeling bied 'n basiese beskrywing van die beoogde projekgebied se huidige status.

Geologie: Mamatwan is geleë in die Kalahari Manganveld en is bedek deur gruis, klei, kalkkreet en eoliese sand van die Kalaharigrup.

Klimaat: Mamatwan is geleë in die Noordelike Steppe Klimaatzone. Dit is 'n semi-ariëde streek, gekenmerk deur seisoenale reënval, warm temperature in die somer en kouer temperature in die winter. Reënval wissel tussen 1,3 mm en 72,3 mm per maand en heersende winde in die gebied is vanuit die noorde en noordooste.

Topografie: Die beoogde projekgebied is geleë in 'n betreklik plat gebied met geleidelike hellings. Die natuurlike omgewing en interne topografie is grootliks beïnvloed deur omliggende mynboubedrywighede.

Grondsoorte en grondvermoë: Grond op die terrein bestaan uit struktuurlose, diep (>1 200 mm), sanderige, rooi en geel grondsoorte van die Huttonvorm. Weens die hoë infiltrasietempo's wat verband hou met sanderige grond, het die beoogde projekgebied se grondsoorte 'n lae verbouingspotensiaal. Weens die fyn, sanderige aard van die grondvorme en die lae klei-inhoud en beperkte organiese stowwe, is die grondsoorte hoogs erodeerbaar, veral waar plantegroei verwyder is.

Plantlewe: Die beoogde projekgebied is in die Kathu-bosveld geleë. Die Kathu-bosveld word gekenmerk deur die oop savanna met *Vachellia erioloba* (kameeldoringboom) en *Boscia albitrunca* (witgatboom) as die prominente bome. Die strokie plantegroei tussen die afvalkliphoope is blootgestel aan die daaglikse werking van MMT en aan verhoogde stofvlakke en die storting van materiaal wat uitgegrawe is. Daar is geen wesenlike biodiversiteit in die gapinggebied nie.

Dierelewe: Weens die teenwoordigheid van mynbou, prosperiteitswerke en boerderybedrywighede, is daar baie min bewyse van wilde dierbevolkings wat met die algemene gebied en die beoogde projekgebied geassosieer word. Voëlspesies op die rooidatalys wat waarskynlik in die beoogde projekgebied voorkom, sluit in die Breëkoparend, Sekretarisvoël en die Afrika Witruigaasvoël. Dierspesies op die rooidatalys wat waarskynlik voorkom, sluit in die ratel en die Suid-Afrikaanse krimpvarkie.

Oppervlakwater: MMT is geleë in die opvangsgebied van die Ga-Moragarivier, 'n sytak van die Kurumanrivier wat by die Moloporivier aansluit en in die Oranjerivier invloei. MMT is geleë in die D41K kwarternêre opvangsgebied. Daar is geen waterlope in die projekgebied nie. Die naaste waterloop is die efemere Vlermuisleegterivier (sowat 10 km wes) van MMT. Daar is geen derdeparty-afhanklikheid van oppervlakwater nie.

Grondwater: Die projekgebied word onderlê deur 'n vlak, onbegrensde Kalahari-akwifereer en die dieper, gefrakteerde Hotazelakwifereer. Die beoogde projekgebied se gemiddelde grondwatervlak wissel tussen 30 m en 45 m onder grondvlak. Die gehalte van die grondwater is oor die algemeen swak, weens verhoogde konsentrasies chloor, natrium en magnesium. Die meeste van die derdeparty-boorgate rondom die beoogde projekgebied word vir huishoudelike gebruik en veesuipings gebruik.

Luggehalte: Die omringende luggehalte is beïnvloed deur naburige myne, die verbranding van huishoudelike brandstof en voertuie se uitlaatgasse.

Geraas: Die breër gebied word algemeen gekenmerk deur landelike eienskappe en is nie blootgestel aan verhoogde geraasvlakke nie. Geraasvlakke in die beoogde projekgebied word hoofsaaklik deur omliggende boerderybedrywighede, plaaslike verkeer en mynboubedrywighede veroorsaak.

Visueel: MMT is in die plat oop vlaktes van die Kalahari geleë en die algemene gebied rondom MMT is landelik van aard. Die visuele waarde van die beoogde projekgebied is baie laag, weens die teenwoordigheid van die Tshipi oostelike afvalkliphoop en die MMT Sinterfontein afvalkliphoop en gepaardgaande myninfrastruktuur.

Erfenis-/Kultuur- en paleontologiese hulpbronne: Die myn is geleë in 'n gebied wat in geheel betreklik lae menslike teenwoordigheid het weens die droogheid van die streek, met die gevolg dat as daar menslike nedersettings was, hulle eerder op of naby waterlope sou wees. Dit is onwaarskynlik dat daar erfenis-/kultuurhulpbronne in die beoogde projekterrein is. Die terrein se paleontologiese sensitiwiteit is laag, hoewel daar 'n moontlikheid van aanwesige Stromatoliete in die projekgebied is.

Sosio-ekonomies: Die dorp Hotazel is sowat 25 km noord van die beoogde projekgebied geleë. Die opvoedingsvlakke in die gebied is betreklik laag met 'n hoë werkloosheidsvlak en 'n afhanklikheid van bestaansboerdery, die openbare sektor, seisoenswerkers en emplojering in die mynbousektor. Watervoorsiening en sanitasie bly 'n uitdaging, veral in die landelike gebiede. Daar was 'n toename in die aantal huishoudings in die gebied wat elektrisiteit as kragbron ontvang het. Mynbou en staatsdienste is die primêre ekonomiese sektore.

Grondgebruik: Grondgebruik rondom MMT sluit in 'n kombinasie van weiding vir lewendehawe, wildsboerdery, mynbou, 'n sonkragplaas en ylgesaaide wonings. Grondgebruik in die beoogde projekgebied is geraak deur bestaande mynboubedrywighede (teenwoordigheid van die afvalkliphope).

POTENSIEËLE OMGEWINGS-/KULTUUR-/SOSIO-EKONOMIESE IMPAKTE

Potensiële impakte wat geïdentifiseer is en as deel van die omgewingsimpakevalueringproses ondersoek sal word, verskyn in die tabel hieronder. Waar spesialisinsette benodig word, is dit ook aangedui in die tabel hieronder.

Aspek	Potensiële omgewings-/kultuur-/sosio-ekonomiese impak	Spesialisinset (waar nodig)
Geologie	Die sterilisasie van minerale hulpbronne deur die storting van minerale hulpbronne op gemineraliseerde afvalaanlegte (Sinterfontein afvalkliphoop).	Kwalitatief geëvalueer
Topografie	Potensiaal om topografie verder te verander deur 'n vergroting van die afvalkliphoop se voetspooroppervlak.	Kwalitatief geëvalueer
Grondsoorte en grondvermoë*	Potensiaal om grondhulpbronne verder nadelig te beïnvloed deur erosie, kompaksie en/of besoedeling en die gepaardgaande natuurlike vermoë van die grond deur 'n vergroting van die afvalkliphoop se voetspooroppervlak.	Studie van grond en grondvermoë
Biodiversiteit*	Potensiaal om plantegroei, habitateenhede en gepaardgaande ekosistefunksionaliteit verder te versteur en/of te vernietig deur 'n vergroting van die afvalkliphoop se voetspooroppervlak.	Ter plaatse biodiversiteitsstudie
Oppervlakwater*	Potensiële toename in afloopindamming wat die natuurlike dreineringspatrone kan verander en die toename in besoedelingsbronne wat oppervlakwaterhulpbronne kan besoedel.	Hidrologiese studie
Grondwater*	Potensiële toename van bestaande besoedelingsbronne deur die vergroting van die afvalkliphoop se voetspooroppervlak wat grondwaterhulpbronne kan besoedel, wat 'n impak op die beskikbaarheid aan omliggende gebruikers van grondwater kan hê.	Grondwaterstudie en afvalevaluering
Lug*	Toename in emissies wat potensieel 'n negatiewe impak op omringende luggehalte kan hê.	Luggehaltestudie
Geraas	Potensiële toename in steurende geraasvlakke weens voertuigbedrywighede.	Kwalitatief geëvalueer
Visueel	Potensiële bydrae tot die bestaande negatiewe visuele uitsig.	Kwalitatief geëvalueer
Erfenis-/Kultuur- en paleontologiese hulpbronne	Die potensiaal om erfenis-/kultuur- en paleontologiese hulpbronne te beskadig.	Erfenis-/Kultuur- en paleontologiese studie

* Daar sal verwys word na spesialisstudies wat Tshipi as deel van hul OBP-wysigingsproses onderneem om voorsiening te maak vir die samesmelting van die afvalkliphope.

AANSOEKPROSES VIR OMGEWINGSMAGTIGING EN WATERGEBRUIKLISENSIE

Die omgewingsevalueringproses:

- Bied inligting oor die projek en die omgewing waarin dit onderneem word;
- Identifiseer die potensiele negatiewe en positiewe omgewings-/kultuur-/socio-ekonomiese impakte van die beoogde projek in ooreenstemming met B&GP's;
- Doen verslag oor bestuursmaatreëls wat benodig word om impakte tot op 'n aanvaarbare vlak te versag en inkorporeer vereistes vir moniteringsprogramme (waar nodig).

Die proses se waarskynlike stappe en tydsraamwerke word hieronder uiteengesit.

STAPPE IN DIE MAGTIGINGSPROSES

FASE I – Voor-aansoekfase (Januarie tot Mei 2019)

- Voor-aansoekvergadering met die DMH en DWS
- Stel ander owerhede wat kommentaar lewer en B&GP's in kennis van die beoogde projek en omgewingsevaluering (deur koerantadvertensies, terreinkennisgewings en hierdie dokument)
- Hou 'n openbare vergadering

FASE II – BEV- en IWUL-fase (April tot Junie 2019)

- Indiening van aansoek om geïntegreerde omgewingsmagtiging (NEMA/NEM:WA) by die DMH
- Indiening van die IWULA by die DWS
- Opstel van BEV en opsomming en verspreiding aan B&GP's en owerhede wat kommentaar lewer vir 30-dae insaetydperk
- Stel tegniese dokumentasie op ter staving van die IWULA (spesialisstudies en die Geïntegreerde Water- en Afvalbestuursplan) en lê voor aan B&GP's en owerhede wat kommentaar lewer vir 30-dae insaetydperk
- Werk die BEV en IWULA tegniese dokumentasie by met enige kommentaar wat tydens die openbare insaetydperk ontvang is

FASE III – Bevoegde owerheid insaefase (Junie tot Oktober 2019)

- Dien BEV (met insluiting van kommentaar wat tydens die insaetydperk geopper is) in by die DMH vir besluitneming (107-dae afgekondigde besluitnemingstydperk)
- Dien die IWULA tegniese dokumentasie (met insluiting van kommentaar wat tydens die insaetydperk geopper is) in by die DWS vir besluitneming (139-dae afgekondigde insaetydperk)
- Sirkuleer besluite aan B&GP's wat op die projek se databasis geregistreer is

PARTYE BETROKKE BY DIE OMGEWINGSEVALUERINGSPROSES

B&GP's

- * Omliggende grondeienaars, grondgebruikers en gemeenskapsforums
- * Omliggende myne en nywerhede
- * Semi-staatsinstellings

BEVOEGDE OWERHEDE

- * Noord-Kaapse Departement van Minerale Hulpbronne (DMH)
- * Noord-Kaapse Departement van Water en Sanitasie (DWS)

OWERHEDE WAT KOMMENTAAR LEWER

- * Noord-Kaapse Departement van Omgewingsake en Natuurbewaring (DENC)
- * Noord-Kaapse Departement van Landbou, Bosbou en Visserie (DAFF)
- * Suid-Afrikaanse Provinsiale Erfenishulpbronagentskap (SAHRA)
- * Noord-Kaapse Departement van Landelike Ontwikkeling en Grondhervorming (DRDLR) – met insluiting van die Kommissaris van Grondseis

PLAASLIKE OWERHEDE

- * Joe Morolong Plaaslike Munisipaliteit (met insluiting van wyksraadslid)
- * John Taolo Gaetsewe Distriksmunisipaliteit

Stel ons asseblief in kennis indien daar enige verdere partye is wat betrokke moet wees.

SOUTH32

AGTERGRONDINLIGTINGSDOKUMENT VIR DIE SAMESMELTING VAN DIE MAMATWAN SINTERFONTEIN
AFVALKLIPOOP EN DIE TSHIPI OOSTELIKE AFVALKLIPOOP

REGISTRASIE- EN ANTWOORDVORM VIR BELANGSTELLEDE EN GEAFFEKTEERDE PARTYE

DATUM		TYD	
BESONDERHEDE VAN DIE BELANGSTELLEDE EN GEAFFEKTEERDE PARTY			
NAAM			
POSADRES			
		POSKODE	
STRAATADRES			
		POSKODE	
TELEFOONNOMMER BY DIE WERK/BEDAGS		FAKSNOMMER BY DIE WERK/BEDAGS	
SELFOONNOMMER		E-POSADRES	

MAAK ASSEBLIEF U BELANG BY DIE BEOOGDE PROJEK BEKEND

SKRYF U KOMMENTAAR EN VRAE ASSEBLIEF HIER NEER

Stuur ingevulde vorms asseblief terug aan:

Natasha Smyth

SLR Consulting (South Africa) (Edms.) Bpk.
011 467 0945 (tel) en/of 011 467 0978 (faks)

nsmyth@slrconsulting.com

SOUTH32

BACKGROUND INFORMATION DOCUMENT FOR THE MERGING OF THE MAMATWAN SINTERFONTEIN WASTE ROCK DUMP AND THE TSHIPI EASTERN WASTE ROCK DUMP

MARCH 2019

INTRODUCTION

South32 operates the open pit manganese Mamatwan Mine (MMT) (forms part of the legal entity Hotazel Manganese Mines (Pty) Ltd) located on portion 5 and 6 of the farm Goold 329, the farm Sinterfontein 748, portion of portion 2 (Currently Portion 17) and portion of portion 1 (Currently Portion 16) of the farm Mamatwan 331, portion 3 of the farm Moab 700 and portion 4 of the farm Adams 328. The MMT is located approximately 25km to the south of the town Hotazel in the Northern Cape Province. MMT holds an Environmental Management Programme (EMP) and a Mining Right, issued and approved by the former Department of Minerals and Energy (currently the Department of Mineral Resources (DMR)). In addition to this, the MMT also holds an Integrated Water Use Licence (IWUL) issued by the Department of Water and Sanitation (DWS).

An 18m wide (on surface) boundary is located between the MMT and the Tshipi Borwa Mine (Figure 1). Tshipi and MMT have approval to mine the 18m wide boundary pillar. Additional capacity is required to store waste rock generated as part of mining the boundary pillar. To cater for the additional storage, it is proposed that the Mamatwan Sinterfontein and the Tshipi eastern waste rock dumps are merged to fill the void between the two dumps (Figure 1). MMT is proposing on amending their approved EMP to cater for the merging of the waste rock dumps.

ENVIRONMENTAL AUTHORISATION PROCESS

Prior to the commencement of the proposed project, the following is required:

- An approved amended EMP from the DMR in terms of Section 102 of the Mineral and Petroleum Resources Development Act (No. 28 of 2002)
- An environmental authorisation from the DMR in terms of the National Environmental Management Act No. 107 of 1998. The Environmental Impact Assessment Regulations being followed are Government Notice Regulation (GNR) 982 of 4 December 2014, as amended
- An amendment of the IWUL from the DWS in terms of Section 21 of the National Water Act (No. 36 of 1998). The Regulations being followed for this project are GNR 267 of 2017 for the Procedural Requirements for Water Use Licence Applications.
- A Waste Management Licence from the DMR in terms of the National Environmental Management: Waste Act (No. 59 of 2008).

PURPOSE OF THIS DOCUMENT

This document has been prepared by SLR to inform you about:

- The proposed project
- The baseline environment of the project area
- The environmental assessment process being followed (Basic Assessment Process)
- Possible environmental/cultural/socio-economic impacts
- How you can have input into the environmental assessment process.

SLR Consulting (South Africa) (Pty) Ltd (SLR), an independent firm of environmental consultants, has been appointed by Hotazel Manganese Mines (Pty) Ltd to manage the environmental assessment process.

YOUR ROLE

You have been identified as an interested and/or affected party (I&AP) who may want to be informed about the proposed project and have input into the environmental process and report.

You have an opportunity to review this document and to provide your initial comments to SLR for incorporation in the environmental assessment process. You will also be given the opportunity to provide input at the public meeting (details below), and to review and comment on the Basic Assessment Report (BAR)

All comments will be recorded and included in the reports submitted to the DMR for decision-making.

HOW TO RESPOND

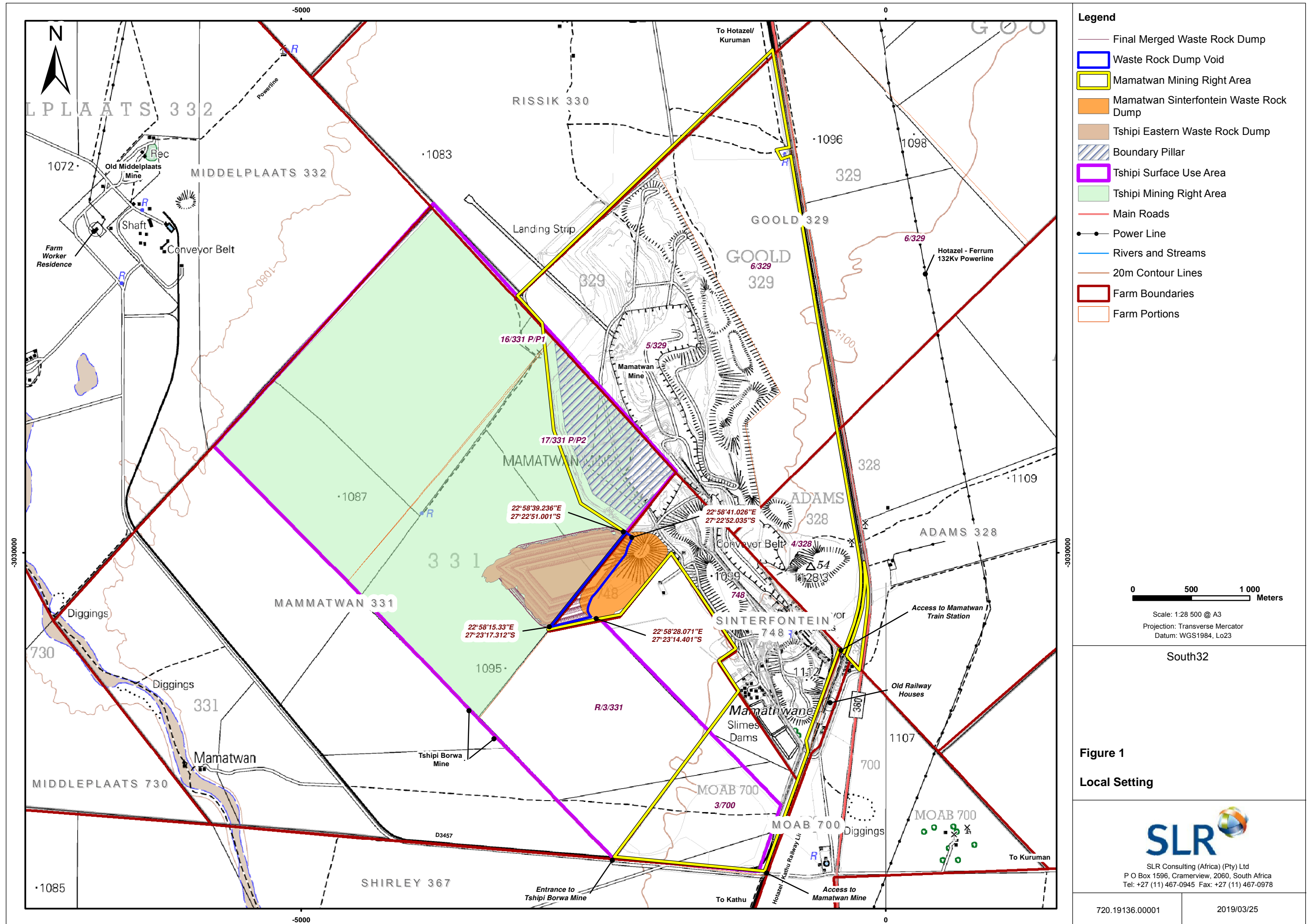
Responses to this document can be submitted by means of the attached comments sheet and/or through communication with the person listed below.

WHO TO CONTACT

Natasha Smyth
(011) 467 0945 (Tel) or
(011) 467 0978 (Fax) or
nsmyth@slrconsulting.com

PUBLIC MEETING

Venue: Hotazel recreational club
Time: 15:00 to 17:00
Date: 16 April 2019



OVERVIEW

An 18m wide (on surface) boundary is located between the MMT and the Tshipi Borwa Mine (Figure 1). Tshipi and South32 have approval to mine the 18m wide boundary pillar. Tshipi would be responsible for stripping waste, drilling and blasting the ore on behalf of both parties. Waste rock would be deposited onto each party's waste rock dump (Tshipi eastern and Mamatwan Sinterfontein). Ore would be loaded by each party and delivered to their respective stockpile areas.

The Mamatwan Sinterfontein waste rock dump would be extended in a north-westerly direction to merge with the Tshipi eastern waste rock dump in order to fill the narrow void between these two waste rock dumps. The Sinterfontein waste rock dump extension would cover an area of approximately 4 ha. Water management infrastructure such as berms around the existing waste rock dump would be adapted as required to manage run-off from the waste rock dump once the void is filled. Rehabilitation of the waste rock dump will be in line with current practises.



Current void between Mamatwan Sinterfontein waste rock dump (right) and the Tshipi eastern waste rock dump (left)

MOTIVATION FOR THE PROPOSED PROJECT

The merging of the two waste rock dumps will provide capacity for the storage of waste rock when the boundary pillar is mined. The merging of the two waste rock dumps avoids the extension of the footprint of the mine into undisturbed area.

PROJECT ALTERNATIVES

No feasible alternatives exist for the proposed project. The merging of the waste rock dumps would disturb vegetation that has already been impacted by mining activities thereby minimising the mine's footprint. In addition to this, undisturbed areas within MMT are earmarked for future infrastructure limiting the availability of space for additional waste rock storage. The merged waste rock dump would allow for optimised haulage distance due to its location in close proximity to the open pit.

This section provides a basic description of the existing status of the proposed project area.

Geology: Mamatwan falls in the Kalahari Manganese Field and is covered by gravels, clays, calcretes and aeolian sands of the Kalahari Group.

Climate: Mamatwan falls within the Northern Steppe Climatic Zone. It is a semi-arid region characterised by seasonal rainfall, hot temperatures in summer, and colder temperatures in winter. Rainfall ranges from 1.3 mm to 72.3 mm per month and winds from the north and north-east are dominant in the area.

Topography: The proposed project area is located in a relatively flat area with gentle slopes. The natural surrounding and on-site topography has been influenced largely through surrounding mining activities

Soils and land capability: Soils on site comprise structureless, deep (>1 200 mm), sandy, red and yellow soils of the Hutton form. Soils at the proposed project area have a low cultivation potential due to the high infiltration rates associated with sandy soils. Due to the fine sandy nature of the soil forms and the low clay content and limited organic matter, the soils are highly erodible, particularly where vegetation is removed.

Plant life: The proposed project area falls within the Kathu Bushveld. The Kathu Bushveld is characterised by open savannah with *Vachellia erioloba* (Camel thorn) and *Boscia albitrunca* (Shepherd's tree) as the prominent trees. The small pocket of vegetation between the waste rock dumps has been subjected to the daily functioning of the MMT and has been subjected to increased levels of dust and dumping of excavated material. No significant biodiversity is present within the void area.

Animal life: Very little evidence of wild faunal populations is associated with the general area and the proposed project area due to the presence of mining, prospecting and farming activities. Red data bird species that are likely to occur within the proposed project area include the Martial Eagle, Secretary bird and the African Whitebacked Vulture. Red data mammal species likely to occur include the honey badger and the South African Hedgehog.

Surface water: The MMT falls within the catchment of the Ga-Mogara River, a tributary of the Kuruman River which joins the Molopo River and flows into the Orange River. The MMT is located in the D41K quaternary catchment. There are no watercourses within the project area. The nearest watercourse is the ephemeral Vlermuisleege River (approximately 10 km west) from the MMT. There is no third party reliance on surface water.

Groundwater: The project area is underlain by a shallow unconfined Kalahari Aquifer and the deeper fractured Hotazel Aquifer. The average ground water level at the proposed project site ranges from 30 to 45 metres below ground level. Groundwater quality is generally poor due to elevated concentrations of chloride, sodium and magnesium. The majority of third party boreholes surrounding the proposed project area are used for domestic use and livestock watering purposes.

Air quality: The surrounding ambient air quality has been influenced by neighbouring mines, household fuel combustion and vehicle tailpipe emissions.

Noise: The greater area is generally defined by rural features and is not subjected to elevated noise levels. Noise levels in the proposed project area are mainly as a result of surrounding farming activities, localised traffic and mining operations.

Visual: The MMT is located within the flat open plains of the Kalahari and the general area surrounding the MMT is rural in nature. The visual value of the proposed project area is very low due to the presence of the Tshipi eastern waste rock dump and the MMT Sinterfontein waste rock dump and associated mine infrastructure.

Heritage/cultural and palaeontological resources: The mine is situated in an area that as a whole has a relatively low human presence due to the dryness of the region, and as such if there were human settlements they tended to be located on or near watercourses. It is unlikely that heritage/cultural resources occur within the proposed project site. The palaeontological sensitivity of the site is low, although there is a possibility of Stromatolites being present in the project area.

Socio-economic: The town of Hotazel is located approximately 25km north of the proposed project area. The educational levels in the area are relatively low with a high level of unemployment and a dependency on subsistence agriculture, the public sector, seasonal workers and employment in the mining sector. Water provision and sanitation remains a challenge, mostly in the rural areas. There has been an increase in the number of households that were provided with electricity as a source of energy in the area. Mining and government services are the main economic sectors.

Land use: Land uses surrounding the MMT include a combination of livestock grazing, game farming, mining, a solar farm and sparsely situated residences. Land use within the proposed project area has been influenced by existing mining activities (presence of the waste rock dumps).

POTENTIAL ENVIRONMENTAL/CULTURAL/SOCIO-ECONOMIC IMPACTS

Potential impacts that have been identified and will be investigated as part of the environmental impact assessment process are tabulated below. Where specialist input is required this has been indicated in the table below.

Aspect	Potential environmental/cultural/socio-economic impact	Specialist input (where required)
Geology	The sterilisation of mineral resources through the disposal of mineral resources onto mineralised waste facilities (Sinterfontein waste rock dump).	Qualitatively assessed
Topography	Potential to further alter topography through an increase of the waste rock dump footprint area.	Qualitatively assessed
Soils and land capability*	Potential to further compromise soil resources through erosion, compaction and/or pollution and the related natural capability of the land through an increased waste rock dump footprint area.	Soil and land capability study
Biodiversity*	Potential to further disturb and/or destroy vegetation, habitat units and related ecosystem functionality through an increased waste rock dump footprint area.	Terrestrial biodiversity study
Surface water*	Potential increase of run-off containment that can alter natural drainage patterns and the increase of pollution sources that can pollute surface water resources.	Hydrological study
Groundwater*	Potential increase of existing pollution sources through the increase in the waste rock dump footprint area that can contaminate groundwater resources which could impact availability to surrounding groundwater users.	Groundwater study and waste assessment
Air*	Increase in emissions which could potentially have a negative impact on ambient air quality.	Air quality study
Noise	Potential increase in disturbing noise levels due to operations of vehicles.	Qualitatively assessed
Visual	Potential contribution to existing negative visual views.	Qualitatively assessed
Heritage/cultural and palaeontological	The potential to damage heritage/cultural and palaeontological resources.	Heritage/cultural and palaeontological study

* Reference will be made to specialist studies undertaken by Tshipi as part of their EMP amendment process to cater for the merging of the waste rock dumps.

ENVIRONMENTAL AUTHORISATION AND WATER USE LICENCE APPLICATION PROCESS

The environmental assessment process provides:

- Information on the project and environment in which it is being undertaken
- Identifies, in consultation with I&APs the potential negative as well as positive environmental/cultural/socio-economic impacts of the proposed project
- Reports on management measures required to mitigate impacts to an acceptable level and incorporates requirements for monitoring programmes (where required).

The likely process steps and timeframes are provided below.

STEPS IN THE AUTHORISATION PROCESS

PHASE I - Pre-application phase

(January to May 2019)

- Pre-application meeting with the DMR and DWS
- Notify other commenting authorities and I&APs of proposed project and environmental assessment (via newspaper advertisements, site notices and this document)
- Hold a public meeting

PHASE II – BAR and IWUL phase

(April to June 2019)

- Submission of integrated environmental authorisation (NEMA/NEM:WA) application to the DMR
- Submission of the IWULA to the DWS
- Compile BAR and summary and distribute to I&APs and commenting authorities for review for 30 days
- Compile technical documentation in support of the IWULA (specialist studies and the Integrated Water and Waste Management Plan) and submit to I&APs and commenting authorities for review for 30 days
- Update the BAR and IWULA technical documentation with any comments received during the public review period

PHASE III – Competent authority review phase

(June to October 2019)

- Submit BAR (inclusive of comments raised during the review period) to the DMR for decision making (107 days legislated decision making period)
- Submit the IWULA technical documentation (inclusive of comments raised during the review period) to the DWS for decision making (139 day legislated review period)
- Circulate decisions to I&APs registered on the project database.

PARTIES INVOLVED IN THE ENVIRONMENTAL ASSESSMENT PROCESS

IAPs

- * Surrounding landowners, land users and community forums
- * Surrounding mines and industries
- * Parastatals

COMPETENT AUTHORITIES

- * Northern Cape Department of Mineral Resources (DMR)
- * Northern Cape Department of Water and Sanitation (DWS)

COMMENTING AUTHORITIES

- * Northern Cape Department of Environment and Nature Conservation (DENC)
- * Northern Cape Department of Agriculture, Forestry and Fisheries (DAFF)
- * Provincial South Africa Heritage Resource Agency (SAHRA)
- * Northern Cape Department of Rural Development and Land Reform (DRDLR) – inclusive of the Land Claims Commissioner

LOCAL AUTHORITIES

- * Joe Morolong Local Municipality (includes ward councillor)
- * John Taolo Gaetsewe District Municipality

Please let us know if there are any additional parties that should be involved.

SOUTH32

BACKGROUND INFORMATION DOCUMENT FOR THE MERGING OF THE MAMATWAN SINTERFONTEIN WASTE ROCK DUMP AND THE TSHIPI EASTERN WASTE ROCK DUMP

REGISTRATION AND RESPONSE FORM FOR INTERESTED AND AFFECTED PARTIES

DATE		TIME	
PARTICULARS OF THE INTERESTED AND AFFECTED PARTY			
NAME			
POSTAL ADDRESS			
		POSTAL CODE	
STREET ADDRESS			
		POSTAL CODE	
WORK/ DAY TELEPHONE NUMBER		WORK/ DAY FAX NUMBER	
CELL PHONE NUMBER		E-MAIL ADDRESS	

PLEASE IDENTIFY YOUR INTEREST IN THE PROPOSED PROJECT

PLEASE WRITE YOUR COMMENTS AND QUESTIONS HERE

Please return completed forms to:

Natasha Smyth

SLR Consulting (South Africa) (Pty) Ltd
(011) 467 0945 (Tel) and/or (011) 467 0978 (Fax)

nsmyth@slrconsulting.com

Clive Phashe

From: Natasha Smyth
Sent: 27 March 2019 03:22 PM
To: JacolineMa@daff.gov.za
Subject: South32: Mamatwan Mine - Merging the Sinterfontein and Tshipi Waste Rock Dumps
Attachments: 2019-BID- Mamatwan (Afrikaans) Final.pdf; 2019-BID- Mamatwan Final.pdf

SOUTH32

THE MERGING OF THE MAMATWAN SINTERFONTEIN WASTE ROCK DUMP AND THE TSHIPI EASTERN WASTE ROCK DUMP

Attention: Department of Agriculture, Forestry and Fisheries

South32 operates the open pit manganese Mamatwan Mine (MMT) (forms part of the legal entity Hotazel Manganese Mines (Pty) Ltd) located on portion 5 and 6 of the farm Goold 329, the farm Sinterfontein 748, portion of portion 2 (Currently Portion 17) and portion of portion 1 (Currently Portion 16) of the farm Mamatwan 331, portion 3 of the farm Moab 700 and portion 4 of the farm Adams 328.

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Date:	16 April 2019
Time:	10h00 to 12h00
Venue:	Hotazel Recreational Club

For any queries please do not hesitate to contact me.

Kind regards

Natasha



Natasha Smyth

Environmental Assessment Practitioner

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Clive Phashe

From: Natasha Smyth
Sent: 27 March 2019 03:27 PM
To: fortune@ncpg.gov.za; fortunec@agri.ncpg.gov.za
Subject: South32: Mamatwan Mine - Merging the Mamatwan Sinterfontein and Tshipi Waste Rock Dumps
Attachments: 2019-BID- Mamatwan (Afrikaans) Final.pdf; 2019-BID- Mamatwan Final.pdf

SOUTH32

THE MERGING OF THE MAMATWAN SINTERFONTEIN WASTE ROCK DUMP AND THE TSHIPI EASTERN WASTE ROCK DUMP

Attention: Department of Agriculture and Land Reform

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Clive Phashe

From: Natasha Smyth
Sent: 27 March 2019 03:23 PM
To: tmtho@webmail.co.za; Tmthombeni@ncpg.gov.za; mokonopin@gmail.com
Subject: South32: Mamatwan Mine - Merging the Sinterfontein and Tshipi Waste Rock Dumps
Attachments: 2019-BID- Mamatwan (Afrikaans) Final.pdf; 2019-BID- Mamatwan Final.pdf

SOUTH32

THE MERGING OF THE MAMATWAN SINTERFONTEIN WASTE ROCK DUMP AND THE TSHIPI EASTERN WASTE ROCK DUMP

Attention: Department of Environment and Nature Conservation

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Clive Phashe

From: Natasha Smyth
Sent: 27 March 2019 03:30 PM
To: Johannes Nematatani
Subject: South32: Mamatwan Mine - Merging the Sinterfontein and Tshipi Waste Rock Dumps
Attachments: 2019-BID- Mamatwan (Afrikaans) Final.pdf; 2019-BID- Mamatwan Final.pdf

SOUTH32

THE MERGING OF THE MAMATWAN SINTERFONTEIN WASTE ROCK DUMP AND THE TSHIPI EASTERN WASTE ROCK DUMP

Attention: Department of Mineral Resources

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Clive Phashe

From: Natasha Smyth
Sent: 27 March 2019 03:24 PM
To: livhuwani.malatjie@dmr.gov.za; Ntsundeni.Ravhugoni@dmr.gov.za; takalani.khorombi@dmr.gov.za; johannes.nematadani@dmr.gov.za; kgaudi.shapo@dmr.gov.za
Subject: South32: Mamatwan Mine - Merging the Sinterfontein and Tshipi Waste Rock Dumps
Attachments: 2019-BID- Mamatwan (Afrikaans) Final.pdf; 2019-BID- Mamatwan Final.pdf

SOUTH32

THE MERGING OF THE MAMATWAN SINTERFONTEIN WASTE ROCK DUMP AND THE TSHIPI EASTERN WASTE ROCK DUMP

Attention: Department of Mineral Resources

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Natasha



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Environmental Assessment Practitioner

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📄 2029

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Clive Phashe

From: Natasha Smyth
Sent: 27 March 2019 03:27 PM
To: Ryan Oliver
Subject: South32: Mamatwan Mine - Merging the Mamatwan Sinterfontein and Tshipi Waste Rock Dumps
Attachments: 2019-BID- Mamatwan (Afrikaans) Final.pdf; 2019-BID- Mamatwan Final.pdf

SOUTH32

THE MERGING OF THE MAMATWAN SINTERFONTEIN WASTE ROCK DUMP AND THE TSHIPI EASTERN WASTE ROCK DUMP

Attention: Department of Rural Development and Land Reform

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Clive Phashe

From: Natasha Smyth
Sent: 27 March 2019 03:22 PM
To: Msimango Philani (KBY)
Subject: South32: Mamatwan Mine - Merging the Sinterfontein and Tshipi Waste Rock Dumps
Attachments: 2019-BID- Mamatwan (Afrikaans) Final.pdf; 2019-BID- Mamatwan Final.pdf

SOUTH32

THE MERGING OF THE MAMATWAN SINTERFONTEIN WASTE ROCK DUMP AND THE TSHIPI EASTERN WASTE ROCK DUMP

Attention: Department of Water Sanitation

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Clive Phashe

From: Natasha Smyth
Sent: 27 March 2019 03:25 PM
To: juliakatong2@gmail.com; Jmmasela66@gmail.com; mm@joemorolong.gov.za; mmorwagae@joemorolong.gov.za; leutlwetsed@joemorolong.gov.za; sseleka@webmail.co.za; sseleka@joemorolong.gov.za
Subject: South32: Mamatwan Mine - Merging the Sinterfontein and Tshipi Waste Rock Dumps
Attachments: 2019-BID- Mamatwan (Afrikaans) Final.pdf; 2019-BID- Mamatwan Final.pdf

SOUTH32

THE MERGING OF THE MAMATWAN SINTERFONTEIN WASTE ROCK DUMP AND THE TSHIPI EASTERN WASTE ROCK DUMP

Attention: Joe Morolong Local Municipality and Ward Councillor

South32 operates the open pit manganese Mamatwan Mine (MMT) (forms part of the legal entity Hotazel Manganese Mines (Pty) Ltd) located on portion 5 and 6 of the farm Goold 329, the farm Sinterfontein 748, portion of portion 2 (Currently Portion 17) and portion of portion 1 (Currently Portion 16) of the farm Mamatwan 331, portion 3 of the farm Moab 700 and portion 4 of the farm Adams 328.

An 18m wide (on surface) boundary is located between the MMT and the Tshipi Borwa Mine. Tshipi and MMT have approval to mine the 18m wide boundary pillar. Additional capacity is required to store waste rock generated as part of mining the boundary pillar. To cater for the additional storage, it is proposed that the Mamatwan Sinterfontein and the Tshipi eastern waste rock dumps are merged to fill the void between the two dumps. MMT is proposing on amending their approved EMP to cater for the merging of the waste rock dumps.

SLR Consulting (South Africa) (Pty) Ltd (SLR) has been appointed by Hotazel Manganese Mines (Pty) Ltd, to undertake the environmental assessment process.

You have been identified as a commenting authority who may be interested in the proposed project and the environmental assessment process. In this regard, please find attached a copy of the Background Information Document that has been prepared to provide you with more information. The BID is available in both English and Afrikaans.

This email also serves to invite you to a commenting authorities meeting that has been arranged as part of the public participation process. Meeting particulars are tabulated below. *It is important to note that a general public meeting has also been arranged for the same day at the same venue at 15h00. Please feel free to attend the later meeting should this be more suitable. Please note that the same material will be presented at both the general public and commenting authorities meetings.*

Date:	16 April 2019
Time:	10h00 to 12h00
Venue:	Hotazel Recreational Club

For any queries please do not hesitate to contact me.

Kind regards

Natasha



Natasha Smyth

Environmental Assessment Practitioner

☎ +27 83 226 8570

☎ +27 11 467 0945

📄 2029

✉ nsmyth@slrconsulting.com

SLR Consulting (Africa) (Pty) Ltd
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Clive Phashe

From: Natasha Smyth
Sent: 27 March 2019 03:26 PM
To: mmsec@taologaetsewe.gov.za; matlhareTH@taologaetsewe.gov.za
Subject: South32: Mamatwan Mine - Merging the Mamatwan Sinterfontein and Tshipi Waste Rock Dumps
Attachments: 2019-BID- Mamatwan (Afrikaans) Final.pdf; 2019-BID- Mamatwan Final.pdf

SOUTH32

THE MERGING OF THE MAMATWAN SINTERFONTEIN WASTE ROCK DUMP AND THE TSHIPI EASTERN WASTE ROCK DUMP

Attention: John Taolo Gaetsewe District Municipality

South32 operates the open pit manganese Mamatwan Mine (MMT) (forms part of the legal entity Hotazel Manganese Mines (Pty) Ltd) located on portion 5 and 6 of the farm Gould 329, the farm Sinterfontein 748, portion of portion 2 (Currently Portion 17) and portion of portion 1 (Currently Portion 16) of the farm Mamatwan 331, portion 3 of the farm Moab 700 and portion 4 of the farm Adams 328.

An 18m wide (on surface) boundary is located between the MMT and the Tshipi Borwa Mine. Tshipi and MMT have approval to mine the 18m wide boundary pillar. Additional capacity is required to store waste rock generated as part of mining the boundary pillar. To cater for the additional storage, it is proposed that the Mamatwan Sinterfontein and the Tshipi eastern waste rock dumps are merged to fill the void between the two dumps. MMT is proposing on amending their approved EMP to cater for the merging of the waste rock dumps.

SLR Consulting (South Africa) (Pty) Ltd (SLR) has been appointed by Hotazel Manganese Mines (Pty) Ltd, to undertake the environmental assessment process.

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Date:	16 April 2019
Time:	10h00 to 12h00
Venue:	Hotazel Recreational Club

For any queries please do not hesitate to contact me.

Kind regards

Natasha



Natasha Smyth

Environmental Assessment Practitioner

+27 83 226 8570

+27 11 467 0945

2029

nsmyth@slrconsulting.com

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Natasha Smyth

From: Natasha Smyth
Sent: 27 March 2019 03:33 PM
Subject: South32: Mamatwan Mine - Merging the Mamatwan Sinterfontein and Tshipi Waste Rock Dumps
Attachments: 2019-BID- Mamatwan (Afrikaans) Final.pdf; 2019-BID- Mamatwan Final.pdf

Bcc: tsteyn@lantic.net; james@tshipi.co.za; nthabeleng@tshipi.co.za; ndarap@eskom.co.za; Gerrie.vanschalkwyk@eskom.co.za; Benito.williams@eskom.co.za; khanyen@eskom.co.za; ludekefj@eskom.co.za; vgenseal@eskom.co.za; dbruiner@eskom.co.za; Sam.fiff@transnet.net; cabangile.zulu@transnet.net; 4409NDENBERG@ABSAMAIL.CO.ZA; andriesmvd@gmail.com; anfour@absamail.co.za; krugersoret@yahoo.com; mmvanwyk10@gmail.com; camel@vodamail.co.za; Cupido.Love@UMK.co.za; daniel@solafuture.co.za; siphawe@kalagadi.co.za; Tshepo@kalagadi.co.za; henneyrc@telkom.co.za; info@sebiloresources.co.za; didi@sebiloresources.co.za; voorsitter@agrikur.co.za; info@tshiping.co.za; wessanc@yahoo.com; juriekr@gmail.com; louis@soetvlakte.co.za; hendrik.arangies@kmr.co.za; conri.moolman@asia-minerals.com; bonolol@brmo.co.za; Rethabile.Mboya@arm.co.za; AshleyG.Mcleod@arm.co.za; info@afribits.co.za; Wezi.banda@ergafrica.com; Gert.theart@vodamail.co.za; ebenanthonissen@hotmail.com; ebena@absamail.co.za; Carel.reyneke@absamail.co.za; josephmatshidiso@yahoo.com; Tshivhangwaho.Mudau@umk.co.za

SOUTH32

THE MERGING OF THE MAMATWAN SINTERFONTEIN WASTE ROCK DUMP AND THE TSHIPI EASTERN WASTE ROCK DUMP

Dear Interested and/or Affected Party

South32 operates the open pit manganese Mamatwan Mine (MMT) (forms part of the legal entity Hotazel Manganese Mines (Pty) Ltd) located on portion 5 and 6 of the farm Goold 329, the farm Sinterfontein 748, portion of portion 2 (Currently Portion 17) and portion of portion 1 (Currently Portion 16) of the farm Mamatwan 331, portion 3 of the farm Moab 700 and portion 4 of the farm Adams 328.

An 18m wide (on surface) boundary is located between the MMT and the Tshipi Borwa Mine. Tshipi and MMT have approval to mine the 18m wide boundary pillar. Additional capacity is required to store waste rock generated as part of mining the boundary pillar. To cater for the additional storage, it is proposed that the Mamatwan Sinterfontein and the Tshipi eastern waste rock dumps are merged to fill the void between the two dumps. MMT is proposing on amending their approved EMP to cater for the merging of the waste rock dumps.

SLR Consulting (South Africa) (Pty) Ltd (SLR) has been appointed by Hotazel Manganese Mines (Pty) Ltd, to undertake the environmental assessment process.

You have been identified as an Interested and Affected Party who may be interested in the proposed project and the environmental assessment process. In this regard, please find attached a copy of the Background Information Document that has been prepared to provide you with more information. The BID is available in both English and Afrikaans.

This email also serves to invite you to a public meeting that has been arranged as part of the public participation process. Meeting particulars are included in the table below.

Date:	16 April 2019
Time:	15h00 to 17h00
Venue:	Hotazel Recreational Club

For any queries please do not hesitate to contact me.

Kind regards

Natasha



Natasha Smyth

Environmental Assessment Practitioner

c +27 83 226 8570

o +27 11 467 0945

d 2029

e nsmyth@slrconsulting.com

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Clive Phashe

From: Natasha Smyth
Sent: 27 March 2019 03:28 PM
To: nhiggitt@sahra.org.za
Subject: South32: Mamatwan Mine - Merging the Mamatwan Sinterfontein and Tshipi Waste Rock Dumps
Attachments: 2019-BID- Mamatwan (Afrikaans) Final.pdf; 2019-BID- Mamatwan Final.pdf

SOUTH32

THE MERGING OF THE MAMATWAN SINTERFONTEIN WASTE ROCK DUMP AND THE TSHIPI EASTERN WASTE ROCK DUMP

Attention: South African Heritage Resources Agency

South32 operates the open pit manganese Mamatwan Mine (MMT) (forms part of the legal entity Hotazel Manganese Mines (Pty) Ltd) located on portion 5 and 6 of the farm Goold 329, the farm Sinterfontein 748, portion of portion 2 (Currently Portion 17) and portion of portion 1 (Currently Portion 16) of the farm Mamatwan 331, portion 3 of the farm Moab 700 and portion 4 of the farm Adams 328.

An 18m wide (on surface) boundary is located between the MMT and the Tshipi Borwa Mine. Tshipi and MMT have approval to mine the 18m wide boundary pillar. Additional capacity is required to store waste rock generated as part of mining the boundary pillar. To cater for the additional storage, it is proposed that the Mamatwan Sinterfontein and the Tshipi eastern waste rock dumps are merged to fill the void between the two dumps. MMT is proposing on amending their approved EMP to cater for the merging of the waste rock dumps.

SLR Consulting (South Africa) (Pty) Ltd (SLR) has been appointed by Hotazel Manganese Mines (Pty) Ltd, to undertake the environmental assessment process.

You have been identified as a commenting authority who may be interested in the proposed project and the environmental assessment process. In this regard, please find attached a copy of the Background Information Document that has been prepared to provide you with more information. The BID is available in both English and Afrikaans.

This email also serves to invite you to a commenting authorities meeting that has been arranged as part of the public participation process. Meeting particulars are tabulated below. *It is important to note that a general public meeting has also been arranged for the same day at the same venue at 15h00. Please feel free to attend the later meeting should this be more suitable. Please note that the same material will be presented at both the general public and commenting authorities meetings.*

Date:	16 April 2019
Time:	10h00 to 12h00
Venue:	Hotazel Recreational Club

Please note that we will create a case file and upload the BID onto the SAHRIS website. This email just serves as a record for our internal purposes.

For any queries please do not hesitate to contact me.

Kind regards

Natasha



Natasha Smyth

Environmental Assessment Practitioner

☎ +27 83 226 8570

☎ +27 11 467 0945

📄 2029

✉ nsmyth@slrconsulting.com

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**Copy of site notice
including
photographic
record and map
illustrating the
location of the site
notices.**

SOUTH32

WATER USE LICENSE APPLICATION

Project: The merging of the Mamatwan Mine Sinterfontein and the Tshipi Borwa Mine eastern waste rock dumps

Farm (water use location): The farm Sinterfontein 748

Location: Mamatwan Mine located approximately 25km south of the town Hotazel in the Northern Cape Province.

Legislation	Applicable water use	Competent authority
National Water Act (36 of 1998) and Regulations Regarding the Procedural Requirements for Water Use Licence Applications and Appeals (GNR. 267 of 2017)	Section 21(g): Disposal of waste in a manner which may detrimentally impact on a water resource	Department of Water and Sanitation

Further information queries, comments and/or objections to the application are to be submitted in writing to the person listed below by no later than 29 April 2019.

Contact Details: Natasha Smyth

Email: nsmyth@slrconsulting.com

Fax: (011) 467 0978

Post: P O Box 1596, Cramerview, 2060

Queries Tel: (011) 467 0945.



PROPOSED BASIC ASSESSMENT PROCESS ASSOCIATED WITH THE MERGING OF THE MAMATWAN SINTERFONTEIN WASTE ROCK DUMP AND THE TSHIPI EASTERN WASTE ROCK DUMP

South32 operates the open pit manganese Mamatwan Mine (MMT) (forms part of the legal entity Hotazel Manganese Mines (Pty) Ltd) located approximately 25km south of the town Hotazel in the John Taolo Gaetsewe District Municipality in the Northern Cape Province. The MMT is located on portion 5 and 6 of the farm Goold 329, the farm Sinterfontein 748, portion of portion 2 (Currently Portion 17) and portion of portion 1 (Currently Portion 16) of the farm Mamatwan 331, portion 3 of the farm Moab 700 and portion 4 of the farm Adams 328. MMT holds an Environmental Management Programme (EMP) and a Mining right, issued and approved by the former Department of Minerals and Energy (currently the Department of Mineral Resources). In addition to this, the MMT also holds an Integrated Water Use Licence issued by the Department of Water and Sanitation (DWS).

An 18m wide (on surface) boundary is located between the MMT and the Tshipi Borwa Mine (which is located adjacent to the MMT). Tshipi and MMT have approval to mine the 18m wide boundary pillar. Additional capacity is required to store waste rock generated as part of mining the boundary pillar. To cater for the additional storage it is proposed that the Mamatwan Sinterfontein waste rock dump and the Tshipi eastern waste rock dump are merged. MMT is proposing on amending their approved EMP to cater for the merging of the waste rock dumps.

Notice is hereby given of the applications to be made for authorisation of the proposed project in terms of the environmental legislation listed below:

Legislation	Listed Activities	Key Process Elements	Competent Authority
National Environmental Management Act (No. 107 of 1998) and Environmental Impact Assessment Regulations, 2014 as amended.	GNR 983. Listing Notice 1: <ul style="list-style-type: none"> Activity 27: The clearance of an area of 1 hectares or more, but less than 20 hectares of indigenous vegetation (<i>indigenous vegetation to be removed as part of the waste rock dump merge</i>) Activity 34: The expansion of existing facilities or infrastructure for any process or activity where such expansion will result in the need for an amended permit or licence in terms of national or provincial legislation governing the release of emissions, effluent or pollution (<i>Existing IWUL will need to be amended to cater for an increase in waste rock dump capacity</i>) 	<ul style="list-style-type: none"> Environmental Authorisation Application Basic Assessment Report, including Environmental Management Programme and supporting specialist studies Stakeholder engagement 	Northern Cape Department of Mineral Resources
National Environmental Management: Waste Act (No. 59 of 2008)	GNR 921. Category A: <ul style="list-style-type: none"> Activity 13: The expansion of a waste management activity Listed in Category A (<i>Merging of the waste rock dumps requires a waste management licence</i>) 	<ul style="list-style-type: none"> Waste Management Licence Application Basic Assessment report, including Environmental Management Programme and supporting specialist studies Stakeholder engagement 	
National Water Act (No 36 of 1998) and Regulations Regarding the Procedural Requirements for Water Use Licence Applications and Appeals (GNR. 267 of 2017)	Section 21(g): Disposing of waste in a manner which may detrimentally impact on a water resource (<i>Existing IWUL will need to be amended to cater for an increase in waste rock dump capacity</i>)	<ul style="list-style-type: none"> Water Use Licence Application Integrated Water and Waste Management Plan and supporting specialist studies Stakeholder engagement 	Northern Cape Department of Water and Sanitation

In addition, MMT will apply for a Section 102 EMP amendment from the DMR in terms of the Mineral and Petroleum Resources Development Act (No. 28 of 2002) (MPRDA), which will be supported by the EMP included in the Basic Assessment report.

SLR Consulting (South Africa) (Pty) Ltd, an independent firm of environmental consultants, has been appointed by Hotazel Manganese Mines (Pty) Ltd to manage the Basic Assessment and the Water Use Licence Application processes. A public meeting has been arranged as part of the public participation process as follows:

Date	Venue	Time
16 April 2019	Hotazel Recreation Club	15:00 – 17:00

All stakeholders are invited to register as Interested and Affected Parties (I&AP) and submit any initial comments to SLR by 29 April 2019. All registered I&APs will continue to be given the opportunity to participate and comment for the full duration of the Basic Assessment and Water Use Licence Application processes. Registered I&APs will be notified when the Basic Assessment Report and Water Use Licence Application will be available for public review. To register or to check that you are registered and/or to submit any comment on the proposed project and process contact SLR at the contact details below:

Natasha Smyth
 Email: nsmyth@slrconsulting.com
 Tel: 011 467 0945
 Fax: 011 467 0978
 Post: PO Box 1596, Cramerview, 2060
 (Note: If using post, please also contact us telephonically to notify us of your submission).

VOORGESTELDE BASIESE ASSESSERINGSPROSES GEASSOSIEERD MET DIE SAMESMELTING VAN DIE MAMATWAN SINTERFONTEIN AFVALROTS MYNHOOP EN DIE TSHIPI OOSTELIKE AFVALROTS MYNHOOP

South32 bedryf die oopgroef Mamatwan Mangaanmyn (MMT) (vorm deel van die regsenteit Hotazel Manganese Mines (Edms) Bpk) sowat 25 km suid van die dorp Hotazel in die Noord-Kaaprovinsie geleë in die John Taolo Gaetsewe Distriksmunisipaliteit. MMT is geleë op gedeelte 5 en 6 van die plaas Goold 329, die plaas Sinterfontein 748, n' gedeelte van gedeelte 2 (Huidiglik gedeelte 17) en n' gedeelte van gedeelte 1 (Huidiglik Portion 16) van die plaas Mamatwan 331, gedeelte 3 van die plaas Moab 700 en gedeelte 4 van die plaas Adams 328. MMT het 'n Omgewingsbestuursprogram (OBPr) en 'n Mynreg, uitgereik en goedgekeur deur die voormalige Departement van Minerale en Energie (tans die Departement van Minerale Hulpbronne (DMR)). Daarbenewens het die MMT ook 'n geïntegreerde watergebruikslisensie (IWUL) uitgereik deur die Departement van Water en Sanitasie (DWS).

'n 18m breë grens (op die oppervlak) is geleë tussen die MMT en die Tshipi Borwa-myn (wat langs die MMT geleë is). Tshipi en MMT het goedkeuring om die 18m wye grenspilaar te myn. Bykomende bergingskapasiteit word benodig om afvalrots wat gegeneer word as deel van die ontginning van die grenspilaar, te berg. Om voorsiening te maak vir die bykomende berging word voorgestel dat die Mamatwan Sinterfontein-afvalrots mynhoop (ARM) en die Tshipi-Oostelike ARM saamgevoeg word. MMT stel voor om hul goedgekeurde OBPr te wysig om voorsiening te maak vir die samesmelting van die ARMe.

Hiermee word kennis gegee van die aansoek om goedkeuring van die voorgestelde projek ingevolge die omgewingswetgewing wat hieronder gelys word:

Wetgewing	Gelyste Aktiwiteite	Sleutel Proses Elemente	Bevoegde Owerheid
Nasionale Omgewingsbestuurswet (Nr. 107 van 1998) en Regulasies vir Omgewingsimpakbepalings, 2014 soos gewysig.	GNR 983. Lyskenningsgewing 1: <ul style="list-style-type: none"> Aktiwiteit 27: Die skoonmaak van 'n gebied van 1 hektaar of meer, maar minder as 20 hektaar van inheemse plantegroei (<i>verwydering van inheemse plantegroei as deel van die samesmelting van die twee ARMe</i>) Aktiwiteit 34: Die uitbreiding van bestaande fasiliteite of infrastruktuur vir enige proses of aktiwiteit waar sodanige uitbreiding sal lei tot die noodsaaklikheid van 'n gewysigde permit of lisensie ingevolge nasionale of provinsiale wetgewing wat die vrystelling van emissies, uitvloei of besoedeling beheer. (<i>Bestaande IWUL sal gewysig moet word om voorsiening te maak vir 'n toename in ARM kapasiteit</i>) 	<ul style="list-style-type: none"> Omgewingsmagtigingsaansoek Basiese Asseseringsverslag (BAV), insluitende OBPr en ondersteunende spesialisstudies Skakeling met belanghebbendes 	Noord-Kaapse Departement van Minerale Hulpbronne
Nasionale Omgewingsbestuur: Afvalwet (No. 59 van 2008)	GNR 921. Kategorie A: <ul style="list-style-type: none"> Die uitbreiding van 'n afvalbestuursaktiwiteit wat in Kategorie A voorkom (<i>die samesmelting van die ARMe vereis 'n afvalbestuurslisensie</i>) 	<ul style="list-style-type: none"> Afvalbestuurslisensie aansoek BAV, insluitende OBPr en ondersteunende spesialisstudies Skakeling met belanghebbendes 	
Nasionale Waterwet (Nr 36 van 1998) en Regulasies aangaande die Prosesvereistes vir Aansoek en Appelle vir Watergebruikslisensies (GNR 267 van 2017)	Artikel 21 (g): Wegdoening van afval op 'n wyse wat 'n nadelige uitwerking op 'n waterhulpbron kan hê (<i>Bestaande IWUL sal gewysig moet word om voorsiening te maak vir 'n toename in ARM kapasiteit</i>)	<ul style="list-style-type: none"> Watergebruikslisensie aansoek (WULA) Geïntegreerde Water- en Afvalbestuursplan en ondersteunende spesialisstudies Skakeling met belanghebbendes 	Noord-Kaapse Departement van Water en Sanitasie

Daarbenewens sal MMT aansoek doen vir 'n Artikel 102-OBPr-wysiging van die DMR ingevolge die Wet op die Ontwikkeling van Minerale- en Petroleumhulpbronne (No. 28 van 2002) (MPRDA), wat deur die OBPr ondersteun sal word in die BAV.

SLR Consulting (South Africa) (Edms) Bpk, 'n onafhanklike firma van omgewingskonsultante, is deur Hotazel Manganese Mines (Edms) Bpk aangestel om die BA- en WULA prosesse te bestuur. 'n Publieke vergadering is soos volg as deel van die openbare deelnameproses gereël:

Date	Venue	Time
16 April 2019	Hotazel Ontspanningsklub	15:00 – 17:00

Alle belanghebbendes word uitgenooi om as Belanghebbende en Geaffekteerde Partye (B&GP) te registreer en enige aanvanklike kommentaar aan SLR teen 29 April 2019 in te dien. Alle geregistreerde B&GPe sal steeds die geleentheid kry om deel te neem en kommentaar te lewer vir die volle duur van die BA en WULA prosesse. Geregistreerde B&GPe sal in kennis gestel word wanneer die BAV en WULA beskikbaar sal wees vir publieke hersiening. Om te registreer of om te bevestig dat u geregistreer is en/of om enige kommentaar op die voorgestelde projek en proses te maak, kontak SLR by die kontakbesonderhede hieronder:

Natasha Smyth
 E-pos: nsmyth@slrconsulting.com
 Tel: 011 467 0945
 Faks: 011 467 0978
 Pos: Posbus 1596, Cramerview, 2060
 (Nota: As u voorleggings per pos stuur, kontak ons ook telefonies om ons in kennis te stel van u voorlegging).



Photo 1: Gamagara Local Municipality



Photo 2: Hotazel Public Library

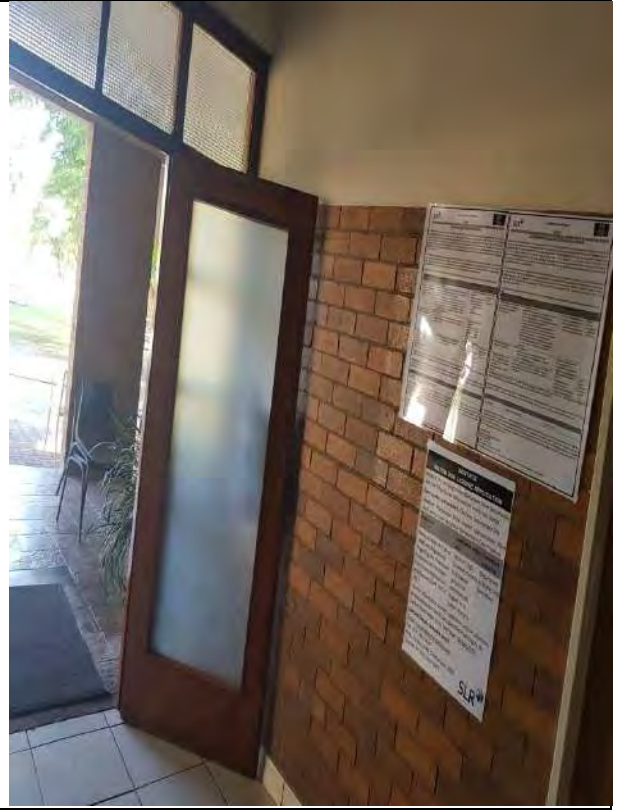


Photo 3: Hotazel Recreational Club

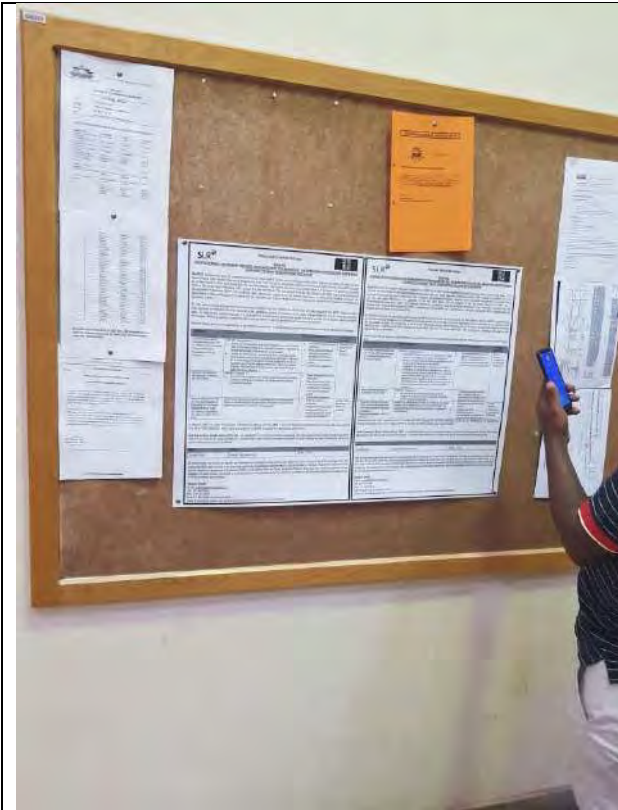


Photo 4: Joe Morolong Local Municipality



Photo 5: Ga-Segonyane Local Municipality



Photo 6: Black Rock Community Library



Photo 7: South32 Hotazel Manganese Mine Site Entrance



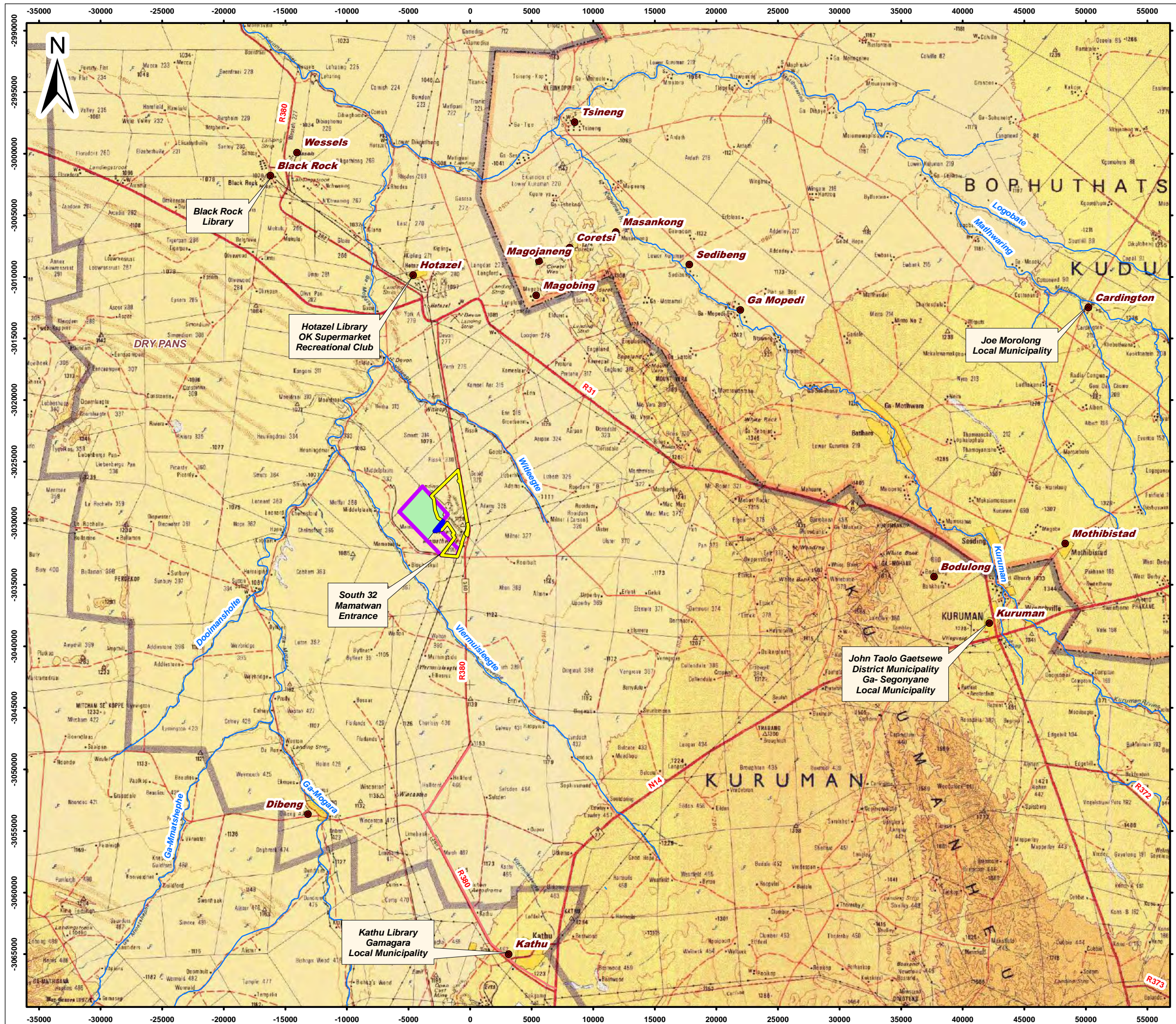
Photo 8: Hotazel OK Supermarket



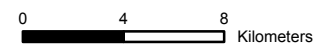
Photo 9: Kathu Public Library



Photo 10: John Taolo Gaetsewe District Municipality



- Legend**
- Waste Rock Dump Void
 - Tshipi Surface Use Area
 - Tshipi Mining Right Area
 - Mamatwan Mining Right Area
 - Towns / Villages
 - Main Roads
 - Rivers



Scale: 1:250 000 @ A3
 Projection: Transverse Mercator
 Datum: Hartbeeshoek, Lo 23

South32

Figure 4

Site Notices



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

**Advertisements
placed in the
Kalahari Bulletin
and the Kathu
Gazette.**

POSTMASBURG

Skoolhoof lê tuig neer

Mimi Swart



Skoolhoof Mev Marianne Coetzee

Mev Marianne Coetzee, die skoolhoof wat pas afgetree het, het in 2005 'n aansoek gekry om Engels Huistaal as vak by Postmasburg Hoërskool aan te bied; dit nadat sy op dié stadium reeds 28-jaar aan die Hoërskool Kathu verbonde was.

Op 2 Februarie 2006 is die oorplasing bevestig. Haar gedagtes begin ver in trurat versit: Haar eerste matriekklas van ses leerders was vir haar 'n aangenome ervaring weens die individuele aandag aan die min leerders asook hulle gedissiplineerdheid. Met die groter juniorklasse was dit 'n redelike verandering om hulle op standaard te kry, maar

die wiele het bly draai met behulp van 'n ondersteunende personeel.

Die skoolhoof, Mnr Monk, aanvaar 'n pos as hoof by Springbok Hoërskool en mnr. Steven Carsten neem in sy plek waar. Daarna besluit die Departement om Mnr Kobus Naude, 'n afgetrede hoof, wat toe in 'n tydelike pos was, aan te stel as waarnemende hoof. Ongelukkig was Mnr Naude toe na drie maande in 'n motorongeluk betrokke toe hy met 'n sportspan op pad was en is hy noodlottig beseer. Hierna word Mev Coetzee vanaf Julie 2011 deur die SBL aangestel om as skoolhoof waar te neem.

Gedurende haar termyn het die skool op verskeie terreine vorentoe beweeg. Die onderwysbehuising het, met Kolomela se

hulp, 'n welkome hupstoot gekry deur die bou van vier huise en twee woonstelle waarvoor die SBL besluit het om 'n bekostigbare huur te vra.

Na verskeie fondsinsamelings kon die skool 'n jaar later, nog vier klaskamers met die nodige ameublement oprig. Weens toenemende getalle is vanjaar nog 2 nuwe opslaanklaskamers van Kolomela gekry omdat onderrigruimte 'n probleem bly. Weens die toename in getalle is die skool se departementele onderwystoekenning van 12 in 2011 opgeskuif na 17 in 2019. Die SBL betaal ook ongeveer 9 SBL-poste om te veel leerders in 'n klas die hoof te bied.

'n Rustige aftrede in Kathu word jou toegewens.

POSTMASBURG

Lief & Leed



Mimi Swart

Siektes / Behandeling

Munisipale werker oorlede

Mnr Thabong Francis Mthibedi (38) van Haakbosdraai Maranteng wat die afgelope 11 jaar 'n werknemer van die Tsantsabane munisipaliteit was, is na 'n siekbed oorlede. Hy laat sy ma, Malefo, en suster, Lucia, saam met wie hy gewoon het, agter. Na verneem word sal hy op 06 April 2019 begrawe word. Ons diepe meegevoel aan die familie.

Aan diegene wat sukkel met hul gesondheid en wat ons weer aan dink:

Mev Marie van Niekerk van Vleistraat, Mev Connie Burger van Gagianostraat, Mev Anna Bester van Erasmusstraat, Mev Anna van Zyl van Casper Venterstraat.

Ook aan Mnr Jimmy Young, wat 'n nuwe inwoner van Huis Jan Vorster is, wat sukkel met 'n beenwond. Mag Hy altyd naby u almal wees. Sterkte.

Van die plaas na die tafel

From the farm to the table

KONTAK NR: 053 723 2531 EMAIL: kekkelenkraai@gmail.com

WINKEL URE MA-VRY: 08:00-17:30 SATERDAE: 08:00-13:30

Koop vir meer as R200 en staan 'n kans om 'n prys te WEN !!!
1 - 30 April 2019

KATHU Eienaar Verandering

4KG IQF FROZEN BREAST	R 119-90
1 KG NECKS	R11-90
1 KG BREAST BONES	R14-90

Spesiale pryse
Geldig 29 - 30 Maart 2019

KOM BESOEK ONS GERUS BY KATHU SENTRUM RIETBOK ST 13

KLK Landbou Beperk is 'n diverse publieke maatskappy in die Landbou sektor met belange in kleinhandel, brandstof, abattoirs, lewendehawe en motorhandelaarskappe

VAKATURE

BEMARKER- KLK PETROLEUMVERSPREIDERS KURUMAN EN OMGEWING

Die posbekleër rapporteer aan die Bestuurder: Brandstof en sal verantwoordelik wees vir die bemerking van alle Petroleum produkte, met die fokus op brandstof, olie en gas.

Vir hierdie doel word daar gesoek na aansoekers wat beskik oor:

- 'n Minimum Graad 12 met naskoolse bemarkings kwalifikasie sal as aanbeveling dien.
- Goeie kennis van bemerking en moet goed tegnies aangelê wees.
- Goeie kommunikasie- en onderhandelingsvaardighede
- Die vermoë om voorraadvlakke doeltreffend en koste-effektief te kan bestuur.
- Die vermoë om produkte te kan verkoop aan kliënte en die besigheid winsgewend te kan bedryf.
- Moet risikobestuur ten opsigte van verkepe en veral krediet verkepe effektief kan bestuur.
- Geldige rybewys

Rig asseblief jou aansoek aan: **Die Bestuurder, KLK Petroleum, Upington : faks dit na 054 3322623 of epos: phillip@klk.co.za**

KLK Landbou Beperk is 'n gelyke geleentheid werkgewer en aanstellings word gedoen ooreenkomstig die maatskappy se Gelyke Geleentheids Plan

Sluitingsdatum: **05 April 2019**

Aansoekers wat nie binne 14 dae na die sluitingsdatum van ons verneem nie, moet asseblief aanvaar dat die aansoek onsuksesvol was.

Pêrels vir oordenking

Martjie Gerber

ons dink dat die Here ons vergeet het. In die woord van die Here kry ons die versekering dat ons gebede voor God gebring word.

Ons lees in Openbaring 5:8 "en toe Hy die boek neem, val die vier lewende wesens en die vier-en-twintig ouderlinge voor die Lam neer, elkeen met siters en goue skale vol reukwerk, wat die gebede van die heiliges is." Daarom moet ons nie moedeloos word nie, maar volhard in gebed met smeking en danksegging voor die Here. Wag geduldig op 'n antwoord. Soms antwoord die Here gou, soms moet ons wag, en soms antwoord die Here ons gebede anders as wat ons dit wil hê. Die Here weet wat die heel beste vir elkeen van ons is.

Ps 40:2 "Ek het die HERE lank verwag, en Hy het Hom na my toe neergebuig en my hulpgeroep gehoor;"

Bid teen die plafon?

Ps 13:2 "Hoe lank, HERE, sal U my altyddeur vergeet? Hoe lank sal U vir my U aangesig verberg?"

Soms voel dit vir ons asof ons teen die plafon vas bid. Hoor die Here ons gebede – is dikwels ons wanhoopskreet. Ons raak moedeloos, moeg en hartseer en wil tou opgooi omdat

PUBLIC PARTICIPATION PROCESS

SOUTH32

PROPOSED BASIC ASSESSMENT PROCESS ASSOCIATED WITH THE MERGING OF THE MAMATWAN SINTERFONTEIN WASTE ROCK DUMP AND THE TSHIPI EASTERN WASTE ROCK DUMP

South32 operates the open pit manganese Mamatwan Mine (MMT) (forms part of the legal entity Hotazel Manganese Mines (Pty) Ltd) located approximately 25km south of the town Hotazel in the John Taolo Gaetsewe District Municipality in the Northern Cape Province. The MMT is located on portion 5 and 6 of the farm Goold 329, the farm Sinterfontein 748, portion of portion 2 (Currently Portion 17) and portion of portion 1 (Currently Portion 16) of the farm Mamatwan 331, portion 3 of the farm Moab 700 and portion 4 of the farm Adams 328.

MMT holds an Environmental Management Programme (EMP) and a Mining right, issued and approved by the former Department of Minerals and Energy (currently the Department of Mineral Resources). In addition to this, the MMT also holds an Integrated Water Use Licence issued by the Department of Water and Sanitation (DWS).

An 18m wide (on surface) boundary is located between the MMT and the Tshipi Borwa Mine (which is located adjacent to the MMT). Tshipi and MMT have approval to mine the 18m wide boundary pillar. Additional capacity is required to store waste rock generated as part of mining the boundary pillar. To cater for the additional storage it is proposed that the Mamatwan Sinterfontein waste rock dump and the Tshipi eastern waste rock dump are merged. MMT is proposing on amending their approved EMP to cater for the merging of the waste rock dumps.

Notice is hereby given of the applications to be made for authorisation of the proposed project in terms of the environmental legislation listed below:

Legislation	Listed Activities	Key Process Elements	Competent Authority
National Environmental Management Act (No. 107 of 1998) and Environmental Impact Assessment Regulations, 2014 as amended.	GNR 983. Listing Notice 1: • Activity 27: The clearance of an area of 1 hectares or more, but less than 20 hectares of indigenous vegetation (<i>indigenous vegetation to be removed as part of the waste rock dump merge</i>) • Activity 34: The expansion of existing facilities or infrastructure for any process or activity where such expansion will result in the need for an amended permit or licence in terms of national or provincial legislation governing the release of emissions, effluent or pollution (<i>Existing IWUL will need to be amended to cater for an increase in waste rock dump capacity</i>)	<ul style="list-style-type: none"> • Environmental Authorisation Application • Basic Assessment Report, including Environmental Management Programme and supporting specialist studies • Stakeholder engagement 	Northern Cape Department of Mineral Resources
National Environmental Management: Waste Act (No. 59 of 2008)	GNR 921. Category A: • Activity 13: The expansion of a waste management activity Listed in Category A (<i>Merging of the waste rock dumps requires a waste management licence</i>)	<ul style="list-style-type: none"> • Waste Management Licence Application • Basic Assessment report, including Environmental Management Programme and supporting specialist studies • Stakeholder engagement 	Northern Cape Department of Mineral Resources
National Water Act (No 36 of 1998) and Regulations Regarding the Procedural Requirements for Water Use Licence Applications and Appeals (GNR. 267 of 2017)	Section 21(g): Disposing of waste in a manner which may detrimentally impact on a water resource (<i>Existing IWUL will need to be amended to cater for an increase in waste rock dump capacity</i>)	<ul style="list-style-type: none"> • Water Use Licence Application • Integrated Water and Waste Management Plan and supporting specialist studies • Stakeholder engagement 	Northern Cape Department of Water and Sanitation

In addition, MMT will apply for a Section 102 EMP amendment from the DMR in terms of the Mineral and Petroleum Resources Development Act (No. 28 of 2002) (MPRDA), which will be supported by the EMP included in the Basic Assessment report.

SLR Consulting (South Africa) (Pty) Ltd, an independent firm of environmental consultants, has been appointed by Hotazel Manganese Mine (Pty) Ltd to manage the Basic Assessment and the Water Use Licence Application processes. A public meeting has been arranged as part of the public participation process as follows:

Date	Venue	Time
16 April 2019	Hotazel Recreation Club	15:00 – 17:00

All stakeholders are invited to register as Interested and Affected Parties (I&AP) and submit any initial comments to SLR by 29 April 2019. All registered I&APs will continue to be given the opportunity to participate and comment for the full duration of the Basic Assessment and Water Use Licence Application processes. Registered I&APs will be notified when the Basic Assessment Report and Water Use Licence Application will be available for public review. To register or to check that you are registered and/or to submit any comment on the proposed project and process contact SLR at the contact details below:

Natasha Smyth
Email: nsmyth@slrconsulting.com
Tel: 011 467 0945 | Fax: 011 467 0978
Post: PO Box 1596, Cramerview, 2060
(Note: If using post, please also contact us telephonically to notify us of your submission).

Sanger bekoor met stem

Die vrou van die Vrouelandbouvereniging (VLV) Sirkel Kalahari het aan plaaslike sanger Edna Brink se lippe gehang toe sy op 7 Maart tydens die 86ste konferensie van dié VLV-sirkel, by die NG kerk Moedergemeente in Kuruman, opgetree het.

Brink is in Kuruman gebore en het skoolgegaan in Bloemfontein waar sy sanglesse by Alida van der Walt van die Sentraal-musiek-akademie ontvang het. Daar het sy 'n passie vir klassieke musiek ontwikkel.

Ná skool het Brink vir vier jaar opera aan die Universiteit van Kaapstad (UK) studeer.

Brink het 'n jaar lank in die filmbedryf gewerk.

Sy en haar man, Stephan, bestuur tans die koffiewinkel Meercup in Kuruman.

Hulle het 'n seuntjie Benjamin en sy is swanger met hul tweede kind.



Edna Brink, sanger van Kuruman, bring vreugde met haar stem op die Vrouelandbouvereniging se geselligheid. Foto: Verskaf



health

Department Health
NORTHERN CAPE

MEC for Health
Ms Fufe Makatong



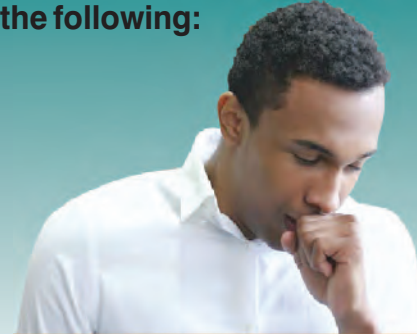
STOP TUBERCULOSIS!

World TB Day is commemorated worldwide on 24 March annually. The South African theme for this year is "It's time!"

Everybody is encouraged to seek medical assistance at the nearest clinic if you experience any of the following:

Signs and symptoms

- Drenching night sweats
- Fever
- Cough for two (2) weeks or more
- Unexplained weight loss
- Chest pain and shortness of breath





What do you need to do?

- Visit nearest clinic for TB screening and testing
- If you have TB, ensure that your close family/contacts, especially children are screened for TB as well
- Always cover your mouth or nose when you cough or sneeze
- If you have TB, complete your medication as instructed by the health practitioner
- If you are on TB treatment, inform your nurse/doctor if you will move to another area
- You will be encouraged to have an HIV Test as well



AIDS HELPLINE
08000 123 22



PUBLIC PARTICIPATION PROCESS

SOUTH32

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National Water Act (No 36 of 1998) and Regulations Regarding the Procedural Requirements for Water Use Licence Applications and Appeals (GNR. 267 of 2017)	Section 21(g): Disposing of waste in a manner which may detrimentally impact on a water resource (<i>Existing IWUL will need to be amended to cater for an increase in waste rock dump capacity</i>)	<input type="checkbox"/> Water Use Licence Application <input type="checkbox"/> Integrated Water and Waste Management Plan and supporting specialist studies <input type="checkbox"/> Stakeholder engagement	Northern Cape Department of Water and Sanitation

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Natasha Smyth
 Email: nsmyth@slrconsulting.com
 Tel: 011 467 0945
 Fax: 011 467 0978
 Post: PO Box 1596, Cramerview, 2060
 (Note: If using post, please also contact us telephonically to notify us of your submission).



17^{DE} TOWTON BONSMARAS PRODUKSIEVEILING

AANBOD: 32 BULLE (2-3 JAAR OUD) EN 150 VROULIKE DIERE





17 APRIL 2019 | 13:00

BESIGTING VANAF 11:00 | GWK VEILINGSKOMPLEKS, KURUMAN

Verkoopsvoorwaardes: Slegs kontant of bankgewaarborgde tjeks. Elektroniese fasiliteite beskikbaar. Aanbod onderhewig aan verandering. Diere word slegs gelaai indien betaling afgehandel is.
 Let wel: FICA nakoming is 'n vereiste om deel te neem in alle veilinge.

GWK Veilingskompleks Kuruman | 053 712 1171
 Chris Hendriks | 083 449 0852
 Philip Williams | 082 780 4218



gwk.co.za 

Correspondence from I&APs

SOUTH32

BACKGROUND INFORMATION DOCUMENT FOR THE MERGING OF THE MAMATWAN SINTERFONTEIN WASTE ROCK DUMP AND THE TSHIPI EASTERN WASTE ROCK DUMP

REGISTRATION AND RESPONSE FORM FOR INTERESTED AND AFFECTED PARTIES

DATE	02/04/2019	TIME	14:30
PARTICULARS OF THE INTERESTED AND AFFECTED PARTY			
NAME	Ishifhwa	Ravele	
POSTAL ADDRESS	P.O. Box 187		
	Santoy		
		POSTAL CODE	8491
STREET ADDRESS	Blackrock		
	Mine		
	Santoy		
		POSTAL CODE	8491
WORK/ DAY TELEPHONE NUMBER	053 751 5260	WORK/ DAY FAX NUMBER	
CELL PHONE NUMBER	083 730 9565	E-MAIL ADDRESS	tshifhwar@brmd.co.za

PLEASE IDENTIFY YOUR INTEREST IN THE PROPOSED PROJECT

~~Top~~ Visual impact & Air pollution

PLEASE WRITE YOUR COMMENTS AND QUESTIONS HERE

There are no objections at all, I am just interested in knowing more about the visual impact air pollution that might emanate from this project.

Please return completed forms to:

Natasha Smyth

SLR Consulting (South Africa) (Pty) Ltd

(011) 467 0945 (Tel) and/or (011) 467 0978 (Fax)

nsmyth@slrconsulting.com



agriculture, forestry & fisheries

Department:
Agriculture, Forestry and Fisheries
REPUBLIC OF SOUTH AFRICA

Directorate: Forestry Management (Other Regions)
P.O. Box 2782, Uptington, 8800, Tel 054 338 5909, Fax 054 334 0030

Enquiries: J Mans
E-mail: JacolineMa@daff.gov.za
Date: 15 April 2019
Ref: 40.8.14.2/NC/152

SLR Consulting (Africa) (Pty)
Unit 7
Fourways Manor Office Park
1 MacBeth Avenue
Fourways, Johannesburg, Gauteng
2191

Attention: Natasha Smyth (nsmyth@slrconsulting.com)

COMMENTS ON BACKGROUND INFORMATION DOCUMENT SOUTH32 THE MERGING OF MAMATWAN SINTERFONTEIN WASTE ROCK DUMP AND THE STHIPI EASTERN WASTE ROCK DUMP

The Directorate: Forestry Management (Other Regions) in the Department of Agriculture, Forestry and Fisheries (DAFF) is responsible for administration of the **National Forests Act, Act 84 of 1998 (NFA)** and **the National Veld and Forest Fires Act, Act 101 of 1998** as amended. The developer must take note of the following sections of the NFA:

- 1.1 Section 12(1): "The Minister may declare-
 - (a) a particular tree,
 - (b) a particular group of trees,
 - (c) a particular woodland; or
 - (d) trees belonging to a particular species, to be a protected tree, group of trees, woodland or species.

- 1.2 Section 15(1): "No person may-
 - (a) Cut, disturb, damage or destroy any protected tree; or
 - (b) Possess, collect, remove, transport, export, purchase, sell, donate or in any other manner acquire or dispose of any protected tree, or any forest product derived from a protected tree, except-
 - (i) under a license granted by the Minister; or
 - (ii) in terms of an exemption from the provision of this subsection published by the Minister in the Gazette on the advice of the Council."

- 1.3 "Any person who contravenes the prohibition on-
 - (i) The cutting, disturbance, damage or destruction of temporarily protected trees or groups of trees referred to in section 14(2) or protected trees referred to in section 15(1)(a); or
 - (ii) The possession, collection, removal, transport, export, purchase or sale of temporarily protected trees or groups of trees referred to in section 14(2) or protected trees

referred to in section 15(1)(b), or any forest product derived from a temporarily protected tree, group of trees or protected tree, is guilty of a first category offence.

- 1.4 Section 58 (1): "Any person who is guilty of a first category offence referred to in sections 62 and 63 may be sentenced to a fine or imprisonment for a period of up to three years, or to both a fine and such imprisonment."
- 1.5 The list of protected tree species under section 12(1) (d) of the National Forests Act, 1998 (Act No. 84 of 1998) is published annually; the most recent publication was in GN536 of 7 September 2018.

2. COMMENTS ON BACKGROUND INFORMATION DOCUMENT

- 2.1 Protected trees such as *Vachellia erioloba*, *Vachellia haematoxylon* and *Boscia albitrunca* can be found in the study side. It unlikely that the impact would be significant by merging the 18m wide void between the two waste rock dumps, because the area has already been impacted by mining activities. In the event that protected trees are encountered, the mine(s) must apply for a Forest Act License prior to disturbance of protected trees.
- 2.2 Provincially protected plants are known to occur in the vicinity the study site and may not be damaged, disturbed or relocated without a valid Flora Permit from the provincial Department of Environment and Nature Conservation (DENC), under the Northern Cape Nature Conservation Act, Act 9 of 2009 (NCNCA), if affected.
- 2.3 Trees with bird nests may not be disturbed without a valid Fauna Permit from Nature Conservation, under the Northern Cape Nature Conservation Act, Act 9 of 2009 (NCNCA).
- 2.4 Getting a Forest Act License can take up to 30 days. License application forms are available on the Departmental website or at any Forestry Office. The Department may ask supporting documentation when assessing a license application. For construction activities of this nature, the following supporting documents are normally requested:
- *Completed License Application Form*
 - *Accurate estimation of the number of trees to be felled per species*
 - *Copy of the I.D. of the applicant (developer's representative)*
 - *Copy of the Environmental Authorisation*
 - *Flora Permit Reference Number*
 - *Copy of Fauna Permit (if applicable)*

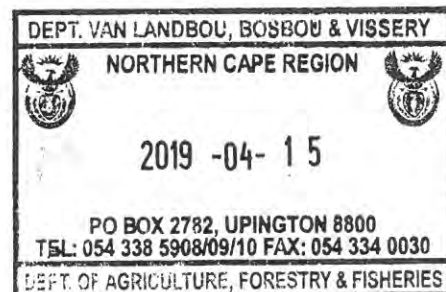
Thank you for notifying the Department of the proposed development.

Kind Regards,



Jacoline Mans (Chief Forester: NFA Regulation)

DATE: 15/04/2019



Public involvement database



BASIC ASSESSMENT REPORT AND ENVIRONMENTAL MANAGEMENT PROGRAMME REPORT FOR THE MERGING OF
THE MAMATWAN SINTERFONTEIN WASTE ROCK DUMP AND TSHIPI EASTERN WASTE ROCK DUMP



PUBLIC INVOLVEMENT DATABASE

Table 1: Project Team

Interest group	Title	Name	Surname	Organisation	Address	Interest	Telephone and cell phone	Email
Project team	Ms.	Mase	Rantsieng	South32		Project Team	0837642596	mase.rantsieng@south32.net
Environmental consultants	Ms	Natasha	Smyth	SLR Consulting (South Africa) (Pty) Ltd	P.O. Box 1596 Cramweview 2060	Project Manager	011-467-0945	nsmyth@slrconsulting.com
	Ms	Alex	Pheiffer			Project Reviewer		Apheiffer@slrconsulting.com
	Mr	Clive	Phashe			Project Assistant		cphashe@slrconsulting.com
Specialist Team	Mr	Ilan	Smeyatsky	PGS Heritage Solutions		Paleontology Specialist	012 332 5305	ilan@pgsheritage.co.za;

Table 2: Landowners within the project area

Name	Surname	Organization	Postal Address	Farm Name
Theresia	Steyn	Gideon Poolman Familietrust	PO Box 346 Hotazel 8490	Goold 326, portion 6
Mase	Rantsieng	South32		Sinterfontein 748
				Adams 328 portion 4
				Goold 326, portion 5
				Moab 700 portion 3
James	Manis	Tshipi e Ntle Manganese Mines Pty		Mamatwan 331 portion 16
Nthabeleng	Paneng	Ltd		Mamatwan 331 portion 17

Table 3: Adjacent land owners

Name	Surname	Organization	Postal Address	Farm Name
Miranda	Lombard	Terra Nominees Pty Ltd	P O Box 61820, Marshalltown, Gauteng, 2107	Smart 314/0
Derick	Korff			Rissik 330/1
Alex	Mooya			Middelplaats 332/1
Stephen	Nakanyane	ESKOM	P.O Box 356 Bloemfontein 9300	Adams Portion 1 and 2
Gerrie	Van Schalkwyk			
Benito	Williams			
Nondwe	Khanya			
Frederick	Ludeke			
Andrea	van Gensen			
Rene	De Briun			
Sam	Fiff			
Cabangile	Zulu	Transnet LTD		Adams 328/3
				Moab 700/1
				Shirley 367/3
				Smart 314/1
				Rissik 330/2
				Goold 329/8
				Mamatwan 331/7
Theresia	Steyn	Gideon Poolman Familietrust	PO Box 346 Hotazel 8490	Goold 329/6
				Rissik 330/0 and 1
Andries Matthys	van den Berg	Private Owner	PO Box 1083 Kuruman 8460	Mamatwan 331/0
		Andries Matthys Duvenhage Testamente Trust		Alton 368/1
Annalien Elizabeth	Fourie	Private Owner	PO Box 1281 Kuruman 8460	Shirley 367/1
Johannes	Pretorius	Private Owner		Shirley 367/2
		Laetitia Penny Trust		Shirley 367/RE
Jacomina Maria	Booyesen	Private Owner	2004 Dolomite STR Kuruman 8460	Alton 368/0
Machiel Andries	Kruger	Private Owner	P O Box 358 Kuruman 8460	Moab 700/0
				Goold 329/1

Name	Surname	Organization	Postal Address	Farm Name
				Milner 327/0
Madelaine	Pyper		P.O Box 132 Kuruman 8460	Middelplaats 730/0
David and HP	Venter	Saltrim Ranches Pty Ltd	P O Box 91, Kuruman, 8460	Middelplaats 332/0
				Adams 328/0
Mase	Rantsieng	Hotazel Manganese Mines Pty Ltd		Mamatwan 331/1
				Mamatwan 331/2
				Mamatwan 331/3
				Adams 328/4
				Goold 329/9
				Goold 329/5
				Middelplaats 332/4
				Moab 700/3
				Sinterfontein 748/0
James	Manis	Tshipi e Ntle Manganese Mines Pty Ltd		Mamatwan 331/16
				Mamatwan 331/17
Nthabeleng	Paneng			Mamatwan 331/18
				Mamatwan 331/8
Cupido	Love	United Manganese Kalahari Pty Ltd		Rissik 330/3
Tshivhangwaho	Mudau			
Daniel		Adams Solar Farm		

Table 4: Regulatory and commenting authorities

Title	Name	Surname	Department	Postal Address
Mr.	Philani	Msimango	Department of Water and Sanitation- Northern Cape region	
Ms	Jacoline	Mans	Department of Agriculture, Forestry and Fisheries	26 Olien Street, Louisvale Road, Upington, 8801
Mr	Thulani	Mthombeni	Department of Environment and Nature Conservation	28 Long Street Kimberley 8300
	Gayle	Sitimela		
Ms	Naomi	Mokonopi		
Ms	Livhuwani	Malatjie	Department of Mineral Resources	P.O Box 6093 Kimberley 8300
Mr	Ntsundeni	Ravhugoni		
Mr	Takalani	Khorombi		
Mr	Johannes	Nematatani		
Mr	Kgaudi	Shapo		
Ms	Julia	Katong	Joe Morolong Local Municipality – Ward Councillor (Ward number 4)	PO Box 1480, Kuruman, 8460
Mr	Joe	Masela	Secretary of Ward Committee – Ward 4	PO Box 63 Van Zylsrus 8467
Mr	Tebogo	Tlhoaele	Joe Morolong Local Municipality – Municipal Manager	Private Bag X117, Mothibistad, 8474
Ms	M.	Morwagae	Joe Morolong Local Municipality – Municipal Manager (PA)	
Ms	Dineo	Leutlwetse	Joe Morolong Local Municipality – municipal mayor	
Ms	Seneo	Seleka	Joe Morolong Local Municipality – Environmental manager	
Mr	Moses	Eilerd	John Taolo Gaetsewe District Municipality – Municipal Manager	
Mr	TH	Matlhare	John Taolo Gaetsewe District Municipality – Community Services Manager	
Mr	Viljoen	Mothibi	Department of Agriculture and Land Reform - HOD	162 George Street, Private Bag X5018, Kimberley, 8300
Mr	Ryan	Oliver	Department of Rural Development and Land Reform - Land claims comissioner	
Ms	Natasha	Higgitt	South African Heritage Resources Agency	

Table 5: Surrounding Industry and Mines, Non-Government Organisations

Title	Name	Surname	Interest	Address	Designation
Mr	Siphiwe	Likhuleni	Kalagadi Manganese Pty Ltd	328 Rivonia Boulevard 1st Floor North Wing Rivonia 2128	Landowner of Olive Pan 282 RE
					Gama 283 Portion 1
Mr	Tshepo	Molai			Whole farm Umtu 281
Mr	Ramon	Henney	Telkom SA (Ltd)		
Ms	Tshepang	Tsekwa	Sebilo Resources	121 Mendelssohn Road Roosevelt Park, Johannesburh 2129	Landowner
Mr	Jan	Theart	Agri Kuruman and Kalagadi Water Verbruikers Forum	P.O Box 224 Hotazel 8490	
Mr	Albertus	Viljoen	Tshiping Water Use Association	PO Box 434, Postmasburg, 8420	
Ms	Suzanne	Erasmus	WESSA NC	P O Box 316 Kimberly 8300	Regional Chairperson
Mr	Elias	Motia		P.O Box 820 Vryburg 8600	
Mr	Jurie	Kriek		PO Box 213 Hotazel 8490	
Mr	Louis	Hauman	BCM Kudumane		
Mr	Hendrik	Arangies	Kudumane Manganese Resources Pty Ltd		
Mr	Conri	Moolman	Kudumane Manganese Resources Pty Ltd		
Mr	Stephen	Nakanyane	ESKOM	P.O Box 356 Bloemfontein 9300	Land and Rights
Mr	Gerrie	Van Schalkwyk			Senior Environmental Advisor
Mr	Benito	Williams			
Mr	Nondwe	Khanya			

Title	Name	Surname	Interest	Address	Designation
	Frederick	Ludeke			
	Andrea	van Gensen			
Mr	Rene	De Briun			
Mr	Bonolo	Lekwa	Assmang Ltd		
Mr	Rethabile	Mboya			
Mr	Ashley	Mcleod			
Mr	Doctor	Bvuma	DMB Minerals cc	92 Villa Toulouse Eagle Trace Estate Dainfern 2055	
Mr	Tumisang	Tagane	AfriBits	York 279 Portion 2, Telele 312 portion 1, Devon 277 portion 0, York 279 portion 2, York 279 portion 11	
Mr	Ramon	Henney	Telkom SA Ltd	Hotazel 280 Portion 2, N'chwaneng 267 portion 5	
Mr	Wezi	Banda	Mamatwan Mining		

Table 6: Other IAPS

Title	Name	Surname	Organisation	Address	Interest
Mr	Jurie	Kriek	Lehating Agriculture	PO Box 213, Hotazel 8490	
Mr	Jan	Theart	Agri Kuruman and Kalagadi Water Verbruikers Forum	PO Box 224 Hotazel 8490	
Mr	Gert	Theart	Landowner		
Mr	Albertus	Viljoen	Tshiping Water Use Association	PO Box 434, Postmasburg 8420	
Mr	Eben	Anthouissen	Mac Mac Agri	PO Box 117 Hotazel 8490	
Mrs	Theresia	Steyn	Portion 6 Goold, Rissik 330	P O Box 346 Hotazel 8490	Owner
Mr	Madelaine	Pyper	Middelplaats 730	P.O Box 132 Kuruman 8460	Land Owner
Mr	Johan	Houps	Smartt 314	P.O Box 58 Kuruman 8460	Land user
Mr	Niekie	Kruger	Goold Ptn 1	P.O Box 358 Kuruman 8460	
Mr	Carel & Martha	Reyneke	Portion 2 Goold 329	P.O Box 255 Kathu 8446	
Ms	Justine	Matabatha	Provincial Government of the North West Province	Private Bag X 2037	Portion 1 Moab 700.
	Mothusi	Loeto			
	Tshifhiwa	Ravele	IAP	PO Box 187 Santoy 8491	
Mr	Joseph	Matshidiso	IAP		

Commenting and general public meeting record

16 April 2019

PROPOSED MERGING OF THE MAMATWAN SINTERFONTEIN AND TSHIPI EASTERN WASTE ROCK DUMPS

NOTE FOR THE RECORD

COMMENTING AUTHORITIES MEETING, HOTAZEL RECREATION CLUB, HOTAZEL

1. INTRODUCTION

On 16 April 2019 at 10:00 am representatives of SLR Consulting and Mamatwan Mine (Mamatwan) met with the relevant authorities as part of consultation being undertaken for the Basic Assessment (BA) and Water Use Licence Application (WULA) processes. The meeting took place at the Hotazel Recreation Club in Hotazel. The only official that attended the meeting was Councillor Julia Katong, a ward councillor in the Joe Morolong Local Municipality. The attendance register is provided in Appendix 1.

2. PRESENTATION

Natasha Smyth (NS) of SLR made a short presentation that provided an introduction to the proposed Merging of the Mamatwan Sinterfontein and Tshipi Eastern Waste Rock Dumps and the BA and WULA processes. The presentation is attached as Appendix 2.

3. DISCUSSION

One clarification question was asked by Cllr Katong and responded to.

Cllr Katong enquired whether the licences for the project have been issued. NS responded that no authorisations have been granted for the project yet and that the processes for these authorisations are in progress.

NS invited further comments or queries and Cllr Katong responded that she will report back to the municipality's speaker or mayor and respond via email to the contact details on the comment sheet.

The meeting closed at approximately 11:00 am.

Yours faithfully



Natasha Smyth



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slrconsulting.com

APPENDIX 1: ATTENDANCE REGISTER

PROJECT: SOUTH32 MAMATWAN MINE

SLR COMPANY: SLR CONSULTING (SOUTH AFRICA) PTY LTD

DATE: 16 APRIL 2019

MEETING: COMMENTING AUTHORITIES MEETING

Name and Surname	Community/Organization	Postal address	Contact numbers	Email
Mase Rantsieng	South32			Mase.rantsieng@south32.net
Julia Katong	Joe Morolong	P.O. Box 362	0828474572	Juliakatong2@gmail.com
Hendrik Louw	South32			Hendrik.louw@south32.net
Natasha Smyth	SLR		0832268570	nsmyth@slrconsulting.com
JC Pretorius	SLR		0114670945	jcpretorius@slrconsulting.com

APPENDIX 2: MEETING PRESENTATION

SOUTH32

MERGING OF THE MAMATWAN SINTERFONTEIN WASTE ROCK DUMP AND THE TSHIPI EASTERN WASTE ROCK DUMP

COMMENTING AUTHORITIES AND PUBLIC MEETING

16 April 2019

global **environmental** and **advisory** solutions



AGENDA

- Welcome and opening
- Overview of the proposed project
- Motivation and alternatives
- Environmental process overview
- Overview of the existing status of the environment
- Potential environmental/socio-economic impacts
- Public participation process
- Questions and answer session
- Close

MEETING PROTOCOL

- Please switch cell phones off or onto a silent setting.
- There will be a dedicated question and answer session.
- Before asking a question, please raise your hand and state your name clearly so that we may correctly record it in the minutes.

OVERVIEW OF PROPOSED PROJECT

- South32 operates the open pit manganese Mamatwan Mine (MMT) – part of Hotazel Manganese Mines (Pty) Ltd.
- MMT is located on portion 5 and 6 of the farm Goold 329, the farm Sinterfontein 748, and portion 16 and 17 of the farm Mamatwan 331, portion 3 of the farm Moab 700 and portion 4 of the farm Adams 328.
- MMT holds:
 - A Mining right
 - An approved EMP
 - An AEL
 - An amended IWUL
 - A Waste Permit for the development and operation of a decommissioned general waste disposal site
 - An EA (for bulk fuel storage).

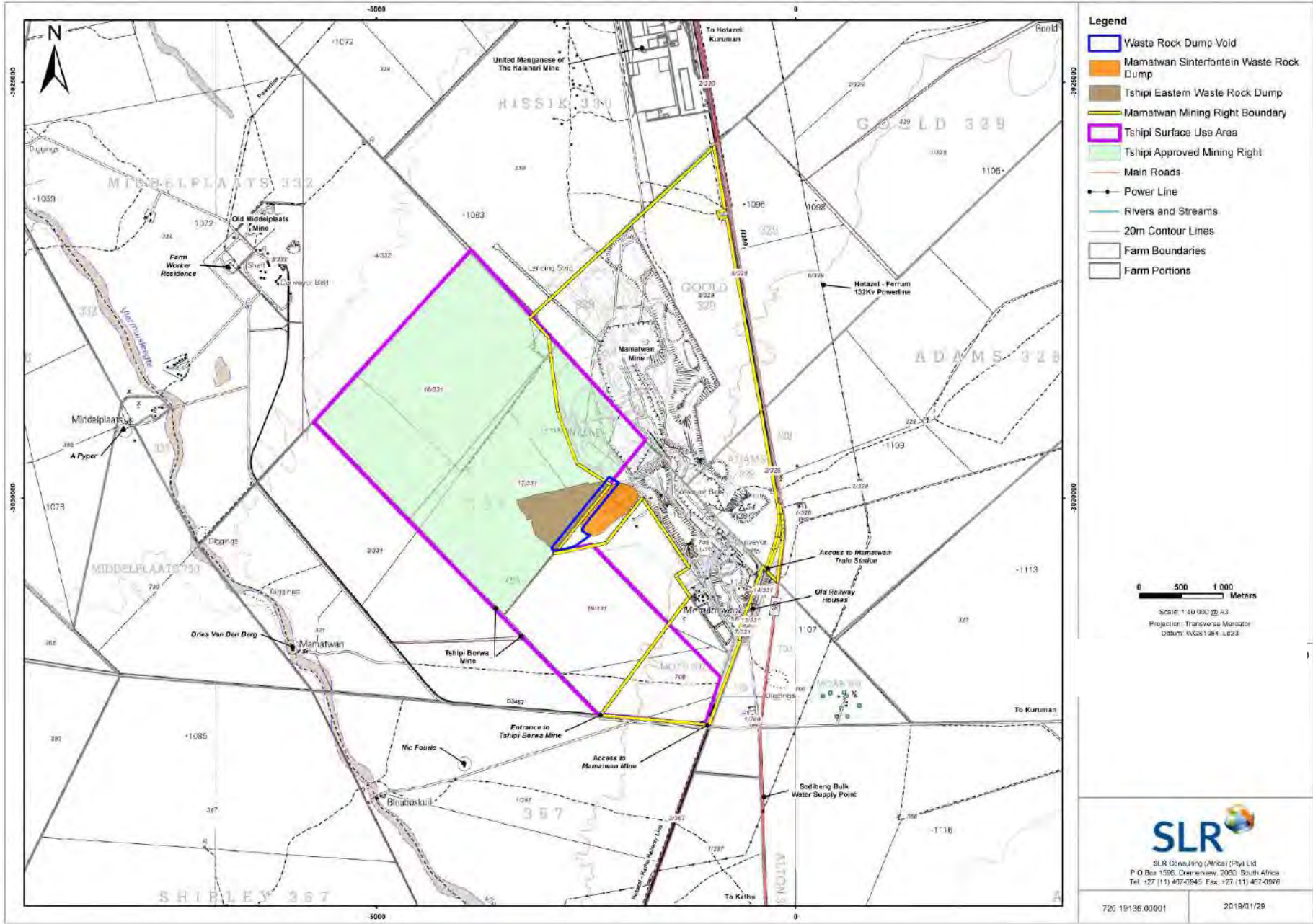
OVERVIEW OF PROPOSED PROJECT

- Tshipi operates the Tshipi Borwa Mine located on the farms Mamatwan 331 and Moab 700, located to the west of Mamatwan Mine.
- An 18m wide boundary is located between the MMT and the Tshipi Borwa Mine.
- Tshipi and MMT have approval to mine the 18m wide boundary pillar.
- Additional capacity is required to store waste rock generated as part of mining the boundary pillar.
- To cater for the additional storage, it is proposed that the Mamatwan Sinterfontein and the Tshipi eastern Waste Rock Dumps (WRDs) are merged to fill the void between the two dumps.

OVERVIEW OF PROPOSED PROJECT

- Tshipi is in the process of amending its approved EMPr to cater for:
 - The extension of the West WRD onto Mamatwan portion 8 to create additional dumping capacity
 - The extension of the East WRD to the south-east, to merge with the Mamatwan Sinterfontein WRD, to provide capacity for the waste rock that will be mined when the boundary pillar is mined
 - Establishment of an overhead powerline and an overland conveyor system
- Mamatwan is undertaking a basic assessment process to cater for the merging of the sinterfontein WRD with the Tshipi eastern WRD. In addition to this the existing WUL needs to be amended.

LOCAL SETTING OF THE PROPOSED PROJECT



SITE LAYOUT OF THE PROPOSED PROJECT



- Legend**
- Sinterfontein Waste Rock Dump Void
 - Final Merged Waste Rock Dump
 - Mamatwan Mining Right Area
 - Tshipi Eastern Waste Rock Dump
 - Mamatwan Sinterfontein Waste Rock Dump
 - Tshipi Surface Use Area
 - Tshipi Mining Right Area
 - Boundary Pillar
 - Farm Boundaries
 - Farm Portions

0 100 200 Meters
 Scale: 1:7 500 @ A3
 Projection: Transverse Mercator
 Datum: WGS1984, Lo23



SLR Consulting (Africa) (Pty) Ltd
 P.O. Box 1596, Craamview, 2060, South Africa
 Tel: +27 (11) 467-0945 Fax: +27 (11) 467-0976

PHOTOS ILLUSTRATING THE VOID BETWEEN THE WRDs



View of the void between the two WRDs.



View of current Mamatwan WRD in background. The WRD will be extended to the left and in front of the existing WRD.

MOTIVATION AND ALTERNATIVES

Motivation for the project

- The merging of the two waste rock dumps will provide capacity for the storage of waste rock when the boundary pillar is mined.
- The merging of the two waste rock dumps avoids the extension of the footprint of the mine into undisturbed area.

Alternatives

- No alternatives were considered for the following reasons:
 - Undisturbed areas at the MMT are planned for future infrastructure.
 - The filling of the void will disturb vegetation that has already been impacted by mining facilities (WRDs on either side of the boundary fence).
 - The WRD is located in close proximity to the open pit to optimise haul distance.
 - Placing waste rock back into the open pit is not deemed feasible due to space limitation within the open pit.

ENVIRONMENTAL PROCESS

What?

- Environment definition (water, biodiversity, etc).
- Assessment of the potential impacts of the proposed project on the environment.
- Implementing appropriate management measures and development of monitoring programmes.

Why?

- Legal requirement and it is the right thing to do

How?

- Basic Assessment Process:
 - Identification and participation of IAPs (landowners, adjacent landowners, land users, commenting and regulatory authorities).
 - Assessment of impacts with input from specialists (where applicable).
 - Identification of possible mitigation measures.
 - Outline mitigation measures including monitoring plan.

ENVIRONMENTAL PROCESS

Permissions required for the proposed project:

Authorisation required	Applicable legislation	Key process elements	Competent authority
Environmental Authorisation (EA)	National Environmental Management Act No. 107 of 1998 and the Environmental Impact Assessment (EIA) Regulations, 2014 as amended	<ul style="list-style-type: none"> • NEMA EA Application • Stakeholder engagement • BAR and supporting specialist studies 	DMR
Waste Management Licence	National Environmental Management: Waste Act (No. 59 of 2008)	<ul style="list-style-type: none"> • NEM:WA WML application • Stakeholder engagement • BAR and supporting specialist studies 	DMR
Water Use Licence	National Water Act No. 36 of 1998 and Regulations Regarding the Procedural Requirements for Water Use Licence Applications WULAs (GNR 267 of 2017)	<ul style="list-style-type: none"> • WUL application • Stakeholder engagement • WULA forms • IWWMP and supporting specialist studies 	DWS

ENVIRONMENTAL PROCESS

Permissions required for the proposed project:

Authorisation required	Applicable legislation	Key process elements	Competent authority
Amend EMP	Mineral and Petroleum Resources Development Act (No. 28 of 2002)	Section 102 application	DMR

ENVIRONMENTAL PROCESS

Relevant listed activities:

Applicable legislation	Relevant activity	Description
NEMA listing Notice 1	Activity 27: Clearance of indigenous vegetation of more than 1ha but less than 20ha	As part of filling the void, indigenous vegetation will be removed.
NEMA listing Notice 1	Activity 34: The expansion of a facility that requires an amendment to an existing licence in terms of national or provincial legislation governing the release of emissions, effluent or pollution.	The existing IWUL will need to be amended to cater for the increase in WRD capacity.

ENVIRONMENTAL PROCESS

Relevant listed activities:

Applicable legislation	Relevant activity	Description
NEM:WA Category A	Activity 13: The expansion of a waste management activity Listed in Category A or B of this Schedule, which does not trigger an additional waste management activity of this Schedule.	The filling of the void with waste material requires a waste management licence.
Section 21 of the NWA	21(g): Disposal of waste that may detrimentally impact the environment	The existing IWUL will need to be amended to cater for the increase in WRD capacity.

ENVIRONMENTAL PROCESS

Commenting authorities

- Department of Environment and Nature Conservation
- Department of Agriculture, Forestry and Fisheries
- Department of Rural Development and Land Reform
- Provincial South Africa Heritage Resource Agency

Local authorities

- John Taolo Gaetsewe District Municipality
- Joe Morolong Local Municipality and applicable ward councillor

EXISTING STATUS OF THE ENVIRONMENT

- Geology: MMT falls in the Kalahari Manganese Field and is covered by gravels, clays, calcretes and aeolian sands of the Kalahari Group.
- Climate: MMT falls within the Northern Steppe Climatic Zone. It is a semi-arid region characterised by seasonal rainfall, hot temperatures in summer, and colder temperatures in winter. Rainfall ranges from 1.3 mm to 72.3 mm per month and winds from the north, north-east are dominant in the area.
- Topography: The natural surrounding and on-site topography has been influenced largely through surrounding mining activities
- Soils and land capability: Soil forms include Witbank. This is an anthropogenic soil form that is characterised by soils that have undergone physical, chemical and hydrological impacts to the extent that land use options, as well as performance of vegetation that they support, are strongly and often permanently affected. Its agricultural potential is low but has potential for supporting grazing.
- Plant life: The small pocket of vegetation between the WRDs, has been subjected to the daily functioning of the MMT and has been subjected to increased levels of dust and dumping of excavated material. This areas has no significant biodiversity present and no protected species.

EXISTING STATUS OF THE ENVIRONMENT

- Animal life: The animal population in the area has been disturbed due to existing mining and agricultural activities. Several bird and mammal species are expected in the area and protected or endangered species that are likely to occur in the area and include the Honey Badger, Pangolin, Southern African Hedgehog, Dent's Horseshoe Bat, Schreibers' Bat, various endemic desert birds and raptors e.g. Ludwig's Bustard, Martial Eagle and Secretary Bird.
- Surface water: MMT falls within the catchment of the Ga-Mogara River, a tributary of the Kuruman River which joins the Molopo River and flows into the Orange River. MMT is located in the D41K quaternary catchment which has a gross total catchment area of 4 216 km², with a MAR of 6.53 mcm. There is no third party reliance on surface water. No wetlands are located within the area.
- Groundwater: The site is in a poor/minor aquifer region with a shallow aquifer with low yield and a deeper fractured bedrock aquifer with a higher yield. The groundwater levels at the mine range between 30 to 45 mbgl. Groundwater quality is primarily used for livestock watering and does show elevated concentrations of EC, Mg, Ni, Ca, Cl and NH.

EXISTING STATUS OF THE ENVIRONMENT

- Air quality: Ambient air quality has been influenced by mines, household fuel combustion, vehicle tailpipe emissions and agricultural activities.
- Noise: Existing noise in the area is mainly caused by farming activities, localised traffic movements and nearby mining operations and existing mining operations.
- Visual: The visual value of the project area is very low due to the presence of the Tshipi eastern WRD and the MMT sinterfontein WRD.
- Heritage/cultural resources: No heritage/cultural sites are expected and there is a low possibility of palaeontological resources occurring at the MMT.
- Socio-economic: There are communities, mines, private landowners and farm occupants around the MMT. Unemployment and education levels in the area are higher than the provincial and municipal average. Basic services infrastructure appears to be far less formalized when considering the province and municipalities as a whole
- Land use: Land uses around the MMT include agriculture, isolated residences, infrastructure/servitudes, solar plant and mining activities. Land uses on-site have already been influenced by MMT activities.

ENVIRONMENTAL/SOCIO-ECONOMIC IMPACTS

Impact and mitigation actions	Significance (UN)	Significance (M)
Geology - Loss and sterilisation of mineral resources		
<p><u>Impact:</u></p> <ul style="list-style-type: none"> Mineral sterilisation through the placement of infrastructure and waste. The WRD extension located centrally between the mining operations. No sterilisation expected. <p><u>Management action:</u></p> <ul style="list-style-type: none"> No management actions are deemed necessary. 	Insignificant	Insignificant
Topography - Altering topography		
<p><u>Impact:</u></p> <ul style="list-style-type: none"> Alteration of natural topography through placement of waste. WRD extension will further alter natural topography. Natural topography already disturbed. WRD extension is located centrally between mining operations. Any potential alteration of topography is expected to be negligible. <p><u>Management action:</u></p> <ul style="list-style-type: none"> Minimising the area of disturbance. Rehabilitation in accordance with approved mine closure plan. 	Insignificant	Insignificant

ENVIRONMENTAL/SOCIO-ECONOMIC IMPACTS

Impact and mitigation actions	Significance (UN)	Significance (M)
Soils and land capability - Loss through physical disturbance and contamination		
<p><u>Impact:</u></p> <ul style="list-style-type: none"> • Potential loss of soils resource and land capability through contamination, compaction and erosion. • Existing sources of pollutants. • Occupies small area and is located centrally between mining operations. • Anthropogenic activity influence. • The land use options and performance to support vegetation has been affected. <p><u>Management action:</u></p> <ul style="list-style-type: none"> • Pollution prevention. • Implementing soil conservation procedures. • Limiting site clearance to what is absolutely necessary. 	Insignificant	Insignificant

ENVIRONMENTAL/SOCIO-ECONOMIC IMPACTS

Impact and mitigation actions	Significance (UN)	Significance (M)
Biodiversity – Physical destruction and general disturbance of biodiversity		
<p><u>Impact:</u></p> <ul style="list-style-type: none"> • Potential to destroy or disturb biodiversity. • Land transformation increases the destruction of the site specific biodiversity, the fragmentation of habitats, reduces intrinsic functionality and reduces the linkage role. • WRD extension is located centrally between mining operations which has influenced the condition of naturally occurring vegetation. • No protected species. • Moderate-low sensitivity. <p><u>Management actions:</u></p> <ul style="list-style-type: none"> • Limiting the project footprint area. • Operation controls to limit on-going disturbance. 	Medium	Low

ENVIRONMENTAL/SOCIO-ECONOMIC IMPACTS

Impact and mitigation actions	Significance (UN)	Significance (M)
Surface water – Alteration of natural drainage patterns		
<p><u>Impact:</u></p> <ul style="list-style-type: none"> • Potential to reduce run-off to catchment. • WRD extension requires adaptation of existing stormwater management measures. • Drainage patterns altered by existing approved mining activities. • Occupies small area and located centrally between mining operations. • Loss of runoff to the catchment is expected to be negligible. <p><u>Management action:</u></p> <ul style="list-style-type: none"> • Separation of clean and dirty water. • Diverting clean run-off away from the site. 	Insignificant	Insignificant

ENVIRONMENTAL/SOCIO-ECONOMIC IMPACTS

Impact and mitigation actions	Significance (UN)	Significance (M)
Surface water – contamination of surface water resources		
<p><u>Impact:</u></p> <ul style="list-style-type: none"> • Potential long-term contamination source (seepage and run-off). • WRD extension is located centrally between mining operations. • Nearest drainage lines (Vlermuisleegte (3km) and Witleegte (6km)). • Highly unlikely that any potential seepage or runoff would reach drainage lines. <p><u>Management action:</u></p> <ul style="list-style-type: none"> • Pollution prevention and monitoring. 	Insignificant	Insignificant
Groundwater – Contamination of groundwater resources		
<p><u>Impact:</u></p> <ul style="list-style-type: none"> • Potential long-term contamination sources. • Modelling results show plume of low contamination extends outside of MMT into the Tshipi boundaries. • No third party boreholes. <p><u>Mitigation action:</u></p> <ul style="list-style-type: none"> • Monitoring and pollution prevention through basic infrastructure design. 	Low	Low

ENVIRONMENTAL/SOCIO-ECONOMIC IMPACTS

Impact and mitigation actions	Significance (UN)	Significance (M)
Air – Air pollution		
<p><u>Impact:</u></p> <ul style="list-style-type: none"> • Number of sources that can impact on ambient air quality and surrounding land uses. • WRD extension would contribute additional dust generation sources. • These sources already exist on site, occupies small area, shielding by existing dumps and acting as wind barrier reduces impact. <p><u>Management action:</u></p> <ul style="list-style-type: none"> • Pollution prevention and monitoring. 	Low	Low
Noise – Noise pollution		
<p><u>Impact:</u></p> <ul style="list-style-type: none"> • Project is associated with noise generating activities. • Background noise sampling shows noise levels typical of rural area. • WRD centrally located between mining activities and short term project. • Potential increase in noise levels at potential receptor sites is expected to be negligible. <p><u>Mitigation action:</u></p> <ul style="list-style-type: none"> • Noise pollution prevention and monitoring when required. 	Insignificant	Insignificant

ENVIRONMENTAL/SOCIO-ECONOMIC IMPACTS

Impact and mitigation actions	Significance (UN)	Significance (M)
Visual – Negative visual views		
<u>Impact:</u> <ul style="list-style-type: none"> The visual environment has been transformed. WRD extension area is located centrally between mining activities. The WRD extension would be absorbed into current views. At closure the WRD extension would be rehabilitated. <u>Management action:</u> <ul style="list-style-type: none"> Rehabilitation in accordance with approved mine closure plan. 	Insignificant	Insignificant
Traffic – Road disturbance and traffic safety		
<u>Impact:</u> <ul style="list-style-type: none"> The WRD extension will not generate additional traffic. <u>Management actions:</u> <ul style="list-style-type: none"> No management actions are deemed necessary. 	Not applicable	Not applicable
Heritage/palaeontological – Loss of heritage/palaeontological resources		
<u>Impact:</u> <ul style="list-style-type: none"> No heritage resources. Low palaeontological sensitivity. <u>Management action:</u> <ul style="list-style-type: none"> Change find. 	Insignificant	Insignificant

ENVIRONMENTAL/SOCIO-ECONOMIC IMPACTS

Impact and mitigation actions	Significance (UN)	Significance (M)
Socio-economic – Inward migration and economic impact		
<p><u>Impact:</u></p> <ul style="list-style-type: none"> • Forms part of existing approved operations. • No additional employment opportunities. • Additional capacity to store waste rock as part of mining the boundary pillar. • Negative socio-economic impacts are not expected to occur. • The economic benefits (boundary pillar) already accounted for. <p><u>Management measures:</u></p> <ul style="list-style-type: none"> • Not deemed necessary 	Not applicable	Not applicable
Land use – change in land use		
<p><u>Impact:</u></p> <ul style="list-style-type: none"> • Potential to affect land uses by physical land transformation and through direct or secondary impacts. • WRD extension established in existing mining area and will not change the current land use. <p><u>Management action:</u></p> <ul style="list-style-type: none"> • Communication with neighbouring communities and rehabilitation for post closure land use. 	Low	Low

PUBLIC PARTICIPATION

I&AP and authority notification and consultation

- Hold pre-application meetings (DMR and DWS) – February 2019
- The public consultation for the BA and IWULA amendment processes will be run in parallel.
- The public participation will cater for both the NEMA 2014 EIA regulations and the NWA Regulations pertaining to procedural requirements for WULAs.
- The public consultation includes the following:
 - Placement of an advert in two local papers (Kathu Gazette and Kalahari Bulletin) – March 2019
 - Distribute BID informing I&APs and regulatory authorities about the proposed project, public meeting and related processes – March 2019
 - Placement of site notices in two languages (English and Afrikaans) – March 2019
 - Review of the BAR and IWULA and/or summary – April to May 2019

PUBLIC PARTICIPATION

Review of the BAR and IWULA:

- Hard copies of the BAR will be made available for review for 30 days at the following venues:
 - John Taolo Gaetsewe District Municipality
 - Joe Morolong Local Municipality
 - Hotazel and Black Rock public libraries
 - Kuruman and Kathu public libraries.
- I&APs will be notified when the IWWMP has been submitted to the DWS.
- Distribution of a summary (English and Afrikaans) of the BAR and IWWMP via fax, email or post.
- SMS notifications.
- Electronic copies will be made available on the SLR website.
- Second public meeting planned during the review of the BAR.

QUESTIONS AND ANSWERS



THANK YOU AND CLOSE



16 April 2019

PROPOSED MERGING OF THE MAMATWAN SINTERFONTEIN AND TSHIPI EASTERN WASTE ROCK DUMPS

NOTE FOR THE RECORD

PUBLIC MEETING, HOTAZEL RECREATION CLUB, HOTAZEL

1. INTRODUCTION

On 16 April 2019 at 15:00 am representatives of SLR Consulting and Mamatwan Mine (Mamatwan) hosted an information sharing meeting to for interested and affected parties (I&APs) as part of consultation being undertaken for the Basic Assessment (BA) and Water Use Licence Application (WULA) processes. The meeting took place at the Hotazel Recreation Club in Hotazel. No I&APs attended the meeting. The attendance register is provided in Appendix 1.

2. PRESENTATION

Due to the lack of attendance by any I&APs, no presentation was made.

The meeting was abandoned at 15:45.

Yours faithfully



Natasha Smyth



SLR Consulting (South Africa) (Proprietary) Limited

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APPENDIX 1: ATTENDANCE REGISTER

Project: **SOUTH32 MAMATWAN MINE**

SLR Company: **SLR CONSULTING (SOUTH AFRICA) PTY LTD**

Date: **16 April 2019**

AUTHORITIES INFORMATION SHARING MEETING

Name and Surname	Community/Organization	Postal address	Contact numbers	Email
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Natasha Smyth	SLR		0832268570	nsmyth@slrconsulting.com
JC Pretorius	SLR		0114670945	jcpretorius@slrconsulting.com

Project: SOUTH 32 MAMATWAN MINE

SLR Company: SLR CONSULTING (SOUTH AFRICA) PTY LTD

Date: 16 April 2019

PUBLIC INFORMATION SHARING MEETING



Name and Surname	Community/Organization	Postal address	Contact numbers	Email
Natasha Singh	SLR	PO Box 1526 Pretoria	0832268570	natasha@slrconsulting.co.za
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Summary of BAR.

MAMATWAN MINE**BASIC ASSESSMENT REPORT AND ENVIRONMENTAL MANAGEMENT PROGRAMME
REPORT FOR THE MERGING OF THE MAMATWAN SINTERFONTEIN WASTE ROCK DUMP
AND THE TSHIPI EASTERN WASTE ROCK DUMP****BASIC ASSESSMENT REPORT AVAILABLE FOR PUBLIC REVIEW****DMR Reference number: NC00148MR102**

Dear Sir/Madam

1. INTRODUCTION

South32 operates the opencast manganese Mamatwan Mine (MMT) (forms part of the legal entity Hotazel Manganese Mines (Pty) Ltd) located approximately 25km to the south of Hotazel in the John Taolo Gaetsewe District Municipality and Joe Morolong Local Municipality of the Northern Cape Province of South Africa.

Tshipi é Ntle Manganese Mining (Pty) Ltd (Tshipi) operates the Tshipi Borwa Mine located on the farms Mamatwan 331 and Moab 700, located to the west of MMT. An 18m wide (on surface) boundary is located between the MMT and the Tshipi Borwa Mine. Tshipi and MMT have approval to mine the 18m wide boundary pillar. Additional capacity is required to store waste rock generated as part of mining the boundary pillar. To cater for the additional storage, it is proposed that the Mamatwan Sinterfontein and the Tshipi eastern Waste Rock Dump (WRD's) are merged to fill the void between the two dumps (1). In this regard, the Mamatwan Sinterfontein WRD would be extended in a north-westerly direction to merge with the Tshipi eastern WRD in order to fill the narrow void between these two WRDs.

MMT is proposing on amending their approved EMP to cater for the merging of the WRDs.

SLR Consulting (South Africa) (Pty) Ltd (SLR), an independent firm of environmental consultants, has been appointed by Hotazel Manganese Mines (Pty) Ltd to manage the environmental assessment process.

In this regard, the Basic Assessment Report (BAR) for the proposed project is now available for public review. This document presents a summary of the findings for the BAR undertaken for the proposed project. In this regard the following sections have been extracted from the BAR report and included in the summary document:

- The executive summary – included in Appendix A of this document
- Summary of issues and concerns raised by Interested and Affected Parties (I&APs) – included in Appendix B of this document.



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+27 21 851 3348 slrconsulting.com

2. REVIEW OF BAR

In addition to the BAR summary that has been distributed to all I&APs that are registered on the public involvement database, full copies of the BAR are available for public review at the following venues:

- The Joe Morolong Local Municipality;
- The John Taolo Gaetsewe District Municipality;
- The Hotazel Public Library;
- The Kathu Public Library;
- The Black Rock Library; and

The BAR is also available from the SLR website (at <https://slrconsulting.com/za/slr-documents/>). Alternatively, electronic copies of the BAR will be made available to I&APs on request.

The BAR will be distributed for a 30 day comment period from **25 April 2019 to 31 May 2019** in order to provide I&APs with an opportunity to comment on any aspect of the proposed project and the findings of the BA process. All comments need to be submitted in writing to SLR via fax (011 467 0978) and/or email (nsmyth@slrconsulting.com). All received comments will be included in the final BAR which will be made available to the Department of Mineral Resources for decision making purposes.

If you have any questions please contact the undersigned.

Kind regards



Natasha

APPENDIX A: EXECUTIVE SUMMARY OF THE BAR FOR THE PROPOSED PROJECT

PROJECT BACKGROUND

South32 operates the opencast manganese Mamatwan Mine (MMT) (forms part of the legal entity Hotazel Manganese Mines (Pty) Ltd) located approximately 25km to the south of Hotazel in the John Taolo Gaetsewe District Municipality and Joe Morolong Local Municipality of the Northern Cape Province of South Africa (Figure 1). MMT holds the following environmental permits and authorisations:

- A Mining right (Reference number: NC 256 MR) issued and approved by the former Department of Minerals and Energy (DME) (currently the Department of Mineral Resources (DMR)) in May 2006.
- An Environmental Management Programme (EMP) (Reference number: NC 6/2/2/118) issued and approved by the former DME (currently the DMR) in November 2005.
- An Air Emissions Licence (AEL) (Licence number: NC/AEL/NDM/ZRH01/2014) issued by the Northern Cape Department of Environment and Nature Conservation (DENC) in March 2015.
- An amended Integrated Water Use Licence (IWUL) (License number: 10/D41K/KAGJ/1537) issued by the Department of Water and Sanitation (DWS) in January 2012.
- A Waste Permit (Permit number: B33/2/441/21/P157) for the development and operation of a decommissioned general waste disposal site issued by the former Department of Water Affairs and Forestry (currently DWS) in February 1995.
- An Environmental Authorisation (Reference number: NC/KGA/HOT3/07) for bulk fuel storage issued by former Department of Tourism, Environment and Conservation (currently DENC) in July 2007.

Tshipi é Ntle Manganese Mining (Pty) Ltd (Tshipi) operates the Tshipi Borwa Mine located on the farms Mamatwan 331 and Moab 700, located to the west of MMT. An 18m wide (on surface) boundary is located between the MMT and the Tshipi Borwa Mine. Tshipi and MMT have approval to mine the 18m wide boundary pillar. Additional capacity is required to store waste rock generated as part of mining the boundary pillar. To cater for the additional storage, it is proposed that the Mamatwan Sinterfontein and the Tshipi eastern Waste Rock Dump (WRD's) are merged to fill the void between the two dumps. In this regard, the Mamatwan Sinterfontein WRD would be extended in a north-westerly direction to merge with the Tshipi eastern WRD in order to fill the narrow void between these two WRDs.

MMT is proposing on amending their approved EMP to cater for the merging of the WRDs (referred to as the WRD extension).

SUMMARY OF AUTHORISATION REQUIREMENTS

Prior to the commencement of the proposed project, the following is required:

- An approved amended EMP from the DMR in terms of Section 102 of the Mineral and Petroleum Resources Development Act (No. 28 of 2002) (MPRDA)
- An environmental authorisation from the DMR in terms of the NEMA, as amended. The Environmental Impact Assessment (EIA) Regulations being followed are Government Notice Regulation (GNR) 982 of 4 December 2014, as amended.
- A Waste Management Licence from the DMR in terms of the National Environmental Management: Waste Act (No. 59 of 2008) (NEM:WA).

In addition to the above list, an amendment of the IWUL from the DWS in terms of Section 21 of the National Water Act (No. 36 of 1998) is also required. In this regard, a separate application will be submitted to the DWS for consideration. For completeness purposes, the relevant listed activity to be applied for as part of the IWUL amendment process is included in Section 3.1 of this report. The Regulations being followed to amend the IWUL are the GNR 267 of 2017 for the Procedural Requirements for Water Use Licence Applications.

STAKEHOLDER ENGAGEMENT

The stakeholder engagement process commenced prior to the submission of the BAR (Basic Assessment Report) and has continued throughout the environmental assessment process. As part of this process, commenting authorities and interested and affected parties (IAPs) were given the opportunity to attend a public meeting, submit questions and comments to the project team, and review the background information document and now the BAR. All comments submitted to date by the commenting authorities and IAPs have been included and addressed in this BAR. Further comments arising during the review of the BAR report will be handled in a similar manner.

IMPACTS AND MANAGEMENT ACTIONS

This section provides a summary of the assessment of the potential impacts of the project and provides measures to prevent or mitigate the impacts. The potential impacts associated with the mine activities and infrastructure can be categorised into those that have low, medium and/or high significance in the unmitigated scenario. All three categories of impacts require a measure of management actions which, if successfully implemented will reduce the significance of the impacts. All identified impacts are considered both incrementally and cumulatively in the context of the existing MMT infrastructure and activities.

The table below provides a summary of the potential impacts in no particular order of importance.

TABLE A – POTENTIAL IMPACT SUMMARY

Aspect	Potential impact	Impact discussion and reference to mitigation measures	Significance	
			Unmitigated	Mitigated
Geology	Loss and sterilisation of mineral resources	Mineral resources can become sterilised through the placement of surface infrastructure and waste. The proposed WRD extension could present the potential for sterilisation of mineral resources. The WRD extension is located centrally between the existing Tshipi and Mamatwan mining operations. No sterilisation of mineral resources is expected. No management actions are deemed necessary.	Insignificant	Insignificant
Topography	Altering topography	The natural topography at the MMT has been disturbed as a result of the existing mining infrastructure and activities. The establishment of the proposed WRD extension will further alter natural topography and cannot be mitigated. It is however important to note that the WRD extension is located centrally between the existing Tshipi and Mamatwan mining operations. Any potential alteration of topography is expected to be negligible. Related management actions include minimising the area of disturbance and rehabilitation in accordance with approved mine closure plan.	Insignificant	Insignificant
Soil and land capability	Loss of soil resources and land capability through contamination and physical disturbance	The approved infrastructure and activities presents numerous sources of soil pollutants that can result in a loss of soils (and associated land capability) as a resource. This in turn can result in a loss of soils as an ecological driver because it can create a toxic environment for vegetation and ecosystems that rely on the soil. The WRD extension will occupy a relatively small area of 4 ha, located centrally between the existing Tshipi and Mamatwan mining operations. The soil resources in the proposed WRD extension footprint has already been influenced by anthropogenic activities (witbank soil forms) to the extent that the land use options as well as performance of the soil to support vegetation has been affected. Related management actions focus on pollution prevention, implementing soil conservation procedures and limiting site clearance to what is absolutely necessary.	Insignificant	Insignificant
Biodiversity	Physical destruction and general disturbance of biodiversity	The development of the proposed WRD extension has the potential to destroy or disturb biodiversity in the broadest sense, particularly in the unmitigated scenario. This will present a final land form that may have pollution potential through long term seepage and/or runoff. Areas of ecological sensitivity include functioning biodiversity areas with species diversity (including protected species) and associated intrinsic value. Linkages between these areas have value because of the role they play in allowing the migration or movement of flora and fauna between the areas, which is a key function for the broader ecosystem. The transformation of land for any purpose increases the destruction of the site specific biodiversity, the fragmentation of habitats, reduces its intrinsic functionality and reduces the linkage role that undeveloped land fulfils between different areas of biodiversity importance. It should however be noted that the proposed WRD extension is located centrally, adjacent to and within existing MMT and Tshipi	Medium	Low

Aspect	Potential impact	Impact discussion and reference to mitigation measures	Significance	
			Unmitigated	Mitigated
		Borwa Mine mining activities which has influenced the condition of naturally occurring vegetation. No protected species were noted in the area where the WRD extension is proposed. The proposed footprint is located within an area rated by the biodiversity specialist to have moderate-low sensitivity. Related management measures focus on limiting the project footprint area and operation controls to limit on-going disturbance.		
Surface water	Alteration of natural drainage patterns	Natural drainage across the project area is via sheet flow. Drainage patterns have been altered by existing approved mining activities. The extension of the WRD will require an adaptation of existing stormwater management measures in order to contain dirty water in compliance with R704 of the NWA. Stormwater management measures will be in place until such time as the WRD extension is rehabilitated. The WRD extension will occupy a relatively small area of 4 ha, located centrally between the existing Tshipi and Mamatwan mining operations. Any potential loss of runoff to the catchment is expected to be negligible. Related management actions focus on diverting clean run-off away from the site.	Insignificant	Insignificant
	Contamination of surface water resources	The proposed WRD extension presents a potential long-term contamination source to surface water through seepage reaching the baseflow of rivers and runoff from the side slopes of the WRD reaching the nearest drainage lines. However, given that the WRD extension is located centrally between the existing Tshipi and Mamatwan mining operations, the nearest drainage lines to the WRD extension are between 3 km (the ephemeral Vlermuisleegte River) and 6 km (the ephemeral Witleegte River) away, and the WRD extension will be designed with stormwater management measures that comply with R704 of the NWA, it is considered highlight unlikely that any potential seepage or runoff from the WRD extension would reach drainage lines in the vicinity of the mine. Related mitigation measures focus on pollution prevention and monitoring.	Insignificant	Insignificant
Groundwater	Contamination of groundwater resources	The proposed WRD extension presents a potential long-term contamination source to groundwater and is expected to be a permanent structure at the mine. Modelling results indicate that a plume of low contamination would extend outside of the Mamatwan Mining Right area into the Tshipi Mining Right area. No third party boreholes fall within the predicted contamination plume. Related management actions focus on monitoring, pollution prevention through basic infrastructure design.	Low	Low

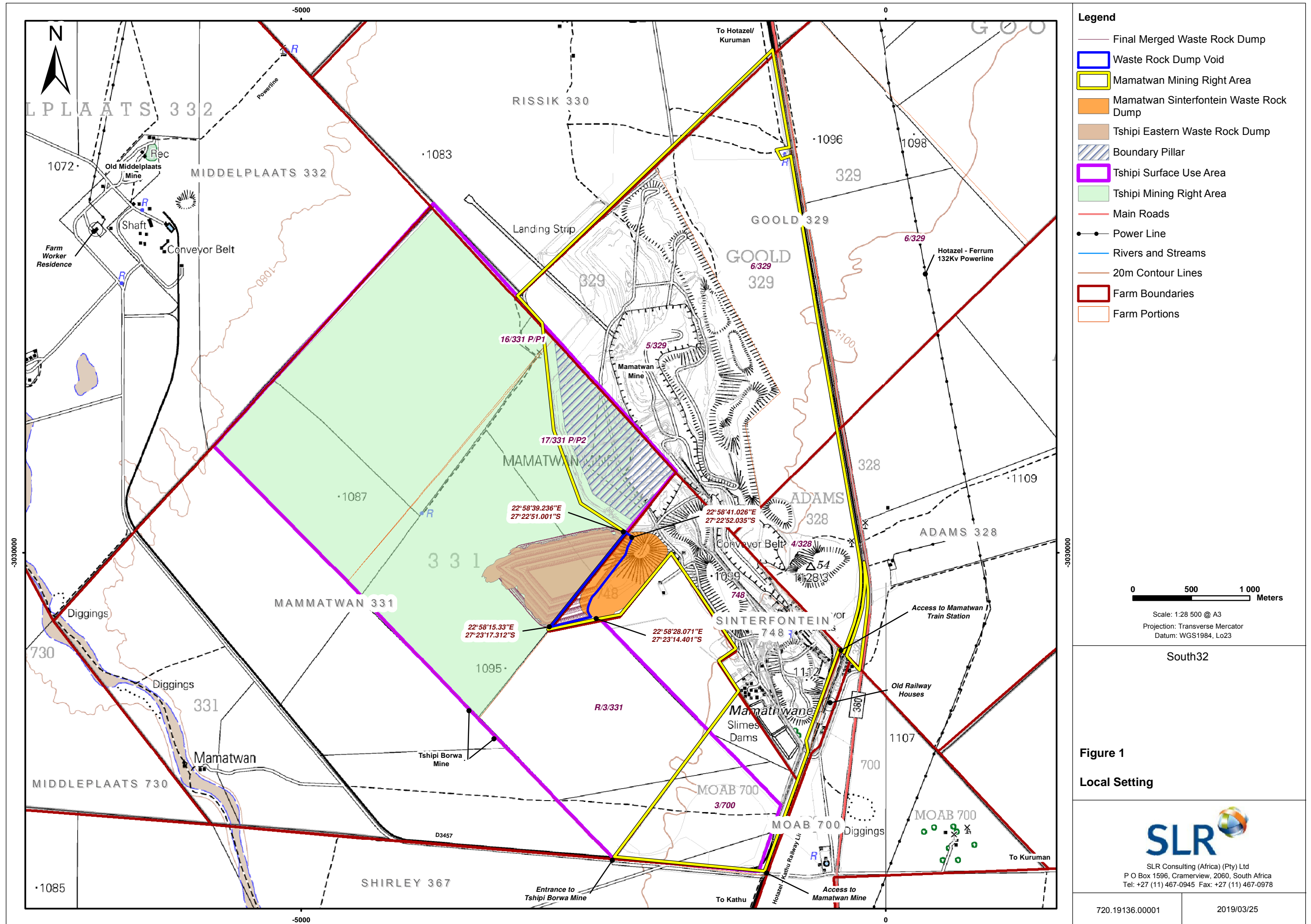
Aspect	Potential impact	Impact discussion and reference to mitigation measures	Significance	
			Unmitigated	Mitigated
Air quality	Air pollution	The extension of the WRD presents a number of sources that can have a negative impact on ambient air quality and surrounding land uses in all phases. Sources include clearing of vegetation, materials handling, wind erosion from stockpiles and wind erosion of disturbed areas. These activities already take place on site as the mine is in operation; however, the establishment and operation of the proposed WRD extension would contribute additional dust generation sources. The advantage of the WRD from an air quality perspective is that the footprint is small (approximately 4 ha), and that it is shielded by the existing Tshipi Eastern WRD to the west and the existing Mamatwan WRD to the east. The Tshipi Eastern WRD should act as a wind barrier from the stronger westerly winds, and to some extent from the northerly winds. The filling of waste rock into the void instead of tipping at the crest of the WRD, would also reduce potential impacts. Related management actions focus on pollution prevention and monitoring.	Low	Low
Noise	Increase in disturbing noise levels	Although the development and disposal of waste rock as part of the proposed project is associated with noise generating activities, the increase in noise levels at potential receptor sites is expected to be negligible. This is based on the results of the background noise sampling (which was undertaken at a time when mining operations were active) which indicated that the area has noise levels typical of a rural area as well as the location of the proposed project area centrally between the current Tshipi and MMT mining activities. This is further influenced by the short-term duration of the activities (less than the life of mine) and the distance of between 3 and 6 km between the WRD extension area and potential noise receptors. Related management actions focus on noise pollution prevention and monitoring when required.	Insignificant	Insignificant
Visual	Negative visual views	The visual landscape within the MMT area has been transformed due to the presence of approved mining infrastructure and activities. The proposed WRD extension area is located centrally between the current Tshipi Borwa Mine and the MMT mining activities and is therefore not expected to influence existing negative visual impacts. The WRD extension would be absorbed into current views of the mining activities. At closure the WRD extension would be rehabilitated in line with the mine's rehabilitation and closure plan which makes provision for a final land use of wilderness. Related management actions focus on rehabilitation.	Insignificant	Insignificant
Traffic	Road disturbance and traffic safety	The proposed WRD extension will not generate additional traffic and as such project-related road disturbance and traffic safety impacts are not expected to occur. This issue is therefore not assessed further in this EIA. The significance of impacts associated with the overall MMT would remain unchanged. No management actions are deemed necessary.	Not applicable	Not applicable
Heritage/cultural and palaeontological resources	Loss of heritage/cultural and Palaeontological resources	No heritage resources occur within the area proposed for the WRD extension. In addition, there is a low possibility of palaeontological resources occurring in the area. Related management measures include notifying heritage and/or palaeontological specialists in the event of a chance find.	Insignificant	Insignificant

Aspect	Potential impact	Impact discussion and reference to mitigation measures	Significance	
			Unmitigated	Mitigated
Socio-economic	Inward migration and economic impact	Given that the project forms part of existing approved operations and that the proposed extension to the WRD will not generate any additional employment opportunities, negative project-related socio-economic impacts including inward migration are not expected to occur. In addition, the extension of the WRD is required to provide additional capacity to store waste rock that is generated as part of mining the boundary pillar. The economic benefits associated with mining the boundary pillar have previously been accounted for. As a result the potential for increased economic benefits due to project activities is expected to be negligible. This issue is therefore not assessed further in this BAR. Management actions are not deemed necessary.	Not applicable	Not applicable
Land use	Change in land use	Mining-related activities have the potential to affect land uses both within the mine area and in the surrounding areas. This can be caused by physical land transformation and through direct or secondary impacts. The proposed WRD extension will be established within the existing mining area and will not change the current land use. Related management actions include communication with neighbouring communities and rehabilitation for post closure land use.	Low	Low

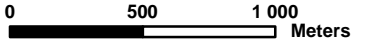
ENVIRONMENTAL STATEMENT

The assessment of the proposed project presents the potential for negative impacts to occur (in the unmitigated scenario in particular) on the biophysical, cultural and socio-economic environments both on the project site and in the surrounding area. With management actions these potential impacts can be prevented or reduced to acceptable levels.

It follows that provided the EMP is effectively implemented there is no biophysical, social or economic reason why the project should not proceed.



- Legend**
- Final Merged Waste Rock Dump
 - Waste Rock Dump Void
 - Mamatwan Mining Right Area
 - Mamatwan Sinterfontein Waste Rock Dump
 - Tshipi Eastern Waste Rock Dump
 - Boundary Pillar
 - Tshipi Surface Use Area
 - Tshipi Mining Right Area
 - Main Roads
 - Power Line
 - Rivers and Streams
 - 20m Contour Lines
 - Farm Boundaries
 - Farm Portions



Scale: 1:28 500 @ A3
 Projection: Transverse Mercator
 Datum: WGS1984, Lo23

South32

Figure 1
Local Setting



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APPENDIX B: SUMMARY OF ISSUES RAISED

Interested and affected party	Date comment received	Issues raised	Response provided
Regulatory authority			
Department of Mineral Resources (DMR)			
Johannes Nematatani	Comment raised at the pre-application meeting held with the DMR in Kimberley on 01 February 2019.	The public participation process outlined in the presentation does not make provision for a public meeting. This needs to form part of the public participation process. In addition to this, the public meeting must take place after the submission of the application and during the review of the Basic Assessment Report.	The public meeting has been scheduled to take place after the submission of the integrated NEMA/NEM:WA application to the DMR and during the 30 day review period of the BAR. In this regard the public meeting has been scheduled for 16 April 2019.
Ntsundeni Ravhugoni		South32 needs to ensure that the Mine Works Programme and the Environmental Management Programme are aligned.	Authorisation is required from the DMR in terms of Section 102 of the MPRDA to amend the existing EMP and mine works programme to take cognisance of the proposed project. MMT will apply for a Section 102 Amendment in terms of the MPRDA. This EIR will support this application.
Ntsundeni Ravhugoni		Due to the nature of the project and the close working relationship between the MMT and Tshipi, the DMR may investigate the viability of granting one authorisation for both South32 and Tshipi.	Noted.
Takalani Khorombi		Why does the waste rock need to be stored on surface and not backfilled into the pit?	Placing waste rock back into the open pit is not deemed feasible due to space limitation within the open pit. If waste rock was placed in the pit, there would be insufficient space within the open pit for mining activities to take place.
Commenting authorities			
Local Municipality – Ward 4			
Councillor Katong	16 April 2019, raised at the commenting authorities meeting	Have the necessary licences for the project have been issued.	No authorisations have currently been issued by the DMR or DWS. The proposed project triggers various activities for which authorisation is required in terms of the NEMA, NEM:WA and NWA. A BAR is required in order for the DMR to consider the application for NEMA/NEM:WA environmental authorisation. A separate report (Integrated Water and Waste Management Plan and supporting water use forms), will be submitted to the DWS in order for their department to consider the application in terms of the NWA.
Department of Forestry and Fisheries			
Jacoline Mans	Comment received on 15 April 2019	Protected trees such as <i>Vachelle erioloba</i> , <i>Vachellia Haematoxylon</i> and <i>Bascia albitrunca</i> can be found in the study area. It is unlikely the impact would be significant by	A biodiversity study was completed for the MMT in 2018. This study indicated that there are no protected trees or plants located within the proposed project area. However, the mitigation actions outlined in this report, commit MMT to

Interested and affected party	Date comment received	Issues raised	Response provided
		<p>merging the 18m wide void between the two waste rock dumps, because the area has already been impacted by mining activities. In the event that protected trees are encountered, the mines must apply for a Forest Act Licence prior to disturbance of trees.</p> <p>Provincially protected plants are known to occur in the vicinity of the study site and may not be damaged, disturbed or relocated without a valid Flora Permit from the provincial Department of Environment and Nature Conservation, under the Northern Cape Nature Conservation Act, No. 9 of 2009, if affected.</p> <p>Trees with birds nest may not be disturbed without a valid Fauna Permit from Nature Conservation, under the Northern Cape Nature Conservation Act, No. 9 of 2009.</p> <p>Getting a Forest Act Licence can take up to 30 days. Licence application forms are available on the Departmental website or at only Forestry Office. The Department may ask for supporting documentation when assessing a licence application. For construction activities of this nature, the following supporting documents are normally requested:</p> <ul style="list-style-type: none"> • Completed Licence Application Form • Accurate estimation of the number of trees to be felled per species • Copy of ID • Copy of Environmental Authorisation • Flora Permit Reference number • Copy of Fauna Permit (if applicable). 	<p>obtain the necessary licences (Tree permits from DAFF and plant permits from DENC), if any protected species are encountered. In addition to this, if any active bird nests are identified within the proposed project area that need to be disturbed, the necessary permits will be obtained from the DENC.</p>
Interested Parties			
Ravete Tshifyiwa	Comment received via comment sheet submitted on 04 April 2019	There are no objections to the project at all; I am just interested in knowing more about the visual impact and air pollution that might emanate from this project.	In terms of the visual impact; the visual landscape within the MMT area has been transformed due to the presence of approved mining infrastructure and activities. The proposed WRD extension area is located centrally between the current Tshipi Borwa Mine and the MMT mining activities and is therefore not expected to influence existing negative visual impacts. The WRD extension would be absorbed into current views of the mining activities. At closure the WRD

Interested and affected party	Date comment received	Issues raised	Response provided
			<p>extension would be rehabilitated in line with the mine's rehabilitation and closure plan which makes provision for a final land use of grazing. This impact has therefore been rated as being INSIGNIFICANT.</p> <p>In terms of air pollution, the main contaminants associated with the proposed project includes: inhalable particulate matter less than 10 microns in size (PM10) (including a manganese component) and larger total suspended particulates (TSP) that relate to dust fallout. The inhalable components can cause human health impacts at high concentrations over extended periods, while the larger particulate component can cause nuisance dust impacts such as soiling of grazing veld at high fallout quantities over extended periods. While manganese is an essential trace element that is required for good health, exposure to high levels of manganese can cause neuro-toxic health effects in susceptible individuals – generally referred to as Manganism.</p> <p>During all project phases dust will be generated by activities associated with the extension of the WRD. The advantage of the WRD from an air quality perspective is that the footprint is small (approximately 4 ha), and that it is shielded by the existing Tshipi Eastern WRD to the west and the existing Mamatwan WRD to the east. The Tshipi Eastern WRD should act as a wind barrier from the stronger westerly winds, and to some extent from the northerly winds. The filling of waste rock into the void instead of tipping at the crest of the WRD, would also reduce potential impacts. At decommissioning, truck activity, tipping of topsoil and levelling out of the exposed side slopes during rehabilitation might result in significant dust generation. Taking this into account, the increase in ground level concentrations for PM10 or PM2.5 and dust fallout off-site is rated as having a low significance in the mitigated and unmitigated scenarios.</p>

MAMATWANMYN**BASIESE EVALUERINGSVERSLAG EN OMGEWINGSBESTUURSPROGRAMVERSLAG
VIR DIE SAMESMELTING VAN DIE MAMATWAN SINTERFONTEIN AFVALKLIPHOOP
EN DIE TSHIPI OOSTELIKE AFVALKLIPHOOP****BASIESE EVALUERINGSVERSLAG BESKIKBAAR VIR OPENBARE INSAE****DMH-verwysingsnommer: NC00148MR102**

Geagte Meneer/Mevrou/Mejuffrou

1. INLEIDING

South32 bedryf die oopgroef Mamatwan Mangaanmyn (MMT) (wat deel vorm van die Hotazel Manganese Mines (Edms.) Bpk. regsentiteit) wat sowat 25 km suid van Hotazel in die John Taolo Gaetsewe Distriksmunisipaliteit en die Joe Morolong Plaaslike Munisipaliteit van Suid-Afrika se Noord-Kaapprovinsie geleë is.

Tshipi é Ntle Manganese Mining (Edms.) Bpk. (Tshipi) bedryf die Tshipi Borwa-myn wat op die plase Mamatwan 331 en Moab 700, wes van MMT, geleë is. Daar is 'n 18 m-wye grens (op die oppervlak) tussen die MMT en die Tshipi Borwa-myn. Tshipi en MMT het goedkeuring om die 18 m-wye grenspilaar te ontgin. Bykomende kapasiteit word benodig om afvalklip wat as deel van die ontginning van die grenspilaar gegenereer sal word, te berg. Om voorsiening te maak vir die bykomende berging, word aan die hand gedoen dat die Mamatwan Sinterfontein en die Tshipi Oostelike Afvalkliphope (AKH's) saamsmelt om die gaping tussen die twee afvalhope te vul (1). In hierdie verband, sal die Mamatwan Sinterfontein AKH in 'n noordwestelike rigting uitgebrei word om saam te smelt met die Tshipi Oostelike AKH ten einde die nou gaping tussen die twee AKH's te vul.

MMT beoog om hul goedgekeurde OBP te wysig om voorsiening te maak vir die samesmelting van die AKH's.

SLR Consulting (South Africa) (Edms.) Bpk. (SLR), 'n onafhanklike firma van omgewingskonsultante, is deur Hotazel Manganese Mines (Edms.) Bpk. aangestel om die omgewingsevalueringsproses te bestuur.

In hierdie verband is die Basiese Evaluatoringsverslag (BEV) vir die beoogde projek nou beskikbaar vir openbare insae. Hierdie dokument bied 'n opsomming van die bevindinge van die BEV wat vir die beoogde projek onderneem is. Met betrekking hiertoe is die volgende gedeeltes uit die BE-verslag onttrek en in die opsommingsdokument vervat:

- Die beknopte oorsig – ingesluit in Bylae A van hierdie dokument;
- Opsomming van kwessies en knelpunte wat deur Belangstellende en Geaffekteerde Partye (B&GP's)



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geopper is – ingesluit in Bylae B van hierdie dokument.

2. OORSIG VAN BEV

Benewens die opsomming van die BEV wat aan alle B&GP's versprei is wat op die projek se openbare betrokkenheidsdatabasis geregistreer is, is volledige afskrifte van die BEV by die volgende plekke beskikbaar vir openbare insae:

- Die Joe Morolong Plaaslike Munisipaliteit;
- Die John Taolo Gaetsewe Distriksmunisipaliteit;
- Die Hotazel Openbare Biblioteek;
- Die Kathu Openbare Biblioteek; en
- Die Black Rock Biblioteek.

Die BEV is ook beskikbaar op SLR se webwerf (by <https://slrconsulting.com/za/slr-documents/>). Andersins sal elektroniese afskrifte van die BEV ook op versoek aan B&GP's beskikbaar gestel word.

Die BEV sal **vanaf 25 April 2019 to 31 Mei 2019** vir 'n 30-dae kommentaartydperk versprei word ten einde aan B&GP's 'n geleentheid te bied om kommentaar te lewer op enige aspek van die beoogde projek en op die bevindinge van die BE-proses. Alle kommentaar moet skriftelik per faks (011 467 0978) en/of per e-pos (nsmyth@slrconsulting.com) by SLR ingedien word. Alle kommentaar wat ontvang word, sal in die finale BEV vervat word wat vir besluitnemingsdoeleindes aan die Departement van Minerale Hulpbronne beskikbaar gestel sal word.

Indien u enige vrae het, moet u asseblief in verbinding tree met die onderstaande persoon.

Vriendelike groete



Natasha

BYLAE A: BEKNOPTTE OORSIG VAN DIE BEV VIR DIE BEOOGDE PROJEK

AGTERGROND TOT DIE PROJEK

South32 bedryf die oopgroef Mamatwan Mangaanmyn (MMT) (wat deel vorm van die Hotazel Manganese Mines (Edms.) Bpk. regsentiteit) wat sowat 25 km suid van Hotazel in die John Taolo Gaetsewe Distriksmunisipaliteit en die Joe Morolong Plaaslike Munisipaliteit van Suid-Afrika se Noord-Kaapprovinsie geleë is (Figuur 1). MMT beskik oor die volgende omgewingspermitte en -magtigings:

- 'n Mynreg (Verwysingsnommer: NC 256 MR) wat in Mei 2006 uitgereik en deur die eertydse Departement van Minerale en Energie (DME) (tans die Departement van Minerale Hulpbronne (DMH)) goedgekeur is.
- 'n Omgewingsbestuursprogram (OBP) (Verwysingsnommer: NC 6/2/2/118) wat in November 2005 uitgereik en deur die eertydse DME (tans die DMH) goedgekeur is.
- 'n Lugemissielisensie (LEL) (Lisensienommer: NC/AEL/NDM/ZRH01/2014) wat in Maart 2015 uitgereik is deur die Noord-Kaapse Departement van Omgewingsake en Natuurbewaring (DENC).
- 'n Gewysigde Geïntegreerde Watergebruiklisensie (IWUL) (Lisensienommer: 10/D41K/KAGJ/1537) wat in Januarie 2012 uitgereik is deur die Departement van Water en Sanitasie (DWS).
- 'n Afvalpermit (Permitnommer: B33/2/441/21/P157) vir die ontwikkeling en bedryf van 'n algemene afvalstortingsterrein wat uit bedryf gestel is, wat in Februarie 1995 uitgereik is deur die eertydse Departement van Waterwese en Bosbou (tans die DWS).
- 'n Omgewingsmagtiging (Verwysingsnommer: NC/KGA/HOT3/07) vir grootmaat brandstofberging, wat in Julie 2007 uitgereik is deur die eertydse Departement van Toerisme, Omgewingsake en Bewaring (tans die DENC).

Tshipi é Ntle Manganese Mining (Edms.) Bpk. (Tshipi) bedryf die Tshipi Borwa-myn wat op die plase Mamatwan 331 en Moab 700, wes van MMT, geleë is. Daar is 'n 18 m-wye grens (op die oppervlak) tussen die MMT en die Tshipi Borwa-myn. Tshipi en MMT het goedkeuring om die 18 m-wye grenspilaar te ontgin. Bykomende vermoë word benodig om afvalklip wat as deel van die ontginning van die grenspilaar gegenereer sal word, te berg. Om voorsiening te maak vir die bykomende berging, word aan die hand gedoen dat die Mamatwan Sinterfontein en die Tshipi Oostelike Afvalkliphope (AKH's) saamsmelt om die gaping tussen die twee afvalhope te vul. In hierdie verband, sal die Mamatwan Sinterfontein AKH in 'n noordwestelike rigting uitgebrei word om saam te smelt met die Tshipi Oostelike AKH ten einde die nou gaping tussen die twee AKH's te vul.

MMT beoog om hul goedgekeurde OBP te wysig om voorsiening te maak vir die samesmelting van die AKH's (wat die AKH-uitbreiding sal heet).

OPSOMMING VAN MAGTIGINGSVEREISTES

Voor die aanvang van die beoogde projek, word die volgende benodig:

- 'n Goedgekeurde gewysigde OBP van die DMH ingevolge Artikel 102 van die Wet op die Ontwikkeling van Minerale en Petroleum Hulpbronne (Wet 28 van 2002) (MPRDA).
- 'n Omgewingsmagtiging van die DMH ingevolge die NEMA, soos gewysig. Die Regulasies op Omgewingsimpakevaluering (OIE) wat gevolg word, is Staatskennisgewingsregulasie 982 van 4 Desember 2014, soos gewysig.

- 'n Afvalbestuurlisensie van die DMH ingevolge die Nasionale Wet op Omgewingsbestuur: Afval (Wet 59 van 2008) (NEM:WA).

Benewens die bogenoemde lys, word 'n wysiging van die IWUL deur die DWS ingevolge Artikel 21 van die Nasionale Waterwet (Wet 36 van 1998) (NWW) ook benodig. In hierdie verband sal 'n afsonderlike aansoek by die DWS ingedien word vir oorweging. Vir volledigheid word die tersaaklike gelyste aktiwiteit waarvoor aansoek gedoen word as deel van die IWUL-wysigingsproses in Afdeling 3.1 van hierdie verslag ingesluit. Die Regulasies wat gevolg word om die IWUL te wysig, is Staatskennisgewingsregulasie 267 van 2017 vir die Prosedurele Vereistes vir Aansoeke om Watergebruiklisensies.

SKAKELING MET BELANGHEBBERS

Die skakelingsproses met belanghebbers het vóór die indiening van die BEV (Basiese Evalueringsverslag) 'n aanvang geneem en het regdeur die omgewingsevalueringproses voortgeduur. As deel van hierdie proses het owerhede wat kommentaar lewer, sowel as Belangstellende en Geaffekteerde Partye (B&GP's), die geleentheid gekry om 'n openbare vergadering by te woon, vrae en kommentaar aan die projekspan te rig en die agtergrondinligtingsdokument en nou die BEV na te gaan. Alle kommentaar wat tot op hede deur die owerhede wat kommentaar lewer en B&GP's ingedien is, is in hierdie BEV vervat en aangespreek. Verdere kommentaar wat tydens die BE-verslag se oorsigproses opduik, sal op 'n soortgelyke wyse hanteer word.

IMPAKTE EN BESTUURSAKSIES

Hierdie afdeling bied 'n oorsig van die evaluering van die potensiële impakte van die projek en hou maatreëls voor om die impakte te voorkom of te versag. Die potensiële impakte wat met die myn se bedrywighede en infrastruktuur verband hou, kan gekategoriseer word in dié wat lae, medium en/of hoë wesenlikheid in die scenario voor versagting het. Al drie kategorieë van impakte verg 'n mate van bestuursaksies wat, sou dit suksesvol geïmplementeer word, die wesenlikheid van die impakte sal verminder. Alle geïdentifiseerde impakte geniet beide inkrementele en kumulatiewe oorweging in die konteks van die bestaande MMT-infrastruktuur en -bedrywighede.

Die tabel hieronder bied 'n opsomming van die potensiële impakte in geen spesifieke volgorde van belangrikheid nie.

TABEL A – OPSOMMING VAN POTENSIËLE IMPAKTE

Aspek	Potensiële impak	Bespreking van impak en verwysing na versagtingsmaatreëls	Weselikheid	
			Onversag	Na versagting
Geologie	Verlies aan en sterilisasie van minerale hulpbronne	Minerale hulpbronne kan gesteriliseer word deur plasing van oppervlakinfrastruktuur en afval. Die beoogde AKH-uitbreiding kan die moontlikheid vir sterilisasie van minerale hulpbronne inhou. Die AKH-uitbreiding is sentraal tussen die bestaande Tshipi- en Mamatwan mynboubedryghede geleë. Geen sterilisasie van minerale hulpbronne word verwag nie. Geen bestuursaksies word nodig geag nie.	Onbeduidend	Onbeduidend
Topografie	Verandering van topografie	Die natuurlike topografie by die MMT is versteur as gevolg van die bestaande mynbouinfrastruktuur en -bedryghede. Die vestiging van die beoogde AKH-uitbreiding sal die natuurlike topografie verder verander en kan nie versag word nie. Dit is egter belangrik om daarop te let dat die AKH-uitbreiding sentraal tussen die bestaande Tshipi en Mamatwan mynboubedryghede geleë is. Enige potensiële verandering van topografie sal na verwagting weglaatbaar klein wees. Verwante bestuursaksies sluit in die minimalisering van die versteuringsgebied en rehabilitasie in lyn met die goedgekeurde mynsluitingsplan.	Onbeduidend	Onbeduidend
Grond en grondvermoë	Verlies aan grondhulpbronne en -vermoë deur kontaminasie en fisiese versteuring	Die goedgekeurde infrastruktuur en bedryghede hou talle bronne van grondbesoedelaars in wat 'n verlies aan grondsoorte (en gepaardgaande grondvermoë) as 'n hulpbron tot gevolg kan hê. Op sy beurt kan dit weer aanleiding gee tot 'n verlies aan grondsoorte as 'n ekologiese aandrywer omdat dit 'n toksiese omgewing kan skep vir plantegroei en ekosisteme wat op die grond staatmaak. Die AKH-uitbreiding sal 'n betreklik klein oppervlak van 4 ha beslaan, wat sentraal tussen die bestaande Tshipi en Mamatwan mynboubedryghede geleë is. Die grondhulpbronne in die beoogde AKH-uitbreidingsvoetspoor is reeds tot so 'n mate deur antropogene aktiwiteite (witbank grondvorms) beïnvloed dat die grondgebruikopsies sowel as die grondvermoë om plantegroei te dra, geaffekteer is. Verwante bestuursaksies fokus op die voorkoming van besoedeling, die implementering van grondbewaringsprosedures en die beperking van die ontbossing van die terrein tot die absoluut noodsaaklike.	Onbeduidend	Onbeduidend
Biodiversiteit	Fisiese vernietiging en algemene versteuring van biodiversiteit	Die ontwikkeling van die beoogde AKH-uitbreiding het die potensiaal om biodiversiteit in die breedste sin te vernietig of te versteur, veral in die onversagte scenario. Dit sal 'n finale grondvorm verteenwoordig wat besoedelingspotensiaal deur langtermyn syfering en/of afloop kan hê. Gebiede van ekologiese sensitiviteit sluit in funksionerende biodiversiteitsgebiede met spesiediversiteit (insluitend beskermde spesies) en gepaardgaande intrinsieke waarde. Skakels tussen hierdie gebiede is waardevol as gevolg van die rol wat hulle speel om die migrasie of verskuiwing van flora en fauna tussen die gebiede moontlik te maak, wat 'n belangrike funksie vir die groter ekosisteem is. Die transformasie van grond vir enige doel verhoog die vernietiging van die terreinspesifieke biodiversiteit, die fragmentasie van habitats, verminder sy intrinsieke funksionaliteit en verminder die skakelrol wat onontwikkelde grond tussen gebiede met verskillende biodiversiteitsbelang speel. Daar moet egter op gelet word dat die beoogde AKH-	Medium	Laag

Aspek	Potensiële impak	Bespreking van impak en verwysing na versagtingsmaatreëls	Weselikheid	
			Onversag	Na versagting
		uitbreiding sentraal geleë is, langs en in die bestaande MMT- en Tshipi Borwamynboubedrywighede, wat die toestand van plantegroei wat natuurlik voorkom, reeds beïnvloed het. Geen beskermde spesies is opgemerk in die gebied waar die AKH-uitbreiding beoog word nie. Die beoogde voetspoor is binne-in 'n gebied wat die biodiversiteitspesialis as matig-lae sensitiwiteit gegradeer her. Verwante bestuursmaatreëls fokus daarop om die projek se voetspoorgebied te beperk en op bedryfsbeheermaatreëls om volgehoue versteuring te beperk.		
Oppervlakwater	Verandering van natuurlike dreineringspatrone	Natuurlike dreinering regoor die projekgebied is via plaatvloei. Dreineringspatrone is reeds deur bestaande goedgekeurde mynboubedrywighede verander. Die uitbreiding van die AKH sal 'n aanpassing van bestaande stormwaterbestuursmaatreëls verg ten einde vuilwater ter voldoening aan R704 van die NWW in te dam. Stormwaterbestuursmaatreëls sal in plek wees totdat die AKH-uitbreiding gerehabiliteer is. Die AKH-uitbreiding sal 'n betreklik klein oppervlak van 4 ha beslaan, wat sentraal tussen die bestaande Tshipi en Mamatwan mynboubedrywighede geleë is. Enige potensiële verlies van afloop na die opvangsgebied sal na verwagting weglaatbaar klein wees. Verwante bestuursaksies fokus daarop om skoon afloop weg van die terrein af te omlei.	Onbeduidend	Onbeduidend
	Besoedeling van oppervlakwater-hulpbronne	Die beoogde AKH-uitbreiding hou 'n potensiële langtermyn kontaminasiebron van oppervlakwater in deur syfering wat die droëseisoenvloei van riviere bereik en afloop van die syhelling van die AKH af wat die naaste dreineringslyne bereik. Met dié dat die AKH-uitbreiding sentraal geleë is tussen die bestaande Tshipi en Mamatwan mynboubedrywighede, is die naaste dreineringslyne aan die AKH-uitbreiding tussen 3 km (die efemere Vlermuisleegterivier) en 6 km (die efemere Witleegterivier) daarvandaan, en omdat die AKH-uitbreiding ontwerp sal word met stormwaterbestuursmaatreëls wat voldoen aan Regulasie 704 van die NWW, word dit egter as hoogs onwaarskynlik geag dat enige potensiële syfering of afloop van die AKH-uitbreiding af dreineringslyne in die nabyheid van die myn sal bereik. Verwante versagtingsmaatreëls fokus op die voorkoming en monitering van besoedeling.	Onbeduidend	Onbeduidend
Grondwater	Besoedeling van grondwaterhulpbronne	Die beoogde AKH-uitbreiding hou 'n potensiële langtermyn besoedelingsbron vir grondwater in en sal na verwagting 'n permanente struktuur by die myn wees. Modelleringsuitslae dui aan dat 'n pluim van lae kontaminasie buite die Mamatwan Mynreggebied tot in die Tshipi Mynreggebied sal strek. Daar is geen derdepartyboorgate binne-in die voorspelde kontaminasiepluim nie. Verwante bestuursaksies fokus op monitering en die voorkoming van besoedeling aan die hand van basiese infrastruktuurontwerp.	Laag	Laag

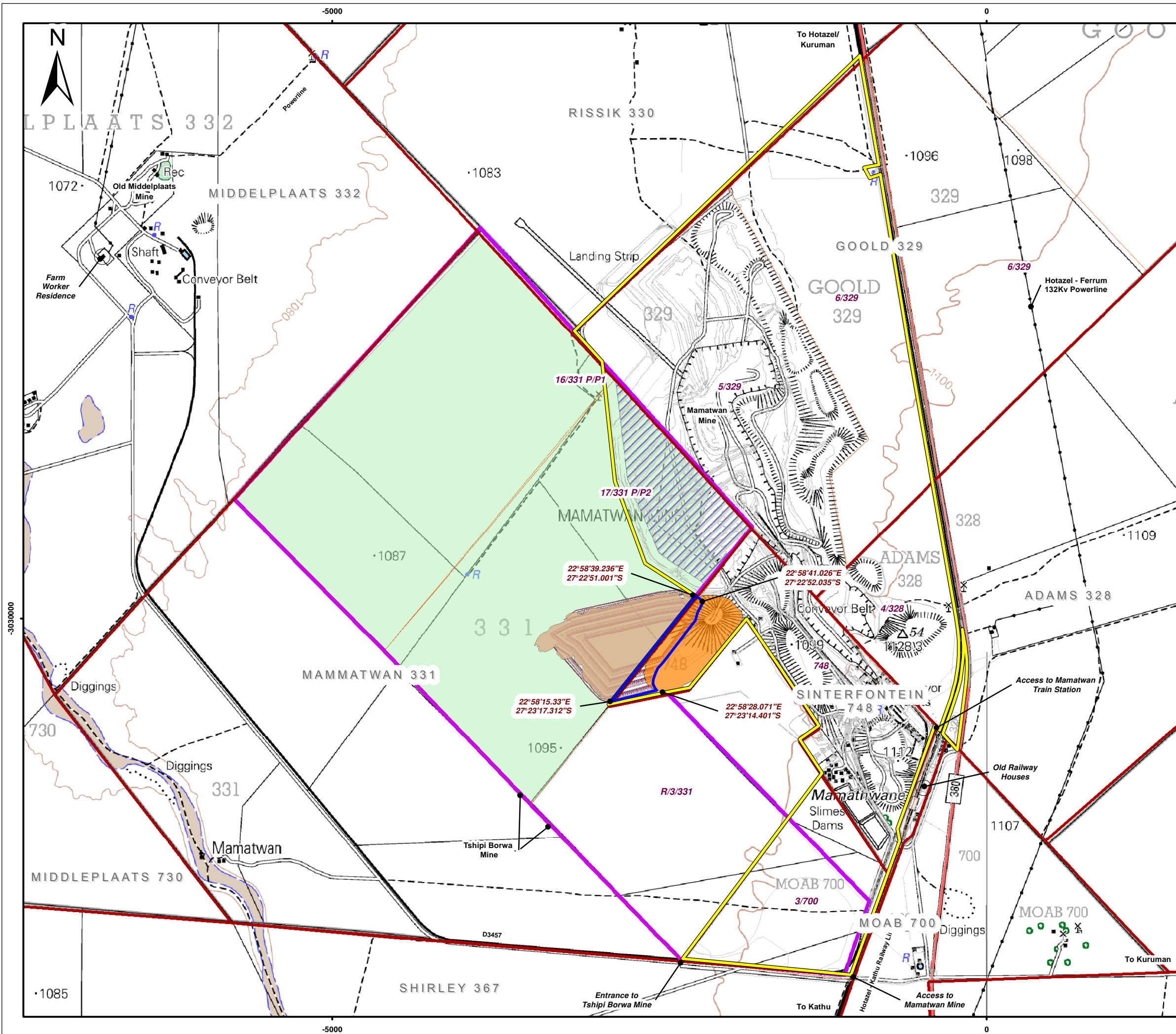
Aspek	Potensiële impak	Bespreking van impak en verwysing na versagtingsmaatreëls	Weselikheid	
			Onversag	Na versagting
Luggehalte	Lugbesoedeling	Die uitbreiding van die AKH hou 'n aantal bronne in wat 'n negatiewe impak op omringende luggehalte en omliggende grondgebruik in alle fases kan hê. Bronne sluit in ontbossing van plantegroei, hantering van materiale, winderosie van stapelwerwe en winderosie van versteurde gebiede. Hierdie bedrywighede vind reeds op die terrein plaas aangesien die myn in bedryf is; die oprigting en bedryf van die beoogde AKH-uitbreiding sal egter bykomende stofopwekkingsbronne bydra. Die voordeel van die AKH vanuit 'n luggehalte perspektief is dat die voetspoor klein is (ongeveer 4 ha) en dat dit beskut word deur die bestaande Tshipi Oos-AKH in die weste en die bestaande Mamatwan AKH in die ooste. Die Tshipi Oos-AKH sal as 'n windversperring optree teen die sterker weste wind, en tot 'n mate teen die noorde wind. Die vulling van afvalrots in die leemte in plaas daarvan om dit op die kruin van die AKH te stort, sal ook die potensiële impak verminder. Verwante bestuursaksies fokus op voorkoming van besoedeling en monitering.	Laag	Laag
Geraas	Toename in steurende geraasvlakke	Hoewel die ontwikkeling en verwydering van afvalklip as deel van die beoogde projek met geraasopwekkingsbedrywighede gepaard gaan, is die toename in geraasvlakke by potensiële reseptorterreine na verwagting weglaatbaar klein. Dit is gegrond op die uitslae van die agtergrondgeraasmonsterneming (wat gedoen was toe die mynboubedrywighede aan die gang was), wat getoon het dat die gebied geraasvlakke het wat normaalweg in landelike gebiede voorkom, asook op die ligging van die beoogde projekgebied wat sentraal tussen die huidige Tshipi- en MMT-mynboubedrywighede is. Dit word voorts beïnvloed deur die korttermyn tydsduur van die bedrywighede (korter as die lewensduur van die myn) en die afstand van tussen 3 km en 6 km tussen die AKH-uitbreidingsgebied en potensiële geraasreseptors. Verwante bestuursaksies fokus op voorkoming van geraasbesoedeling en monitering, soos nodig.	Onbeduidend	Onbeduidend
Visueel	Negatiewe visuele uitsigte	Die visuele landskap in die MMT-gebied is getransformeer weens die teenwoordigheid van goedgekeurde mynbou-infrastruktuur en -bedrywighede. Die beoogde AKH-uitbreidingsgebied is sentraal tussen die huidige Tshipi Borwa-myn en die MMT mynboubedrywighede geleë, gevolglik sal dit na verwagting nie bestaande negatiewe visuele impakte beïnvloed nie. Die AKH-uitbreiding sal in huidige uitsigte van die mynboubedrywighede geabsorbeer word. Met sluiting sal die AKH-uitbreiding in lyn met die myn se rehabilitasie en sluitingsplan, wat voorsiening maak vir 'n uiteindelijke grondgebruik van wildernis, gerehabiliteer word. Verwante bestuursaksies fokus op rehabilitasie.	Onbeduidend	Onbeduidend
Verkeer	Padversteuring en verkeersveiligheid	Die beoogde AKH-uitbreiding sal geen bykomende verkeer genereer nie en sodoende sal daar na verwagting geen projekverwante padversteuring en verkeersveiligheidsimpakte wees nie. Hierdie kwessie word gevolglik nie verder in hierdie OIE geëvalueer nie. Die weselikheid van impakte wat met die algehele MMT gepaard gaan, sal onveranderd bly. Geen bestuursaksies word nodig geag nie.	Nie van toepassing nie	Nie van toepassing nie
Erfenis-/Kultuur- en	Verlies aan erfenis-/	Daar is geen erfenishulpbronne in die gebied wat vir die AKH-uitbreiding beoog word nie. Voorts	Onbeduidend	Onbeduidend

Aspek	Potensiële impak	Bespreking van impak en verwysing na versagtingsmaatreëls	Wesenlikheid	
			Onversag	Na versagting
paleontologiese hulpbronne	kultuur- en paleontologiese hulpbronne	is daar 'n lae moontlikheid dat paleontologiese hulpbronne in die gebied kan voorkom. Verwante bestuursmaatreëls sluit in om erfenis- en/of paleontologiese spesialiste in kennis te stel, sou 'n terloopse vonds ontdek word.		
Sosio-ekonomies	Inwaartse migrasie en ekonomiese impak	Met dié dat die projek deel vorm van bestaande goedgekeurde bedrywighede en dat die beoogde uitbreiding van die AKH nie enige bykomende werksgeleenthede sal skep nie, sal daar na verwagting geen negatiewe projekverwante sosio-ekonomiese impakte, insluitend inwaartse migrasie, wees nie. Voorts moet die uitbreiding van die AKH bykomende kapasiteit bied om afvalklip te berg wat as deel van ontginning van die grenspilaar gegenerer word. Die ekonomiese voordele wat verband hou met die ontginning van die grenspilaar, is reeds aangespreek. Gevolglik sal die potensiaal vir groter ekonomiese voordele weens projekbedrywighede na verwagting weglaatbaar klein wees. Hierdie kwessie word gevolglik nie verder in hierdie BEV geëvalueer nie. Bestuursaksies word nie nodig geag nie.	Nie van toepassing nie	Nie van toepassing nie
Grondgebruik	Verandering in grondgebruik	Mynbouverwante bedrywighede het die potensiaal om grondgebruik te affekteer, beide in die mynbougebied en in die omliggende gebiede. Dit kan veroorsaak wees deur fisiese grondtransformasie en deur regstreekse of sekondêre impakte. Die beoogde AKH-uitbreiding sal binne-in die bestaande mynbougebied gevestig word en sal nie die huidige grondgebruik verander nie. Verwante bestuursaksies sluit in kommunikasie met naburige gemeenskappe en rehabilitasie vir grondgebruik ná sluiting.	Laag	Laag

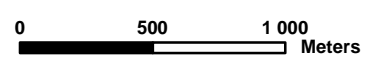
OMGEWINGSVERKLARING

Die evaluering van die beoogde projek hou die potensiaal in vir negatiewe impakte om plaas te vind (veral in die scenario waar dit nie versag word nie) op die biofisiese, kulturele en sosio-ekonomiese omgewings, beide op die projekterrein en in die omliggende omgewing. Met bestuursaksies kan hierdie potensiële impakte voorkom of tot aanvaarbare vlakke verlaag word.

Sou die OBPr doeltreffend geïmplementeer word, is daar gevolglik geen biofisiese, maatskaplike of ekonomiese rede waarom die projek nie kan voortgaan nie.



- Legend**
- Finale Saamgesmelt
 - ▭ Afvalkloof Gaping
 - ▭ Mamatwan Mynreg Gebied
 - ▭ Mamatwan Sinterfontein
 - ▭ Tshipi Oostelike Afvalkloof
 - ▨ Boundary Pillar
 - ▭ Tshipi Surface Use Area
 - ▭ Tshipi Mining Right Area
 - Hoofpaapie
 - Kraglyn
 - Riviere en Strome
 - 20m Kontoorlyne
 - ▭ Plaasgrens
 - ▭ Plaasgedeelte



Scale: 1:28 500 @ A3
 Projection: Transverse Mercator
 Datum: WGS1984, Lo23

South32

Figuur 1

Plaaslike Ligging



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

BYLAE B: OPSOMMING VAN KWESSIES WAT GEOPPER IS

Belangstellende en Geaffekteerde Party	Datum waarop kommentaar ontvang is	Kwessies geopper	Antwoord voorsien
Reguleringsowerheid			
Departement van Minerale Hulpbronne (DMH)			
Johannes Nematatani	Kommentaar geopper by die vooraanloop-vergadering wat op 1 Februarie 2019 te Kimberley met die DMH gehou is.	Die openbare deelnameproses wat in die voorlegging uiteengesit is, maak nie voorsiening vir 'n openbare vergadering nie. Dit moet deel vorm van die openbare deelnameproses. Voorts moet die openbare vergadering ná die indiening van die aansoek en tydens die insae van die Basiese Evalueeringsverslag plaasvind.	Die openbare vergadering was geskeduleer om ná die indiening van die geïntegreerde NEMA/NEM:WA-aansoek by die DMH en tydens die 30-dae insaetydperk van die BEV plaas te vind. Met betrekking hiertoe is die openbare vergadering geskeduleer vir 16 April 2019.
Ntsundeni Ravhugoni		South32 moet toesien dat die Mynwerke- en Omgewingsbestuursprogram in lyn met mekaar is.	Ingevolge Artikel 102 van die MPRDA, moet magtiging van die DMH bekom word om die bestaande OBP en Mynwerkeprogram te wysig om die beoogde projek in ag te neem. Ingevolge die MPRDA sal MMT aansoek doen om 'n Artikel 102-wysiging. Hierdie OIV sal daardie aansoek rugsteun.
Ntsundeni Ravhugoni		Weens die aard van die projek en die noue werksverhouding tussen MMT en Tshipi, kan die DMH dalk die lewensvatbaarheid ondersoek om een magtiging vir beide South32 en Tshipi uit te reik.	Kennis is hiervan geneem.
Takalani Khorombi		Waarom moet die afvalklip bogronds geberg en nie in die groef teruggevol word nie?	Weens die beperkte spasie in die oop groef, word dit nie as uitvoerbaar geag om afvalklip daarin terug te vul nie. Sou afvalklip in die groef geplaas word, sal daar nie genoeg ruimte in die oop groef wees vir mynboubedrywighede om plaas te vind nie.
Kommentaar owerhede			
Plaaslike Munisipaliteit – Wyk 4			
Raadslid Katong	16 April 2019, geopper tydens die kommentaar owerhede vergadering.	Is die nodige lisensies vir die projek uitgereik?	Geen magtigings is tans deur die DMH of DWS uitgereik nie. Die voorgestelde projek lei tot verskeie aktiwiteite waarvoor magtiging vereis word ingevolge die NEMA, NEM: WA en NWW. 'n BEV is nodig om die aansoek om NEMA / NEM: WA omgewingsmagtiging te oorweeg. 'n Afsonderlike verslag (geïntegreerde water- en afvalbestuursplan en ondersteunende watergebruiksvorms) sal aan die DWS voorgelê word sodat hul departement die aansoek ingevolge die NWW kan

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			oorweeg.
Departement Bosbou en Visserye			
Jacoline Mans	Kommentaar ontvang op 15 April 2019	<p>Beskermdede bome soos <i>Vachelle erioloba</i>, <i>Vachellia Haematoxylon</i> en <i>Bascia albitrunca</i> an gevind word in die studiegebied. Dit is onwaarskynlik dat die impak betekenisvol sal wees deur die 18m wye leegte tussen die twee afvalstortings te versmelt, aangesien die gebied reeds deur mynaktiwiteit geraak is. In die geval waar beskermdede bome voorkom, moet die myne aansoek doen vir 'n Bosbouwet-lisensie voordat bome versteur word.</p> <p>Provinsiaal beskermdede plante is bekend om naby die studiearea voor te kom en mag nie beskadig, versteur of verskuif word sonder 'n geldige Flora Permit van die provinsiale Departement van Omgewingsake en Natuurbewaring ingevolge die Noord-Kaapse Natuurbewaringswet, No. 9 van 2009, indien geaffekteer.</p> <p>Bome met voëlneeste mag nie versteur word sonder 'n geldige Fauna Permit van Natuurbewaring, onder die Noord-Kaapse Natuurbewaringswet, Nr. 9 van 2009 nie.</p> <p>Om 'n Bosbouwet-lisensie te kry, kan tot 30 dae duur. Lisensie aansoekvorms is beskikbaar op die Departementele webwerf of by slegs Bosbou Kantoor. Die Departement kan vra om ondersteunende dokumentasie wanneer 'n lisensie aansoek geassesseer word. Vir konstruksie-aktiwiteite van hierdie aard word die volgende ondersteunende dokumente word normaalweg versoek:</p> <ul style="list-style-type: none"> • Voltooide Lisensie Aansoekvorm • Akkurate skatting van die aantal bome wat per spesie afgekap moet word • Afskrif van ID • Afskrif van Omgewingsmagtiging • Flora Permit Verwysingsnommer • Afskrif van Fauna Permit (indien van toepassing). 	'n Biodiversiteitsstudie is in 2018 vir die MMT voltooi. Hierdie studie het aangedui dat daar geen beskermdede bome of plante binne die voorgestelde projekgebied is nie. Die mitigasiemaatreeëls wat in hierdie verslag uiteengesit word (Artikel 26), verbind MMT egter om die nodige lisensies te verkry (Boompermitte van DAFF en plantpermitte van DENC) indien enige beskermdede spesies aangetref word. Benewens hierdie, indien enige aktiewe voëlneeste geïdentifiseer word binne die voorgestelde projekarea wat versteur moet word, sal die nodige permitte verkry word vanaf die DENC.

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Ravete Tshifyiwa	Kommentaar ontvang deur kommentaarvorm wat op 4 April 2019 ingedien is	Daar is hoegenaamd geen besware teen die projek nie; ek stel net belang om meer te weet oor die visuele impak en lugbesoedeling wat danksy hierdie projek kan voorkom.	<p>Wat die visuele impak behels, is die visuele landskap in die MMT-gebied reeds weens die teenwoordigheid van goedgekeurde mynbou-infrastruktuur en –bedrywighede getransformeer. Die beoogde AKH-uitbreidingsgebied is sentraal tussen die huidige Tshipi Borwa-myn en die MMT mynboubedrywighede geleë, gevolglik sal dit na verwagting nie bestaande negatiewe visuele impakte beïnvloed nie. Die AKH-uitbreiding sal in huidige uitsigte van die mynboubedrywighede geabsorbeer word. Met sluiting sal die AKH-uitbreiding in lyn met die myn se rehabilitasie en sluitingsplan, wat voorsiening maak vir 'n uiteindelijke grondgebruik van weiding, gerehabiliteer word. Hierdie impak is gevolglik as ONBEDUIDEND gegradeer.</p> <p>Wat lugbesoedeling behels, sluit die vernaamste besoedelaars wat verband hou met die beoogde projek die volgende in: Stofdeeltjies kleiner as 10 mikron (PM10) wat ingeasem kan word (insluitend 'n mangaankomponent), asook groter totale gesuspendeerde deeltjies (TSP) wat verband hou met die uitsakking van stof. Die komponente wat ingeasem kan word, kan impakte op mense se gesondheid teen hoë konsentrasies oor verlengde tydperke veroorsaak, terwyl die groter stofdeeltjiekomponent steurende stofimpakte, soos vuil weivelde teen hoë uitsakkingsvolumes oor verlengde tydperke veroorsaak. Hoewel mangaan 'n noodsaaklike spoorelement is wat onontbeerlik is vir goeie gesondheid, kan blootstelling aan hoë vlakke mangaan neurotoksiese gesondheidsuitwerkings in vatbare individue veroorsaak, waarna in die algemeen as manganisme verwys word.</p> <p>Tydens alle projekfases sal stof gegeneer word deur bedrywighede wat verband hou met die uitbreiding van die AKH. Die voordeel van die AKH, vanuit 'n luggehalteperspektief, is dat die voetspoor klein is (sowat 4 ha), en dat dit deur die bestaande Tshipi Oostelike AKH aan die westekant en die bestaande Mamatwan AKH aan die oostekant beskut word. Die Tshipi Oostelike AKH behoort 'n windskerm teen die sterker westewinde te bied, en tot 'n mate ook teen die noordewinde. Die vulling van afvalklip in die oop ruimte, eerder as om</p>

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			<p>dit op die kruin van die AKH te stort, sal ook potensiële impakte verminder. Met uitbedryfstelling kan vragmotorbedrywighe, die aflaa van bogrond en gelykmaking van die blootgestelde syhellings tydens rehabilitasie beduidende stofopwekking tot gevolg hê. Dit in ag genome, word die toename in grondvlakkonsentrasies vir PM10 of PM2.5 en stofuitsakking weg van die terrein af, as van lae wesenlikheid in die versagte en onversagte scenario's gegradeer.</p>

Proof of distribution of the BAR.

**BASIC ASSESSMENT REPORT AND ENVIRONMENTAL MANAGEMENT PROGRAMME REPORT FOR
THE MERGING OF THE MAMATWAN SINTERFONTEIN WASTE ROCK DUMP AND TSHIPI EASTERN
WASTE ROCK DUMP**

BAR AVAILABLE FOR PUBLIC AND COMMENTING AUTHORITY REVIEW

DMR REFERENCE NUMBER: NC00148MR102

This is to certify that I

Santa Schoeman

in my capacity as a representative of

have received the following documents:

PLEASE COMPLETE AND TICK RELEVANT BOX

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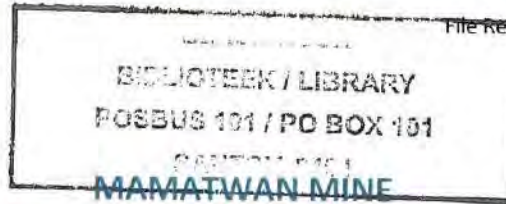
Date: *26/4/2019*

Signature/ Stamp: *S. Schoeman*

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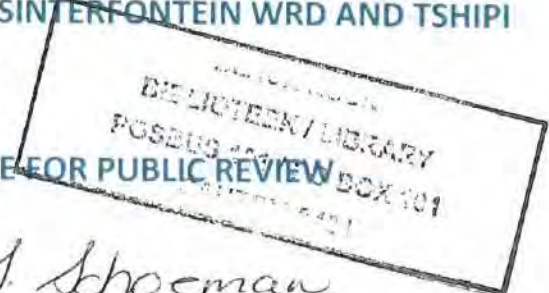
File Ref: 20190409 Mamatwan Cover Letter



25 April 2019

**BASIC ASSESSMENT REPORT AND ENVIRONMENTAL MANAGEMENT PROGRAMME
REPORT FOR THE MERGING OF THE MAMATWAN SINTERFONTEIN WRD AND TSHIPI
EASTERN WRD**

BASIC ASSESSMENT REPORT AVAILABLE FOR PUBLIC REVIEW



DMR REFERENCE NUMBER: NC00148MR102

J. Schoeman
26.4.2019
Black Rock Library

Dear Interested and/or Affected Party

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SLR Consulting (South Africa) (Proprietary) Limited

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1 Macleod Avenue, Fourways, 2193

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Reg. No: 2017/005114/01

Vat No: 468317133

Fourways Office: Physical Address: Unit 7 & 8, Fourways Manor Office Park, 1 Macleod Avenue, Fourways
Postal Address: P.O. Box 1136, Fourways, 2196 ☎ +27 21 467 0040 ☎ +27 21 467 0070

Cape Town Office: Physical Address: Unit 26, Waterfront Square, 33 Shry Lane, Cape Town
Postal Address: P.O. Box 10345, Waterfront Square, 7900 ☎ +27 21 461 0218 ☎ +27 21 461 0220

Somerset West Office: Unit 211, Building 3, Fourways Office Park, 46th Ave, Somerset West
☎ +27 21 451 0330

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MMT is proposing on amending their approved EMP to cater for the merging of the WRDs.

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If you have any queries please do not hesitate to contact the undersigned.

Kind regards



Natasha Smyth
EAP and Project Manager
For SLR Consulting (South Africa) (Pty) Ltd
Tel: 011 467 0945
Email: nsmyth@slrconsulting.com

**BASIC ASSESSMENT REPORT AND ENVIRONMENTAL MANAGEMENT PROGRAMME REPORT FOR
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Date: 24/04/17

Signature/ Stamp:



25 April 2019

MAMATWAN MINE
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Handwritten signature and date: 26/04/19

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If you have any queries please do not hesitate to contact the undersigned.

Kind regards

A handwritten signature in black ink, appearing to read 'Natasha Smyth'.

Natasha Smyth
EAP and Project Manager
For SLR Consulting (South Africa) (Pty) Ltd
Tel: 011 467 0945
Email: nsmyth@slrconsulting.com

**BASIC ASSESSMENT REPORT AND ENVIRONMENTAL MANAGEMENT PROGRAMME REPORT FOR
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Date:.....

Signature/ Stamp

JOHN TAOLU GAETSEWE
DISTRISKS MUNISIPALITEIT

2019 -04- 26

DISTRICT MUNICIPALITY

25 April 2019

MAMATWAN MINE
BASIC ASSESSMENT REPORT AND ENVIRONMENTAL MANAGEMENT PROGRAMME
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Signature/ Stamp:



 DEPARTMENT OF ENVIRONMENTAL AFFAIRS
 LIMPOPO PROVINCE
 MAMATWAN

25 April 2019

MAMATWAN MINE
BASIC ASSESSMENT REPORT AND ENVIRONMENTAL MANAGEMENT PROGRAMME
REPORT FOR THE MERGING OF THE MAMATWAN SINTERFONTEIN WRD AND TSHIPI
EASTERN WRD

BASIC ASSESSMENT REPORT AVAILABLE FOR PUBLIC REVIEW



DMR REFERENCE NUMBER: NC00148MR102

Dear Interested and/or Affected Party

South32 operates the opencast manganese Mamatwan Mine (MMT) (forms part of the legal entity Hotazel Manganese Mines (Pty) Ltd) located approximately 25km to the south of Hotazel in the John Taolo Gaetsewe District Municipality and Joe Morolong Local Municipality of the Northern Cape Province of South Africa. MMT holds the following environmental permits and authorisations.

- A Mining right (Reference number: NC 256 MR) issued and approved by the former Department of Minerals and Energy (DME) (currently the Department of Mineral Resources (DMR)) in May 2006.
- An Environmental Management Programme (EMP) (Reference number: NC 6/2/2/118) issued and approved by the former DME (currently the DMR) in November 2005.
- An Air Emissions Licence (AEL) (Licence number: NC/AEL/NDM/ZRH01/2014) issued by the Northern Cape Department of Environment and Nature Conservation (DENC) in March 2015.
- An amended Integrated Water Use Licence (IWUL) (License number: 10/D41K/KAGJ/1537) issued by the Department of Water and Sanitation (DWS) in January 2012.
- A Waste Permit (Permit number: B33/2/441/21/P157) for the development and operation of a decommissioned general waste disposal site issued by the former Department of Water Affairs and Forestry (currently DWS) in February 1995.
- An Environmental Authorisation (Reference number: NC/KGA/HOT3/07) for bulk fuel storage issued by former Department of Tourism, Environment and Conservation (currently DENC) in July 2007.

Tshipi é Ntle Manganese Mining (Pty) Ltd (Tshipi) operates the Tshipi Borwa Mine located on the farms Mamatwan 331 and Moab 700, located to the west of MMT. An 18m wide (on surface) boundary is located between the MMT and the Tshipi Borwa Mine. Tshipi and MMT have approval to mine the 18m wide boundary pillar. Additional capacity is required to store waste rock generated as part of mining the boundary pillar. To cater for the additional storage, it is proposed that the Mamatwan Sinterfontein and the Tshipi eastern Waste Rock Dumps (WRD's) are merged to fill the void between the two dumps. In this



SLR Consulting (South Africa) (Proprietary) Limited

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 Vat No. 463024149

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Cape Town Office: Physical Address: Unit 26, Rosebank Square, 90 Shry Lane, Eagle Square,
 Postal Address: PO Box 10145, Calverton Square, 7905 ☎ +27 21 466 4128 ☎ +27 21 461 2120

Somerset West Office: Unit 28, Building 5, Fourways Office Park, 4800a Wynne Somerset West
 ☎ +27 21 851 3348

regard, the Mamatwan Sinterfontein WRD would be extended in a north-westerly direction to merge with the Tshipi eastern WRD in order to fill the narrow void between these two WRDs.

MMT is proposing on amending their approved EMP to cater for the merging of the WRDs.

SLR Consulting (South Africa) (Pty) Ltd (SLR), an independent firm of environmental assessment practitioners (EAP), has been appointed by South32 to manage the environmental authorisation processes.

The Basic Assessment Report (BAR) has been distributed for a 30-day comment period from **25 April to 31 May 2019** in order to provide Interested and Affected Parties (I&APs) with an opportunity to comment on any aspect of the proposed project and the findings of the Basic Assessment Process. Copies of the full report are available at:

- The SLR website (<https://slrconsulting.com/za/slr-documents/>)
- The Joe Morolong Local Municipality
- The John Taolo Gaetsewe District Municipality
- The Hotazel Public Library
- The Kathu Public Library
- The Black Rock Library.

In addition to the above, summary documents (available in English and Afrikaans) have also been attached.

Electronic copies (compact disk) of the report are available from SLR, at the contact details provided below. In addition to this, summary documents of the BAR (available in English and Afrikaans) have also been attached.

For comments to be included in the updated BAR that is submitted to Department of Mineral Resources (DMR) for decision-making, comments should reach SLR by no later than **31 May 2019**. Please use the following reference number when submitting comments: DMR reference number: NC00148MR102.

If you have any queries please do not hesitate to contact the undersigned.

Kind regards



Natasha Smyth
EAP and Project Manager
For SLR Consulting (South Africa) (Pty) Ltd
Tel: 011 467 0945
Email: nsmyth@slrconsulting.com

**BASIC ASSESSMENT REPORT AND ENVIRONMENTAL MANAGEMENT PROGRAMME REPORT FOR
THE MERGING OF THE MAMATWAN SINTERFONTEIN WASTE ROCK DUMP AND TSHIPI EASTERN
WASTE ROCK DUMP**

BAR AVAILABLE FOR PUBLIC AND COMMENTING AUTHORITY REVIEW

DMR REFERENCE NUMBER: NC00148MR102

This is to certify that I

Kelebogye *Koofsa*

in my capacity as a representative of

have received the following documents:

PLEASE COMPLETE AND TICK RELEVANT BOX

1 Hardcopy of the Basic Assessment Report and Environmental Management Programme Report for the merging of the Mamatwan Sinterfontein WRD and the Tshipi Eastern WRD	✓
1 Electronic copy (CD) of the Basic Assessment Report and Environmental Management Programme Report for the merging of the Mamatwan Sinterfontein WRD and the Tshipi Eastern WRD	✓
20 copies of the summary (10 English, 10 Afrikaans) of the Basic Assessment Report and Environmental Programme Report for the merging of the Mamatwan Sinterfontein WRD and the Tshipi Eastern WRD	✓

Date: *26/04/2018*

Signature/ Stamp:



MAMATWAN MINE
BASIC ASSESSMENT REPORT AND ENVIRONMENTAL MANAGEMENT PROGRAMME
REPORT FOR THE MERGING OF THE MAMATWAN SINTERFONTEIN WRD AND TSHIPI
EASTERN WRD

BASIC ASSESSMENT REPORT AVAILABLE FOR PUBLIC REVIEW

DMR REFERENCE NUMBER: NC00148MR102

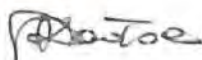
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regard, the Mamatwan Sinterfontein WRD would be extended in a north-westerly direction to merge with the Tshipi eastern WRD in order to fill the narrow void between these two WRDs.

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- The Black Rock Library.

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If you have any queries please do not hesitate to contact the undersigned.

Kind regards



Natasha Smyth
EAP and Project Manager
For SLR Consulting (South Africa) (Pty) Ltd
Tel: 011 467 0945
Email: nsmyth@slrconsulting.com



**WATER USE LICENCE APPLICATION FOR THE MERGING OF THE MAMATWAN SINTERFONTEIN
AND TSHIPI EASTERN WASTE ROCK DUMP**

**SUBMISSION OF IWWMP TO DWS FOR DECISION MAKING
DWS LICENCE NUMBER: 10/D41K/AGJ/1537**

This is to certify that I

Phaloi Msimang

in my capacity as a representative of

have received the following documents:

PLEASE COMPLETE AND TICK RELEVANT BOX

1 Hardcopy of the Water Use Licence Application for the merging of the Mamatwan Sinterfontein and Tshipi eastern waste rock dump	✓
1 Electronic copy (CD) of the Water Use Licence Application for the merging of the Mamatwan Sinterfontein and Tshipi eastern waste rock dump	✓

Date: *03/06/2019*

Signature/ Stamp:

Phaloi



Natasha Smyth

From: Natasha Smyth
Sent: 26 April 2019 03:05 PM
Subject: Mamatwan BAR - Available for public review
Attachments: 2019-04-24-Mamatwan summary-Eng.pdf; 2019-04-24-Mamatwan Afrikaans summary.pdf

Bcc: tsteyn@lantic.net; james@tshipi.co.za; nthabeleng@tshipi.co.za; ndarap@eskom.co.za; Gerrie.vanschalkwyk@eskom.co.za; Benito.williams@eskom.co.za; khanyen@eskom.co.za; ludekefj@eskom.co.za; vgenseal@eskom.co.za; dbruiner@eskom.co.za; Sam.fiff@transnet.net; cabangile.zulu@transnet.net; 4409NDENBERG@ABSAMAIL.CO.ZA; andriesmvd@gmail.com; anfour@absamail.co.za; krugersoret@yahoo.com; mmvanwyk10@gmail.com; camel@vodamail.co.za; Cupido.Love@UMK.co.za; daniel@solafuture.co.za; siphawe@kalagadi.co.za; Tshepo@kalagadi.co.za; henneyrc@telkom.co.za; info@sebiloresources.co.za; didi@sebiloresources.co.za; voorsitter@agrikur.co.za; info@tshiping.co.za; wessanc@yahoo.com; juriekr@gmail.com; louis@soetvlakte.co.za; hendrik.arangies@kmr.co.za; conri.moolman@asia-minerals.com; bonolol@brmo.co.za; Rethabile.Mboya@arm.co.za; AshleyG.Mcleod@arm.co.za; info@afribits.co.za; Wezi.banda@ergafrica.com; Gert.theart@vodamail.co.za; ebenanthonissen@hotmail.com; Carel.reyneke@absamail.co.za; josephmatshidiso@yahoo.com; Tshivhangwaho.Mudau@umk.co.za; msimangop@dws.gov.za; JacolineMa@daff.gov.za; tmtho@webmail.co.za; Tmthombeni@ncpg.gov.za; mokonopin@gmail.com; ebena@absamail.co.za; juliakatong2@gmail.com; Jmmasela66@gmail.com; mm@joemorolong.gov.za; mmorwagae@joemorolong.gov.za; leutlwetsed@joemorolong.gov.za; sseleka@webmail.co.za; sseleka@joemorolong.gov.za; mmsec@taologaetsewe.gov.za; matlhareTH@taologaetsewe.gov.za; fortunec@agri.ncpg.gov.za; ryan.oliver@drdlr.gov.za; nhiggitt@sahra.org.za

MAMATWAN MINE

BASIC ASSESSMENT REPORT AND ENVIRONMENTAL MANAGEMENT PROGRAMME REPORT FOR THE MERGING OF THE MAMATWAN SINTERFONTEIN WASTE ROCK DUMP AND THE TSHIPI EASTERN WASTE ROCK DUMP

BASIC ASSESSMENT REPORT AVAILABLE FOR PUBLIC AND COMMENTING AUTHORITY REVIEW DMR REFERENCE NUMBER: NC00148MR102

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MMT is proposing on amending their approved EMP to cater for the merging of the WRDs. SLR Consulting (South Africa) (Pty) Ltd (SLR), an independent firm of environmental consultants, has been appointed by Hotazel Manganese Mines (Pty) Ltd to manage the environmental assessment process.

In this regard, the Basic Assessment Report (BAR) for the proposed project is now available for public and commenting authority review. Full copies of the BAR are available at the following venues:

- The Joe Morolong Local Municipality;
- The John Taolo Gaetsewe District Municipality;
- The Hotazel Public Library;
- The Kathu Public Library; and
- The Black Rock Library.

The BAR is also available from the SLR website (at <https://slrconsulting.com/za/slr-documents/>). Alternatively, electronic copies of the BAR will be made available to I&APs on request. The BAR will be distributed for a 30 day comment period until **31 May 2019** in order to provide I&APs with an opportunity to comment on any aspect of the proposed project and the findings of the BA process. All comments need to be submitted in writing to SLR via fax (011 467 0978) and/or email (nsmyth@slrconsulting.com). All received comments will be included in the final BAR which will be made available to the Department of Mineral Resources for decision making purposes.

A summary of the BAR has also been prepared and is attached (English and Afrikaans) for your perusal.

Kind regards

Natasha



Natasha Smyth

Environmental Assessment Practitioner

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☎ +27 11 467 0945

🏠 2029

✉ nsmyth@slrconsulting.com

SLR Consulting (Africa) (Pty) Ltd
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Notice: Mamatwan Mine: Basic Assessment Report available for public and commenting authority review until 30 May 2019. Full copies available at Joe Morolong Local Municipality, John Taola District Municipality, Hotazel, Black Rock and Kathu public libraries or on SLR website (<https://slrconsulting.com/za/slr->

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**Notifications of
second public
meeting (30 May
2019).**

Natasha Smyth

From: Natasha Smyth
Sent: 13 May 2019 03:45 PM
Subject: South32: Mamatwan Mine - Merging the Mamatwan Sinterfontein and Tshipi Waste Rock Dumps
Attachments: 2019-04-24-Mamatwan summary-Eng.pdf; 2019-04-24-Mamatwan Afrikaans summary.pdf

Bcc: tsteyn@lantic.net; james@tshipi.co.za; nthabeleng@tshipi.co.za; ndarap@eskom.co.za; Gerrie.vanschalkwyk@eskom.co.za; Benito.williams@eskom.co.za; khanyen@eskom.co.za; ludekefj@eskom.co.za; vgenseal@eskom.co.za; dbruiner@eskom.co.za; Sam.fiff@transnet.net; cabangile.zulu@transnet.net; 4409NDENBERG@ABSAMAIL.CO.ZA; andriesmvdb@gmail.com; anfour@absamail.co.za; krugersoret@yahoo.com; mmvanwyk10@gmail.com; camel@vodamail.co.za; Cupido.Love@UMK.co.za; daniel@solafuture.co.za; siphawe@kalagadi.co.za; Tshepo@kalagadi.co.za; henneyrc@telkom.co.za; info@sebiloresources.co.za; didi@sebiloresources.co.za; voorsitter@agrikur.co.za; info@tshiping.co.za; wessanc@yahoo.com; juriekr@gmail.com; louis@soetvlakte.co.za; hendrik.arangies@kmr.co.za; conri.moolman@asia-minerals.com; bonolol@brmo.co.za; Rethabile.Mboya@arm.co.za; AshleyG.Mcleod@arm.co.za; info@afribits.co.za; Wezi.banda@ergafrica.com; Gert.theart@vodamail.co.za; ebenanthonissen@hotmail.com; Carel.reyneke@absamail.co.za; josephmatshidiso@yahoo.com; Tshivhangwaho.Mudau@umk.co.za; msimangop@dws.gov.za; JacolineMa@daff.gov.za; tmtho@webmail.co.za; Tmthombeni@ncpg.gov.za; mokonopin@gmail.com; ebena@absamail.co.za; juliakatong2@gmail.com; Jmmasela66@gmail.com; mm@joemorolong.gov.za; mmorwagae@joemorolong.gov.za; leutlwetsed@joemorolong.gov.za; sseleka@webmail.co.za; sseleka@joemorolong.gov.za; mmsec@taologaetsewe.gov.za; matlhareTH@taologaetsewe.gov.za; fortunec@agri.ncpg.gov.za; ryan.oliver@drdlr.gov.za; nhiggitt@sahra.org.za

SOUTH32

THE MERGING OF THE MAMATWAN SINTERFONTEIN WASTE ROCK DUMP AND THE TSHIPI EASTERN WASTE ROCK DUMP

NOTIFICATION OF PUBLIC MEETING

Dear Interested and/or Affected Party

South32 operates the open pit manganese Mamatwan Mine (MMT) (forms part of the legal entity Hotazel Manganese Mines (Pty) Ltd) located on portion 5 and 6 of the farm Goold 329, the farm Sinterfontein 748, portion of portion 2 (Currently Portion 17) and portion of portion 1 (Currently Portion 16) of the farm Mamatwan 331, portion 3 of the farm Moab 700 and portion 4 of the farm Adams 328.

Tshipi é Ntle Manganese Mining (Pty) Ltd (Tshipi) operates the Tshipi Borwa Mine located on the farms Mamatwan 331 and Moab 700, located to the west of MMT. An 18m wide (on surface) boundary is located between the MMT and the Tshipi Borwa Mine. Tshipi and MMT have approval to mine the 18m wide boundary pillar. Additional capacity is required to store waste rock generated as part of mining the boundary pillar. To cater for the additional storage, it is proposed that the Mamatwan Sinterfontein and the Tshipi eastern Waste Rock Dump (WRD's) are merged to fill the void between the two dumps. In this regard, the Mamatwan Sinterfontein WRD would be extended in a north-westerly direction to merge with the Tshipi eastern WRD in order to fill the narrow void between these two WRDs.

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The Basic Assessment Report has been distributed and is available for public review for 30 days until 31 May 2019. Further detail is provided in the attached summary document.

As part of the review of the BAR, a public meeting will be held for those wishing to attend. Meeting particulars are included in the table below.

Date:	30 May 2019
Time:	10h00 to 12h00
Venue:	Hotazel Recreational Club

For any queries please do not hesitate to contact me.

Kind regards

Natasha



Natasha Smyth

Environmental Assessment Practitioner

☎ +27 83 226 8570

☎ +27 11 467 0945

📄 2029

✉ nsmyth@slrconsulting.com

SLR Consulting (Africa) (Pty) Ltd
Unit 7
Fourways Manor Office Park
1 MacBeth Avenue
Fourways, Johannesburg, Gauteng, 2191



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**Correspondence
received from
commenting
authorities
following the
review of the
BAR.**



water & sanitation

Department:
Water and Sanitation
REPUBLIC OF SOUTH AFRICA

Northern Cape Provincial Operations, Private Bag X6101, Kimberley 8300; 28 Central Road, Beaconsfield, Kimberley, 8301

	(053) 830 8825		P. Msimango
	msimangop@dws.gov.za		(053) 836 7649
			16/2/7/D41K/A/3/100148

SLR Consulting (South Africa) (Pty) Ltd (on behalf of South 32 Mine)
P. O. Box 1596
Cramerview
2060

nsmyth@slrconsulting.com

BY REGISTERED MAIL/EMAIL

Attention: Natasha Smyth

RE: BASIC ASSESSMENT REPORT AND ENVIRONMENTAL MANAGEMENT PROGRAMME REPORT FOR THE MERGING OF THE MAMATWAN SINTERFONTEIN WRD AND TSHIPI EASTERN WRD SUBMITTED BY SOUTH 32 (PTY) LTD FOR MINING OPERATIONS ON FARM SINTERFONTEIN 748, SITUATED NEAR HOTAZEL, IN THE LOWER VAAL BUSINESS UNIT OF THE VAAL PROTO-CATCHMENT MANAGEMENT AGENCY, NORTHERN CAPE PROVINCE

1. BACKGROUND

The Department of Water and Sanitation (from herein referred to as the Department or DWS) received a notification letter requesting comment for the proposed merging of the waste rock dumps from Mamatwan Mine and Tshipi Mine by South 32 Mine (Pty) Ltd, which is to take place on farm Sinterfontein 748, near Hotazel in the Northern Cape Province. The document was then reviewed with reference to the National Water Act (Act No. 36 of 1998) and the following are the comments;

The proposed activities will include:

1. Increase the capacity of the current waste rock dump;
2. Clearing of vegetation, stripping of topsoil, construction of new stormwater infrastructure, etc.



NATIONAL DEVELOPMENT PLAN
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RE: BASIC ASSESSMENT REPORT AND ENVIRONMENTAL MANAGEMENT PROGRAMME REPORT FOR THE MERGING OF THE MAMATWAN SINTERFONTEIN WRD AND TSHIPI EASTERN WRD SUBMITTED BY SOUTH 32 (PTY) LTD FOR MINING OPERATIONS ON FARM SINTERFONTEIN 748, SITUATED NEAR HOTAZEL, IN THE LOWER VAAL BUSINESS UNIT OF THE VAAL PROTO-CATCHMENT MANAGEMENT AGENCY, NORTHERN CAPE PROVINCE

The area falls within the D41K quaternary catchment in the Lower Vaal Business Unit of the Vaal River Proto Catchment Management Agency. No application for water use licence has been submitted as part of this project. There has however been a pre-application engagement with the Department.

2. Distance from the water course

Please note that our Department rates all perennial and non-perennial rivers together with all dry river beds and natural drainage and associated riparian areas extremely sensitive to development. An option of developing furthest away from the all water course would be the preferred option.

Please note that no development or prospecting/mining should be done within 100 m or 1:100 year flood line of any water course and 500m of wetlands without authorisation from our Department. The water courses should be delineated in order to provide appropriate buffer to maintain such water course. The delineation should be done according to the appropriate Department of Water and Sanitation's delineation document.

The construction camp shall not be located within the 1:100 year flood line or within 100 meters whatever is the greatest from any watercourse. Operation and storage of equipment within the riparian zone must be limited as far as possible.

Vehicles and other machinery must be serviced well above the 1:100 year flood line or within a horizontal distance of 100 meters from any watercourse or estuary. Oils and other potential pollutants must be disposed off at an appropriate licensed site, with the necessary agreement from the owner of such a site.

3. Storm Water management

Any storm water must be diverted from the construction works and roads and must be managed in such a manner as to disperse runoff and to prevent the concentration of storm water flow. Where necessary, works must be constructed to attenuate the velocity of the storm water discharge and to protect the banks of the watercourse. Storm water control works must be constructed, operated and maintained in a sustainable manner throughout the project.

Increased runoff due to vegetation clearance and/or soil compaction must be managed, and steps must be taken to ensure that storm water does not lead to bank instability and excessive levels of silt entering the watercourse. Storm water leaving the construction site must in no way be contaminated by any substance, whether such substance is a solid, liquid, vapour or gas or a combination thereof which is produced, used, stored, dumped or spilled on the premises.

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4. Invasive alien vegetation

Vegetation must be monitored and managed on an on-going basis during construction and operation. Alien vegetation must not be allowed to further colonise the area, and all new alien vegetation recruitment must be eradicated or controlled, using standard methods approved by the Department.

5. Design and layout of prospecting/mining

A detailed layout plan needs to be submitted to our Department showing all the facilities in the proposed development, distance from the any watercourses and bathroom facilities.

Details of the final design must also be supplied as soon as a decision has been made, as the details of this factor may influence the environmental impact both during the construction and operational phases of the project.

6. Construction

Material with pollution generating potential must be limited in any construction activities. Any hazardous substances must be handled according to the relevant legislation relating to transport, storage and use of the substance.

Any spillage of any hazardous materials including diesel that may occur during construction and operation must be reported immediately to our Department.

7. Waste Management

Rubbish bins and Enviro loose/mobile toilets must be there and enough for the people on site during construction. A letter of consent from a registered waste facility to allow contractor to empty the toilet facility at their sewer system should be submitted to our department.

All sewage, grey and wash water, as well as any waste generated during the construction phase of the facilities will be collected, contained and disposed of at the permitted and / or licensed facilities of the Local Authority and this must please be confirmed in writing by the local authority.

8. Rehabilitation

Soils that have become compacted through the activities of the development must be loosened to an appropriate depth to allow seed germination. The necessary erosion prevention mechanisms must be employed to ensure the sustainability of all structures and activities and to prevent in-stream sedimentation. Rehabilitation remains the sole responsibility of the applicant and the Department.

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9. Water use entitlement

The Department notes that the applicant has not submitted a request for a water use authorisation from our Department. Please be informed that engaging in water use activities is unlawful without necessary authorisation from our Department. Please note that an application can be lodged electronically via the Electronic Water Use Licence Application and Authorisation (EWULAA) system (www.dws.gov.za/ewulaas).

10. Issues to take into consideration

The applicant is to submit an Environmental Management Programme (EMP)/Environmental Impact Assessment (EIA) and it should take the following issues into consideration:

- a) Should the project continue; a site visit and pre consultation meeting must be conducted by a DWS official with the applicant, which will be followed by an application for Water Use Authorisation (proof of consultation and submission of an application). This must be submitted to DWS in terms of the National Water Act, 1998 (Act 36 of 1998) before any prospecting/mining activities take place. The following should be included in the application:
 - i. Fully completed application forms. The water uses that will possibly be triggered are section 21 (a) and (g) water uses in terms of the National Water Act (Act 36 of 1998). These forms for the various water uses are available on the Department of Water and Sanitation's website (<https://www.dws.gov.za/Projects/WARMS/Licensing/licensing1.aspx>) or upon request;
 - ii. Registration fee (R115) and proof of payment;
 - iii. Certified copy of the representative's id or company registration certificate;
 - iv. Copy of the property title deed;
 - v. Copy of the property zoning document;
 - vi. Letter of consent from land owner if the applicant is not the land owner;
 - vii. A copy of 1:50 000 topographic map / 1:10 000 indicating map name number of farm boundaries including subdivision;
 - viii. Approved EMP, and Integrated Water and Waste Management Plan with Overall Water Balance;
 - ix. Environmental Impact Assessment Report and Environmental Authorisation/RoD From Environmental Affairs;

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- x. Public Participation Correspondence (notice proof and minutes from meeting);
 - xi. Section 27 (1) of NWA of 1998 No. 36 and proof of BBBEE status;
 - xii. Service level agreement with waste collector (sewage, domestic and oil) and water services provider during construction and for the remainder of the prospecting/mining development; and
 - xiii. Clearance Letter from Land Claim
- b) The EMP must clearly show all water courses as defined in the National Water Act, 1998 (Act 36 of 1998) as well as the delineated 1:100 year flood lines. No activity may occur within the 1:100 year flood line of a river/drainage lines without authorisation. No activity may occur within the 500 metres radius of a pan/wetland (perennial/non perennial) without authorisation.
- c) The EMP must clearly show the methods for collecting, storing, transporting and finally disposing of all waste products produced as well as the responsible and accountable persons. This includes written consent from the relevant accredited waste disposal site/ sewage disposal/ oil disposal in handling the waste. All applicable sections of the National Environmental Management: Waste Act 59 of 2008 should be strictly adhered to.
- d) The EMP must clearly identify all risks that are associated with the project that can affect the water resources in and around the project area and state all implementable measures to prevent and respond to accidents and abnormal events that may occur.
- e) The EMP must clearly identify all risks that are associated with the project that can affect the water resources in and around the project area and state all corresponding measures to prevent and respond to accidents and abnormal events that may occur.
- f) The EMP must clearly show through a responsibility matrix and organogram the responsible persons for implementing the mitigation measures and reporting lines, in the event of an accident.
- g) The EMP must show in written form that the developer has made a legally binding commitment to implement the proposed mitigation measures and that these measures are not only suggestions and recommendations.
- h) The EMP must clearly show the process followed if the developer does not comply with the legal requirements of the EMP and National Water Act, 1998 (Act No 36 of 1998).

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The regulations on the use of water for prospecting/mining and related activities aimed at the protection of the Water Resources as published in the Government Notice No.704 on 4 June (Government Gazette No. 20119) must be complied with. Every person in control of a mine or activity must take reasonable measures to comply with the following requirements:

- a) prevent water containing waste or any substance which causes or is likely to cause pollution of a water resource from entering any water resource, either by natural flow or by seepage, and must retain or collect such substance or water containing waste for use, re-use, evaporation or for purification and disposal in terms of the Act;
- b) design, modify, locate, construct and maintain all water systems, including residue deposits, in any area so as to prevent the pollution of any water resource through the operation or use thereof and to restrict the possibility of damage to the riparian or in-stream habitat through erosion or sedimentation, or the disturbance of vegetation, or the alteration of flow characteristics;
- c) cause effective measures to be taken to minimise the flow of any surface water or floodwater into mine workings, opencast workings, other workings or subterranean caverns, through cracked or fissured formations, subsided ground, sinkholes, outcrop excavations, audits, entrances or any other openings;
- d) design, modify, construct, maintain and use any dam or any residue deposit or stockpile used for the disposal or storage of mineral tailings, slimes, ash or other hydraulic transported substances, so that the water or waste therein, or falling therein, will not result in the failure thereof or impair the stability thereof;
- e) prevent the erosion or leaching of materials from any residue deposit or stockpile from any area and contain material or substances so eroded or leached in such area by providing suitable barrier dams, evaporation dams or any other effective measures to prevent this material or substance from entering and polluting any water resources;
- f) ensure that water used in any process at a mine or activity is recycled as far as practicable, and any facility, sump, pumping installation, catchments dam or other impoundment used for recycling water, is of adequate design and capacity to prevent the spillage, seepage or release of water containing waste at any time;
- g) at all times keep any water system free from any matter or obstruction which may affect the efficiency thereof; and
- h) cause all domestic waste, including wash-water, which cannot be disposed of in a municipal sewage system, to be disposed of in terms of an authorisation under the Act.

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11. Conclusion

The Department therefore has no objections to this activity provided proof of adherence to the above mentioned recommendations has been obtained.

This reply does not grant any exemption from the requirements of any applicable Act, Ordinance, Regulation or By-law.

Should you have any further queries, please contact the relevant official at the number above.

Yours faithfully,

M. Mahunonyane

pp

MR. M. MAHUNONYANE
DIRECTOR: INSTITUTIONAL ESTABLISHMENT

DATE: 28/05/2019

THE MERGING OF THE MAMATWAN SINTERFONTEIN WASTE ROCK DUMP AND THE TSHIPI EASTERN WASTE ROCK DUMP

Our Ref:



an agency of the
Department of Arts and Culture

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South African Heritage Resources Agency | 111 Harrington Street | Cape Town
P.O. Box 4637 | Cape Town | 8001
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Enquiries: Natasha Higgitt
Tel: 021 462 4502
Email: nhiggitt@sahra.org.za
CaseID: 13642

Date: Friday May 31, 2019
Page No: 1

Interim Comment

In terms of Section 38(3), 38(8) of the National Heritage Resources Act (Act 25 of 1999)

Attention: South 32 - Hotazel Manganese Mine (Pty) Ltd: Mamatwan Mine

6 Hollard Street
Johannesburg
2107

An 18m wide (on surface) boundary is located between the MMT and the Tshipi Borwa Mine. Tshipi and MMT have approval to mine the 18m wide boundary pillar. Additional capacity is required to store waste rock generated as part of mining the boundary pillar. To cater for the additional storage, it is proposed that the Mamatwan Sinterfontein and the Tshipi eastern waste rock dumps are merged to fill the void between the two dumps. MMT is proposing on amending their approved EMP to cater for the merging of the waste rock dumps.

SLR Consulting (South Africa) (Pty) Ltd has been appointed by Mamatwan Mine to conduct an Environmental Authorisation (EA) Application for the merging of the Mamatwan Sinterfontein Waste Rock Dump (WRD) and the Tshipi Eastern WRD, near Hotazel, Northern Cape Province.

A Basic Assessment Report (BAR) has been submitted in terms of the National Environmental Management Act, No 107 of 1998 (NEMA), NEMA Environmental Impact Assessment (EIA) Regulations for activities that trigger the Mineral and Petroleum Resources Development Act, No 28 of 2002 (MPRDA)(As amended). The proposed activities include filling the void between two existing WRDs covering 4 ha.

PGS Heritage has been appointed to provide the heritage specialist component as part of the EA in terms of section 24(4)b(iii) of the NEMA and section 38(8) of the National Heritage Resources Act, Act 25 of 1999 (NHRA).

Smeyatsky, I. 2019. Request for Exemption from a Heritage Impact Study: Mamatwan Mine Waste Rock Dump Extension, Hotazel, Joe Morolong Local Municipality, Northern Cape Province.

The Letter of Recommendation for Exemption notes the disturbed nature of the proposed infill area and cites a field survey undertaken where no heritage resources were identified. Additionally, the letter cites a previous Palaeontological Study that rated the impact significance on palaeontological resources as low.

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Recommendations provided in the letter include the following:

- No further heritage impact of the study area is required;
- In the unlikely event of any unmarked human burials, burial pits, potsherds or stone tools being uncovered during earthworks for the proposed development, these must be reported immediately to the South African Heritage Resources Agency–Burials and Graves Unit (Ms Thinghangwi Thivhase -012 320 8490 / 4968).

Interim Comment

The assessment of palaeontological resources referred to in the motivational letter was not accepted as part of the application the report was submitted to i.e. SAHRIS Case ID 12573 (<https://sahris.sahra.org.za/cases/tshipi-borwa-project>).

SAHRA requests that the outstanding assessment of palaeontological resources is completed before further comments can be provided.

Should you have any further queries, please contact the designated official using the case number quoted above in the case header.

Yours faithfully

Natasha Higgitt
Heritage Officer
South African Heritage Resources Agency

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Phillip Hine
Acting Manager: Archaeology, Palaeontology and Meteorites Unit
South African Heritage Resources Agency

ADMIN:

Direct URL to case: <http://www.sahra.org.za/node/522278>
(DMR - NC, Ref:)

Terms & Conditions:

1. This approval does not exonerate the applicant from obtaining local authority approval or any other necessary approval for proposed work.
2. If any heritage resources, including graves or human remains, are encountered they must be reported to SAHRA immediately.
3. SAHRA reserves the right to request additional information as required.