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# SCOPING REPORT FOR LISTED ACTIVITIES ASSOCIATED WITH MINING RIGHT AND/ORBULK SAMPLING ACTIVITIES INCLUDING TRENCHING IN CASES OF CHROME ORE PROSPECTING.

SUBMITTED FOR ENVIRONMENTAL AUTHORIZATIONS 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).

NAME OF APPLICANT: MODISON MINING(PTY)LTD

FILE REFEFERENCE NUMBER SAMRANWD: NW30/5/1/1/3/2/1/13313EM/PR

#### **IMPORTANT NOTICE**

In terms of the Mineral and Petroleum Resources Development Act (Act 28 of 2002 as amended), the Minister must grant a prospecting or mining right if among others the mining "will not result in unacceptable pollution, ecological degradation or damage to the environment".

Unless an Environmental Authorisation can be granted following the evaluation of an Environmental Impact Assessment (EIA) and an Environmental Management Programme report (EMPr) in terms of the National Environmental Management Act (Act 107 of 1998) (NEMA), it cannot be concluded that the said activities will not result in unacceptable pollution, ecological degradation or damage to the environment.

In terms of section 16(3) (b) of the EIA Regulations, 2014, any report submitted as part of an application must be prepared in a format that may be determined by the Competent Authority and in terms of section 17 (1) (c) the Competent Authority must check whether the application has taken into account any minimum requirements applicable or instructions or guidance provided by the Competent Authority to the submission of applications.

It is therefore an instruction that the prescribed reports required in respect of applications for an environmental authorisation for listed activities triggered by an application for a right or permit are submitted in the exact format of, and provide all the information required in terms of, this template. Furthermore please be advised that failure to submit the information required in the format provided in this template will be regarded as a failure to meet the requirements of the Regulation and will lead to the Environmental Authorisation being refused.

It is furthermore an instruction that the Environmental Assessment Practitioner must process and interpret his/her research and analysis and use the findings thereof to compile the information required herein. (Unprocessed supporting information may be attached as appendices). The EAP must ensure that the information required is placed correctly in the relevant sections of the Report, in the order, and under the provided headings as set out below, and ensure that the report is not cluttered with un-interpreted information and that it unambiguously represents the interpretation of the applicant.

#### **OBJECTIVE OF THE SCOPING PROCESS**

The objective of the scoping process is to, through a consultative process—

- a) Identify the relevant policies and legislation relevant to the activity;
- b) Motivate the need and desirability of the proposed activity, including the need and desirability of the activity in the context of the preferred location;
- c) Identify and confirm the preferred activity and technology alternative through an impact and risk assessment and ranking process;
- d) identify and confirm the preferred site, through a detailed site selection process, which includes an impact and risk assessment process inclusive of cumulative impacts and a ranking process of all the identified alternatives focusing on the geographical, physical, biological, social, economic, and cultural aspects of the environment;
- e) Identify the key issues to be addressed in the assessment phase;
- f) agree on the level of assessment to be undertaken, including the methodology to be applied, the expertise required as well as the extent of further consultation to be undertaken to determine the impacts and risks the activity will impose on the preferred site through the life of the activity, including the nature, significance, consequence, extent, duration and probability of the impacts to inform the location of the development footprint within the preferred site; and
- g) Identify suitable measures to avoid, manage, or mitigate identified impacts and to determine the extent of the residual risks that need to be managed and monitored.

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Appendix 3: Site Photographs Appendix 4: Plans in A3 Format

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# LIST OF ACRONYMS:

ACRONYM:	DESCRIPTION:
AEL	Air Emissions License in terms of NEM:AQA
ASTM	American Standard for Testing and Materials (followed by protocol number)
ВА	Basic Assessment (process or report)
BID	Background Information Documents
CARA	Conservation of Agricultural Resources Act (Act 43 of 1983) as amended
CBD	Central Business District
COP	Codes of Practice
DMR	Department of Mineral Resources
DWS	Department of Water Affairs and Sanitation
EA	Environmental Authorisation in terms of NEMA
EAP	Environmental Assessment Practitioner
ECA	Environmental Conservation Act (Act 73 of 1989) as amended
EIA	Environmental Impact Assessment (process or report)
EIA Regs.	Environmental Impact Assessment Regulation published under NEMA
EIS	Ecological Importance and Sensitivity
EMF	Environmental Management Framework
EMPr	Environmental Management Programme Report
GDP	Gross Domestic Product
GIS	Geographical Information Systems
GN	General Notice (issued under an Act, providing notice or information)
GNR	General Notice Regulation (issued under an Act, providing instruction)
I&AP	Interested and Affected Parties
IAIA SA	International Association of Impact Assessment South Africa
IDP	Integrated Development Plan
IWUL	Integrated Water Use Licence
IWULA	Integrated Water Use Licence Application
IWWMP	Integrated Water and Waste Management Plan
LED	Local Economic Development
MHSA	Mine Health and Safety Act (Act 29 of 1996) as amended
MPRDA	Mineral and Petroleum Resources Development Act (Act 28 of 2002) as amended

ACRONYM:	DESCRIPTION:
MR	Mining Right in terms of the MPRDA
MRA	Mining Right Application in terms of the MPRDA
NAEIS	National Atmospheric Emissions Inventory System
NEA	National Energy Act, Act 34 of 2008
NEM:AQA	National Environmental Management: Air Quality Act (act 59 of 2008) as amended
NEM:BA	National Environmental Management: Biodiversity Act (Act 10 of 2004) as amended
NEM:PAA	National Environmental Management: Protected Areas Act (Act 57 of 2003) as amended
NEM:WA	National Environmental Management: Waste Act (Act 39 of 2004) as amended
NEMA	National Environmental Management Act (Act 107 of 1998) as amended
NFEPA	National Freshwater Ecology Priority Areas
NHRA	National Heritage Resources Act (Act No. 25 of 1999) as amended
NPAES	National Protected Area Expansion Strategy
NWA	National Water Act (Act 35 of 1998) as amended
PES	Present Ecological State (usually followed by category A-F)
PM10/5/2.5	Particulate Matter up to 10/5/2.5 micrometres
PPP	Public Participation Process
RoD	Record of Decision (for specific application)
RoM	Run of mine (mineral extracted but not yet processed)
RWQO	Resource Water Quality Objectives
S&EIR	Scoping and Environmental Impact Reporting process
S&LP	Social and Labour Plan
SACNASP	South African Council for Natural Scientific Professions
SAHRA	South African Heritage Resource Agency
SAMRAD	South African Mineral Resources Administration System
SANBI	South African National Biodiversity Institute
SANS	South African National Standard (followed by standard number)
SASS5	South African Scoring System version 5 (in terms of aquatic invertebrate assessments)
SAWIS	South African Waste Information System
SDP	Spatial Development Plan

ACRONYM:	DESCRIPTION:
SEMA	Specific Environmental Management Acts
SOP	Standard Operating Procedure
SPLUMA	Spatial Planning and Land Use Management Act (Act No.16 of 2013)
Stats SA	Statistics South Africa
WMA	Water Management Area
WML	Waste Management Licence in terms of NEM:WA

#### 1 INTRODUCTION

Modison Mining (Pty) Ltd intends to prospect for chrome and general aggregate over the farm Zilkaatsnek 439 JQ and as such has submitted an application for a Prospecting Right (PR) in terms of the Minerals and Petroleum Resources Development Act, Act No. 28 of 2002 (MPRDA).

An application for Environmental Authorisation (EA) was submitted simultaneously, as per the requirements of the National Environmental Management Act, Act No. 107 of 1998 (NEMA) and the NEM: Waste Act, Act No. 59 of 2008 (NEM:WA); read with the requirements of the MPRDA. Please refer to Appendix 1 for a copy of the relevant Acceptance Letters.

South African Law requires that the environmental and social impacts associated with prospecting and mining activities be assessed to identify any potential negative and / or positive consequences as result thereof. Following which measures must be proposed to avoid or minimise these impacts.

As the application relates to prospecting with bulk sampling activities, a full Scoping and Environmental Impact Report (S&EIR) is required as well as an Environmental Management Plan (EMP) report.

This report constitutes the Scoping Report and is the first phase in the environmental assessment process. The purpose of the Scoping Report is to identify key environmental issues for further investigation during the Environmental Impact Assessment (EIA) phase of the project; and to outline the plan of study / terms of reference for the preparation of the EIA and EMPr.

#### 2 CONTACT PERSON AND CORRESPONDENCE ADDRESS

#### 2.1 Details of the Applicant

NAME OF APPLICANT:	MODISON MINING (Pty) Ltd
TEL NO.:	+27 83742 5816/ +27 76 848 7581
E-MAIL:	admin@modison.co.za
FAX NO.:	N/A
POSTAL ADDRESS:	8 Carla Street, Wilkoppies Ext 84, Klerksdorp, North West
PHYSICAL ADDRESS:	8 Carla Street, Wilkoppies Ext 84, Klerksdorp, North West
FILE REFERENCE NUMBER SAMRAD:	NW30/5/1/1/3/2/1/13313EM/PR

# 2.2 Details of the EAP who prepared the report

# Cabanga **Table 1: EAP details**

EAP:	Dr Patrick Sithole			
Professional affiliation/registration:	EAPASA (2016/27); SACNASP (400264)			
Contact person (if different from EAP):	Dr Patrick Sithole/ Moses Mushi			
Company:	QEMS			
Physical address:	7 Munnik Avenue, Polokwane, 0699			
Postal address:	P.O Box 1091, Polokwane			
Postal code:	0700	Cell:	076 848 7581	
Telephone:		Fax:	086 5444 911	
E-mail:	langavimining@gmail.co m/iammoses.muxe@gma il.com/SITHOLET@QEMS. CO.ZA			

# i. Expertise of the EAP

The summery of the EAP's past experience and projects undertaken is attached as appendix 2.

# 3 PROJECT DESCRIPTION

# 3.1 Description of the property

**Table 1: Affected Properties** 

Farm Name:	Zilkaatsnek 439 JQ
Application area (Ha)	18 ha
Magisterial district:	Bojanala Platinum District, Madibeng Local Municipality
Distance and direction from nearest town	The project area is approximately 15 km from Brits town and 20 Km from Hartebeespoortdam
21 digit Surveyor General Code for each farm portion	T0JQ000000043900000

# 3.2 Location of site

The project area is situated in the Madibeng Local Municipality, Bojanala Platinum District, North West Province, and is situated approximately 15km south-East of the town Brits. See attached Locality and reg 2.2 sketch plans

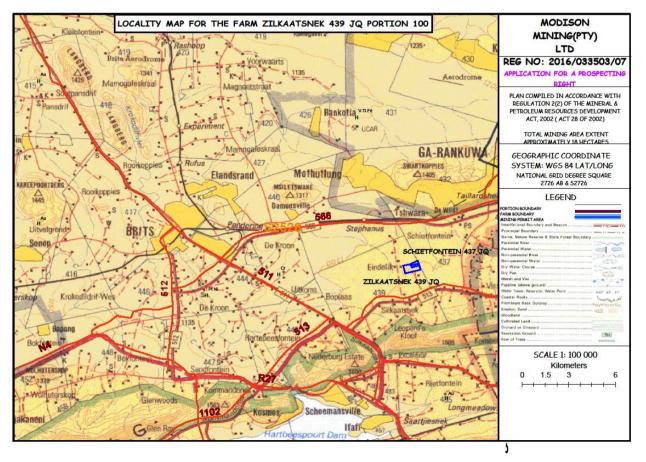


Figure 1:Plan 1: Locality map for Zilkaatsnek 439 JQ farm portions 99&174

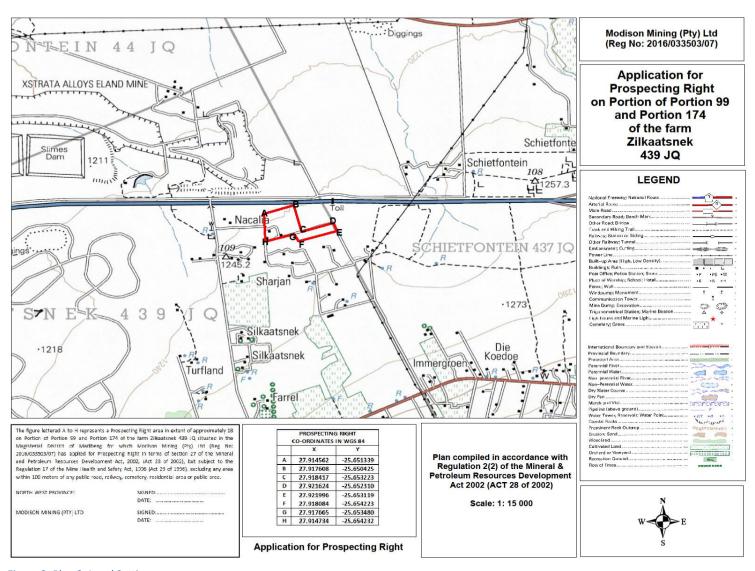


Figure 2: Plan 2, Local Setting

Zilkaatsnek Chrome PR Scoping Report March 2022

# 3.3 Description of the proposed overall activity

The application is being lodged for the prospecting (including all prospecting activities) rights, for chrome and aggregate with bulk sampling. This will involve drilling and bulk sampling. The development will primarily include 5-10 borehole sites of approximately 30-60m each, each comprising of a borehole, drill rig and a sump. Core will be taken from each borehole to test the targets identified through mapping and geophysical and geochemical surveys. Approximately Six (6) bulk sampling pits of 70mX200mX10.5m dimension will also be dug to obtain larger samples of the area (and any minerals if contained in the samples)

**Table 3: Listed and specified activities** 

NAME OF ACTIVITY	Aerial extent of the Activity Ha or m <sup>2</sup>	LISTED	APPLICABLE LISTING	WASTE MANAGEMENT
		ACTIVITY	NOTICE	AUTHORISATION
(E.g. For prospecting - drill site, site camp, ablution facility, accommodation, equipment storage, sample storage, site office, access route etcetc  E.g. for mining, - excavations, blasting, stockpiles, discard dumps or dams, Loading, hauling and transport, Water supply dams and boreholes, accommodation, offices, ablution, stores, workshops, processing plant, storm water control, berms, roads, pipelines, power lines, conveyors, etcetc)		(Mark with an <b>X</b> where applicable or affected).	or GNR 546)	(Indicate whether an authorizations is required in terms of the Waste Management Act).  (Mark with an X
Clearing of prospecting site	Only the areas where prospecting		GNR 327 LN 1 Activity 20	N/A
Drilling & Blasting	takes place, will be cleared.  100 m2	x	GNR 327 LN 1 Activity 20	N/A
Stripping and stockpiling of topsoil.	1000m2	X	GNR 327 LN 1 Activity 20	N/A

Site camp & temporary ablution facilities	800 m2	х	GNR 327 LN 1 Activity	
			20	
Access roads	100m2	х	GNR 327 LN 1 Activity	
			20	
Equipment storage	100m2	x	GNR 327 LN 1 Activity	
			20	
Bulk sampling, Excavation , loading and hauling to	12.5 ha	×	GNR 327 LN 1 Activity	
the processing area.			20	
Replacing the topsoil and vegetating	18.0 ha	X	GNR 327 LN 1 Activity	
the disturbed area.			20	

## 3.3.1 Description of the activities to be undertaken

Prospecting activities will be carried out to assess the potential and feasibility of mining Gold in the area. The primary activities that will be carried out as part of the prospecting include:

- Site preparation
- Drilling, Logging, excavation and bulk sampling
- Decommissioning and Rehabilitation

## Site preparation:

Field mapping will be carried out to fine-tune location of the pits and boreholes. The areas surrounding the planned pit and borehole positions will be mapped in the field to monitor the geology recorded by previous work. The positions will be adjusted as required.

A truck mounted drill rig will be placed on site for the drilling of core boreholes. Low volumes of diesel are used to run the drill unit; therefore, diesel drums will also be placed on site in fuel and oil storage bays alongside the units. Small sumps will be excavated and lined with plastic. These sumps are used to recycle water used during the drilling process.

Site preparation will also include the clearing of the site of any vegetation present where the sumps will be located and drilling will be carried out, as well as the area that will be designated as a parking bay. Topsoil will be removed where necessary, and stockpiled. Water carts will be used for providing water for drilling purposes.

Mobile offices and ablution facilities will be placed on site. Lockable and bounded facilities for hazardous substances and bounded areas for small scale maintenance will also be provided.

### **Drilling, Excavation and logging**

Once borehole and suitable pit positions have been demarcated, 5-10 boreholes will be drilled at each drilling site. Each borehole site will have the lined sump which will be rehabilitated (together with the borehole site) at the completion of the borehole drilling process. Approximately 10 sampling pits

(30m D X200m L X 10m B in dimensions) will be excavated with the use of a back actor or any other excavator machine. Top soil will be removed from the drilling, pits and sump locations and stockpiled on the side prior to the drilling and excavating. The drilled boreholes will be closed with a steel casing to suitable depth and a concrete cap will be placed on top. The drilling and sampling pit areas will be fenced off with barricade tape that will serve as access control during operation.

The core and pits results will be logged to evaluate the potential for potential deposits of chrome Drilling and bulk sampling will be conducted simultaneously. Core material will be taken to the Laboratory for analysis.

Determination of contents of Chrome will be achieved using bulk sampling techniques. Processing of Chrome discovered will be undertaken through gravity processing to avoid using chemicals that will contaminate the environment. The tailings will be dumped on a temporal tailings dam. Any Chrome that may be recovered will be sold.

## **Decommissioning and Rehabilitation**

Upon completion of the excavation and logging process, the excavation equipment will be removed from site. All campsite facilities will also be removed from site. The pits will be backfilled by the tailings and waste rock that will be on site. Topsoil that will be removed from excavated and drill sites will be replaced, and all disturbed areas (including roads) will be ripped and allowed to return to the natural state. The denuded area will be re-vegetated.

## 3.3.2 Associated activities, infrastructure and services

The infrastructure area in relation to the mine area is indicated in Plan 3 below. The anticipated infrastructure for the operations includes:

**Table 5: Proposed Infrastructure** 

SURFACE INFRASTRUCTURE:	DESCRIPTION
Access and security control	<ul> <li>Internal haul and access roads</li> <li>Access will be via the existing roads</li> <li>Security</li> <li>Weighbridge (in the event product is trucked)</li> <li>Fencing</li> </ul>
Bulk sampling area	<ul> <li>Soil berms</li> <li>Stockpiles</li> <li>Ablution facilities (portable toilets)</li> </ul>
Infrastructure Area	<ul> <li>Vehicle park area</li> <li>Workshop and store</li> <li>Fuel storage</li> <li>Container offices</li> <li>Ablution facilities linked to conservancy tanks</li> <li>Jojo tank</li> <li>Stockpile Yard</li> <li>Generators</li> <li>Lighting</li> <li>Clean and dirty water trenches, water management sumps and silt traps</li> </ul>

# 3.3.2.1 Power supply:

All Prospecting and Bulk sampling services will be undertaken using diesel driven machinery.

Equipment, lighting and wall sockets at the infrastructure area will be powered by diesel generators where necessary.

## **3.3.2.2** Water supply

Water requirements on site will be limited to that of potable/domestic use, and dust suppression. The total average water demand is expected to be 81m<sup>3</sup>/day.

At this stage it is anticipated that water will be sourced from the existing boreholes/ Nearby sources on site. Water will be pumped and stored in a jojo tank, to be located at the infrastructure area.

#### 3.3.2.3 Waste management:

General and hazardous waste will be generated on site:

- General waste includes office and domestic waste; construction and building waste; scrap metal and old tyres.
- o Hazardous waste includes used hydrocarbons, oily rags and sewage.

No landfill site will be constructed on site. All waste will be separated and stored as per the relevant Norms and Standards where applicable. Waste will be recycled and sold/given to interested parties as far as possible. Waste for disposal will be collected by a reputable contractor for transport to a suitably licensed facility. Waste safety disposal certificates will need to be obtained from disposal contractors and waste management will be maintained on site.

Sewage will be collected within conservancy tanks to be emptied by honey sucker for treatment at a suitably licensed facility.

# 4 POLICY AND LEGISLATIVE CONTEXT

Table 6 outlines the applicable legislation and guidelines that are considered to be applicable to the proposed project; and which were considered at the time of compiling this report

Table 6: Applicable legislation and guidelines

APPLICABLE LEGISLATION AND	REFFERENCE WHERE APPLIED
GUIDELINES USED TO COMPILE THE REPORT	
Constitution of the Republic of South Africa	The Bill of Rights, in the Constitution of South Africa (No. 108 of 1996), states that everyone has a right to a non-threatening environment and requires that reasonable measures are applied to protect the environment. This protection encompasses preventing pollution and promoting conservation and environmentally sustainable development. These principles are embraced in NEMA and given further expression. The development will ensure that as little damage as possible will be left on the surrounding environment and local community. This report is drafted to ensure compliance to this piece of legislation.
National Environmental Management Act, 1998	National Environmental Management Act (Act No 107, 1998) requires that measures are taken to prevent pollution and ecological degradation; promote conservation; and secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development  In addition, it makes provision:

That the disturbance of the environment (biological and physical) is avoided, or where they cannot be altogether avoided, are minimized and remedied:

That a risk-averse and cautious approach is applied, which takes into account the limits of current knowledge about the consequences of decisions and actions; and

Sensitive, vulnerable, highly dynamic or stressed ecosystems, such as coastal shores, estuaries, wetlands, and similar systems require specific attention in management and planning procedures, especially where they are subject to significant human resource usage and development pressure.

NEMA also requires that environmental authorisation is obtained for any development/ activity prior to its commencement. The Act also requires that all environmental impacts (including social impacts) due as a result of the development and/or its activities are assessed and where possible, minimised or mitigated. The following are the references where the NEMA has been applied (as per section 24 of NEMA):

- Environmental Authorisation application
- Public participation
- Scoping report
- EIR

National Environmental Management Act EIA Regulations 2014	Section 24 of Netwin provides for the activities that require specific crivilonimental actions ation. Activity 15 from the
Mineral and Petroleum Resources Development Act, 2002 as amended	
	<ul> <li>Application for a prospecting right to carry out prospecting activities (including bulk sampling) as per section 20 of the MPRDA as amended.</li> </ul>
Mineral Petroleum Development Resources Regulations	
National Heritage Resources Act (Act 25 of 1999)	The National Heritage Resources Act seeks to

-Introduce an integrated and interactive system for the management of the national heritage resources;
-To promote good government at all levels, and empower civil society to nurture and conserve their heritage resources so that they may be bequeathed to future generations;
-To lay down general principles for governing heritage resources management throughout the Republic;
-To introduce an integrated system for the identification, assessment and management of the heritage resources of South Africa;
-To establish the South African Heritage Resources Agency together with its Council to co- ordinate and promote the management of heritage resources at national level;
-To set norms and maintain essential national standards for the management of heritage resources in the Republic and to protect heritage resources of national significance;
-To control the export of nationally significant heritage objects and the import into the Republic of cultural property illegally exported from foreign countries;
-To enable the provinces to establish heritage authorities which must adopt powers to protect and manage certain categories of heritage resources;
-To provide for the protection and management of conservation-worthy places and areas by
local authorities; and

	-To provide for matters connected therewith
	Should any heritage resources be found on site, it will be ensured that such resources are not destroyed, tempered with or removed from site and that all activities are carried out within reasonable distance from the resources.
National Environmental Management: Biodiversity Act	t The National Environmental Management: Biodiversity Act (Act 10 of 2004) (NEMBA) provides for listing threatened or protected ecosystems, in one of four categories: critically endangered (CR), endangered (EN), vulnerable (VU) or protected. The Draft National List of Threatened Ecosystems (Notice 1477 of 2009, Government Gazette No 32689, 6 November 2009) has been gazetted for public comment. The list of threatened terrestrial ecosystems supersedes the information regarding terrestrial ecosystem status in the NSBA 2004. In terms of the EIA regulations, a basic assessment report is required for the transformation or removal of indigenous vegetation in a critically endangered or endangered ecosystem regardless of the extent of transformation that will occur.  The Act also provides for listing of species as threatened or protected, under one of the following categories:

Critically Endangered: any indigenous species facing an extremely high risk of extinction in the wild in the immediate future.
 Endangered: any indigenous species facing a high risk of extinction in the wild in the near future, although it is not a critically endangered species.
 Vulnerable: any indigenous species facing an extremely high risk of extinction in the wild in the medium-term future; although it is not a critically endangered species or an endangered species.
 Protected species: any species which is of such high conservation value or national importance that it requires national protection. Species listed in this category include, among others, species listed in terms of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).

## 5 NEED AND DESIRABILITY OF THE PROPOSED ACTIVITIES

The Need and Desirability of the project has been assessed as per the DEA Guideline on Need and Desirability (2017) for Scoping. It is important to note that this section will be updated in the EIA Phase with input from the various specialists, as more information becomes available.

**Table 7: Needs and Desirability Assessment** 

development? What measures were explored to

firstly avoid waste, and where waste could not be

explored to minimise, reuse and/or recycle the

avoided altogether; what measures were

### **RESPONSE** QUESTION 1. How will this development (and its separate elements/aspects) impact on the ecological integrity of the area)? 1.1. How were the following ecological integrity considerations taken into account? 1.1.1. Threatened Ecosystems, 1.1.2. Sensitive, vulnerable, highly dynamic or stressed ecosystems, such as coastal shores, estuaries, wetlands, and similar systems require specific attention in management and planning procedures, especially where they are subject to significant human resource usage and development pressure, 1.1.3. Critical Biodiversity Areas ("CBAs") and Ecological Support Areas ("ESAs"), The baseline environment has been discussed 1.1.4. Conservation targets, briefly under Section 9, whist Section 10 discusses 1.1.5. Ecological drivers of the ecosystem, the preliminary impacts associated with the 1.1.6. Environmental Management Framework, project. 1.1.7. Spatial Development Framework, and The EIA will assess the impacts of the project in greater detail, with specialist input. Critical 1.1.8. Global and international responsibilities Terrestrial biodiversity specialist study is underway relating to the environment (e.g. RAMSAR sites, as per the plan of study and will be presented in Climate Change, etc.). the EIA. 1.2. How will this development disturb or enhance The specialist studies will identify all ecologically ecosystems and/or result in the loss or protection sensitive areas; areas to be avoided and their of biological diversity? What measures were applicable buffers; as well as make any explored to firstly avoid these negative impacts, recommendations with regards to mitigation so as and where these negative impacts could not be to maintain the ecological integrity of the area. avoided altogether, what measures were explored to minimise and remedy (including offsetting) the impacts? What measures were explored to enhance positive Impacts? 1.3. How will this development pollute and/or degrade the biophysical environment? What measures were explored to firstly avoid these impacts, and where impacts could not be voided Altogether, what measures were explored to minimise and remedy (including offsetting) the impacts? What measures were explored to enhance positive impacts? 1.4. What waste will be generated by this Waste generation on site will be minimal.

General waste will include office and domestic

Hazardous waste will be limited to used

waste; scrap metal and old tyres.

#### **QUESTION RESPONSE** waste? What measures have been explored to hydrocarbons, oily rags and sewage. safely treat and/or dispose of unavoidable waste? No landfill site will be constructed on site. All waste will be separated and stored as per the relevant Norms and Standards where applicable. Waste will be recycled and sold/given to interested parties as far as possible. Waste for disposal will be collected by a reputable contractor for transport to a suitably licensed facility. Sewage will be collected within conservancy tanks to be emptied by honey sucker for treatment at a suitably licensed facility. The baseline environment has been discussed 1.5. How will this development disturb or enhance landscapes and/or sites that constitute the briefly under Section 9, whist Section 10 discusses nation's cultural heritage? What measures were the preliminary impacts associated with the explored to firstly avoid these impacts, and where project. impacts could not be avoided altogether, what The EIA will assess the impacts of the project measures were explored to minimise and remedy in greater detail with specialist input. (including offsetting) the impacts? What measures A Visual Impact Assessment and Phase I were explored to enhance positive impacts? Heritage Impact Assessment will be conducted if necessery and will be presented in the EIA. The specialist studies will identify all sensitive areas; areas to be avoided and their applicable buffers; as well as make any recommendations with regards to mitigation so as to maintain the sense of place and cultural history of the area. 1.6. How will this development use and/or impact on non-renewable natural resources? What measures were explored to ensure responsible and equitable use of the resources? How have the consequences of the depletion of the nonrenewable natural resources been considered? The baseline environment has been discussed What measures were explored to firstly avoid briefly under Section 9, whist Section 10 discusses these impacts, and where impacts could not be the preliminary impacts associated with the avoided altogether, what measures were project. explored to minimise and remedy (including The EIA will assess the impacts of the project in offsetting) the impacts? What measures were greater detail with specialist input. explored to enhance positive impacts? All mining and ancillary services will be 1.7. How will this development use and/or impact undertaken using diesel driven machinery. on renewable natural resources and the Equipment. Lighting and wall sockets at the ecosystem of which they are part? Will the use of infrastructure area will powered by solar panels the resources and/or impact on the ecosystem (renewable energy) and/or diesel generator jeopardise the integrity of the resource and/or (10kVa) where necessary. As such the project will system taking into account carrying capacity not put any additional strain on the National Grid. restrictions, limits of acceptable change, and Waste and water will be recycled as far as thresholds? What measures were explored to firstly possible, this will be incorporated into the EMP. avoid the use of resources, or if avoidance is not possible, to minimise the use of resources? What measures were taken to ensure responsible and equitable use of the resources? What measures were explored to enhance positive impacts? Does the proposed development

QUESTION	RESPONSE
exacerbate the increased dependency on increased use of resources to maintain economic growth or does it reduce resource dependency (i.e. de-materialised growth)? (note: sustainability requires that settlements reduce their ecological footprint by using less material and energy demands and reduce the amount of waste they generate, without compromising their quest to improve their quality of life),  1.7.2. Does the proposed use of natural resources constitute the best use thereof? Is the use justifiable when considering intra- and intergenerational equity, and are there more important priorities for which the resources should be used (i.e. what are the opportunity costs of using these resources of the proposed development alternative?),  1.7.3. Do the proposed location, type and scale of development promote a reduced dependency on resources?	
1.8. How were a risk-averse and cautious approach applied in terms of ecological impacts?  1.8.1. What are the limits of current knowledge (note: the gaps, uncertainties and assumptions must be clearly stated)?  1.8.2. What is the level of risk associated with the limits of current knowledge?  1.8.3. Based on the limits of knowledge and the level of risk, how and to what extent was a risk-averse and cautious approach applied to the development?	The precautionary approach has been adopted for the impact assessment i.e. the worst-case scenario has been assumed before mitigation.  It is currently assumed that product will be transported using existing roads and or rails to the market. It must be noted however, that no agreement has been reached with Transnet to date and thus the possibility of hauling product from site cannot beruled out.  Knowledge gaps, uncertainties and assumptions with regards to the various environmental aspects will be detailed in the EIA EMP report.
1.9. How will the ecological impacts resulting from this development impact on people's environmental right in terms following:  1.9.1. Negative impacts: e.g. access to resources, opportunity costs, loss of amenity (e.g. open space), air and water quality impacts, nuisance (noise, odour, etc.), health impacts, visual impacts, etc. What measures were taken to firstly avoid negative impacts, but if avoidance is not possible, to minimise, manage and remedy negative impacts?  1.9.2. Positive impacts: e.g. improved access to resources, improved amenity, improved air or water quality, etc. What measures were taken to enhance positive impacts?	The baseline environment has been discussed briefly under Section 9, whist Section 10 discusses the preliminary impacts associated with the project.  The EIA will assess the impacts of the project in greater detail with specialist input.
1.10. Describe the linkages and dependencies between human wellbeing, livelihoods and ecosystem services applicable to the area in question and how the development's ecological	The baseline socio-economic environment has been discussed briefly under Section 9, whist Section 10 discusses the preliminary impacts associated with the project.

QUESTION	RESPONSE
impacts will result in socio-economic impacts (e.g. on livelihoods, loss of heritage site, opportunity costs, etc.)?	The EIA will assess the impacts of the project in greater detail, and will consider the IDP and SDF.
1.11. Based on all of the above, how will this development positively or negatively impact on ecological integrity objectives / targets /considerations of the area?	The baseline environment has been discussed briefly under Section 9, whist Section 10 discusses the preliminary impacts associated with the project.  The local EMF will be considered when assessing the impacts in the EIA phase.
1.12. Considering the need to secure ecological integrity and a healthy biophysical environment, describe how the alternatives identified (in terms of all the different elements of the development and all the different impacts being proposed), resulted in the selection of the "best practicable environmental option" in terms of ecological considerations?	Section 7 describes the alternatives considered for the project.
1.13. Describe the positive and negative cumulative ecological/biophysical impacts bearing in mind the size, scale, scope and nature of the project in relation to its location and existing and other planned developments in the area?	The baseline environment has been discussed briefly under Section 9, whist Section 10 discusses the preliminary impacts associated with the project, including cumulative impacts.
<ul> <li>2.1 What is the socio-economic context of the area based on, amongst other considerations, the following considerations?</li> <li>2.1.1. The IDP (and its sector plans' vision, objectives, strategies, indicators and targets) and any other strategic plans, frameworks of policies applicable to the area,</li> <li>2.1.2. Spatial priorities and desired spatial patterns (e.g. need for integrated of segregated communities, need to upgrade informal settlements, need for densification, etc.).</li> <li>2.1.3. Spatial characteristics (e.g. existing land uses, planned land uses, cultural landscapes, etc.).</li> <li>2.1.4. Municipal Economic Development Strategy ("LED Strategy").</li> <li>2.2. Considering the socio-economic context, what will the socio-economic impacts be of the development (and its separate elements/aspects), and specifically also on the socio-economic objectives of the area?</li> <li>2.2.1. Will the development complement the local socio-economic initiatives (such as local economic development (LED) initiatives), or skills development programs?</li> </ul>	The baseline socio-economic environment has been discussed briefly under Section 9, whist Section 10 discusses the preliminary impacts associated with the project.  The EIA will assess the impacts of the project in greater detail, and will consider the IDP, LED and SDF. This information will largely be sourced from the Social and Labour Plan.
2.3. How will this development address the specific physical, psychological, developmental, cultural	Social development and community upliftment will be undertaken as per the Social and Labour

QUESTION	RESPONSE
and social needs and interests of the relevant communities?	Plan.
2.4. Will the development result in equitable (intra and inter-generational) impact distribution, in the short- and long term? Will the impact be socially and economically sustainable in the short- and long-term?	The authorization period is required for a period of atleast 5 years, the results or outcomes of this process will further guide whether Modison should apply for a mining right or not.
·	will further guide whether Modison should apply for a
2.5.11. encourage environmentally sustainable land development practices and processes 2.5.12. take into account special locational factors that might favour the specific location (e.g. the location of a strategic mineral resource, access to the port, access to rail, etc.), 2.5.13. the investment in the settlement or area in question will generate the highest socioeconomic returns (i.e. an area with high economic potential), 2.5.14. impact on the sense of history, sense of place and heritage of the area and the socio-	

QUESTION	RESPONSE
cultural and cultural-historic characteristics and sensitivities of the area, and 2.5.15. in terms of the nature, scale and location of the development promote or act as a catalyst to create a more integrated settlement?	
2.6. How were a risk-averse and cautious approach applied in terms of socio-economic impacts?  2.6.1. What are the limits of current knowledge (note: the gaps, uncertainties and assumptions must be clearly stated)?  2.6.2. What is the level of risk (note: related to inequality, social fabric, livelihoods, vulnerable communities, critical resources, economic vulnerability and sustainability) associated with the limits of current knowledge?  2.6.3. Based on the limits of knowledge and the level of risk, how and to what extent was a risk-averse and cautious approach applied to the development?	The precautionary approach has been adopted for the impact assessment i.e. the worst-case scenario has been assumed before mitigation.  It is currently assumed that product will be transported by truck to market using the existing roads, onsite. It must be noted however, that no agreement hasbeen reached with any buyers to date and thus thepossibility of hauling product from site cannot beruled out.  Knowledge gaps, uncertainties and assumptions with regards to the various environmental aspects will be detailed in the EIA EMP report.
2.7. How will the socio-economic impacts resulting from this development impact on people's environmental right in terms following:  2.7.1. Negative impacts: e.g. health (e.g. HIVAids), safety, social ills, etc. What measures were taken to firstly avoid negative impacts, but if avoidance is not possible, to minimise, manage and remedy negative impacts?  2.7.2. Positive impacts. What measures were taken to enhance positive impacts?	The baseline socio-economic environment has been discussed briefly under Section 9, whist Section 10 discusses the preliminary impacts associated with the project.  The EIA will assess the impacts of the project in greater detail.
2.8. Considering the linkages and dependencies between human wellbeing, livelihoods and ecosystem services, describe the linkages and dependencies applicable to the area in question and how the development's socioeconomic impacts will result in ecological impacts (e.g. over utilisation of natural resources, etc.)?  2.9. What measures were taken to pursue the selection of the "best practicable environmental option" in terms of socio-economic considerations?	The baseline socio-economic environment has been discussed briefly under Section 9, whist Section 10 discusses the preliminary impacts associated with the project.  The EIA will assess the impacts of the project in assess data it and will consider the IDD and CDE.
2.10. What measures were taken to pursue environmental justice so that adverse environmental impacts shall not be distributed in such a manner as to unfairly discriminate against any person, particularly vulnerable and disadvantaged persons (who are the beneficiaries and is the development (located appropriately)? Considering the need for social equity and justice, do the alternatives identified, allow the "best	the project.

QUESTION	RESPONSE
practicable environmental option" to be selected, or is there a need for other alternatives to be considered?	
2.11. What measures were taken to pursue equitable access to environmental resources, benefits and services to meet basic human needs and ensure human wellbeing, and what special measures were taken to ensure access thereto by categories of persons disadvantaged by unfair discrimination?	
2.12. What measures were taken to ensure that the responsibility for the environmental health and safety consequences of the development has been addressed throughout the development's life cycle?	
2.13. What measures were taken to: 2.13.1. ensure the participation of all interested	
and affected parties,  2.13.2. provide all people with an opportunity to develop the understanding, skills and capacity necessary for achieving equitableand effective participation,  2.13.3. ensure participation by vulnerable and disadvantaged persons,  2.13.4. promote community wellbeing and empowerment through environmental education, the raising of environmental awareness, the sharing of knowledge and experience and other appropriate means,  2.13.5. ensure openness and transparency, and access to information in terms of the process,  2.13.6. ensure that the interests, needs and values of all interested and affected parties were taken into account, and that adequate recognition were given to all forms of knowledge, including traditional and ordinary knowledge,  2.13.7. ensure that the vital role of women and youth in environmental management and development were recognised and their full participation therein was promoted.	Section 8 and Appendix 5 outlines the public participation proposed (PPP) for the project.  Potential interested and affected parties (I&APs) were notified by means of advertisements, notices, posters and background information documents. Following which an introductory public meeting (open day) was held to introduce the project to I&APs and outline the environmental process.  At the meeting the I&APs were afforded the opportunity to discuss the impacts of the project and Opportunity to review and comment on all environmental documents will be provided as per the EIA Regulations.
2.14. Considering the interests, needs and values of all the interested and affected parties, describe how the development will allow for opportunities for all the segments of the community (e.g. a mixture of low-, middle-, and high-income housing opportunities) that is consistent with the priority needs of the local area (or that is proportional to the needs of an area)?	The EIA process will take cognissance of all interests, needs and values of all interested and affected parties during the PPP.

#### **RESPONSE QUESTION** 2.15. What measures have been taken to ensure Job specific induction and training will be provided if the prospecting activities prove that current and/or future workers will be informed of work that potentially might be harmful to feasible and when that time arises all personnel human health or the environment or of dangers be made aware of the potential associated with the work, and what measures environmental and health impacts associated have been taken to ensure that the right of with their job. Further to this, all personnel will workers to refuse such work will be respected and be made aware of their right to refuse work which protected? may be harmful to their health and/or the environment. 2.16. Describe how the development will impact on job creation in terms of, amongst other aspects: The proposed project will provide employment for the the number of temporary versus 2.16.1. local people. Additional jobs will be created permanent jobs that will be created, indirectly through procurement from service 2.16.2. whether the labour available in the providers i.e. construction activities, area will be able to take up the job management etc. opportunities (i.e. do the required skills match Employment will be sourced locally as far as the skills available in the area), practical. Skills required include drivers, 2.16.3. the distance from where labourers will operators, and laboratory technicians. have to travel, 2.16.4. the location of jobs opportunities versus the location of impacts (i.e. equitable distribution of costs and benefits), 2.16.5. the opportunity costs in terms of job creation (e.g. a mine might create 100 jobs, but impact on 1000 agricultural jobs, etc.). Section 8 and Appendix 5 outlines the public 2.17. What measures were taken to ensure: participation proposed (PPP) for the project. 2.17.1. that there were intergovernmental Various organs of state and other relevant coordination and harmonisation of policies, stakeholders were identified as I&APs and notified legislation and actions relating to the of the project via physical consultation, eenvironment, mail, or telephone. Copies of the Scoping reports will be circulated to the 2.17.2. that actual or potential conflicts of Department Environmental Affairs, the Department interest between organs of state were resolved Agriculture land Affairs, the Local and District through conflict resolution procedures? Municipality for comment and review and also interested and affected parties 2.18. What measures were taken to ensure that The Scoping, EIA and EMP will be compiled in the environment will be held in public trust for the terms of the various Environmental Legislation and people, that the beneficial use of environmental applicable Guidelines (see Section Table 6), with resources will serve the public interest, and that the aim of avoiding and/or minimising all impacts the environment will be protected as the people's on the environment. common heritage? The preliminary management measures are outlined in Section10.4. These management 2.19. Are the mitigation measures proposed measures are realistic, and typical for an realistic and what long term environmental legacy operation of this type and scale. and managed burden will be left? Long term impacts will be better understood on completion of the EIA, with specialist input. 2.20. What measures were taken to ensure that The polluter pays principle will be incorporated the costs of remedying pollution, environmental into the EMP. degradation and consequent adverse health effects and of preventing, controlling or minimising

QUESTION	RESPONSE
further pollution, environmental damage or adverse health effects will be paid for by those responsible for harming the environment?	
2.21. Considering the need to secure ecological integrity and a healthy bio-physical environment, describe how the alternatives identified (in terms of all the different elements of the development and all the different impacts being proposed), resulted in the selection of the best practicable environmental option in terms of socio-economic considerations?	The various specialist studies will be conducted once the Scoping Report is accepted by the department as per the plan of study for the EIA. Following which the impacts can be assessed in detail and recommendations on layout alternatives proposed.
2.22. Describe the positive and negative cumulative socio-economic impacts bearing in mind the size, scale, scope and nature of the project in relation to its location and other planned developments in the area?	The potential cumulative impacts resulting from the proposed project can only be objectively determined at the end of the EIA Process

# 6 PERIOD FOR WHICH THE ENVIRONMENTAL AUTHORISATION IS REQUIRED

The authorisation is required for a minimum period of 5 years in order for Modison mining to complete the outlined prospecting activities.

#### 7 DESCRIPTION OF THE PROCESS FOLLOWED TO REACH THE PROPOSED PREFERRED SITE

#### 7.1 Details of alternatives considered

#### 7.1.1 Property / Location Alternatives

Not applicable, the proposed site was selected based on the extensive desktop research (Geological formation) and the availability of the property in terms of existing rights (i.e. rights not held by another company).

In terms of the technology proposed, the proposed prospecting methods (i.e. Drilling method for Shallow Surface, Diamond Drilling and bulk sampling) have been chosen based on the known success of prospecting using the above methods.

Therefore, no alternatives are indicated, but rather a phased approach of trusted prospecting techniques. Various sites were assessed during the planning phase prior to the submission of a prospecting application. Sites were identified based on previous information obtained from historical exploration, Google Earth, as well as a site walk-over by a geologist. Most of the information below is extracted from reports of field work undertaken for surrounding Chrome Mining.

#### 7.1.2 Type of activity to be undertaken

The Modison Mining plans to prospect and subsequently mine by way of Bulk sampling for chrome and general aggregate on portions 99& 174 of the farm Zilkaatsnek 439 JQ, the current application of a prospecting right will include Bulk sampling in order to test the economic viability of the chrome that is believed to run through the aforesaid farm.

The prospecting activities will include geological mapping, trenching and drilling of boreholes.

The site will include temporary ablution facilities which will be in a form of a trailer. Drilled samples will be stored in a moving vehicle to a sight where offices will be based. prospecting right will trigger the listed activity 20 in the R983

#### 8 DETAILS OF THE PUBLIC PARTICIPATION PROCESS FOLLOWED

The table below highlights the requirements for public participation as per NEMA. Please refer to Appendix 5 for the comprehensive public participation process (PPP) report.

The public participation process (PPP) aims to involve the authorities and I&APs in the project process, and determines their needs, expectations and perceptions which in turn ensures a complete and comprehensive environmental study. An open and transparent process has and will be followed at all times and will be based on reciprocal dissemination of information.

Table 8: NEMA minimum PPP requirements

Legal and	Regulatory Requirement: NEMA Regulation 982, Section 41 — Public participation process
1	This regulation only applies in instances where adherence to the provisions of this regulation is specifically required
Noted	
2	The person conducting a public participation process must take into account any relevant guidelines applicable to public participation as contemplated in section 24J of the Act and must give notice to all potential interested and affected parties of an application or proposed application which is subjected to public participation b:
NEMA PPP	Guidelines have been followed.
а	fixing a notice board at a place conspicuous to and accessible by the public at the boundary, on the fence or along the corridor of:
i	the site where the activity to which the application or proposed application relates is or is to be undertaken
ii	An alternative site
Notices we	ere compiled in English and Afrikaans and erected (14th March-14th April) on the site houndary

Notices were compiled in English and Afrikaans and erected (14<sup>th</sup> March-14<sup>th</sup> April) on the site boundary fence as well as other public locations, close by road signs and nearby villages

These posters informed the public of the proposed activities, invited (I&APs) to attend the scoping phase public meeting and requested people to register as I&APs for the project.

Copies of the Posters, newspaper ads evidence thereof have been included in the relevant Annexureof the PPP Report attached as Appendix 5.

b	giving written notice, in any of the manners provided for in section 47D of the Act, to:
i	the occupiers of the site and, if the proponent or applicant is not the owner or person in control of the site on which the activity is to be undertaken, the owner or person in control of the site where the activity is or is to be undertaken or to any alternative site where the activity is to be undertaken;

Legal and	Regulatory Requirement: NEMA Regulation 982, Section 41 — Public participation process
ii	owners, persons in control of, and occupiers of land adjacent to the site where the activity is or is to be undertaken or to any alternative site where the activity is to be undertaken;
iii	the municipal councilor of the ward in which the site or alternative site is situated and any organisation of ratepayers that represent the community in the area;
iv	the municipality which has jurisdiction in the area;
V	any organ of state having jurisdiction in respect of any aspect of the activity; and
vi	any other party as required by the Competent Authority.
C	Placing an advertisement in:
i	One local newspaper; or
ii	Any official Gazette that is published specifically for the purpose of providing public notice of applications or other submissions made in terms of these Regulations.
d	placing an advertisement in at least one provincial newspaper or national newspaper, if the activity has or may have an impact that extends beyond the boundaries of the metropolitan or district municipality in which it is or will be undertaken: Provided that this paragraph need not be complied with if an advertisement has been placed in an official Gazette referred to in paragraph (c)(ii)
Advertisen	
	nents were placed in one (1) local newspaper, in English :
• Pla	nents were placed in one (1) local newspaper, in English : atinum weekly on the 18 <sup>th</sup> March 2022 Publication.

Legal and	Regulatory Requirement: NEMA Regulation 982, Section 41 – Public participation process
	in information dissemination have been noted to date. Any additional requirements made by rities will be applied during the PPP process.
3	A notice, notice board or advertisement referred to in sub regulation (2) must –
a	Give details of the application which is subject to public participation
b	State -
i	whether basic assessment or S&EIR procedures are being applied to the application
ii	Whether basic assessment or scoping procedures are being applied to the application, in the case of an application for environmental authorisation
iii	The nature and location of the activity to which the application relates
iv	Where further information on the application or activity can be obtained
V	The manner in which and the person to whom representations in respect of the application may be made
•	ects are addressed in the BIDs, Notices and Adverts. Please see the relevant annexures in the t included as Appendix 5.
4	A notice board referred to in sub regulation (2) must -
а	be of a size at least 60cm by 42 cm
b	Display the required information in lettering and in a format as may be determined by the Competent Authority
Notices we	re A2 in size (42 x 60 cm).
5	Where public participation is conducted in terms of this regulation for an application or proposed application, sub regulation (2)(a), (b), (c) and (d) need not be complied with again during the additional public participation process contemplated in regulations 19(1)(b) or 23(1)(b) or the public participation process contemplated in regulation 21(2)(d), on condition that:
а	such process has been preceded by a public participation process which included compliance with sub regulation (2)(a), (b), (c) and (d); and
b	written notice is given to registered interested and affected parties regarding where the: -
i	revised basic assessment report or, EMPr or closure plan, as contemplated in regulation 19(1)(b) may be obtained, the manner in which and the person to whom representations on these reports or plans may be made and the date on which such representations are due;
ii	revised environmental impact report or EMPr as contemplated in regulation 23(1)(b) may be obtained, the manner in which and the person to whom representations on these reports or plans may be made and the date on which such representations are due; or
iii	environmental impact report and EMPr as contemplated in regulation 21(2)(d) may be obtained, the manner in which and the person to whom representations on these reports or plans may be made and the date on which such representations are due;
Noted. No	deviation required.
6	When complying with this regulation, the person conducting the public participation process must ensure that:
а	Information containing all the relevant facts in respect of the application is made available to potential interested and affected parties; and

Legal and	Regulatory Requirement: NEMA Regulation 982, Section 41 — Public participation process
b	Participation by potential interested and affected parties is facilitated in such a manner that all potential interested and affected parties are provided with a reasonable opportunity to comment on the application.
Noted.	
All environ	mental reports will be made available for public review for a minimum of 30 days.
7	Where an environmental authorisation is required in terms of these Regulations and an authorisation, permit or licence is required in terms of a specific environmental management Act, the public participation process contemplated in this Chapter may be combined with any public participation processes prescribed in terms of a specific environmental management Act, on condition that all relevant authorities agree to such combination of processes.
	as been combined for all the authorisations required from the DMR in terms of the MPRDA, I NEM:WA. The notices have also included information on the water use license application

This section outlines the PPP initiated to date, and completed as part of the Scoping Phase of the project:

#### 8.1 I&AP Consultation

process through the DWS under the NWA.

As summarised in Table 8 above, I&APs for the project were identified using information from similar projects in the past, as well as from information and responses received from the press advertisements, notices and the BID's sent out.

The I&APs include a broad database of immediately affected landowners, adjacent landowners, land users, communities, local authorities, ward councillors and other interest groups. A copy of the I&AP register and proof of notification (BIDs, notices, advertisements etc.) is included in the PPP report, attached as Appendix 2.

All comments, questions and/or concerns received in response to the various notices to date, have been summarised in the issues and response table below (Table 9).

Further to this all registered I&APs have been notified of the Scoping Report's availability for review and comment. The report will be made available for a minimum period of thirty (30) days at the following locations:

All comments and / or issues raised during the review period will be included in the final Scoping Report for submission to the DMR.

#### 8.2 Authorities Consultation

The lead authority for the applications in terms of the MPRDA, NEMA and NEM:WA is the Department of Mineral Resources (DMR). The Department of Water Affairs and Sanitation (DWS) is the lead authority with regards to the water use license application.

Other local and Regional authorities were identified and included in the I&AP register, and notified of the proposed project by means of the BID.

In addition, copies of the draft Scoping Report will be circulated to the following authorities for review and comment:

- > Department of Rural development and Land reform
- > Dept of Agriculture, Conservation and Environment
- Madibeng Local Municipality;

Comments (where received) will be included in the I&AP issues and response table below.

The Land Claims Commissioner will be contacted to determine whether any land claims have been registered over the affected properties.

#### 8.3 Summary of issues raised by I&APs

Table 9 below summarises the issues raised by the various I&APs and authorities to date, and the EAP's response/feedback thereto.

**Table 9: PPP Issues & Response Table** 

Interested and affected parties	Date comments were raised	Issues raised	Response to the issue
Land owners	07 April 2022	I, W.K.A. Louw want to register as an I&AP to receive more information regarding the application of Modison mining (Pty)Ltd for a prospecting right on the farm Zilkaatsnek 439 JQ, Reference No. NW 30/5/1/1/2/13313 PR.  As a landowner of a portion of the above farm, I am therefore fully entitled for access to the requested information, as well as to be informed about the proceedings.	Noted, You will be informed about the entire process, Modison is requesting a meeting with you at your earliest convenience as the land owners to give you more information about the project
Lawful occupiers	N/A	Also please be aware that we hereby oppose all prospecting on Portion 174 of Zilkaatsnek 439JQ as this is directly over our only water source.	Your objection is noted, please note that specialist studies will be undertaken to avoid contamination of any water source and currently a terrestrial biodiversity study is underway and it revealed that the water source is 200m away from the area of application.

Landowners & lawful occupiers of	04 April 2022	I am a resident of this area and the	Your objection is noted and
adjacent land and interested		conservation of the area is very	mitigation measures
		important to me. I am against the	regarding your concerns will
Parties		environmental implications this project	be in place before any mining
		will have on the area. I am objecting	can commence
(Note: all other I&AP have requested to be		against this project due to the following	
registered as such, and receive the		concerns:	
Scoping and EIA reports for commentary.			
Such commentary will be incorporated		Heavy Traffic	
once received.)		Noise pollution	
		Atmospheric pollution – This	
		project will affect the control	
		over vital environmental	
		resources such as fossil fuel to	
		contestations over natural	
		resources such as clean air.	
		Over-population – Employees	
		will need accommodation (I	
		would like to keep this area free	
		from housing projects and	
		incomers who doesn't have the	
		best interest of the area)	
		Crime rate will increase!  Witten all the projects like the project linterproject like the project like the project like the project li	
		Water pollution – Projects like  these will affects the water in	
		these will affects the water in the area.	
		<ul> <li>Waste disposal – This project</li> </ul>	
		will definitely create extra	
		waste.	
		waste.	
		Deforestation – Wildlife	
		extinction and Habitat loss.	

		<ul> <li>Loss of animal and bird species in this area due to this project.</li> <li>Poaching of animals - More people in the area create opportunities to poach or indigenous wildlife.</li> <li>Loss of many native plants and trees to the area and Magaliesberg area.</li> </ul>	
		Hope the above is in order!	
Local Municipality	22 March 2022	The requested properties are not owned by the municipality and the tittle deed is noy yet registered for the property, go to surveyor general office in Pretoria they will be able to advise you further as to why the properties do not have the tittle deed	Noted with thanks

Community and community Leaders	05 April 2022	Support the mining in the area because it will create employment particularly for the South African black youth who are mostly un employed in the area because the white farmers are employing the Zimbabwean nationals because of cheap labour.	Yes Modison mining seeks to uplift our African communities that are struggling, if this projects gets approved a social and labour plan will be drafted so that the community can benefit from this project
Dept of Agriculture, Conservation and Environment	17 March 2022	Requested a Draft scoping report to review	Submitted physically at the department on
Dept of Rural development and Land reform	17 March 2022	Responsible person not available, email has been sent with the consultation letter, no response to date	
Interested and Affected parties  1. (Magaliesberg Biosphere)	31 March	Kindly register the Magaliesberg Biosphere NPC as an i≈ in this application. The application falls within Magaliesberg Biosphere Reserve Buffer Zone, a zone intended for conservation of South Africa's natural and cultural heritage, that supports sustainable development. It will be important to demonstrate how this application supports the multilateral and international agreements on biosphere reserves. The sites are also zoned for agricultural land-use. The biosphere buffer zone supports investment in food security through sustainable	Thank you for showing interest in the application, i will send you an invite to the public participation meeting that will take place soon so I can present the documents that you require, also there is a critical biodiversity specialist study that is being undertaken by a competent person, so far the preliminary investigations indicated that the area of application is not part of the environmental protected area and even the land use, there is no farming taking place in the property as its comprised of old grass fields and sparsely populated trees.

		agricultural practices. A change of land-use application, with public consultation, is required for prospecting.  Please send a copy of the acceptance letter from the DMRE and the approved public participation plan and timing of the process ahead. We would also like to know what specialist studies have been commissioned and whether specialists are SACNASP registered.	
Interested and Affected parties	04 April 2022	I, KA Olivier would like to register my objection regarding prospecting rights NW30/5/1/1/2/13313PR portion 99 & 174 of the farm Zilkaatsnek 439 JQ	Your objection is noted and issues raised will be addressed and mitigation measures implemented before any mining can commence
		am OBJECTING against this project because of the following reasons:	
		Firstly, we are <b>LANDOWNERS</b> in this area and the conservation of the area is very important to us. As landowners it is our duty to make sure Environmental protection and the practice of protecting the natural environment by individuals in the area are enforced against organizations and	

governments that would like to destroy our environment.
our environment.
We are concerned about the
following implications and
reasons this project will have on
the environment:
the chynomicht.
Pollution, climate change
Causes can range from control
over vital environmental
resources such as fossil fuels to
contestations over natural resources such as clean air.
Loss of biodiversity (humans)
are destroying our planet)
Waste disposal (any major
project creates extra waste)
Water pollution (
developments such as these
affects the water in the aera and
our natural water table)  • Deforestation ( the natural
habitat of animals will be
destroyed)
Loss of animal and bird species
in this area due to the project
Poaching of animals ( more
people in the area create
opportunities to poach or
indigenous wildlife)

	<ul> <li>Loss of many native plants and trees to the Magaliesberg area</li> <li>Overpopulation in the area (the workers will need housing), we would like to keep this area free from housing projects and incomers that are not concerned about the area in general.</li> <li>Traffic and noise pollution</li> <li>CRIME WILL RISE (more people equals more crime)</li> <li>The Magaliesberg mountains are of the oldest in the world, with geological history that must be preserved for future generations. The area is also a greenbelt area and no developments such as these should be allowed. I am against the environmental implications this project will have on the area.</li> </ul>	

# 9 BASELINE ENVIRONMENT

#### 9.1 Geology

The main geological feature within which the farms are located is the Bushveld Complex, a saucer shaped volcanic intrusion about 375 km wide (east to west) and 300 km north to south. It is approximately 2 billion years old.

The Bushveld Complex is divided into three main geographic sectors (or "limbs"); Eastern Limb, Western Limb, and Northern Limb. It is also divided from bottom to top into four geological zones: The Lower, Critical, Main and Upper Zone. The abovementioned farms are situated in the Western Limb, part of the lower critical zone. The figure below shows simplified geological features of the bushveld igneous complex.

The Lower Critical Zone is also known for its considerable reserve of platinum group metals and it's extending for nearly 400 Km in strike length of the western and the eastern limb of the Bushveld complex. The Bushveld complex accounts for more than 80% of PGE's known to date.

Historically and because of active mining activities surrounding the application area falls under areas where the chrome was proven to be economically viable as it is located on the Western limb of the Bushveld Complex consisting the Lower Critical Zone, which hosts the Lower Group (LG) and Main Group (MG) layers underlies the application area and it comprises layered pyroxenite, harzburgite and dunite.

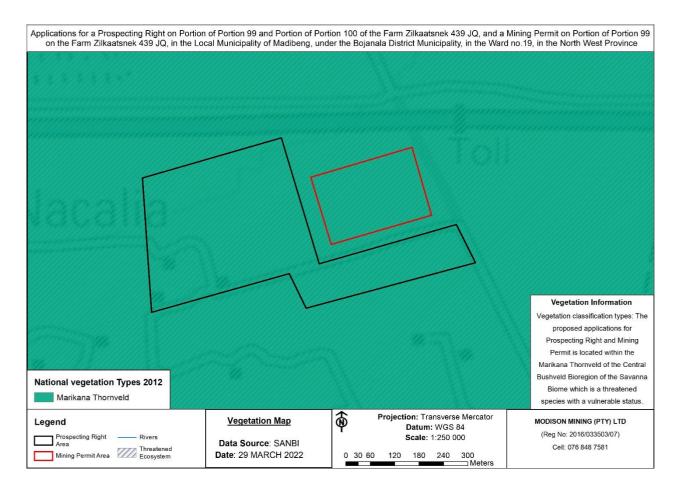
# 9.2 Vegetation

The Mucina and Rutherford (2006) described the project application area as falling within the Savanna biome. The Savanna Biome is the largest Biome in southern Africa, occupying 46% of its area, and over one-third the area of South Africa. It is well developed over the Lowveld and Kalahari region of South Africa and is also the dominant vegetation in neighbouring Botswana, Namibia, and Zimbabwe. A grassy ground layer and a distinct upper layer of woody plants characterize it. Where this upper layer is near the ground vegetation may be referred to as Shrubveld, where it is dense as Woodland, and the intermediate stages are locally known as Bushveld.

The Marikana Thornveld vegetation type occurs in the North-West and Gauteng Provinces, on plains from the Rustenburg area in the west, through Marikana and Brits to the Pretoria area in the east. The ecosystem is characterised by open *Acacia karroo* woodland, occurring in valleys and slightly undulating plains, and some lowland hills. Shrubs are denser along drainage lines, on termitaria and rocky outcrops or in other habitat protected from fire.

Mucina and Rutherford (2006:462) also states that the conservation of this thornveld type, is endangered with a target of 19%. Only 1% is statutorily conserved in, for example, Magaliesberg Nature Area. More conserved in addition in other reserves, mainly in De Onderstepoort Nature Reserve. Considerably impacted, with 48% transformed, mainly

cultivated and urban or built-up areas. Most agricultural development of this unit is in the western regions towards Rustenburg, while in the east (near Pretoria) industrial development is a greater threat of land transformation. Erosion is very low to moderate. Alien invasive plants occur localised in high densities, especially along the drainage lines.



#### 9.3 Climate

Climate plays an important role in determining the availability of water resources, the nature of the natural landscape and vegetation types. As of late, the number of sun days and the frequency of wind has become a significant consideration in terms of the availability of alternative power. There is a wide variation in climate throughout the North West Province

The climate around the project area is mild, and generally warm and temperate. The summers receive more rainfall than the winters in Brits with an average of over 600 mm. Droughts and floods occur regularly at both provincial and local scales. They play a significant role in almost every aspect of the social, economic and ecological environment within the Province while Evaporation exceeds rainfall in most parts of the Province.

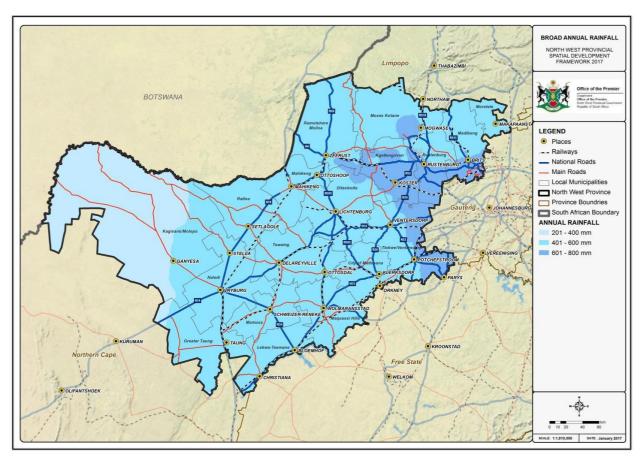


Figure 3:Annual Rainfall NW:

### source dept of water and sanitation

There are wide seasonal and daily variations in temperature, being very hot in summer (daily average high temperatures of  $32^{\circ}$ C in January) and mild to cold in winter (average daily minimum in July is  $0.9^{\circ}$ C). The far western part is arid, encompassing the eastern portion of the Kalahari Desert. The central part of the Province is typically semi-arid, with the eastern part region being predominantly temperate. In the western half of the province, the annual solar radiation is the second highest in the country and measures between 8501 and 9000 MJ/m2

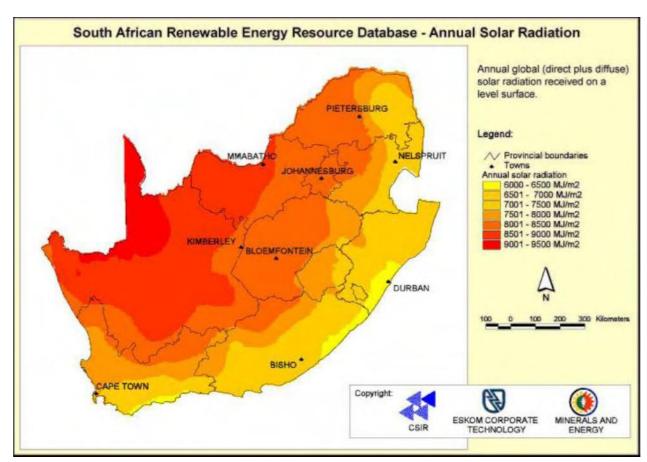


Figure 4:Annual solar radiation graph of SA:

source NW dept of economy and enterprise development

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#### 9.4 Water Resources

The Surface water is dependent on rainfall, soil conditions and land cover. Three primary catchments drain the province: The Limpopo, Vaal and Orange River catchments. The North West Province hosts four Water Management Areas (WMA); namely the Crocodile (West) and Marico, Upper Vaal, Middle Vaal and the Lower Vaal.

The Madibeng Local Municipality forms part of the Marico water catchment system and s a smaller catchment comprising the north-western part of the Bojanala Platinum District.

The main rivers in this catchment are the Groot-Marico, Klein-Marico, Marico and Ngotwane. Rivers are used for direct abstraction and treatment of domestic water. Otherwise, water is abstracted from the rivers for irrigation requirements.

Due to relatively low rainfall throughout the province, water is a scarce resource in the province as the North West faces a multitude of issues with regards to water availability, since most surface water resources are non-perennial, resulting in water stress and limiting development and there is no river passing through the proposed mining area.

#### 9.5 Soils, Land Use and Capability

Agriculture is by far the most extensive land use in the NW province. It takes many forms, including commercial dry land and irrigated cultivation, livestock farming, game farming, as well as subsistence farming. The strong agricultural character also means that the province is considered to be predominantly rural.

Climatic conditions, water availability and soil conditions dictate the success of agriculture in the province. Of all the various soil characteristics, erodibility is the most critical to understand. The erodibility of soils can be described as their sensitivity to the effects of wind and water on the soil structure. This property is expressed as an erodibility index, where low values indicate high susceptibility to erosion, and high values correspondingly indicate a low susceptibility to erosion.

The Land Capability classification within North West indicates the suitability of soils for most kinds of field crops and divides it into 8 classes. The National Department of Agriculture considers Class 1- 4 as well as existing arable land as high potential agricultural land. The department is in the process of refining the land capability classes.

Table 23-1: Land Capability Classification

Class 1	Soils have slight limitations that restrict their use.
Class 2	Soils have moderate limitations that restrict the choice of plants or that require moderate conservation practices.
Class 3	Soils have severe limitations that restrict the choice of plants or that require special conservation practices, or both.
Class 4	Soils have very severe limitations that restrict the choice of plants or that require very careful management, or both.
Class 5	Soils are subject to little or no erosion but have other limitations, impractical to remove, that restrict their use mainly to pasture, rangeland, forestland, or wildlife habitat.
Class 6	Soils have severe limitations that make them generally unsuitable for cultivation and that restrict their use mainly to pasture, rangeland, forestland, or wildlife habitat.
Class 7	Soils have very severe limitations that make them unsuitable for cultivation and that restrict their use mainly to grazing, forestland, or wildlife habitat.
Class 8	Soils and miscellaneous areas have limitations that preclude commercial plant production and that restrict their use to recreational purposes, wildlife habitat, watershed, or esthetic purposes.

High and medium soil erodability indices have a significant influence on the degradation of the agricultural potential of land, aggravated by unmanaged human settlement. See **Map 23-14**.

According to The table below extracted from the National Department of Agriculture and the Map below, area around Brits/ project area fall under class 1 and 2 on the land capability classification and have slight to moderate limitations that restrict the choice of plants or require special conservation practices or both.

The dominant land use on the Prospecting right area is fallow land and old fields (Grass) & Natural grass land according to South African National Land cover 2020 map (SANLC) and the dense forest are sparsely situated across the farm with not much coverage see figure 5 below.

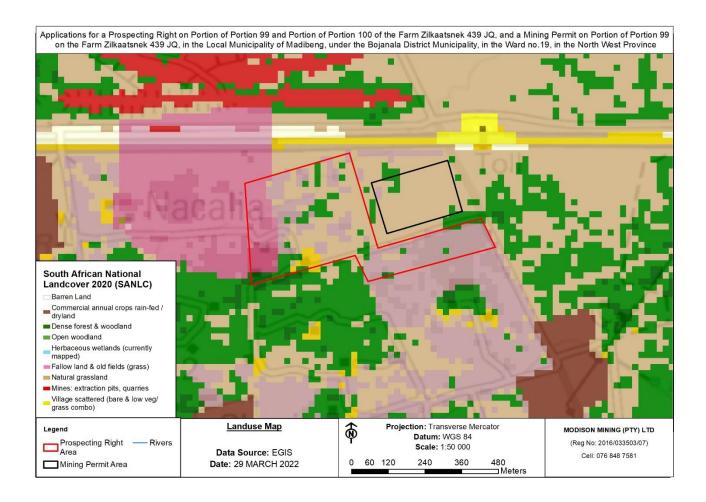




Figure 5:Land use map, showing the Prospecting area in red for Modison Mining

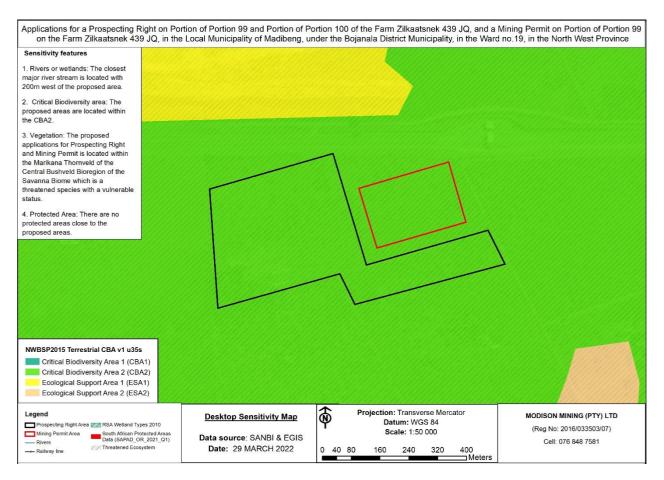
#### 9.6 Biodiversity

This Critical Biodiversity Areas (CBA's) are terrestrial and aquatic features in the landscape that are critical for retaining biodiversity and supporting continued ecosystem functioning and services (SANBI, 2007). These form the key output of a systematic conservation assessment and are the biodiversity sectors inputs into multi-sectoral planning and decision making tools.

The primary purpose of CBA's is to inform land-use planning and the land-use guidelines attached to CBA's aim to promote sustainable development by avoiding loss or degradation of important natural habitat and landscapes in these areas and the landscape as a whole. CBA's can also be used to inform protected area expansion and development plans. The use of CBA's here follows the definition laid out in the guideline for publishing bioregional plans (Anon, **2008**):

"Critical biodiversity areas (CBAs) are areas of the landscape that need to be maintained in a natural or near-natural state in order to ensure the continued existence and functioning of species and ecosystems and the delivery of ecosystem services. In other words, if these areas are not maintained in a natural or near- natural state then biodiversity conservation targets cannot be met. Maintaining an area in a natural state can include a variety of biodiversity-compatible land uses and resource uses".

"**Ecological support areas** (ESA's) are areas that are not essential for meeting biodiversity representation targets/thresholds but which nevertheless play an important role in supporting the ecological functioning of critical biodiversity areas and/or in delivering ecosystem services that support socio-economic development, such as water provision, flood mitigation or carbon sequestration. The degree of restriction on land use and resource use in these areas may be lower than that recommended for critical biodiversity areas."



The Magaliesberg Mountain Range extends 120km eastward from Rustenberg in the North West to the Gauteng Province's Hartebeespoort Dam. The Magaliesberg is a Protected Environment in terms of the National Environmental Management: Protected Areas Act (No. 57 of 2003) and has also been incorporated into a Biosphere Reserve due to the high biodiversity value of this area. It also represents one of the province's 6 Important Bird Areas.

The project area is in close proximity to the magaliesberg biosphere at a distance of approximately 3.5km away from the demarcated Protected area, see figure 5

# **Coordinates of Portions applied for**

	PROSPECTING	G RIGHT
(1)	CO-ORDINATES	IN WGS 84
	х	Y
Α	27.914562	-25.651339
В	27.917608	-25.650425
С	27.918417	-25.653223
D	27.921624	-25.652310
E	27.921996	-25.653119
F	27.918084	-25.654223
G	27.917665	-25.653480
Н	27.914734	-25.654232

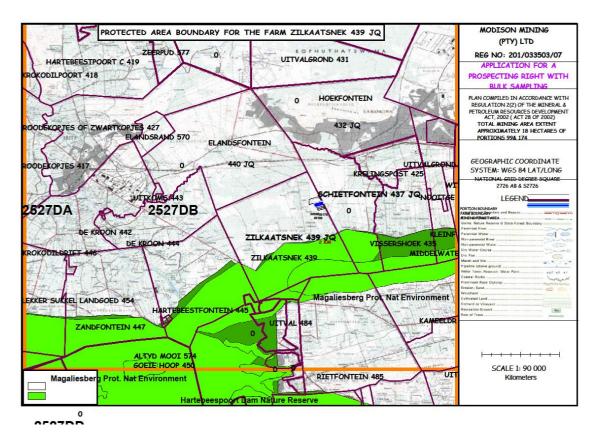


Figure 6: Protected area map

According to this map of the protected environment, the area under application however, is not part of the Magaliesberg Biosphere, even though according to the screening tool report, the map of relative terrestrial Biodiversity theme sensitivity indicates that the area falls under area 2 of critical biodiversity (CBA 2), very sensitive to vulnerable ecosystems and very sensitive to protected areas expansion strategy See figure 6 below



Figure 7: Terrestrial Biodiversity map showing a very high sensitivity report

This implies that the landscape is near to natural state and the Ecosystems and species are largely intact and undisturbed. These are areas with intermediate irreplaceability or some flexibility in terms of area required to meet biodiversity targets also there are options for loss of some components of biodiversity in these landscapes without compromising our ability to achieve targets.

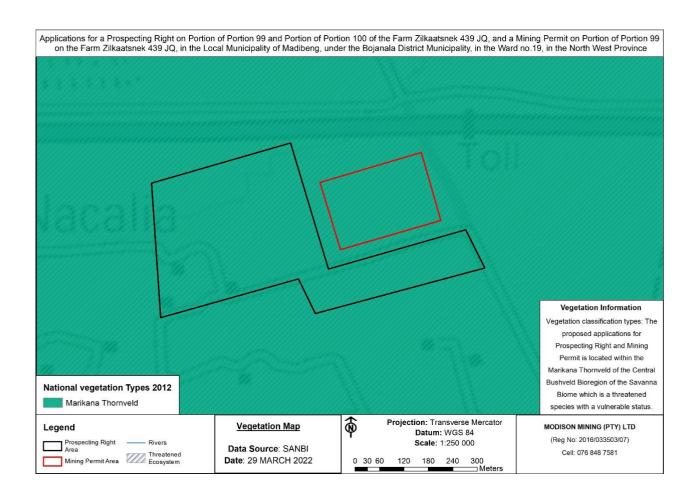
Therefore, a thorough Terrestrial Biodiversity study will be conducted during the EIA Phase in order to thoroughly investigate the species that could be endangered and also to allow for proper mitigation measures to be implemented based on the actual site assessment and not only desktop studies.

#### 9.7 Vegetation

The Mucina and Rutherford (2006) described the project application area as falling within the Savanna biome. The Savanna Biome is the largest Biome in southern Africa, occupying 46% of its area, and over one-third the area of South Africa. It is well developed over the Lowveld and Kalahari region of South Africa and is also the dominant vegetation in neighbouring Botswana, Namibia, and Zimbabwe. A grassy ground layer and a distinct upper layer of woody plants characterize it. Where this upper layer is near the ground

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cultivated and urban or built-up areas. Most agricultural development of this unit is in the western regions towards Rustenburg, while in the east (near Pretoria) industrial development is a greater threat of land transformation. Erosion is very low to moderate. Alien invasive plants occur localised in high densities, especially along the drainage lines.

a thorough Terrestrial Biodiversity study will be conducted during the EIA Phase

#### 9.8 Socio-economic

The Madibeng Local Municipality(NW 372) is situated in the North West Province and cover over an area of about 3 814 km². The Madibeng Local Municipality comprises of the following main towns Brits, Hartbeespoort, Skeerpoort area, 9000 farm portions as well as 43 villages. The Madibeng Local Municipality is demarcated into 41 Wards. The population of Madibeng is estimated by the 2011 population census to be at 477 381. Madibeng Local Municipality is located roughly 40km from Pretoria, 55km from Johannesburg and 50km from Rustenburg.

Madibeng Local Municipality is located or situated on the Northern part of North West Province and one (1) of the five (5) local municipalities within the Bojanala District Municipality.

The Socio-Economic Development Indicators of North West Province and their respective Districts/ Local Municipalities are recorded as per below table. The table illustrates the following scenarios;

- Existing economic and labour force growth result in the shedding of approximately 1 674 jobs per annum within the provincial economy.
- The economically active population is decreasing by approximately 15 077 people per annum. This is related to the province's inability to create jobs.
- The working age population is decreasing by approximately 15 309 people per annum, whilst the population is increasing – resulting in more pressure on breadwinners

Table 10: Socio-economic indicators

District	Working Age Population (2013)	Economically Active Population (2013)	Employed Population (2013)	Working Age Population (Annual Contribution/loss)	Economically Active Segment (Job need)	Jobs (Annual Contribution / loss)
Bojanala Platinum	846 406	499 191	384 794	-5.4	-3 436	458
Ngaka Modiri Molema	492 783	218 145	154 503	-3 764	-3 324	-724
Dr Ruth S Mompati	212 193	75 466	54 231	-7 489	-4 344	-1 880
Dr Kenneth Kaunda	557 111	327 234	258 704	-4 051	-3 973	471
Total	2 108 493	1 120 036	852 232	-15 309	-15 077	-1 674

Source: Demacon, 2016

# 9.9 Description of Current Land Use

Although there is farming on some parts of the farm, most portions of the farm are used for mining activities, the Land Cover can be considered largely natural

# 10 IMPACT ASSESSMENT

# 10.1 List of impacts identified

The proposed project is anticipated to impact on a range of biophysical and socio-economic aspects of the environment. Potential impacts identified for the project are summarised in the table below.

These impacts will be investigated further during the EIA phase of the project, and will be updated in the EIA EMPr based on the findings of the various specialist studies and input from I&APs.

Table 10: High level impact assessment

No	Activity	Impact asse	Phase	Without or With Mitigation	Nature (Negative or Positive Impact)	Probability		Duration		Scale		Magnitude/ Severity		Signific	cance
						Magnitude	Score	Magnitude	Score	Magnitude	Score	Magnitude	Score	Score	Magnitude
Const	ruction Phase														
	Clearance of vegetation for the	Topsoil degradation	Construction	WOM	Negative	Definite	5	Permanent	5	Site	2	Medium	6	65	Moderate-high
1	establishment of the site	and Soil Erosion	Phase	WM	Negative	Highly Probable	4	Medium term	3	Site	2	Low	2	28	Low
	camp, drill and trench sites and	Generation of	Construction	WOM	Negative	Highly Probable	4	Short term	1	Site	2	Low	2	20	Negligible
2	access roads (tracks)	dust	Phase	WM	Negative	Probable	2	Short term	1	Site	2	Low	2	10	Negligible
		Generation of	Construction	wom	Negative	Highly Probable	4	Short term	1	Site	2	Medium	6	36	Low
3		noise	Phase	WM	Negative	Probable	2	Short term	1	Site	2	Low	2	10	Negligible
		Impact on Ecology:	Construction	wom	Negative	Definite	5	Medium term	3	Local	1	Medium	6	50	Moderate
4		Habitat Destruction	Phase	WM	Negative	Probable	2	Medium term	3	Local	1	Low	2	12	Negligible
5		Impact on Ecology:	Construction Phase	WOM	Negative	Definite	5	Medium term	3	Local	1	Medium	6	50	Moderate

	Habitat			ĺ			1		1	1		İ		
	Fragmentation		WM	Negative	Definite	5	Medium term	3	Local	1	Low	2	30	Low
	Impact on			regutive	Demine	3	Wiedidiii eeiiii	3	Local	_	2011		30	2011
	Wetlands:	Construction	WOM	Negative	Definite	5	Long term	4	Local	1	Medium	6	55	Moderate
	Direct wetland / riparian	Phase		-0			0 11							
6	destruction		WM	Negative	Highly Probable	4	Medium term	3	Local	1	Medium	6	40	Low
	Impact on													
	Wetlands: Loss of		WOM	Negative	Definite	5	Medium term	3	Local	1	Medium	6	50	Moderate
	instream													
	habitat due to	Construction Phase												
	change in	Tildse												
	channel structure and													
7	condition		WM	Negative	Highly Probable	4	Medium term	3	Local	1	Medium	6	40	Low
	Impact on													
	heritage resources:	Construction	WOM	Negative	Definite	5	Permanent	5	Local	1	Medium	6	60	Moderate
	(medium	Phase												
	significance)		14/8.4	Negative	lus a a a b a b l a	1	Ch aut tauss	4	1!	1	1	,	,	Na ali ailala
8	Impact on		WM	Negative	Improbable	1	Short term	1	Local	1	Low	2	4	Negligible
	heritage		WOM	Negative	Definite	5	Permanent	5	Local	1	Medium	6	60	Moderate
	resources:	Construction	VVOIVI	ivegative	Definite	3	Permanent	3	LUCAI	1	Medium	0	00	Moderate
	(medium significance)	Phase												
9	o.gea.ree,		WM	Negative	Improbable	1	Short term	1	Local	1	Low	2	4	Negligible
	Impact on													
	heritage resources:	Construction	WOM	Negative	Definite	5	Short term	1	Local	1	Low	2	20	Negligible
	(low	Phase												
	significance)								l					
10	Socio-		WM	Negative	Improbable	1	Short term	1	Local	1	Low	2	4	Negligible
	economic		14/014	No setti	Ulahka Daaka U		Ch aut tauss		1 1		LIC-L		40	
			WOM	Negative	Highly Probable	4	Short term	1	Local	1	High	8	40	Low

		1.	l .		1	T		T	1	1	1	T	1	1	
		impacts (impacts on farming activities such as cultivation	Construction Phase												
11		and grazing land)		WM	Negative	Probable	2	Short term	1	Site	2	Medium	6	18	Negligible
Оре	erational Phase														
	Prospecting activities	Landform													
	including the	disturbance and	Operation Phase	WOM	Negative	Highly Probable	4	Medium term	3	Site	2	Medium	6	44	Moderate
1	drilling and bulk sampling,	soil compaction	Tilase	WM	Negative	Probable	2	Medium term	3	Site	2	Medium	6	22	Low
	sump, storage of core	Pollution of	Operation	WOM	Negative	Highly Probable	4	Medium term	3	Site	2	High	8	52	Moderate- High
	samples, chemical	soils	Phase		. reguerre	Tingini, Tropagio	•			0.00	_			02	moderate riight
2	toilets, storage of			WM	Negative	Probable	2	Medium term	3	Site	2	Medium	6	22	Low
	hydrocarbons	Aesthetic	Operation	WOM	Negative	Probable	2	Medium term	3	Site	2	Medium	6	22	Low
		Impact	Phase												
3				WM	Negative	Probable	2	Medium term	3	Site	2	Low	2	14	Negligible
		Impact on	Operation	WOM	Negative	Highly Probable	4	Medium term	3	Site	2	High	8	52	Moderate- High
4		water resources	Phase	WM	Negative	Probable	2	Medium term	3	Site	2	Medium	6	22	Low
					2011										
		Generation of	Operation	WOM	Negative	Probable	2	Medium term	3	Regional	3	High	8	28	Low
5		Dust	Phase	WM	Negative	Improbable	1	Medium term	3	Site	2	Medium	6	11	Negligible
		Impact on			ivegative	Improbable		Wicaiaiii teriii	3	Site		Wicalam		11	Negligible
		Ecology: Spread	Operation	WOM	Negative	Highly Probable	4	Long term	4	Site	2	Medium	6	48	Moderate
6		of alien invasive Species	Phase	WM	Negative	Probable	2	Medium term	3	Site	2	Low	2	14	Negligible
		Impact on Ecology:		WOM	Negative	Highly Probable	4	Medium term	3	Site	2	Medium	6	44	Moderate
	1		I		-6	3,			L	1	<u> </u>	1			

	-	Ī	i			1		1	1	1	1	•	1		
		Negative effect of human	Operation Phase												
7		activities on site		WM	Negative	Probable	2	Medium term	3	Site	2	Low	2	14	Negligible
		Impact on													
		Ecology: Fauna	Operation	WOM	Negative	Highly Probable	4	Medium term	3	Site	2	Medium	6	44	Moderate
		Mortality on	Phase												
8		Roads		WM	Negative	Highly Probable	4	Medium term	3	Site	2	Low	2	28	Low
		Impact on heritage resources	Operation Phase	WOM	Negative	Probable	2	Short term	1	Local	1	Low	2	8	Negligible
9															
				WM	Negative	Probable	2	Short term	1	Local	1	Low	2	8	Negligible
		Generation of noise	Operation Phase	WOM	Negative	Highly Probable	4	Medium term	3	Site	2	Low	2	28	Low
10															
				WM	Negative	Probable	2	Medium term	3	Local	1	Low	2	12	Negligible
		Impact on socio- economic environment (loss of cultivated land and grazing)	Operation Phase	wom	Negative	Highly Probable	4	Medium term	3	Site	2	High	8	52	Moderate - High
11															
				WM	Negative	Probable	2	Medium term	3	Site	2	Medium	6	22	Low
		Increased risk of	Operation Phase	WOM	Negative	Probable	2	Medium term		Regional	3	Medium	6	24	Low

12	fire													
			WM	Negative	Improbable	1	Medium term	3	Site	2	Medium	6	11	Negligible
13		Operation Phase	wom	Negative	Probable	2	Medium term	3	Site	2	Medium	6	22	Low
13			WM	Negative	Improbable	1	Medium term	3	Site	2	Medium	6	11	Negligible

# 10.2 Methodology used in determining the significance of environmental impacts

An impact can be defined as any change in the physical-chemical, biological, cultural and/or socio-economic environmental system that can be attributed to human activities related to alternatives under study for meeting a project need. Assessment of impacts will be based on the Department of Environmental Affairs Guideline Document: EIA Regulations 2010. The significance of the aspects/impacts of the process will be rated by using a matrix derived from Plomp (2004) and adapted to some extent to fit this process. These matrixes use the consequence and the likelihood of the different aspects and associated impacts to determine the significance of the impacts.

The significance of the impacts will be determined through a synthesis of the criteria below:

The status	of the impact	
Status		Description
Positive:		a benefit to the holistic environment
Negative:		a cost to the holistic environment
Neutral:		no cost or benefit
The magn	itude (severe or beneficial)	of the impact
Score	Severe/beneficial effect	Description
1	Slight	Little effect – negligible disturbance/benefit
2	Slight to moderate	Effects observable – environmental impacts reversible with time
3	Moderate	Effects observable – impacts reversible with rehabilitation
4	Moderate to high	Extensive effects – irreversible alteration to the environment
5	High	Extensive permanent effects with irreversible alteration
The extent	t of the impact	
Score	Extent	Description
1	Site specific	Within the site boundary
2	Local	Affects immediate surrounding areas
3	Regional	Extends substantially beyond the site boundary
4	Provincial	Extends to almost entire province or larger region
5	National	Affects country or possibly world
The durati	on of the impact	
Score	Duration	Description
1	Short term	Less than 2 years
2	Short to medium term	2 – 5 years
3	Medium term	6 – 25 years
4	Long term	26 - 45 years
5	Permanent	46 years or more
The revers	ibility of the impact	
Score	Reversibility	Description

1	Completely reversible	Reverses with minimal rehabilitation and negligible residual affects
3	Reversible	Requires mitigation and rehabilitation to ensure reversibility
5	Irreversible	Cannot be rehabilitated completely/rehabilitation not viable

The Con	sequence	= Magnitude + Spatial Scale + Duration + Reversibility.
The prob	ability of the impact	
Score	Rating	Description
1	Unlikely	Less than 15% sure of an impact occurring
2	Possible	Between 15% and 40% sure of an impact occurring
3	Probable6	Between 40% and 60% sure that the impact will occur
4	Highly Probable	Between 60% and 85% sure that the impact will occur
5	Definite	Over 85% sure that the impact will occur
The Sign	ificance	= Consequence x Probability.
Score ou	t of 100	Significance
1 to 20		Negligible
21 to 40		Low to moderate
41 to 60		Moderate
61 to 80		Moderate to high
81 to 100		High
Is mitigat	cion possible?	Yes or no?
Degree o	f loss of resource	
Low		Where the resource will recover

Note: this is a high level assessment, and impacts have been rated prior to any mitigation measures being proposed.

# 10.3 The positive and negative impacts that the proposed activity (in terms of the initial site layout) and alternatives will have on the environment and the community that may be affected

Table 10 assesses the positive and negative impacts of the proposed activity in line with the methodology detailed in Section 10.2.

# 10.4 The possible mitigation measures that could be applied and the level of risk

10.4 below indicates the preliminary mitigation measures. These will be further detailed in the EIA / EMP report.

#### 10.5 The Outcome of the Site Selection Matrix and Final Layout Plan

Alternatives for the mining layout are limited by the extent of the Chrome resource. The type of mining to be conducted (surface trench mining) is further limited by the shallow depth of the resource.

The surface infrastructure will be placed based on a high level analysis of the area, to avoid existing farmsteads, water resources and other sensitive areas as far as possible so as to minimise the environmental impacts associated with the project. The infrastructure area will also sited based on accessibility and the current land use after the terrestrial biodiversity study has been conducted in the area, also access roads will be considered in order to reduce hauling distances.

Table 10 assesses the positive and negative impacts of the proposed activity in line with the methodology detailed in Section 10.2. It must be stressed that the final location of the infrastructure may shift slightly dependent on the findings of the various specialist studies and input from I&APs.

#### 10.6 Motivation where no alternative sites were considered

No property / site alternatives were considered for this project. Properties are delimited by the properties available for prospecting and/or mining (i.e. not held by another company); and the geology of the area.

#### 10.7 Statement motivating the preferred site

The overall project and infrastructure layout will take into account the environmental sensitivity of the site, current land use and infrastructure will be placed to avoid or minimise environmental impacts as far as possible. The final mine plan and infrastructure layout plan will be adjusted according to the outcome of the various specialist studies and comments raised by I&APs

#### 11 PLAN OF STUDY FOR THE ENVIRONMENTAL IMPACT ASSESSMENT PROCESS

# 11.1 Description of alternatives to be considered including the option of not going ahead with the activity

The current project site is the only available or preferred site due to availability and geology of the area. However, the location of the infrastructure may shift slightly dependent on the findings of the specialist studies and input from I&APs. This will be dependent on the presence and extent of sensitive features on site and legal options regarding the preservation or destruction of such sites or features. This will be finalised in the EIA and EMPr phase and reported within the EIA and EMPr.

The Final EIA and EMPr will include the following assessment:

- A final layout based on the Findings of the site visit after the specialist studies to address te sensitive areas.
- The "no-go" alternative has been briefly stipulated within the Scoping Report and will be elaborated where relevant regarding any changes in layout or activities.

# 11.2 Description of aspects to be assessed as part of the environmental impact assessment process

The following aspects will be assessed within the EIA EMPr: Soils, land use and land capability;

Terrestrial & Aquatic Ecology

Groundwater;

Air Quality;

Cultural Heritage;

Visual Environment;

Social Impacts;

Traffic and Safety; and

Closure and Rehabilitation.

The final impact table will incorporate additional impacts identified by I&APs and by specialists and include proposed mitigation measures, a post mitigation significance assessment, and monitoring and inspection details that need to be implemented to reduce probability or severity of the impact and to ensure mitigation measures are appropriate.

#### 11.3 Proposed method of assessing duration significance

This will be incorporated into the impact assessment as "degree of loss of resource" which is evaluated in terms of:

- Low degree of loss: where the resource will recover from the impact on its own with no/limited rehabilitation over an observable period of time;
- Moderate degree of loss: where the resource will recover from the impact over extended period or with rehabilitation or remedial measures to assist recovery of resource; and
- High degree of loss: Where the resource cannot recover from the impact or the resource will recover over very extended time periods.

#### 11.4 Stages at which the competent authority will be consulted

The DMR will receive all the relevant documentation that would have been presented to registered I&APs during the scoping phase, including copies of the BID, invites to the scoping phase public meeting, review of minutes of the public meeting and the review of information presented in this Scoping Report.

This draft Scoping Report will be submitted to the DMR for comment and feedback. In addition, the final Scoping Report, incorporating all comments raised during the PPP review period, will be submitted to the DMR for approval.

Future stages of the consultation will include:

- Notification of the EIA and EMPr phase public meeting, and the presentation of the meeting;
- Notification of the availability of the meeting minutes for public review and comment;
   and
- Notification of the availability of various environmental reports for public review, including the EIA and EMPr and the IWULA and associated IWWMP report.

The comments received from the public after the completion of the public review period will then be incorporated into the final EIA and EMPr which will be submitted to the DMR for approval.

# 11.5 Particulars of the public participation process with regards to the impact assessment process that will be conducted

#### 11.5.1 Steps to be taken to notify I&APs

Hand delivered notification and emails has been completed as far as possible with land owners / users and adjacent land owners / users.

PPP during the EIA phase of the project involves the review of the EIA and EMPr as well as the findings of the various specialist studies. I&APs will be notified using the following:

- Advertisements
- Registered I&APs will be notified by order of preference either: SMS, fax, e-mail, post or telephone call.

Registered I&APs will be invited to attend an EIA phase PPP meeting where the contents of the EIA EMPr will be presented and the I&APs will have the opportunity to comment.

The stages at which these will occur are detailed further below.

#### 11.5.2 Details of the engagement process to be followed

All persons registered as I&APs and organs of state identified through the scoping phase PPP will be sent invites to attend the EIA and EMPr Phase PPP meeting. The meeting will address specialist findings, focussing on sensitive issues, and provide information on the impact probability and significance. Proposed mitigation measures will also be discussed.

The meeting will be minuted, and the minutes distributed to all attendees and I&APs for comment.

A Final Draft EIA and EMPr will be compiled.

I&APs will be notified of the availability of the EIA and EMPr and associated Appendices for public review and comment, the location where the hard copy and electronic copies can be viewed and the timeframe (30 calendar days, which will be extended if significant public holidays occur within this period as per NEMA EIA regulations) for comment.

All comments received from the review phase will be incorporated into the issues and response table and incorporated into the Final PPP Report and Final EIA and EMPr for submission to authorities.

During the EIA and EMPr phase, if the need is identified to have one-on-one micro-consultations, then these will be organised with the relevant I&AP.

Upon receipt of a RoD, all registered I&APs will be notified of the RoD, the final decision in the RoD and the appeal process they can follow under NEMA.

#### 11.5.3 Description of the information to be provided to the I&APs

PPP during the EIA phase of the project will entail the review of the EIA EMPr and all the completed specialist studies. These reports will be provided to the public for a period of 30 days.

I&APs will be notified of the availability of the EIA and EMPr (and associated specialist studies) for public review. Hard copies will be available on request and Madibeng local Library Electronic copies will also be provided to any I&APs requesting these via email.

In addition to this, registered I&APs will be invited to attend an EIA phase PPP meeting where the contents of the EIA EMPr will be presented and the I&APs will have the opportunity to comment.

## 11.6 Description of the tasks that will be undertaken during the Environmental Impact Assessment Process

The impact identification process will commence by identifying all environmental aspects on site, whether sensitive or not. General environmental aspects that will be considered include:

- Topography
- Geology
- Soil and Associated Land Use and Capability
- Surface Water, Associated Wetlands and Aquatic Ecosystems
- Groundwater
- Floral and Faunal Ecosystems
- Air Quality
- Noise
- Archaeological and Cultural Sites
- Visual Aesthetics
- Social
- Closure and Rehabilitation

All potential impacts that may occur will be listed under each of the aspects.

As the specialist studies are completed, any additional impacts identified through the specialist investigations will be added. All specialists utilise some form of impact rating similar to the process detailed in Section 2(h) (vi). The impact rating completed by the specialists will as far as possible be translated into the impact assessment process detailed above to ensure that similar methodology are applied and comparable significances are obtained to allow for ranking of consolidated impacts.

As far as practically possible, considering variations in impact assessment methodology by different specialists, the specialist impact assessment will therefore be duplicated within a single unified impact assessment process. This will allow for all impacts to be assessed in the same way, reducing subjectivity and allowing for direct comparative ranking of all the impacts identified during the environmental process.

Through the PPP, any issues or potential impacts identified by the I&APs will be added to the list of potential impacts.

All these impacts will then be assessed as per the methodology described above and their significance determined.

# 11.7 Measures to avoid, reverse, mitigate, or manage identified impacts and to determine the extent of the residual risks that need to be managed and monitored

Each impact identified within the impact assessment process will be evaluated in terms of

whether mitigation measure can be applied or not, and what kinds of mitigation measures can be applied. This will be reported in the fully completed and detailed impact assessment table that will be completed for the EIA and EMPr. Therefore each impact, whether the significance is low or high, will have a mitigation measure stipulated where applicable. Furthermore, a post-mitigation assessment of the significance of the impact will also be completed, which will provide an indication of the effectiveness of said mitigation measure.

The preliminary summary is provided in the table below.

**Table 12: Preliminary mitigation measures** 

ACTIVITY	POTENTIAL IMPACT	MITIGATION TYPE (modify, remedy, control, or stop)	POTENTIAL FOR RESIDUAL RISK
All infrastructure areas, development footprints and associated activities (Discussion of potential impacts due Prospecting and Bulk sampling operation as a whole. Specific impacts are discussed for each activity below)	Loss in grazing potential, loss of soil and deterioration of soil characteristics.  Alien invasive encroachment.  Alienation of, and disturbance to, animals.  Loss of biodiversity, degradation of vegetation and loss of ecological function & associated loss of habitat, refuge and food for animals.  Destruction of protected species.  Change in land use to quarrying/mining.  Influx of unsuccessful job seekers.  All environmental impacts can affect quality of life; mining activities carry inherent dangers which are a risk to health and safety.  Change in land use.  A POSITIVE IMPACT: Potential for employment & multiplier effect.	Remedy  Rehabilitate all disturbed areas as soon as they are no longer required and cordon off areas until vegetation has established.  Ameliorate soils as needed to establish stable vegetation communities on rehabilitated areas.  Obtain permits to remove / destroy protected species or leave species in situ.  CONTROL  Compile and implement an alien an invasive species management plan.  Do not hinder, harm or trap animals.  Animals or protected flora under threat from the development will be relocated from site by specialists.  Noise control measures will be considered.  Machinery and equipment will be regularly serviced.  Labourers, contractors, service providers should initially be sought locally and only regionally if skills are not available.  Employ as per S&LP.  Ensure proper communication channels are in place with local businesses and I&APs.	Species will take time to recover.  Land capability may be altered.  Alien and invasive species may become rampant if not adequately controlled during operations and rehabilitation.

ACTIVITY	POTENTIAL IMPACT	MITIGATION TYPE (modify, remedy, control, or stop)	POTENTIAL FOR RESIDUAL RISK
		Protected species cannot be removed unless the necessary permits are obtained under NEM:BA.	

ACTIVITY	POTENTIAL IMPACT	MITIGATION TYPE (modify, remedy, control, or stop)	POTENTIAL FOR RESIDUAL RISK
		demarcated as a no-go zone. A specialist will need to be consulted and responsible action considered.	
Soil stripping & stockpiling	Stockpiles will change the topographical nature of the area.  Compaction and alteration of physical characteristics of soil and potential loss of soil.  Increased runoff and associated potential silt-loading of downstream water resources.	REMEDY  Material stockpile and soil berm placement should consider remediation of other impacts, such as utilising material as a berm to shield visual impacts.  As far as possible, plan soil stripping activities in the dry season.  CONTROL	Land capability may be altered.
	Dust generation.	Minimize the area of disturbance.  Topsoil and underlying material should be stored separately as per stripping guidelines.	
		All excavated topsoil will be stored for use during rehabilitation of the mine.  Topsoil should be stripped and stockpiled with herbaceous vegetation to retain organic content. All stockpiles / berms which will be in place for more than 6 months must be vegetated to reduce risk of erosion.  Topsoil stockpiled as perimeter berms must not exceed 2 m.  All stockpiles must have an outer slope of	

ACTIVITY	POTENTIAL IMPACT	MITIGATION TYPE (modify, remedy, control, or stop)	POTENTIAL FOR RESIDUAL RISK
		potential for erosion of the outer pile face).	
		Construct top perimeter berms on stockpiles to prevent erosion.	
		Cut off drain must be constructed upslope of all stockpiles.	
		Establish storm water control measures before any other activities commence to ensure clean and dirty water separation and dirty water containment.	
		Seed all long term stockpiles - Seeding must be completed at the onset of the rainy season.	
		Consider reducing construction activities when windy.	

ACTIVITY	POTENTIAL IMPACT	MITIGATION TYPE (modify, remedy, control, or stop)	POTENTIAL FOR RESIDUAL RISK
Water supply (potable & process)	Irresponsible use of water and water wastage.	REMEDY Inspection of potable water features for leaks and immediate repair CONTROL Saving water initiatives will be included in the environmental awareness training. Utilise water on site responsibly. Record all water usage on site.	Positive impact as water will be available for other users.
Access and hauling along roads	Increased potential for road incidences and road degradation.  Increased fugitive dust emissions and associated particulate matter.	CONTROL  Material stockpiling and handling must be in designated areas.  Manage dust on internal haul roads through water carts or sprinklers.  Trucks must not be overloaded and must be covered with tarpaulins.  Speed limits will be established on the dirt road.  Drivers, contractors and visitors will enforce speed limits.  Intersections with main roads will be clearly signposted.  Trucks will be in road-worthy condition with	None; traffic will cease.

ACTIVITY	POTENTIAL IMPACT	MITIGATION TYPE (modify, remedy, control, or stop)	POTENTIAL FOR RESIDUAL RISK
		reflective strips.	

ACTIVITY	POTENTIAL IMPACT	MITIGATION TYPE (modify, remedy, control, or stop)	POTENTIAL FOR RESIDUAL RISK
		Waste will be stored according to the Norms and Standards for Storage of Waste.	
		Recyclable waste should not be stored for excessive periods.	
		Refuse bins will be placed around site to collect waste for separation, recycling and disposal.	

ACTIVITY	POTENTIAL IMPACT	MITIGATION TYPE (modify, remedy, control, or stop)	POTENTIAL FOR RESIDUAL RISK
Ablutions & conservancy tanks	Potential contamination of soil, surface water and groundwater with sewage.  Source of microbial contamination and health risk if sewage leaks occur.	REMEDY  Ensure conservancy tanks are adequately sized and emptied accordingly.  CONTROL  Ablutions and conservancy tanks will be inspected regularly for any leaks which will be repaired immediately.	None; will eventually be removed from site.
Rehabilitation	Dust generation associated with material handling.  Lack of functional vegetation due to poor rehabilitation.	REMEDY  The utilizable soil removed during the construction phase shall be redistributed in a manner that achieves an approximate	Groundwater monitoring, soil quality monitoring, topographical surveying, surface water monitoring and monitoring of vegetation cover and succession must

ACTIVITY	POTENTIAL IMPACT	MITIGATION TYPE (modify, remedy, control, or stop)	POTENTIAL FOR RESIDUAL RISK
		uniform stable thickness consistent with the approved post-mining land use, and will attain a free draining surface profile.	be on-going after decommissioning to ensure site is stable.
		Fertilization and amelioration of rehabilitated areas will be undertaken as per soil fertility assessments.	
		Seedbed preparation must be undertaken using agricultural equipment.	
		Restriction of vehicle movement over rehabilitated areas and do not allow any grazing for the first two years.	
		CONTROL	
		Compile a full rehabilitation model before any mining commences and apply this on site.	
		Conduct soil handling as per soil utilisation guide.	
		Rehabilitated areas must be contoured and free draining to prevent ingress and pooling of water.	
		Manage dust through water carts or sprinklers.	
		Runoff from the rehabilitated areas must be allowed to flow naturally to the environment.	
		Monitoring of the rehabilitation success should take place and include corrective follow-up action.	

#### 12 UNDERTAKING REGARDING CORRECTNESS OF INFORMATION

I, Dr Patrick Sithole, declare that –

#### General declaration:

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

• 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

### Disclosure of Vested Interest (delete whichever is not applicable)

performed in terms of the Regulations;
• I have a vested interest in the proposed activity proceeding, such vested interest being:
N/A
_
Diese
Signature of the environmental assessment practitioner:
QEMS
Name of company:
21/04/2022

Date:

## **Appendix 1: Screening tool report**

## **Appendix 2: Public participation documents**

18 MARCH 2022, PLATINUM WEEKLY, Tel: 014 592 5653, Fax: 011 252 6669; E-mail: ads@



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NEMA BASIC ASSESSMENT PUBLIC PARTICIPATION PROCESS FOR A PROSPECTING RIGHT APPLICATION WITH BULK SAMPLING

Notice is hereby given that the Department of Mineral Resources (DMR), in March 2022 has mandated Modison Mining (Pty) Ltd to conduct public participation process for the proposed Prospecting Right application with bulk sampling for chrome and aggregate ore on portions 99 & 174 of the farm Zilkastanek 439 JQ within the Madilbeng Local Municipality in North West Province in Order to comply with the terms of the National Environmental Management Act (NEMA) (Act 107 of 1999) Amendment of the Environmental Impact Assessment Regulation Act 2014 GNR: 324-327, 07 April 2017.

Status of application; Modison mining (Pty/Ltd has applied for a prospecting right with bulk sampling with the department of mineral resources in the health West Region. The application has been accepted and bears a CARRe reference no. NW 306/HAIZH 3313 PR

Project location: the project location is on portions 99 & 174 of the farm Zikastsnek 439 JQ, in the Maditional Local municipality.

Disasterisk-49-02, in the Madberrijt cod municipatry.

Public Participation: interested and affected parties are given an opportunity to participation; interested and affected parties are given an opportunity to participate or comments or suggestions together with the names, centrac details an aduction of direct interest portaining to the property for the contact details listed below. A draft Scoping report for public review will be made available from the 15th March – 15th April upon request, electronically by email or hard copy from the listed contact person and also in the Madberg local library.

To register as an I&AP, and to receive more information, Please contact: Moses Mushi

Please contact: Moses Mushi
Email: unmoses muxe@gmeil.com
Cell No: 076 948 7581
Postal: 15 keigens avenue, Bergsig. 02 Duncan street, Brits.

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#### PUBLIC NOTICE **Legae Medical Centre**

Notice is heroby given in terms of section 5 (4) (5) (a)(b) of Rustenburg Local Municipality Culdoor Advertising By-Law gazette number 9016 that was gazetted on the 11 June 2019, that LEGAE MEDICAL CENTRE would like to place a double sided bilboard at Crit of OLIVER Tambo and Niopper Street (association to remainder of ERF 1031 Rustenburg The size of the board will be 11Mx 11M.

The size of the board will be that IM Attention is specifically drawn to the fact that in terms of techon 6 (6) of the by-law that any person proposing to submit comments or representation or ledge an objection as contemplated must address such comments, representations, or objections to both the municipality and the applicant concerned. Comments must be submitted to Resterburg Local Municipality within the period of 21 days from the date of Advertisement.

The following individuals are to be contacted.

For enquiries please contact: rur enquiries please contact: Lerato Katanel Olebogeng Mabala! nisonono Mantswe 014 590 3436/ 3527/ 3394 Email: Ikatane@rustenburg.gov.za/ oditshwene@rustenburg.gov.za/

Vir enige week kontak ons vandag vir fink en vinnige diens. Doen die volgende - Enige elektries klimer - Altoner - Skade - Keeliksrers en Frieskamers - Coc ep huise - Hek moters - Garage moters - Bedrading van huise Koetak ons vendag | Beste pryse Chris 082 343 2419 | Willem 087 755 9473

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Solve of a confident copy of Deed of Transfer Tapositivizing Solve of a solventier for the time along of PHONE Solventier Transfer of the time along of PHONE PHONE TOWN BOYLUMBLO THAPPLO MUMA, Identify Humber 691214 5627 699, Unmarred in support of Eric 1999 Menting United Township Registration Child 10.0. Province of North West, measuring 212 (Two Numbed and Thereboy Square metres in extent.

Numberd and Twelvey Square metres in extent. All interested oreinors, hiving objection, to the issue if such copy are hereby required to lodge the care in writing with the REGISTRAK OF DEEDS at PRETAIN Central, Merina Building, 140 Pretonus St. Pestoria Central, Particia, 0002 while have veeled from the dode of the publication of this notice. Dated at REJISTRAIJERG on the 15° day of March 2002. COINVEXANCER.

#### NOTICE

APPLICATION FOR A PROSPECTING RIGHT AND AN ENVIRONMENTAL **AUTHORISATION PROCESS** (REF: NW 30/5/1/1/2/13060 PR)

Notice is heraby given in terms of Regulation 41 of the NEMA EIA 2014 Regulations for an application of Prospecting Rights.

NATURE OF ACTIVITY:

application of Prospecting Rights
ARTURE OF ACTIVITY:
Interceled & Affected Parties' are hereby
interceded & Affected Parties' are hereby
interfact that Exhalator (Phy) Ltd has applied
for a Prospecting Right and an Environmental
Authorisation in semis of Regulation 3 of
the National Environmental Management
Act No. 107 of 1998, (NEMA) as amended
in 2017, to undertake prospecting activities
for Pfeltinum Group Metas on 3 farms
in Rustenburg Municipality, District of
Balsieng. The proposed project covers
an extert of 3 244 3 hectaries (ini) of fand
ever various portions of the farms Sandbust.
Zwettberth and Rooder/eastsprut of
Rustenburg Municipality Prospecting will be
done through willing for a period of 5 years.
As part of the application process, any
person who is interested or affected by the
proposed operation, is hereby invited to
register as an I&AP and comment in witting
and submit their comments within 30 days
from the date of this notice.

Te: HN Numato, Agoti Consulting.

Te: HN Humalo, Agoti Consulting, P.O. Box 8360 Rustenburg, 0300 Cell: 072 172 8374/ 082 453 3352 Email: nkule02@gmail.com OR The Regional Manager, Department of Minoral Resources North West Tel: 018 467 4300/ 4346 Fax: 018 487 4350.

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Sefety Officers/COMSOC\* Lovel 1, 2,6,3 Transcramental Management (SAMO) Environmental Management (SAMO) 




## NOTICE OF BASIC ASSESSMENT PROCESS -

NOTICE OF BASIC ASSESSMENT PROCESS – PUBLIC PARTICIPATION
Project Name: Freeh Produce Mariet
Applicant: Moses Kotanie Local Muricipally
Proposed Activity: The project entals the
development of the business complex with shops,
officios, wenthouse, pask and conservation and
within a 5.4 Ha area. Location: Portion 0 of the
Farm Buffeldonen 85 40, GPS Coordinates
25's 18-46,925, 27'125'4-37E. Basic Assessment
Process: In terms of sections 3 and 34'D-0 NEMA,
as read with the R. 982, National Environmental
Managoment Act 10'17'90'8]. Environmental Impact
Managoment Act 10'17'90'8]. Environmental Impact
197. 30'14, a Basic Assessment process
should be undertained to obtain the Environmental
Authorisation for the proposed agreed. All application. should be undertailen to obtain the Environmental Authorisation for the proposed project. An application for Environmental Authorisation has been bidged with Copartment of Economic Development Environment, Conservation and Dussen, Listed Activity Triggered: Activity 9 and 27 of GHS 327 and Adviny 12 (f) (v) of GHS 324 of GHS Agrandies, 4 December 2014 Watercusto Services is undertaking the required Blasic Assessment process and Paulic Participation process Basic Assessement Report for Review: Assessement Report will be available as per Names of the property of the state of the st

NOTICE OF BASIC ASSESSMENT PROCESS—
PUBLIC PARTICIPATION
Project Name: Mediulating Business Complex
Applicant: Mediulating Business
More of Complex Part of Complex
Business
Basic Assessment process and Public Participation process. Basic Assessment Report for Raview. Basic Assessment Report for Raview. Basic Assessment Report will be available as per request thom materials became the application of the notice. To down further subsolution of the notice. To down further submitted register on the declarace, please submit your name, contact details and comments to Teloop Models, Parc. (86) (80) 21-19. Email: youtcountercomment of the declarace and Tel: (971 729-4073).

# NOTICE OF PUBLIC PARTICIPATION PROCESS FOR A BASIC ASSESSMENT PROCESS reject Name: Thoba Ya Batho Township

Applicant: Joseph Nicoli Proposed Activity: The project entails the Applicant: Joseph Microl
Proposed Activity: The project entails the
development of the residential township within
5.3 His area Location: Thata Ya Bisho
Agincultural: Holding GPS Coordinates:
29°174.2015; 29°15°15.80E Basic Assessment
Process in terms of sections 24 and 24D
of NEMA, as read with the R. 992; National
Environmental Mispagement Acq(307)°1989;
Environmental Mispagement Acq(307)°1989;
Environmental Impact Regulations, 2014, a stack assessment process should be undertailen
to obtain the Environmental Authorisation
for the proposed project. An application for
Environmental Authorisation has been lodged
with Department of Economic Development,
Environment, Conservation and Tourism. Lated
Activity Tinggened Authorisation has been lodged
with Department of Economic Development,
Environment, Conservation and Tourism. Lated
Activity Tinggened Authority 27 of 65R 327 and
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Lated A request from watercubeservices@gmail.com 30 days from the day of the notice appearing on

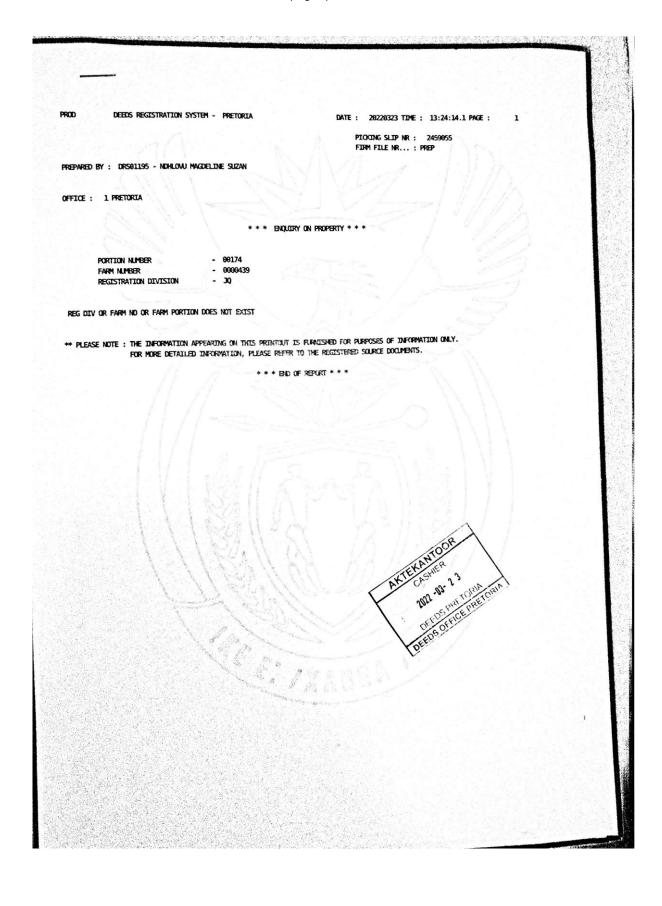












100 DEEDS REGISTRATION SYSTEM - PROTORDA PREPARED BY : DRS01195 - NCHLOAU MAGDELDIE SUZAN

DATE : 28228523 TIPE : 13:24:14:1 PIGE :

PICYDIC SLIP IN: DAYSES

PROPERTY DETAILS PRINT FOR PORTION

99 (R/E) FIRM FILE IR... : 1989

FARM NO 439

REG DIV 30

NORTH WEST PTN4-LG1929/968

DIAGRAM DEED NO EXTENT T35994/969 20.1888 H

CLEARANCE MADIBENG LOCAL MUNICIPALITY

FARM NAME ZTLKAATSNEK

NO INTERDICTS

PROVINCE

PREV DESCRIPTION

DOCUMENTS B158584/2007 K2530/1987PC

30,439,99

HOLDER & SHARE ARSA BANK LTD

THUCK R150000.00

O/P/A SCANMICHO REF

HOD

19878181882518 19670181861617

OWNER DETAILS

FULL NAME & SHARE RAINDANCE INV 705 CC 0.000000

PURCH DATE AMOUNT/REASON O/P/A TOPHTTY 296297977123

DATE OF KTATS

TITLE DEED T182269/2995 MMDD SCAN/MICHO REF 9812 29966181821748

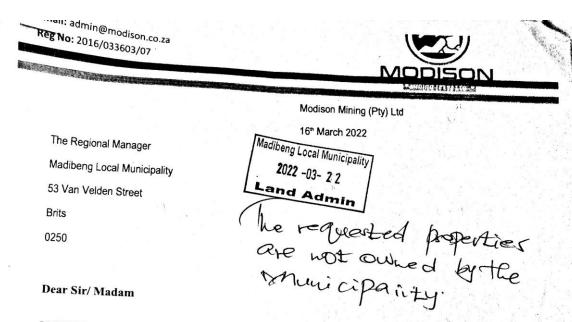
\* 0/P/A - 0 - MULTIPLE OWER P - MULTIPLE PROPERTY A - MULTIPLE OWER AND PROPERTY

ACREEMENT

\*\* PLEASE NOTE : THE INFORMATION APPEARING ON THIS PRINTOUT IS FURNISHED FOR PURPOSES OF INFORMATION ONLY. FOR MORE DETAILED INFORMATION, PLEASE REFER TO THE REGISTERED SOURCE DOOLMENTS.

\* \* \* BND OF REPORT \* \* \*





NOTIFICATION is hereby given that the Department of Mineral Resources (DMR), in March 2022 has mandated Modison Mining (Pty) Ltd to conduct public participation process in support of a Prospecting Right application with bulk sampling and the availability of the draft scoping report for public review on portions 99 & 174 of the farm Zilkaatsnek 439 JQ within the Madibeng Local Municipality in North West Province in Order to comply with the terms of the National Environmental Management Act (NEMA) (Act 107 of 1998) Amendment of the Environmental Impact Assessment Regulation Act 2014 GNR: 324-327, 07 April 2017.

### DMR Application ref no: NW30/5/1/1/2/13313PR

MODISON MINING PTY LTD has lodged an application with the Department of Mineral Resources, the application has been accepted and it bears the above reference number.

The applicant intends to prospect for Chrome ore and general aggregate Prospecting which will include bulk sampling will be carried out in portions 99 & 174 of the farm Zilkaatsnek 439 JQ in the Madibeng Local municipality, North West Province.

The company is also required to obtain Environmental Authorization (EA) in terms of the National Environmental Management Act 107 of 1998 (NEMA) in support of its prospecting right and has accordingly submitted an application for environmental authorization to the DMR on 07 February 2022. The application is subject to a Scoping and EIA Process in accordance with the NEMA EIA Regulations of 2014.



Address: 08 Carla Street, Wilkoppies, Klerksdorp, 2571

Tel: 083 742 6816

Email: admin@modison.co.za Reg No: 2016/033603/07





### mineral resources

Department: Mineral Resources REPUBLIC OF SOUTH AFRICA.

> Received Allowere 22/03/2022 NR Molemene DEDECT

DRAFT SCOPING REPORT FOR PUBLIC REVIEW

FOR LISTED ACTIVITIES ASSOCIATED WITH MINING RIGHT AND/ORBULK SAMPLING ACTIVITIES INCLUDING TRENCHING IN CASES OF CHROME ORE PROSPECTING.

SUBMITTED FOR ENVIRONMENTAL AUTHORIZATIONS 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).

NAME OF APPLICANT: MODISON MINING(PTY)LTD

FILE REFEFERENCE NUMBER SAMRANWD: NW30/5/1/1/3/2/1/13313EM/PR

Address: 08 Carla Street, Wilkoppies, Klerksdorp, 2571

Tel: 083 742 6816

Email: admin@modison.co.za Reg No: 2016/033603/07



#### Particulars of Environmental Consultant

Qems management and business solutions (PTY) LTD

Cell: 076 848 7581 Fax: 086 5444 911

Email: iammoses.muxe@gmail.com/

Sitholet@Qems.co.za

83 shelley road, Lombardy east, Johannesburg, 2090

DATE: 05 April 2022

TIME: 12 h00 pm

VENUE Zilkaatsnek - plot 44

PURPOSE: Public participation meeting for a Prospecting right application by Modison Mining (Pty) Itd with respect to the farm Zilkaatsnek portion 99& 174

#### 1. Welcome and Introduction

Meeting was officially opened by Moses Mushi from Modison Mining who introduced herself to some of the local people who came to attend the meeting, the purpose of the meeting was to conduct a public participation process to solicit the views of some of the local residents around Zilkaatsnek estate.

Moses explained to the local residents that Modison mining applied for a PR with bulk sampling in portion 99 & 174 and that she is engaging the public about the project for an environmental authorization and also to get the input from the public concerning the project, I further explained the exploration process and the impacts (Both negative and positive) the project will have on the environment and how such impacts can be mitigated and also the employment opportunities the project will bring to the community.

#### 2. Certificate of Attendance

A signed roll call is attached.

#### 3. Brief Presentation by Qems Management and Business solutions (PTY)LTD:

• It was presented that MODISON MINING (PTY) LTD applied for a prospecting right with bulk sampling on the farm Zilkaatsnek 439 JQ portions 99 & 174; The application reference number is NW 30/5/1/1/2/13133 PR. The

- application is with the Department of Mineral Recourses in terms of Section 16 of the Mineral and Petroleum Resources Development Act (28 of 2002).
- The plan is to conduct exploration within the aforesaid farm. The project will involve drilling of boreholes. The first stage will involve drilling of five (5) boreholes. The boreholes will be rehabilitated concurrently as the geologist finish with core logging. The first five (5) boreholes will be a test if the next set of five boreholes can be drilled further.
- Existing access roads will be utilised during the project
- Portions of the farm where there is active Farming and or sensitive species will be avoided for the exploration phase and that portions where there is no farming or endangered species will be the main targets of the exploration

#### 4. Concerns and Issues Raised:

The local residence of the impoverished farm dwellers raised concerns about the white people in the area that are against mining and they had a problem because they need employment.

They also indicated that the few famers in the area employ mostly people from zimbawe because of cheap labour so they need the mining so they can get employment and be able to support their families.

Moses asked what ae they using the land for in the area where its fenced and some explained that there are some portions that are being sold for people who don't know where to bury their loved ones

#### .

#### 6. Way Forward/Conclusion

It was concluded that Modison Mining can go ahead with the exploration campaign as long as its priority will be to employ the local residents when job opportunities arise and a second meeting will be scheduled by Lucas so that more peple can attend who are willing to have such positive developments in the area.

### 7. Closure

Moses closed the meeting by thanking the few people that came and appreciated that they will get more people for the follow up meeting.

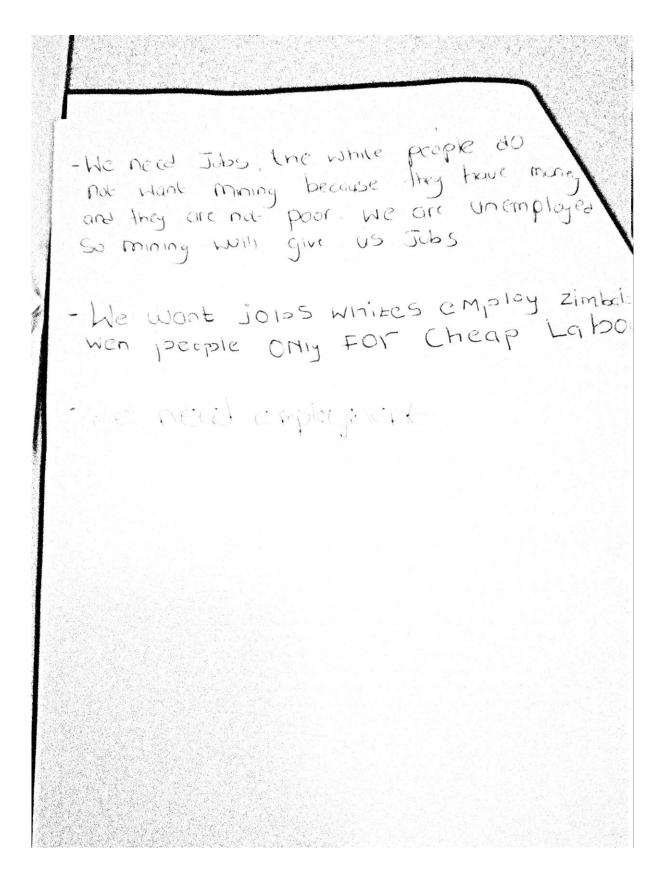
providing proof that notice boards, advertisements and notices notifying potentially interested and affected parties of the proposed application have been displayed, placed or given;

- Maintain a list of all persons, organisation and organs of state that were registered as interested and affected parties in relation to the application;
- Identify issues and concerns of key stakeholders and I&APs with regards to the application for the proposed project;
- Provide a summary of the issues raised by interested and affected parties, the date of receipt of and the response of the EAP to those issues; and
- Provide responses to I&AP's queries.

This letter serves as an engagement/consultation between Modison Mining (PTY)Ltd and all the land owners, interested and affected parties, Local municipalities and departments together with the nearby community about the Prospecting right application and their comments.

### Comments from Land owners/tribal authority/person

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APPENDIX 1 ATTENDANCE REGISTER						
NAMES	FARM/COMPANY	Contact No/email	SIGNATURE			
Moses much	Modison Mining	016 818 758)	411			
Lycas	Local residence		LIKEAS			
A TETELS	Zilkaals Puh	2722 W. Star.	tit /			
Mohlalisi	Zikaats Pus	0842615331	rachlel-			
T. MINISI	11	0632101321	949			
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Address: 08 Carla Street, Wilkoppies, Klerksdorp, 2571

Tel: 083 742 6816

Email: admin@modison.co.za Reg No: 2016/033603/07



#### Particulars of Environmental Consultant

Qems management and business solutions (PTY) LTD

Cell: 076 848 7581 Fax: 086 5444 911

Email: iammoses.muxe@gmail.com/

Sitholet@Qems.co.za

83 shelley road, Lombardy east, Johannesburg, 2090

DATE: 22 March 2022

TIME: 14 h00 pm

**VENUE Zilkaatsnek Estate** 

PURPOSE: Public participation meeting for a Prospecting right application by Modison Mining (Pty) ltd with respect to the farm Zilkaatsnek portion 99& 174

#### 1. Welcome and Introduction

Meeting was officially opened by Moses Mushi from Modison Mining who introduced herself to Riaan (land owner of some portions of Zilkaatsnek estate) and Magda who is from the legal department at Zilkaatsnek estate, the purpose of the meeting was to conduct a public participation process to solicit the views of some of the adjacent landowners around the portions applied for by Modison mining.

Riaan then left the meeting requesting that I deal with Martha as she understands more about mining.

Moses explained that Modison mining applied for a PR with bulk sampling in portion 99 & 174 and that she is engaging the public about the project for an environmental authorization and also to get the input from the interested and affected parties concerning the project, I further explained the exploration process and the impacts (Both negative and positive) the project will have on the environment and how such impacts can be mitigated and also the employment opportunities the project will bring to the community.

#### 2. Certificate of Attendance

There was no signed roll call, however there is a recording of the meeting.

#### 3. Brief Presentation by Qems Management and Business solutions (PTY)LTD:

• It was presented that MODISON MINING (PTY) LTD applied for a prospecting right with bulk sampling on the farm Zilkaatsnek 439 JQ portions 99 & 174; The application reference number is NW 30/5/1/1/2/13133 PR. The

- application is with the Department of Mineral Recourses in terms of Section 16 of the Mineral and Petroleum Resources Development Act (28 of 2002).
- The plan is to conduct exploration within the aforesaid farm. The project will involve drilling of boreholes. The first stage will involve drilling of five (5) boreholes. The boreholes will be rehabilitated concurrently as the geologist finish with core logging. The first five (5) boreholes will be a test if the next set of five boreholes can be drilled further.
- Existing access roads will be utilised during the project
- Portions of the farm where there is active Farming and or sensitive species will be avoided for the exploration phase and that portions where there is no farming or endangered species will be the main targets of the exploration

#### 4. Concerns and Issues Raised:

Magda explained that they do not allow any mining on the farms nearby whether for many reasons that she said she couldn't explain, she further showed the many files that they compiled objecting every application in the area because they are against mining due to the adverse effects it will have on the land.

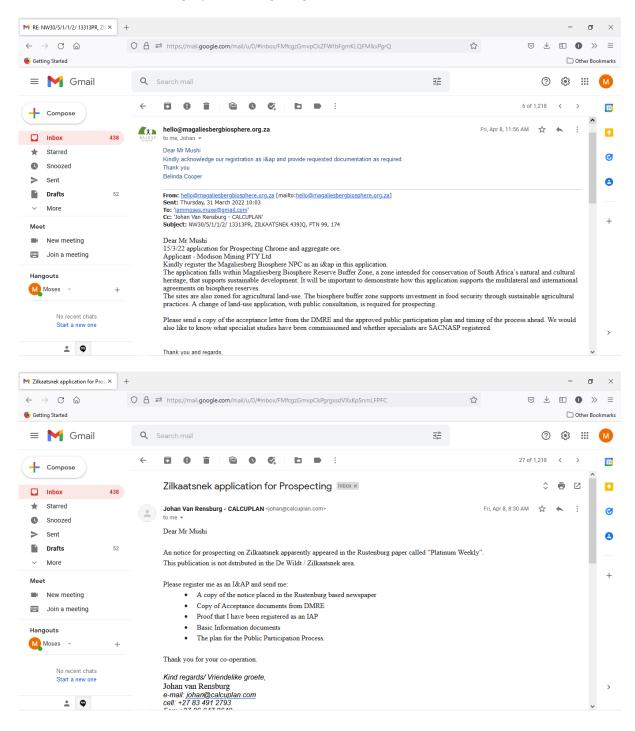
Moses asked if they own the portions which the PR was lodged and she responded y saying they do not own those portions, but even though the portions don't belong to them Modison will be wasting their money because they will object and they have a very powerful lawyer who helps them with these objections.

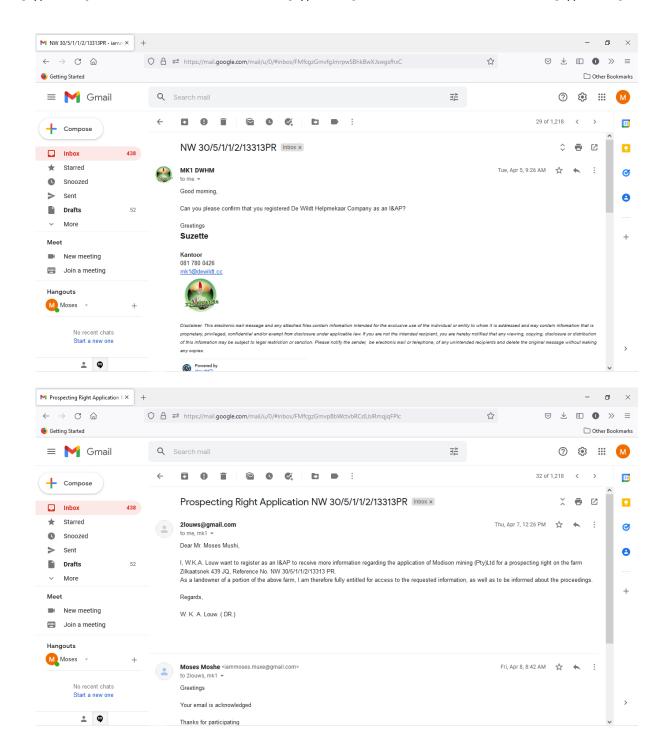
### 6. Way Forward/Conclusion

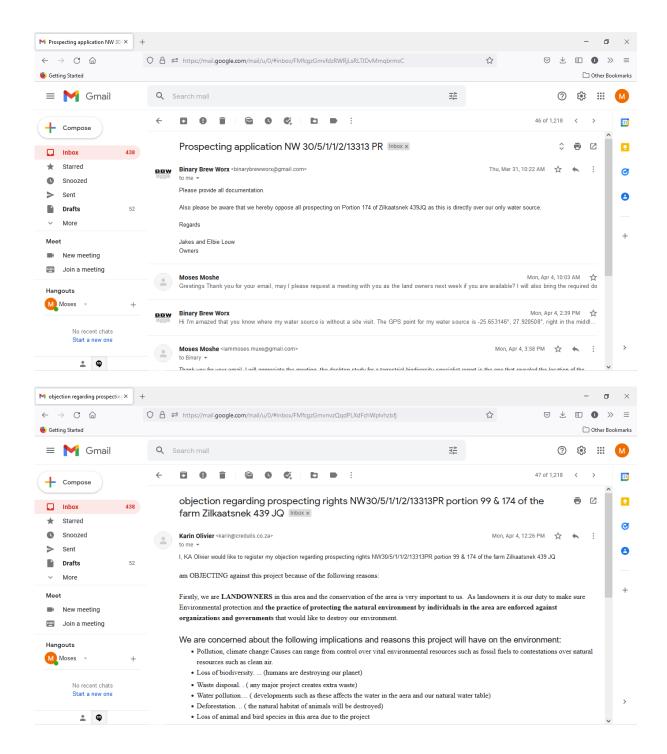
It was advised by magda that Modison mining can stop with the application because they will not allow any mining in their land.

#### 7. Closure

Moses closed the meeting by thanking Magda for her time.







# **Appendix 3: CV of EAP**



POSITION : Environmental, Social, Sustainability, Climate Change

Expert and Pest/Weed Control Operator/ Class (IV)

**Process Controller** 

NAME OF FIRM : QEMS cc

NAME OF STAFF : Dr Patrick SITHOLE

ID Number : 7603176101180

DATE OF BIRTH : 17.03.1976

YEARS OF EXPERIENCE : 22

#### **SUMMARY OF QUALIFICATIONS:**

A Registered natural scientific professional (SACNASP — Environmental and Chemical scientist), Registered Environmental Assessment Practitioner (EAPASA), social and sustainability expert with 21 years of experience, Patrick Sithole specialises in Strategic Environmental, Social and Sustainable Development projects, Climate Change and Health, Environmental Management issues and Construction Supervision of all infrastructural projects. Dr Sithole is a Iso involved in vegetation clearance and pest control projects along infrastructural projects e.g. roads, railway lines, power lines, golf courses and buildings like complexes, houses, malls, etc. Patrick has very strong business development mindset that has seen him winning and working on projects across Africa and in Europe.

His key experience includes the following areas;

- Environmental (Natural Resource) Management
- Environmental Compliance
- Social Facilitation and Consultation
- Socio-Economic Impact Assessment
- Compensation of Land Claims
- Climate Change
- Climate (Change) and Human Health
- Heritage Resources Impact Assessment
- Air Quality Management
- Renewable Energy
- Waste Management
- Land Rehabilitation
- Water Quality and Demand Management
- Strategic Environmental Assessment
- Waste Water (sewer) Treatment
- Project Management
- ISO 9001 and ISO14001
- Vegetation Control Bush Clearance (Invasive plants)
- Teaching and mentoring

EDUCATION:		
Institution:	Qualification:	Year Obtained:
North West University	Doctor of Philosophy (Environmental Sciences) Climate	2016
	Change and Malaria Prevalence	
University of Limpopo	Master of Philosophy (Environmental Law and Management)	2008
	A Legal and Policy Framework for Addressing Climate Change	
	in the Western Cape Province, South Africa	
University of Zimbabwe	Bachelor of Science (Chemistry and Biochemistry)	1997

#### **OTHER TRAINING:**

- Certificate Environmental Management System Development (ISO 14001:1996)
- Certificate Internal Environmental Auditing (ISO 14001:1996)
- Certificate Cleaner Development Mechanism
- Certificate City Guilds Quality Assurance (UK)
- Certificate ISO 9001:1994 Quality Auditing
- Certificate Quality Management Systems Transition (ISO 9001:2000)
- Certificate (ISO 9001:2000) Auditor Transition
- Certificate Ultra Violet Technology (Berson UV-Techniek, Netherlands)
- Certificate Weed Control (PCSIB)

### **MEMBERSHIPS OF PROFESSIONAL ASSOCIATIONS:**

- Registered as a Natural Scientific Professional (Environmental and Chemical Scientist): South African Council for Natural Scientific Professions, 26/09/2007 (Chemical) and 03/03/2010 (Environmental)
  - SACNASP Registration No: 400264/07
- Registered Environmental Assessment Practitioner (EAP) and Assesor, Registration No: 2016/27
- Registered as Pest Control Operator (Weed Control Industrial Use): Department of Agriculture, Forestry and Fisheries, Registration No: P33654 (Initial Registration: 03/10/2011)
- Registered Class (IV) Process Contoller (Department of Water Affairs): Treatment of Portable Water & Waste Water
- Registered Member: Coaches and Mentors of South Africa (COMENSA): 8756
- South African Council for the Project and Construction Management Professions (SACPCMP): Registration in Progress No. CHS20303
- Founding Secretary (General): Pan African Projects Forum, 2017 to date
- International Association for Impact Assessments SA (IAIAsa): Executive Member, 2018 to date
- Past President International Association for Impact Assessments SA (IAIAsa) 2014/2015
- President IAIAsa, 2013/2014
- Vice President/President Elect IAIAsa, 2012/2013
- Vice Chairperson IAIAsa Limpopo Province, 2011/2012
- Sekhukhune Environmental Forum: Founding Chairperson, 2008/2009
- Christian Achievers Academy: Parents Association Chairperson, 2010/2011
- Designated National Authority (RSA): First Sub-Committee Member, Limpopo

#### **COMMUNITY SERVICE/ VOLUNTARY ACTIVITIES:**

- Member Limpopo Coaches & Mentors
- Assist colleagues in Development of Business plans, Tendering and Funding models
- Mentoring and Monitoring of Postgraduate Students (Masters & PhD)
- Religious Marriage Officer and Counsellor (DHA Registration No. BD60021)
- Conducts Marriage Seminars & Couples Retreats

### **COUNTRIES OF WORK EXPERIENCE:**

South Africa Zimbabwe Mozambique Swaziland Lesotho Ghana

Cnaakina

### LANGUAGES:

	эреикту.	neudilig.	willing.
English	Excellent	Excellent	Excellent
Zulu/Ndebele	Some ability	Some ability	Poor
French	Some ability	Some ability	Some ability

Donding

Myiting

#### **EMPLOYMENT RECORD:**

From: November 2003 To: Date

**Employer:** QEMS Management & Business Solutions

Position held: Business Development, Environmental, Social and Sustainability Consultant

From: December 2014 To: September 2017

Employer: GIBB (Pty) Ltd

Position held: Business Development, Environmental, Social and Sustainability Consultant

From: August 2017 To: December 2017

Employer: University of Limpopo
Position held: Senior Lecturer (Part-Time)

*From:* November 2013 *To:* November 2014

Employer: Hatch Goba (Pty) Ltd seconded to Eskom Holdings SOC Ltd

Position held: Environmental Specialist (Rail, Road, Bridges, Substations and Powerlines)

Construction

From: September 2005 To: October 2013
Employer: Limpopo Water Initiative (Pty) Ltd

**Position held:** Technical Director/Environmental Assessment Practitioner (EAP)

From: November 2001 To: December 2003
Employer: Coca-Cola (Delta Beverages) (Pty) Ltd

Position held: Acting QA Manager/Quality Environmental Systems Coordinator/QA Chemist

From: March 1998 To: October 2001
Employer: Olivine Industries (Pty) Ltd

Position held: Plant Chemist/Quality Environmental Systems Coordinator

#### WORK UNDERTAKEN THAT BEST ILLUSTRATES CAPABILITY TO HANDLE THE TASKS ASSIGNED PER DISCIPLINE:

# FEASIBILITY STUDIES AND TRANSACTION ADVISOR

NAME OF ASSIGNMENT/PROJECT: ENVIRONMENTAL AND SOCIAL SPECIALIST - MOZAMBIQUE, ZIMBABWE

AND SOUTH AFRICA POWER LINE STRENGTHENING PROJECT (SAPP)

YEAR: From: 2015 To: 2017

LOCATION: Zimbabwe, Mozambique and South Africa

CLIENT: SAPP

MAIN PROJECT FEATURES: Design and approvals for a total of approximately 900 km transmission power

lines and substations between Zimbabwe, Mozambique and South Africa.

POSITIONS HELD: Environmental and Social Assessment Practitioner (EAP)

ACTIVITIES PERFORMED: Project planning, management and execution for environmental and social

impact assessment and application of other related licenses and permits

NAME OF ASSIGNMENT/PROJECT: TRANSACTION ADVISOR SERVICES TO SUPPORT THE DEVELOPMENT OF

PORTS OF ENTRY MASTER PLAN FOR SOUTH AFRICA – TECHNICAL INPUT

YEAR: From: 2015 To: Date

LOCATION: Zimbabwe, South Africa, Botswana, Mozambique, Swaziland, Lesotho

CLIENT: Department of Home Affairs

MAIN PROJECT FEATURES: Scoping and screening exercise and environmental input for the engineering

designs.

POSITIONS HELD: Project Manager

ACTIVITIES PERFORMED: Project planning, management and reporting

NAME OF ASSIGNMENT/PROJECT: FEASIBILITY STUDY FOR THE MATLOU-MATLALA NATURE RESERVE -

AGANANG LOCAL MUNICIPALITY, LIMPOPO PROVINCE

YEAR: From: 2015 To: 2016

LOCATION: Limpopo, South Africa
CLIENT: Aganang Local Municipality

MAIN PROJECT FEATURES: Conducting a bankable and environmentally acceptable feasibility study for a

nature reserve within Aganang local municipality to allow for tourism improvement within the area. Focus was also done on sustainable

development issues.

POSITIONS HELD: Project Manager

ACTIVITIES PERFORMED: Project planning, management and execution for a bankable feasibility study.

NAME OF ASSIGNMENT/PROJECT: FEASIBILITY STUDY FOR THE ESTABLISHMENT OF IRON AND STEEL

PROCESSING PLANTS AT VARIOUS LOCATIONS IN SOUTH AFRICA

YEAR: From: 2011 To: 2012

LOCATION: South Africa
CLIENT: IDC/HatchJVAsceng

MAIN PROJECT FEATURES: Reviewing and reporting of environmental technical and legal issues for all the

sites and activities

POSITIONS HELD: EAP

ACTIVITIES PERFORMED: Project planning, management and reporting

NAME OF ASSIGNMENT/PROJECT: FEASIBILITY STUDY: KUNZVI AND MUSAMI DAMS DESIGN AND

**CONSTRUCTION, ZIMBABWE** 

YEAR: From: 2017 To: 2019

LOCATION: Zimbabwe CLIENT: ZNWA

MAIN PROJECT FEATURES: Appointment as a service provider to facilitate engineering and environmental

management

POSITIONS HELD: Project Leader – Environmental and Social Facilitation

ACTIVITIES PERFORMED: Planning, management and execution of environmental management and

community participation process

NAME OF ASSIGNMENT/PROJECT: FEASIBILITY STUDY: NGWEMPISI POWER GENERATION, SWAZILAND

YEAR: From: 2017 To: 2018

LOCATION: Swaziland

CLIENT: Swaziland Electricity Company (SEC)

MAIN PROJECT FEATURES: Appointment as a service provider to facilitate engineering and environmental

management

POSITIONS HELD: Project Leader – Environmental and Social Facilitation

ACTIVITIES PERFORMED: Planning, management and execution of environmental management and

community participation process

# **CLIMATE CHANGE REPORTING AND ASSESSMENT**

NAME OF ASSIGNMENT/PROJECT: HITACHI CLIMATE IMPACT ASSESSMENT FOR PROPOSED ADVANCED WATER

TREATMENT DEMONSTRATION PLANT AT THE EXISTING CENTRAL WASTEWATER TREATMENT WORKS, BLUFF, ETHEKWINI MUNICIPALITY

From February 2017 To July 2017

LOCATION: South Africa CLIENT: HITACHI, JAPAN

YEAR:

MAIN PROJECT FEATURES: Vulnerability and Risk assessment

Green house gas assessments,

Assessment of climate impacts for the project plant,

Trending of climatic changes

POSITIONS HELD: Project Manager

NAME OF ASSIGNMENT/PROJECT: MOBILISING DOMESTIC FINANCIAL RESOURCES FOR CLIMATE CHANGE

**RESPONSES IN SADC MEMBER STATES** 

YEAR: From: 2015 To: January 2016

LOCATION: SADC Region states
CLIENT: SADC PF Secretariat

MAIN PROJECT FEATURES: Facilitation of workshop on Mobilising Domestic Financial Resources for

Climate Change Responses in SADC Member

POSITIONS HELD: Workshop Facilitator

ACTIVITIES PERFORMED: Project planning, management and execution on behalf of SADC PF Secretariat

NAME OF ASSIGNMENT/PROJECT: CLIMATE RESILIENCE ASSESSMENT FOR UPGRADING OF TATALE ZABUZUGU,

YENDI AND TAMALE ROADS

YEAR: From: August 2017 To: October 2017

LOCATION: Ghana

CLIENT: UWP Consulting/Ghana Roads and Highway Authority

MAIN PROJECT FEATURES: Assessment of Climate Impacts on the project, Risk Analysis, Vulnerability

Assessments,

POSITIONS HELD: Project Leader

ACTIVITIES PERFORMED: Resilience Assessment, Project Management, Technical Inputs

NAME OF ASSIGNMENT/PROJECT: PRODUCTION OF THE SADC-COMESA-EAC CLIMATE CHANGE YEARBOOK

2015

YEAR: From: 2015 To: 2018

LOCATION: Botswana/ SADC MEMBER STATES

CLIENT: SADC Secretariat

MAIN PROJECT FEATURES: Generation of year book on Climate Change for all countries within the SADC,

COMESA and EAC regions and publication

POSITIONS HELD: Project Manager/Lead Editor

ACTIVITIES PERFORMED: Project planning, management and execution on behalf of SADC Secretariat

NAME OF ASSIGNMENT/PROJECT: DEVELOPMENT OF OZONE DEPLETING SUBSTANCES REGISTER

YEAR: From: 2018 To: 2018

LOCATION: South africa

CLIENT: DWARSRIVIER CHROME MINE

MAIN PROJECT FEATURES: Appointment as a service provider to determine if the chemicals in use at the

mine contain ODSs

POSITIONS HELD: Project Leader

ACTIVITIES PERFORMED: Planning, management and execution of project

NAME OF ASSIGNMENT/PROJECT: CONDUCT AN INDEPENDENT REVIEW OF SOUTH AFRICA'S 2ND BIENNIAL

UPDATE REPORT TO THE UNITED NATIONS FRAMEWORK CONVENTION ON

**CLIMATE CHANGE** 

YEAR: From: 2016 To: 2017

LOCATION: South Africa

CLIENT: Department of Environmental Affairs

MAIN PROJECT FEATURES: Appointment as a service provider to conduct an independent review of South

Africa's 2<sup>nd</sup> biennial update report to the united nations framework convention

on climate change

POSITIONS HELD: Project Manager

ACTIVITIES PERFORMED: Project planning, management and execution on behalf of DEA

NAME OF ASSIGNMENT/PROJECT: CLIMATE CHANGE: NATIONAL ADAPTATION STRATEGY FOR SOUTH AFRICA

(LOCAL GOVERNMENT)

YEAR: From: 2015 To: 2017

LOCATION: South Africa CLIENT: GIZ-DEA

MAIN PROJECT FEATURES: Development of the Climate change National Adaptation Strategy for South

Africa with particular focus on local government strategies.

POSITIONS HELD: Project Manager for GIBB Team/Climate Change Specialist

ACTIVITIES PERFORMED: Project planning, management and execution on behalf of GIZ and DEA

# SOCIO-ECONOMIC ASSESSMENTS, COMPENSATION AND HEARINGS

NAME OF ASSIGNMENT/PROJECT: MUSINA SEZ SUPPORT INFRASTRUCTURE - MUSINA DAM FEASIBILITY -

SOCIAL AND ECONOMIC IMPACT ASSESSMENT

YEAR: From: 2020 To: Date

LOCATION: Musina, Limpopo, South Africa
CLIENT: Sunfrica (Pty) Ltd/ LEDA/ Musina SEZ

MAIN PROJECT FEATURES: Appointment as a service provider to develop the Social and Economic Impact

Assessment Study for the proposed dam development project

POSITIONS HELD: Senior Socio-Economic/ Resettlement Expert

ACTIVITIES PERFORMED: Planning, management and leading

NAME OF ASSIGNMENT/PROJECT: ROYAL BAFOKENG BOEKENHOUTFONTEIN CHROMITITE PROJECT - SOCIAL

AND ECONOMIC IMPACT ASSESSMENT

YEAR: From: 2020 To: Date

LOCATION: Phokeng, South Africa CLIENT: Royal Bafokeng/ TMC

MAIN PROJECT FEATURES: Appointment as a service provider to develop the Social and Economic Impact

Assessment Study and Community engagement Report

POSITIONS HELD: Senior Social/ Resettlement Expert
ACTIVITIES PERFORMED: Planning, management and leading

NAME OF ASSIGNMENT/PROJECT: MABOLA PROTECTED ENVIRONMENT HEARINGS PANEL - MPUMALANGA

**PROVINCIAL GOVERNMENT** 

YEAR: From: 2020 To: Date

LOCATION: Mpumalanga Province, South Africa

CLIENT: DARDLEA

MAIN PROJECT FEATURES: Appointment as a service provider to assist the provincial government and

MEC on Stakeholder and Community Engagement in addressing Protected

Areas proclamation matters

POSITIONS HELD: Senior Social/ Economic/ Resettlement Expert

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ACTIVITIES PERFORMED: Planning, management and leading

NAME OF ASSIGNMENT/PROJECT: RICHARDS BAY MINERALS COMPENSATION CLAIMS PHASES 4 LEGAL

**REVIEWS, RICHARDS BAY** 

YEAR: From: 2020 To: Date

LOCATION: South Africa

CLIENT: Richards Bay Minerals (RBM) in Conjunction with EDTEA

MAIN PROJECT FEATURES: Appointment as a service provider to facilitate community participation and

compensation of historical land claims process

POSITIONS HELD: Senior Social/ Economic/ Resettlement Expert

ACTIVITIES PERFORMED: Planning, management and execution of community participation process and

development of compensation models

NAME OF ASSIGNMENT/PROJECT: MARINE MOUNTAIN MAFEFE CLUSTER MINING PERMITS - SOCIAL AND

**ECONOMIC IMPACT ASSESSMENT** 

YEAR: From: 2020 To: Date

LOCATION: Limpopo, South Africa CLIENT: Marine Mountain EC

MAIN PROJECT FEATURES: Appointment as a service provider to develop the Social and Economic Impact

Assessment Study and Community engagement Report

POSITIONS HELD: Senior Social/ Economic/ Resettlement Expert

ACTIVITIES PERFORMED: Planning, management and leading

NAME OF ASSIGNMENT/PROJECT: MAOKENG TOWNSHIP DEVELOPMENT, KRONSTAD - SOCIAL AND

**ECONOMIC IMPACT ASSESSMENT** 

YEAR: From: 2019 To: 2020

LOCATION: Kronstad, South Africa
CLIENT: ENVIROSHEQ CONSULTING

MAIN PROJECT FEATURES: Appointment as a service provider to develop the Social Impact Assessment

Study and involuntary resettlement and community engagement Report

POSITIONS HELD: Senior Social/ Resettlement Expert
ACTIVITIES PERFORMED: Planning, management and leading

# **ENVIRONMENTAL, SOCIAL AND RESETTLEMENT SPECIALIST**

NAME OF ASSIGNMENT/PROJECT: POLIHALI DAM ENVIRONMENTAL MANAGEMENT AND COMPLIANCE

SPECIALIST, LESOTHO

YEAR: From: 2017 To: Date

LOCATION: Lesotho CLIENT: LHDA

MAIN PROJECT FEATURES: Appointment as a service provider to facilitate engineering and environmental

management and Compliance

POSITIONS HELD: Project Leader – Environmental and Social Facilitation

ACTIVITIES PERFORMED: Planning, management and execution of environmental management and

community participation process

NAME OF ASSIGNMENT/PROJECT: ENVIRONMENTAL AND SOCIAL COMPLIANCE - WATER PIPELINE

CONSTRUCTION AND RELATED IFRASTRUCTURE (TCTA MOKOLO-CROCODILE

**WATER AUGMENTATION PHASE 2 PROJECT)** 

YEAR: From: 2018 To: 2020

LOCATION: Limpopo, South Africa

CLIENT: Trans Caledon Tunnel Authority (TCTA)

MAIN PROJECT FEATURES: Construction of 180 km water pipeline with associated infrastructure (access

roads, low bridges, etc), mining of borrow pits and rehabilitation of completed areas. Development and Implementation of ISO14001 system. Water Quality

Monitoring

POSITIONS HELD: Environmental Specialist

ACTIVITIES PERFORMED: Project planning, management and execution for environmental compliance

to licenses, permits and best practices. Development and Implementation of

ISO14001 system.

NAME OF ASSIGNMENT/PROJECT: ENVIRONMENTAL SPECIALIST - RAIL, ROAD, BRIDGES, SUBSTATION,

**POWERLINE AND MINING (MAJUBA RAIL PROJECT)** 

YEAR: From: 2013 To: 2014

LOCATION: Mpumalanga, South Africa

CLIENT: Eskom Holdings

MAIN PROJECT FEATURES: Construction of 70 km rail with associated infrastructure (roads, bridges,

powerline), mining of borrow pits and rehabilitation of completed areas. Development and Implementation of ISO14001 system. Water Quality

Monitoring

POSITIONS HELD: Environmental Assessment Practitioner (EAP)

ACTIVITIES PERFORMED: Project planning, management and execution for environmental compliance

to licenses, permits and best practices. Development and Implementation of

ISO14001 system. Project got ISO14001 certified

NAME OF ASSIGNMENT/PROJECT: ENVIRONMENTAL SPECIALIST COMPLIANCE - PORT NGQURA MANGANESE

**RAIL AND PORT EXPANSION PROJECT** 

YEAR: From: 2015 To: 2017

LOCATION: Port Elizabeth, South Africa

CLIENT: Transnet

MAIN PROJECT FEATURES: Design and Construction of rail, port expansion with associated infrastructure

(roads, bridges, powerline), mining of borrow pits and rehabilitation of completed areas. Development and Implementation of an Environmental

Management System

POSITIONS HELD: Environmental Specialist

ACTIVITIES PERFORMED: Project planning, management and execution for environmental compliance

to licenses, permits and best practices. Development and Implementation of

an Environmental Management System

NAME OF ASSIGNMENT/PROJECT: DEVELOPMENT AND IMPLEMENTATION OF INVOLUNTARY RESETTLEMENT

ACTION PLAN (RAP) AND COMMUNITY ENGAGEMENT FOR THE INSTALLATION OF HVDS AND SECURITY LIGHTING IN ACCRA TIMBER,

AGBOGLOSHIE & MADINA MARKETS – ACCRA GHANA

YEAR: From: 2018 To: Date

LOCATION: Ghana

CLIENT: MILLENIUM DEVELOPMENT AGENCY (MiDA)

MAIN PROJECT FEATURES: Appointment as a service provider to involuntary resettlement and community

engagement

POSITIONS HELD: Senior Resettlement Expert

ACTIVITIES PERFORMED: Planning, management and leading

NAME OF ASSIGNMENT/PROJECT: DEVELOPMENT AND IMPLEMENTATION OF INVOLUNTARY RESETTLEMENT

ACTION PLAN (RAP) AND COMMUNITY ENGAGEMENT FOR THE INSTALLATION OF LOW VOLTAGE BIFURCATION AND NETWORK

IMPROVEMENT – ACHIMOTA DISTRICT GHANA

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YEAR: From: 2018 To: Date

LOCATION: Ghana

CLIENT: MILLENIUM DEVELOPMENT AGENCY (MIDA)

MAIN PROJECT FEATURES: Appointment as a service provider to involuntary resettlement and community

engagement

POSITIONS HELD: Senior Resettlement Expert

ACTIVITIES PERFORMED: Planning, management and leading

NAME OF ASSIGNMENT/PROJECT: JOSHCO SOCIAL HOUSING PROJECT IN SMIT STREET, CITY OF

**JOHANNESBURG** 

YEAR: From: 2016 To: 2018

LOCATION: South Africa CLIENT: JOSHCO

MAIN PROJECT FEATURES: Appointment as a service provider to facilitate the community participation

process

POSITIONS HELD: Project Leader

ACTIVITIES PERFORMED: Planning, management and execution of community participation process

NAME OF ASSIGNMENT/PROJECT: ENVIRONMENTAL AND SOCIAL ADVISORY SERVICES FOR MAMADI (SECT

24G) – VARIOUS SHELL FILLING STATIONS

YEAR: From: 2017 To: 2018

LOCATION: South Africa

CLIENT: Shell South Africa (Pty) Ltd

MAIN PROJECT FEATURES: Managing and advising Mamadi & Company Environmental unit on Shell South

Africa Filling stations requiring section 24G Rectification Applications.

POSITIONS HELD: Environmental Specialist

ACTIVITIES PERFORMED: Project planning, management and execution for environmental compliance

to licenses, permits and best practices.

NAME OF ASSIGNMENT/PROJECT: NOORDGESIG SOCIAL CLUSTER PROJECT | APPOINTMENT OF COMMUNITY

PARTICIPATION CONSULTANT

YEAR: From: 2015 To: 2016

LOCATION: Johannesburg, South Africa

CLIENT: Johannesburg Development Agency (JDA)

MAIN PROJECT FEATURES: Social Facilitation of various infrastructural projects

POSITIONS HELD: Project Manager

ACTIVITIES PERFORMED: Project planning, management and reporting

NAME OF ASSIGNMENT/PROJECT: JOSHCO SOCIAL HOUSING PROJECT AT THE ROODEPOORT TAXI RANK, CITY

**OF JOHANNESBURG** 

YEAR: From: 2016 To: 2018

LOCATION: South Africa CLIENT: JOSHCO

MAIN PROJECT FEATURES: Appointment as a service provider to facilitate the community participation

process

POSITIONS HELD: Project Manager

ACTIVITIES PERFORMED: Planning, management and execution of community participation process

# **OCCUPATIONAL HEALTH AND SAFETY**

NAME OF ASSIGNMENT/PROJECT:

ENVIRONMENTAL, HEALTH AND SAFETY LEGAL COMPLIANCE AUDITS FOR

**CITY OF CAPE TOWN** 

YEAR: From: 2020 To: date

LOCATION: South africa

CLIENT: SEBATA SHERQ SOLUTIONS/ CITY OF CAPE TOWN

MAIN PROJECT FEATURES: Appointment as Lead Auditor for Environmental, Health and Safety Legal

Compliance Audits for various sites, offices and departments.

POSITIONS HELD: Project Lead Auditor

ACTIVITIES PERFORMED: Planning, management and execution of project

NAME OF ASSIGNMENT/PROJECT: DEVELOPMENT OF A SAFETY, HEALTH AND ENVIRONMENTAL (SHE) PLAN

FOR DEEDUN MINING RESOURCES (PTY) LTD

YEAR: From: 2018 To: Date

LOCATION: South Africa
CLIENT: DEEDUN MINING

MAIN PROJECT FEATURES: Appointment as a service provider to develop a SHE plan for the mine.

POSITIONS HELD: Project Leader

ACTIVITIES PERFORMED: Planning, management and leading

NAME OF ASSIGNMENT/PROJECT: DEVELOPMENT OF A SAFETY, HEALTH AND ENVIRONMENTAL (SHE) PLAN

FOR RISISI (PTY) LTD

YEAR: From: 2018 To: 2018

LOCATION: South Africa CLIENT: Risisi (Pty) Ltd

MAIN PROJECT FEATURES: Appointment as a service provider to develop a SHE plan for construction

project and site.

POSITIONS HELD: Project Leader

ACTIVITIES PERFORMED: Planning, management and leading

# SUSTAINABILITY AND ENERGY ASSESSMENTS

NAME OF ASSIGNMENT/PROJECT: SUSTAINABILITY AND CARBON FOOTPRINT REPORTS 2015, 2016, AND 2017

YEAR: From: 2015 To: 2018

LOCATION: South Africa CLIENT: GIBB (Pty) Ltd

MAIN PROJECT FEATURES: Lead the documentation of the GIBB Sustainability Report and Carbon

Footprint Report for the years 2013, 2014 and 2015.

POSITIONS HELD: Sustainability Expert

ACTIVITIES PERFORMED: Project planning, management and execution.

NAME OF ASSIGNMENT/PROJECT: SOUTH AFRICA ENERGY STORAGE TECHNOLOGY AND MARKET ASSESSMENT

YEAR: From: 2015 To: 2016

LOCATION: South Africa

CLIENT: United States Trade and Development Agency (USTDA)-Parsons

MAIN PROJECT FEATURES: Conduct an assessment of the anticipated environmental impacts of each

energy storage technology with reference to local South African requirements and conduct an assessment of all relevant legislation, regulations, policies and incentives that are currently in place or being considered related to the

adoption of energy storage technologies

POSITIONS HELD: Environmental and Social Assessment Practitioner (EAP)

ACTIVITIES PERFORMED: Project planning, management and execution for environmental and social

impact assessment and review of relevant/related legislation

# **AIR QUALITY MANAGEMENT**

NAME OF ASSIGNMENT/PROJECT: ROYAL BAFOKENG BOEKENHOUTFONTEIN CHROMITITE PROJECT - AIR

**QUALITY IMPACT ASSESSMENT** 

YEAR: From: 2020 To: Date

LOCATION: Phokeng, South Africa CLIENT: Royal Bafokeng/ TMC

MAIN PROJECT FEATURES: Appointment as a service provider to develop the Air quality Impact Study

POSITIONS HELD: Climate Change & Air Quality Expert

ACTIVITIES PERFORMED: Planning, management and leading

NAME OF ASSIGNMENT/PROJECT: APPLICATION FOR AN AIR EMISSIONS LICENSE FOR TIMBER PROCESSING

**FACTORY** 

YEAR: From: 2018 To: Date

LOCATION: South Africa (Eastern Cape)
CLIENT: Sotsho Treated Timber (Pty) Ltd

MAIN PROJECT FEATURES: Appointment as a service provider to acquire an AEL for the company

POSITIONS HELD: Environmental Practitioner

ACTIVITIES PERFORMED: Planning, management and leading

NAME OF ASSIGNMENT/PROJECT: DEVELOPMENT OF AIR QUALITY MANAGEMENT PLAN - SEKHUKHUNE

**DISTRICT** 

YEAR: From: 2007 To: 2007

LOCATION: South Africa

CLIENT: Greater Sekhukhune Municipality

MAIN PROJECT FEATURES: Development of an air quality management plan

POSITIONS HELD: EAP

ACTIVITIES PERFORMED: Project planning, management and execution

NAME OF ASSIGNMENT/PROJECT: AIR QUALITY MONITORING INVESTIGATIONS - RIO TINTO

YEAR: From: 2008 To: 2008

LOCATION: South Africa
CLIENT: Rio Tinto Mining

MAIN PROJECT FEATURES: Development of an air quality management programme

POSITIONS HELD: EAP

ACTIVITIES PERFORMED: Project planning, management and execution

NAME OF ASSIGNMENT/PROJECT: MOPANI DISTRICT DEVELOPMENT OF AIR QUALITY MANAGEMENT PLAN

YEAR: From: 2013 To: 2013

LOCATION: South Africa

CLIENT: Mopani District Municipality

MAIN PROJECT FEATURES: Development of an air quality management programme

POSITIONS HELD: EAP

ACTIVITIES PERFORMED: Project planning, management and execution

# DRINKING AND WASTE WATER QUALITY MANAGEMENT

NAME OF ASSIGNMENT/PROJECT: WATER SUPPLY SCHEME INCL WATER TREATMENT WORKS (HAZARD

EVALUATION & RISK ASSESSMENT), WATER SAFETY COMPLIANCE AUDIT

AND WATER QUALITY MONITORING

YEAR: From: 2018 To: 2018

LOCATION: South Africa

CLIENT: Modikwa Platinum Mine

MAIN PROJECT FEATURES: Performance audit of existing water supply scheme. Development of Water

Safety Plan, Blue Drop Water Quality Audit/ Assessment and Hazard

Evaluation, Risk Assesssment & Identification. Water Quality Monitoring

POSITIONS HELD: EAP/Project Manager

ACTIVITIES PERFORMED: Project planning, management and execution

NAME OF ASSIGNMENT/PROJECT: COMPLIANCE MONITORING, AUDITING AND REGISTRATION OF DRINKING

WATER AND WASTE WATER TREATMENT PLANTS

YEAR: From: 2018 To: 2018

LOCATION: South Africa

CLIENT: Dwarsrivier Chrome Mine

MAIN PROJECT FEATURES: Appointment as a service provider to audit all water treatment works on site

and register them with the Department of Water and sanitation (DWS)

POSITIONS HELD: Project Manager

ACTIVITIES PERFORMED: Planning, management and leading

NAME OF ASSIGNMENT/PROJECT: BURGERSFORT WASTE WATER TREATMENT PLANT OPERATION &

**MAINTENANCE (10ML/DAY)** 

YEAR: From: 2015 To: DATE

LOCATION: Burgersfort, South Africa
CLIENT: Lepelle Northern Water/ LWI
MAIN PROJECT FEATURES: Plant Operation and Maintenance

POSITIONS HELD: Project Manager

ACTIVITIES PERFORMED: Project planning, management, monitoring, reporting and execution

NAME OF ASSIGNMENT/PROJECT: ASPEN INDUSTRIAL WASTE WATER TREATMENT PLANT OPERATION &

**MAINTENANCE (720KL/DAY)** 

YEAR: From: 2018 To: 2018

LOCATION: Gauteng, South Africa

CLIENT: Aspen/LWI

MAIN PROJECT FEATURES: Plant Operation and Maintenance

POSITIONS HELD: Project Manager

ACTIVITIES PERFORMED: Project planning, management, monitoring, reporting and execution

NAME OF ASSIGNMENT/PROJECT: EASTLAND RETIREMENT VILLAGE - BENONI WASTE WATER TREATMENT

PLANT OPERATION & MAINTENANCE (120KL/DAY)

YEAR: From: 2018 To: 2018

LOCATION: Benoni, South Africa

CLIENT: Eastland Retirement Village/ LWI MAIN PROJECT FEATURES: Plant Operation and Maintenance

POSITIONS HELD: Project Manager

ACTIVITIES PERFORMED: Project planning, management, monitoring, reporting and execution

NAME OF ASSIGNMENT/PROJECT: WATER AND SANITISATION AUDIT – LIMPOPO PROVINCE SHOOLS

YEAR: From: 2006 To: 2006

LOCATION: South Africa

CLIENT: Department of Public Works

MAIN PROJECT FEATURES: Evaluation of water and sanitation requirements at various schools within the

province

POSITIONS HELD: EAP/Project Manager

ACTIVITIES PERFORMED: Project planning, management and execution

NAME OF ASSIGNMENT/PROJECT: MABVAZUVA RESIDENTIAL ESTATE WASTE WATER TREATMENT PLANT

**OPERATION & MAINTENANCE (3ML/DAY)** 

YEAR: From: 2019 To: 2019

LOCATION: Harare, Zimbabwe CLIENT: Exodus & Company/ LWI

MAIN PROJECT FEATURES: Plant Operation and Maintenance

POSITIONS HELD: Project Manager

ACTIVITIES PERFORMED: Project planning, management, monitoring, reporting and execution

NAME OF ASSIGNMENT/PROJECT: GROUND AND SURFACE WATER MONITORING - RIO TINTO

YEAR: From: 2008 To: 2008

LOCATION: South Africa
CLIENT: Rio Tinto Mining

MAIN PROJECT FEATURES: Water quality monitoring and reporting

POSITIONS HELD: EAP/Project Manager

ACTIVITIES PERFORMED: Project planning, management and execution

NAME OF ASSIGNMENT/PROJECT: MOPANI DISTRICT WATER QUALITY MANAGEMENT AUDIT

YEAR: From: 2009 To: 2009

LOCATION: South Africa

CLIENT: Mopani District Municipality

MAIN PROJECT FEATURES: Auditing water treatment plants and laboratories. Analysing results from

laboratories and providing recommendations

POSITIONS HELD: EAP/Project Manager

ACTIVITIES PERFORMED: Project planning, management and execution

NAME OF ASSIGNMENT/PROJECT: DWARSRIVIER MINE WATER USE LICENSE APPLICATION

YEAR: From: 2010 To: 2010

LOCATION: South Africa CLIENT: Dwarsrivier Mine

MAIN PROJECT FEATURES: Technical Report and Social Facilitation

POSITIONS HELD: EAP/Project Manager

ACTIVITIES PERFORMED: Project planning, management and execution for water use authorisation

NAME OF ASSIGNMENT/PROJECT: UPGRADE, OPERATION AND MAINTENANCE OF BA-PHALABORWA WASTE

WATER TREATMENT PLANT

YEAR: From: 2006 To: 2011

LOCATION: Ba-Phalaborwa, South Africa CLIENT: Ba-Phalaborwa Municipality

MAIN PROJECT FEATURES: Construction, Operating and maintaining the WWTP at optimal levels

POSITIONS HELD: Project Manager

ACTIVITIES PERFORMED: Project planning, management, reporting and execution

NAME OF ASSIGNMENT/PROJECT: INGULA STORMWATER MANAGEMENT PLAN
YEAR: From: 2015 To: 2015

LOCATION: Ingula Pump Station, South Africa

CLIENT: Eskom Holdings

MAIN PROJECT FEATURES: Inclusion of environmental management standards in the storm water

management plan for the site and power plant

POSITIONS HELD: Project Manager

ACTIVITIES PERFORMED: Project planning, management and reporting

NAME OF ASSIGNMENT/PROJECT: SEDIBENG REGIONAL WATER SANITATION SCHEME
YEAR: From: 2015 To: 2017
LOCATION: Sedibeng District Municipality, South Africa

CLIENT: Sedibeng District Municipality

MAIN PROJECT FEATURES: Sustainability indicators and Social Facilitation of various sanitation

infrastructural projects

POSITIONS HELD: Project Manager

ACTIVITIES PERFORMED: Project planning, management and reporting

NAME OF ASSIGNMENT/PROJECT: MOHLOLO WATER QUALITY SAMPLING AND ANALYSIS YEAR: From: 2010 To: 2010

LOCATION: South Africa

CLIENT: Mohlolo Landscape and Architecture

MAIN PROJECT FEATURES: Surface water sampling, analysis and reporting

POSITIONS HELD: EAP/Project Manager

ACTIVITIES PERFORMED: Project planning, management and execution

NAME OF ASSIGNMENT/PROJECT: BORROWDALE BROOK RESIDENTIAL ESTATE WASTE WATER TREATMENT

PLANT OPERATION & MAINTENANCE (7000KL/DAY)

To: 2019

YEAR: From: 2019 LOCATION: Harare, Zimbabwe

CLIENT: BBRE/LWI

MAIN PROJECT FEATURES: Plant Operation and Maintenance

POSITIONS HELD: Project Manager

ACTIVITIES PERFORMED: Project planning, management, monitoring, reporting and execution

NAME OF ASSIGNMENT/PROJECT: MMALETSWAI VILLAGE - LEPHALALE WASTE WATER TREATMENT PLANT

**OPERATION & MAINTENANCE (1ML/DAY)** 

YEAR: From: 2016 To: 2017

LOCATION: Lephalale, South Africa

CLIENT: Lephalale Local Municipality/ LWI MAIN PROJECT FEATURES: Plant Operation and Maintenance

POSITIONS HELD: Project Manager

ACTIVITIES PERFORMED: Project planning, management, monitoring, reporting and execution

NAME OF ASSIGNMENT/PROJECT: BA-PHALABORWA WASTE WATER TREATMENT PLANT OPERATION &

MAINTENANCE (5-8ML/DAY)

YEAR: From: 2008 To: DATE

LOCATION: Ba-Phalaborwa, South Africa
CLIENT: Ba-Phalaborwa Municipality/ LWI
MAIN PROJECT FEATURES: Plant Operation and Maintenance

POSITIONS HELD: Project Manager

ACTIVITIES PERFORMED: Project planning, management, monitoring, reporting and execution

# **WASTE MANAGEMENT**

NAME OF ASSIGNMENT/PROJECT: REVIEW OF THE WASTE SERVICE DELIVERY BACKLOG REPORT FOR THE WEST

RAND DISTRICT MUNICIPALITY

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YEAR: From: 2018 To: 2020

LOCATION: South Africa

CLIENT: Municipal Infrastructure Support Agent (MISA)

MAIN PROJECT FEATURES: Appointment as a service provider to review the waste management backlog

status and the related plans.

POSITIONS HELD: Environmental Practitioner (Reviewer)

ACTIVITIES PERFORMED: Reports review

NAME OF ASSIGNMENT/PROJECT: DEVELOPMENT OF WASTE TYRE STORAGE AREA & WASTE TYRE ABATEMENT

**PLANS** 

YEAR: From: 2018 To: 2018

LOCATION: South africa

CLIENT: DWARSRIVIER CHROME MINE

MAIN PROJECT FEATURES: Appointment as a service provider to develop the waste tyre storage and

waste tyre abatement plans for the mine

POSITIONS HELD: Project Leader

ACTIVITIES PERFORMED: Planning, management and execution of project

NAME OF ASSIGNMENT/PROJECT: DEVELOPMENT OF AN INTEGRATED WASTE MANAGEMENT PLAN

YEAR: From: 2005 To: 2005

LOCATION: South Africa

CLIENT: Waterberg District Municipality (Enviroexcellence)
MAIN PROJECT FEATURES: Development of a waste management plan

POSITIONS HELD: EAP

ACTIVITIES PERFORMED: Project planning, management and execution

NAME OF ASSIGNMENT/PROJECT: DEVELOPMENT OF A HAZARDOUS WASTE MANAGEMENT PLAN FOR THE

LIMPOPO PROVINCE

YEAR: From: 2005 To: 2005

LOCATION: Limpopo, South Africa

CLIENT: Department of Finance and Economic Development, Environment and

Tourism

MAIN PROJECT FEATURES: Development of a hazardous waste management plan

POSITIONS HELD: EAF

ACTIVITIES PERFORMED: Project planning, management and execution

NAME OF ASSIGNMENT/PROJECT: RURAL WASTE REMOVAL/RURAL WASTE MINIMISATION (+30 SITES) -

TZANEEN MUNICIPALITY

YEAR: From: 2006 To: 2011

LOCATION: South Africa

CLIENT: Tzaneen Municipality

MAIN PROJECT FEATURES: Design and Construction of rural waste collection centres

POSITIONS HELD: EAF

ACTIVITIES PERFORMED: Project planning, management and execution

NAME OF ASSIGNMENT/PROJECT: DWARSRIVIER MINE WASTE MANAGEMENT LICENSE APPLICATIONS

YEAR: From: 2010 To: 2010

LOCATION: South Africa CLIENT: Dwarsrivier Mine

MAIN PROJECT FEATURES: EIA and Social Facilitation

POSITIONS HELD: EAP

ACTIVITIES PERFORMED: Project planning, management and execution for environmental authorisation

NAME OF ASSIGNMENT/PROJECT: DWARSRIVIER MINE DEVELOPMENT OF A WASTE TYRE MANAGEMENT PLAN

YEAR: From: 2012 To: 2012

LOCATION: South Africa
CLIENT: Dwarsrivier Mine

MAIN PROJECT FEATURES: Developing a waste tyre management plan for the mine

POSITIONS HELD: EAP

ACTIVITIES PERFORMED: Project planning, management and execution for licensing

# **ECO. AUDITING AND COMPLIANCE MONITORING**

NAME OF ASSIGNMENT/PROJECT: ENVIRONMENTAL COMPLIANCE AUDITS FOR OAKLEAF AND FIREFLY (LESEDI

- NORTHERN CAPE AND LETSATSI - FREE STATE SOLAR POWER PLANTS)

YEAR: From: 2020 To: 2021

LOCATION: South africa

CLIENT: OAKLEAF AND FIREFLY (PTY) LTD/ UNISAM

MAIN PROJECT FEATURES: Appointment as Lead Auditor for Environmental Legal Compliance Audits for

the 2 solar plants.

POSITIONS HELD: Project Lead Auditor

ACTIVITIES PERFORMED: Planning, management and execution of project

NAME OF ASSIGNMENT/PROJECT: ENVIRONMENTAL COMPLIANCE AUDITS FOR ROADS AND BORROW PITS

**BOCHUM ROAD** 

YEAR: From: 2017 To: 2020

LOCATION: South africa

CLIENT: ROAD AGENCY LIMPOPO

MAIN PROJECT FEATURES: Appointment as a service provider to facilitate all the specialist studies, mining

permits, water use and environmental permits required on the project.

POSITIONS HELD: Project Leader

ACTIVITIES PERFORMED: Planning, management and execution of project

NAME OF ASSIGNMENT/PROJECT: MOHALE WATER TUNNEL ENVIRONMENTAL MANAGEMENT AND

**COMPLIANCE, LESOTHO** 

YEAR: From: 2017 To: 2017

LOCATION: Lesotho CLIENT: LHDA

MAIN PROJECT FEATURES: Appointment as a service provider to facilitate engineering and environmental

management and Compliance

POSITIONS HELD: Project Leader – Environmental and Social Facilitation

ACTIVITIES PERFORMED: Planning, management and execution of environmental management and

community participation process

NAME OF ASSIGNMENT/PROJECT: ENVIRONMENTAL COMPLIANCE - CONSTRUCTION WORKS ON THE

**EXPANSION OF FOURWAYS MALL PROJECT** 

YEAR: From: 2016 To: 2017

LOCATION: Johannesburg, South Africa CLIENT: SIPPM/MFT PROPERTIES

MAIN PROJECT FEATURES: Construction works on mall expansion with associated infrastructure (roads,

bridges, etc) and rehabilitation of completed areas. Development and

Implementation of an Environmental Management System

POSITIONS HELD: Environmental Specialist

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ACTIVITIES PERFORMED: Project planning, management and execution for environmental compliance

to licenses, permits and best practices. Development and Implementation of

an Environmental Management System

NAME OF ASSIGNMENT/PROJECT: RISK ASSESSMENT AND ENVIRONMENTAL COMPLIANCE AUDITS FOR

**EXPLORATION PROJECTS** 

YEAR: From: 2010 To: 2012

LOCATION: Limpopo, South Africa
CLIENT: Rio Tinto Mining
MAIN PROJECT FEATURES: Mining Closure permits

POSITIONS HELD: EAI

ACTIVITIES PERFORMED: Project planning, management and execution for environmental permit for

closure

NAME OF ASSIGNMENT/PROJECT: COMPLIANCE AUDITING AND LICENSING OF LANDFILL SITES: LIMPOPO

PROVINCE (+5 SITES)

YEAR: From: 2012 To: 2012

LOCATION: South Africa

CLIENT: Department of Environmental Affairs

MAIN PROJECT FEATURES: Landfill sites audits and application for Waste management Licenses which

included social impact assessments.

POSITIONS HELD: EAP

ACTIVITIES PERFORMED: Project planning, management and execution for environmental authorisation

NAME OF ASSIGNMENT/PROJECT: WATER USE LICENSE COMPLIANCE AUDIT

YEAR: From: 2012 To: 2012

LOCATION: South Africa

CLIENT: Modikwa Platinum Mine

MAIN PROJECT FEATURES: Performance audit of existing water use license

POSITIONS HELD: EAP/Project Manager

ACTIVITIES PERFORMED: Project planning, management and execution

NAME OF ASSIGNMENT/PROJECT: WATER USE LICENSE COMPLIANCE AUDIT

YEAR: From: 2017 To: 2018

LOCATION: South Africa

CLIENT: Modikwa Platinum Mine

MAIN PROJECT FEATURES: Performance audit of existing water use license

POSITIONS HELD: EAP/Project Manager

ACTIVITIES PERFORMED: Project planning, management and execution

NAME OF ASSIGNMENT/PROJECT: DOCUMENTATION AND IMPLEMENTATION OF ISO 9001 MANAGEMENT

**SYSTEMS** 

YEAR: From: 2009 To: 2009

LOCATION: South Africa
CLIENT: LimAqua (Pty) Ltd.

MAIN PROJECT FEATURES: Generation of documents in preparation of ISO9001/HACCP audits.

POSITIONS HELD: Project Manager

ACTIVITIES PERFORMED: Project planning, management, reporting and execution

# MINING PERMITS, MINING RIGHTS AND PROSPECTING RIGHTS

NAME OF ASSIGNMENT/PROJECT: APPLICATION FOR PROSPECTING RIGHT – HALFGEWONEN

YEAR: From: 2020 To: Date

LOCATION: South Africa

CLIENT: Coga Mining (Pty) Ltd/ Marine Mountain

MAIN PROJECT FEATURES: Appointment as a service provider to compile a BAR and conduct community

engagements for the prospecting right application.

POSITIONS HELD: Environmental Practioner

ACTIVITIES PERFORMED: Planning, management and leading

NAME OF ASSIGNMENT/PROJECT: APPLICATION FOR MINING PERMIT – DSG MINING
YEAR: From: 2019 To: Date

LOCATION: South Africa

CLIENT: DSG Resorces (Pty) Ltd

MAIN PROJECT FEATURES: Appointment as a service provider to compile a BAR and conduct community

engagements for the prospecting right application.

POSITIONS HELD: Environmental Practioner

ACTIVITIES PERFORMED: Planning, management and leading

NAME OF ASSIGNMENT/PROJECT: APPLICATION FOR PROSPECTING RIGHT – ELANDSFONTEIN

YEAR: From: 2020 To: Date

LOCATION: South Africa

CLIENT: Coga Mining (Pty) Ltd/ Marine Mountain

MAIN PROJECT FEATURES: Appointment as a service provider to compile a BAR and conduct community

engagements for the prospecting right application.

POSITIONS HELD: Environmental Practioner

ACTIVITIES PERFORMED: Planning, management and leading

NAME OF ASSIGNMENT/PROJECT: APPLICATION FOR MINING PERMIT - COMMANDODRIFT

YEAR: From: 2020 To: Date

LOCATION: South Africa

CLIENT: Hlabirwa – Hlabirwa Mining (Pty) Ltd/ Marine Mountain

MAIN PROJECT FEATURES: Appointment as a service provider to compile a BAR and conduct community

engagements for the prospecting right application.

POSITIONS HELD: Environmental Practioner

ACTIVITIES PERFORMED: Planning, management and leading

NAME OF ASSIGNMENT/PROJECT: APPLICATION FOR PROSPECTING RIGHT – TIGERSPOORT

YEAR: From: 2020 To: Date

LOCATION: South Africa

CLIENT: MIMKAYS Mining (Pty) Ltd/ Marine Mountain

MAIN PROJECT FEATURES: Appointment as a service provider to compile a BAR and conduct community

engagements for the prospecting right application.

POSITIONS HELD: Environmental Practioner

ACTIVITIES PERFORMED: Planning, management and leading

NAME OF ASSIGNMENT/PROJECT: APPLICATION FOR MINING PERMIT – WONDERKOP YEAR: From: 2020 To: Date

LOCATION: South Africa

CLIENT: Sakhona Mining (Pty) Ltd/ Marine Mountain

MAIN PROJECT FEATURES: Appointment as a service provider to compile a BAR and conduct community

engagements for the prospecting right application.

POSITIONS HELD: Environmental Practioner

ACTIVITIES PERFORMED: Planning, management and leading

NAME OF ASSIGNMENT/PROJECT: APPLICATION FOR PROSPECTING RIGHT – STAINLESS MINING

YEAR: From: 2018 To: 2019

LOCATION: South Africa

CLIENT: Stainless Mining (Pty) Ltd

MAIN PROJECT FEATURES: Appointment as a service provider to compile a BAR and conduct community

engagements for the prospecting right application.

POSITIONS HELD: Environmental Practioner

ACTIVITIES PERFORMED: Planning, management and leading

# MINING LIABILITY COST CALCULATION/ FINANCIAL PROVISION

NAME OF ASSIGNMENT/PROJECT: ROYAL BAFOKENG BOEKENHOUTFONTEIN CHROMITITE PROJECT - MINE

**REHABILITATION LIABILITY CALCULATION** 

YEAR: From: 2020 To: Date

LOCATION: South Africa

CLIENT: Royal Bafokeng/ TMC

MAIN PROJECT FEATURES: Site rehabilitation reports, verification and calculation of closure liability

POSITIONS HELD: EAP

ACTIVITIES PERFORMED: Project planning, management and execution

NAME OF ASSIGNMENT/PROJECT: MAKOLE MINE REHABILITATION LIABILITY CALCULATION

YEAR: From: 2020 To: 2020

LOCATION: South Africa

CLIENT: Makole (Tshilwavhusiku) Mine

MAIN PROJECT FEATURES: Site verification and calculation of closure liability

POSITIONS HELD: EAP

ACTIVITIES PERFORMED: Project planning, management and execution

NAME OF ASSIGNMENT/PROJECT: DWRASRIVIER MINE REHABILITATION LIABILITY CALCULATION

YEAR: From: 2011 To: 2011

LOCATION: South Africa
CLIENT: Dwarsrivier Mine

MAIN PROJECT FEATURES: Site verification and calculation of closure liability

POSITIONS HELD: EAF

ACTIVITIES PERFORMED: Project planning, management and execution

### **ENVIRONMENTAL OUTLOOK REPORTING**

NAME OF ASSIGNMENT/PROJECT: MPUMALANGA ENVIRONMENT OUTLOOK REPORT
YEAR: From: 2018 To: 2020

LOCATION: South Africa

CLIENT: Department of Agriculture, Rural Development, Land and Environmental

Affairs (DARDLEA)

MAIN PROJECT FEATURES: Appointment as a service provider to facilitate the production of the

Environmental outlook report

POSITIONS HELD: Project Leader

ACTIVITIES PERFORMED: Planning, management and leading

NAME OF ASSIGNMENT/PROJECT: 3<sup>rd</sup> SOUTH AFRICA ENVIRONMENT OUTLOOK REPORT

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YEAR: From: 2017 To: Date

LOCATION: South Africa

CLIENT: DEA

MAIN PROJECT FEATURES: Appointment as a service provider to facilitate the production of the

Environmental outlook report

POSITIONS HELD: Project Leader

ACTIVITIES PERFORMED: Planning, management and leading

### **VEGETATION & PEST CONTROL MANAGEMENT**

NAME OF ASSIGNMENT/PROJECT: PLANT SEARCH & RESCUE AND VEGETATION CONTROL (INVASIVES) -

**SALDANHA BAY** 

YEAR: From: 2019 To: 2020

LOCATION: Western Cape, Saldanha Bay, South Africa CLIENT: Transnet/ Khato Holdings (Pty) Ltd

MAIN PROJECT FEATURES: Conduct search and rescue for protected and endangered plant and animal

species followed by vegetation clearance of invasive plants.

POSITIONS HELD: Botanist/ Pest Control Operator (PCO)

ACTIVITIES PERFORMED: Project planning, management and execution

NAME OF ASSIGNMENT/PROJECT: VEGETATION CONTROL BUSH CLEARANCE UNDER POWER LINES LIMPOPO

PROVINCE (+10 PROJECTS)

YEAR: From: 2011 To: 2012

LOCATION: Limpopo, South Africa
CLIENT: Eskom Holdings Distribution

MAIN PROJECT FEATURES: Vegetation management and clearance under powerlines

POSITIONS HELD: Project Manager/Certified Pest Control Operator

ACTIVITIES PERFORMED: Project planning, management, reporting and execution

NAME OF ASSIGNMENT/PROJECT: OFFICE PEST CONTROL; DECONTAMINATION AND VEGETATION CONTROL

(+20 PROJECTS)

YEAR: From: 2011 To: Ongoing

LOCATION: All Provinces, South Africa

CLIENT: Various

MAIN PROJECT FEATURES: Household pest control/ management and foundation treatments

POSITIONS HELD: Project Manager/Certified Pest Control Operator
ACTIVITIES PERFORMED: Project planning, management and execution

NAME OF ASSIGNMENT/PROJECT: PEST CONTROL IN VARIOUS HOUSEHOLDS AND FOUNDATIONS TREATMENT

(+20 PROJECTS)

YEAR: From: 2011 To: DATE

LOCATION: All Provinces, South Africa

CLIENT: Various

MAIN PROJECT FEATURES: Household pest control/ management and foundation treatments

POSITIONS HELD: Project Manager/Certified Pest Control Operator
ACTIVITIES PERFORMED: Project planning, management, reporting and execution

# **LEGAL COMPLIANCE**

NAME OF ASSIGNMENT/PROJECT: REVIEW OF ENVIRONMENTAL REPORT FOR HYDROCARBON

CONTAMINATION AT THE PORT OF PORT ELIZABETH

YEAR: From: 2018 To: 2018

LOCATION: South Africa (Port Elizabeth)

CLIENT: Gemini Environmental Services/ Transnet

MAIN PROJECT FEATURES: Appointment as a service provider to review Hydrocarbon contamination

Report for the port of Port Elizabeth

POSITIONS HELD: Environmental Practitioner

ACTIVITIES PERFORMED: Planning, management and leading

NAME OF ASSIGNMENT/PROJECT: EVALUATION OF THE IMPACT OF HUMAN SETTLEMENTS DEVELOPMENT

PROGRAMMES ON THE ENVIRONMENT DURING IMPLEMENTATION OF 2<sup>ND</sup>

**EDITION OF THE ENVIRONMENTAL IMPLEMENTATION PLAN (EIP)** 

YEAR: From: 2016 To: 2018

LOCATION: South Africa

CLIENT: Department of Human Settlements

MAIN PROJECT FEATURES: Evaluation of selected impacts of housing projects on the environment across

South Africa

POSITIONS HELD: Environmental and Social Assessment Practitioner (EAP)

ACTIVITIES PERFORMED: Project planning, management and execution during the evaluation

NAME OF ASSIGNMENT/PROJECT: INDEPENDENT INVESTIGATION OF THE UNDERLYING CAUSES OF NON-

COMPLIANCE BY ORGANS OF STATE WITH THE PROVISIONS OF CHAPTE 3 OF

**NEMA** 

YEAR: From: 2017 To: 2018

LOCATION: South Africa
CLIENT: DEA

MAIN PROJECT FEATURES: Appointment as a service provider to review the progress and non-compliance

issues around government departments compliance to NEMA Chapter 3

requirements.

POSITIONS HELD: Project Leader

ACTIVITIES PERFORMED: Planning, management and leading

NAME OF ASSIGNMENT/PROJECT: RICHARDS BAY MINERALS HISTORICAL COMPENSATION CLAIMS PHASES 1-3,

**RICHARDS BAY** 

YEAR: From: 2016 To: 2018

LOCATION: South Africa

CLIENT: Richards Bay Minerals (RBM) in Conjunction with EDTEA

MAIN PROJECT FEATURES: Appointment as a service provider to facilitate community participation and

compensation of historical land claims process

POSITIONS HELD: Project Leader

ACTIVITIES PERFORMED: Planning, management and execution of community participation process and

development of compensation models

# **ENVIRONMENTAL MANAGEMENT FRAMEWORKS AND SEAS**

NAME OF ASSIGNMENT/PROJECT: TUBATSE SEZ STRATEGIC ENVIRONMENTAL ASSESSMENT (SEA) FOR

LIMPOPO ECONOMIC DEVELOPMENT AGENCY (LEDA)

YEAR: From: 2016 To: 2017

LOCATION: Burgesfort, Limpopo, South Africa

CLIENT: LEDA

MAIN PROJECT FEATURES: Development of SEA focusing on the management of environmental issues

around selected strategic areas within the SEZ

POSITIONS HELD: Project Manager

ACTIVITIES PERFORMED: Project planning, management and execution for environmental and social

issues

NAME OF ASSIGNMENT/PROJECT: REGIONAL ENVIRONMENTAL MANAGEMENT FRAMEWORK (REMF) FOR

WEST COAST MUNICIPALITY, CAPE TOWN

YEAR: From: 2015 To: 2017

LOCATION: West Coast, Cape Town, South Africa

CLIENT: Western Cape Municipality

MAIN PROJECT FEATURES: Development of an Environmental Management framework for WCM focusing

on the management of environmental issues around selected strategic areas

within the metropolitan

POSITIONS HELD: Project Manager

ACTIVITIES PERFORMED: Project planning, management and execution for environmental and social

issues

NAME OF ASSIGNMENT/PROJECT: ENVIRONMENTAL MANAGEMENT FRAMEWORK (EMF) FOR EKHURHULENI

**METRO, JOHANNESBURG** 

YEAR: From: 2015 To: 2017

LOCATION: Johannesburg, South Africa

CLIENT: Ekhurhuleni Metropolitan, Johannesburg (EMM)

MAIN PROJECT FEATURES: Development of an Environmental Management framework for EMM focusing

on the management of environmental issues around selected strategic areas

within the metropolitan.

POSITIONS HELD: Project Manager

ACTIVITIES PERFORMED: Project planning, management and execution for environmental and social

issues

# **ENVIRONMENTAL IMPACT ASESSMENTS**

NAME OF ASSIGNMENT/PROJECT: ENVIRONMENTAL AUTHORISATION - VLAKPLAATS PUMPSTATION AND

PIPELINE PROJECT

YEAR: From: 2020 To: date

LOCATION: Centurion, Gauteng, South Africa CLIENT: AMCE Engineers/ City of Tshwane

MAIN PROJECT FEATURES: Environmental Authorisation application for a pump satation and pipeline

project within Tshwane municipality.

POSITIONS HELD: Environmental Specialist

ACTIVITIES PERFORMED: Project planning, management and execution for environmental compliance

to licenses, permits and best practices. Management of all specialist studies.

NAME OF ASSIGNMENT/PROJECT: ENVIRONMENTAL AUTHORISATION – GREENROOM POULTRY PROJECT

YEAR: From: 2019 To: 2020

LOCATION: Lydenburg, South Africa

CLIENT: Green Room Management (Pty) Ltd

MAIN PROJECT FEATURES: Environmental Authorisation application for a poultry business for Green

Room Management.

POSITIONS HELD: Environmental Specialist

ACTIVITIES PERFORMED: Project planning, management and execution for environmental compliance

to licenses, permits and best practices. Management of all specialist studies.

NAME OF ASSIGNMENT/PROJECT: ESIA FOR ROADS AND BORROW PITS BOCHUM ROAD YEAR: From: 2017 To: 2020

LOCATION: South africa

CLIENT: ROAD AGENCY LIMPOPO

MAIN PROJECT FEATURES: Appointment as a service provider to facilitate all the specialist studies, mining

permits, water use and environmental permits required on the project.

POSITIONS HELD: Project Leader

ACTIVITIES PERFORMED: Planning, management and execution of project

NAME OF ASSIGNMENT/PROJECT: **ESIA FOR ROADS AND BORROW PITS CHUENE ROAD**YEAR: From: 2017 To: 2018

LOCATION: South africa

CLIENT: POLOKWANE MUNICIPALITY

MAIN PROJECT FEATURES: Appointment as a service provider to facilitate all the specialist studies, mining

permits, water use and environmental permits required on the project.

POSITIONS HELD: Project Leader

ACTIVITIES PERFORMED: Planning, management and execution of project

NAME OF ASSIGNMENT/PROJECT: ENVIRONMENTAL IMPACT ASSESSMENT – NUKE 1 (NUCLEAR PLANT)

YEAR: From: 2015 To: 2017

LOCATION: Western and Eastern Cape, South Africa

CLIENT: Eskom Holdings

MAIN PROJECT FEATURES: EIA and Social Facilitation POSITIONS HELD: Internal Reviewing EAP

ACTIVITIES PERFORMED: Reviewing of EIA Reports and involved in social facilitation

NAME OF ASSIGNMENT/PROJECT: ENVIRONMENTAL IMPACT ASSESSMENT - PRASA RAIL MANUFACTURING

AND ASSOCIATED BULK WORKS PROJECT

YEAR: From: 2015 To: 2016

LOCATION: Johannesburg, South Africa
CLIENT: PRASA (Passenger Rail)
MAIN PROJECT FEATURES: EIA and Social Facilitation.
POSITIONS HELD: Environmental Specialist

ACTIVITIES PERFORMED: Project planning, management and execution for environmental and water

use licenses, permits and best practices. Development and Implementation of

an Environmental Management System.

NAME OF ASSIGNMENT/PROJECT: ENVIRONMENTAL IMPACT ASSESSMENT (BAR) - DEVELOPMENT OF PALM

SPRINGS MULTI-PURPOSE RECREATIONAL FACILITY FOR UMFULENI LOCAL

**MUNICIPALITY** 

YEAR: From: 2014 To: 2015

LOCATION: Umfuleni, South Africa
CLIENT: Umfuleni Local Municipality
MAIN PROJECT FEATURES: EIA and Social Facilitation

POSITIONS HELD: EAP

ACTIVITIES PERFORMED: Project planning, management and execution for environmental authorisation

NAME OF ASSIGNMENT/PROJECT: ENVIRONMENTAL IMPACT ASSESSMENT (BAR) – BIG TREE – REFILWE – PELLY

40 KM 132 KV POWER LINE

YEAR: From: 2014 To: 2015

LOCATION: South Africa CLIENT: Eskom Holdings

MAIN PROJECT FEATURES: EIA and Social Facilitation

POSITIONS HELD: EAP

ACTIVITIES PERFORMED: Project planning, management and execution for environmental authorisation

NAME OF ASSIGNMENT/PROJECT: ENVIRONMENTAL IMPACT ASSESSMENT (BAR) - LENASIA ROAD OVER

**RAILWAY CROSSING** 

YEAR: From: 2014 To: 2015

LOCATION: Gauteng, South Africa

CLIENT: Department of Roads & Transport, Gauteng Province

MAIN PROJECT FEATURES: EIA and Social Facilitation

POSITIONS HELD: EAP

ACTIVITIES PERFORMED: Project planning, management and execution for environmental authorisation

NAME OF ASSIGNMENT/PROJECT: ENVIRONMENTAL IMPACT ASSESSMENT (BAR) - LIBANANON 132 KV LOOP-

**IN POWERLINE** 

YEAR: From: 2014 To: 2015

LOCATION: South Africa
CLIENT: Eskom Holdings

MAIN PROJECT FEATURES: EIA and Social Facilitation

POSITIONS HELD: EAP

ACTIVITIES PERFORMED: Project planning, management and execution for environmental authorisation

NAME OF ASSIGNMENT/PROJECT: ENVIRONMENTAL IMPACT ASSESSMENT (BAR) - PELLY FAIRFIELD

(DINOKENG) 15 KM POWERLINE

YEAR: From: 2014 To: 2015

LOCATION: Dinokeng, South Africa CLIENT: Eskom Holdings

MAIN PROJECT FEATURES: EIA and Social Facilitation

POSITIONS HELD: EAP

ACTIVITIES PERFORMED: Project planning, management and execution for environmental authorisation

NAME OF ASSIGNMENT/PROJECT: ENVIRONMENTAL IMPACT ASSESSMENT (EIA) – SELETENG SUBSTATION

YEAR: From: 2005 To: 2005

LOCATION: Seleteng, South Africa
CLIENT: Eskom Holdings

MAIN PROJECT FEATURES: EIA and Social Facilitation

POSITIONS HELD: EAF

ACTIVITIES PERFORMED: Project planning, management and execution for environmental authorisation

NAME OF ASSIGNMENT/PROJECT: ENVIRONMENTAL IMPACT ASSESSMENT - WITKOP-VOORSPOED 25KM

**POWERLINE** 

YEAR: From: 2005 To: 2005

LOCATION: South Africa
CLIENT: Eskom Holdings

MAIN PROJECT FEATURES: EIA and Social Facilitation

POSITIONS HELD: EAP

ACTIVITIES PERFORMED: Project planning, management and execution for environmental authorisation

NAME OF ASSIGNMENT/PROJECT: ENVIRONMENTAL IMPACT ASSESSMENT – DULLSTROOM MACHADADORP

**SUBSTATION AND POWERLINE PROJECT** 

YEAR: From: 2005 To: 2005

LOCATION: Mpumalanga, South Africa

CLIENT: Eskom Holdings

MAIN PROJECT FEATURES: EIA and Social Facilitation

POSITIONS HELD: EA

ACTIVITIES PERFORMED: Project planning, management and execution for environmental authorisation

NAME OF ASSIGNMENT/PROJECT: ENVIRONMENTAL IMPACT ASSESSMENT - MIDDLEPUNT POWERLINE AND

**SUBSTATION** 

YEAR: From: 2006 To: 2006

LOCATION: Free State, South Africa

CLIENT: Eskom Holdings

MAIN PROJECT FEATURES: EIA and Social Facilitation

POSITIONS HELD: EAP

ACTIVITIES PERFORMED: Project planning, management and execution for environmental authorisation

NAME OF ASSIGNMENT/PROJECT: ENVIRONMENTAL IMPACT ASSESSMENT - ANGLO PLATINUM MINE

**SUBSTATION** 

YEAR: From: 2007 To: 2007

LOCATION: Rustenburg, South Africa

CLIENT: Eskom Holdings

MAIN PROJECT FEATURES: EIA and Social Facilitation

POSITIONS HELD: EAP

ACTIVITIES PERFORMED: Project planning, management and execution for environmental authorisation

NAME OF ASSIGNMENT/PROJECT: ENVIRONMENTAL IMPACT ASSESSMENT – SMOKEY HILL SUBSTATION AND

**SWITCHING STATION** 

YEAR: From: 2007 To: 2007

LOCATION: Burgersfort, South Africa

CLIENT: Eskom Holdings

MAIN PROJECT FEATURES: EIA and Social Facilitation

POSITIONS HELD: EAP

ACTIVITIES PERFORMED: Project planning, management and execution for environmental authorisation

NAME OF ASSIGNMENT/PROJECT: ENVIRONMENTAL IMPACT ASSESSMENT LENYENYE - LETSITELE

(26 KM) POWERLINE PROJECT

YEAR: From: 2009 To: 2009

LOCATION: Tzaneen - Limpopo, South Africa

CLIENT: Eskom Holdings

MAIN PROJECT FEATURES: EIA and Social Facilitation

POSITIONS HELD: EAF

ACTIVITIES PERFORMED: Project planning, management and execution for environmental authorisation

NAME OF ASSIGNMENT/PROJECT: ENVIRONMENTAL MANAGEMENT PLANS (EMP) FOR BORROW PITS IN

WATERBERG DISTRICT

YEAR: From: 2010 To: 2010

LOCATION: South Africa

CLIENT: Department of Roads and Transport

MAIN PROJECT FEATURES: EIA and Social Facilitation

POSITIONS HELD: EAP

ACTIVITIES PERFORMED: Project planning, management and execution for environmental licensing

NAME OF ASSIGNMENT/PROJECT: BASIC ASSESSMENT (EIA) WATERKLOOF POWERLINE (15 KM) AND

**SWITCHING STATION** 

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YEAR: From: 2010 To: 2010

LOCATION: Rustenburg, South Africa
CLIENT: Eskom Holdings Distribution
MAIN PROJECT FEATURES: EIA and Social Facilitation

POSITIONS HELD: EAP

ACTIVITIES PERFORMED: Project planning, management and execution for environmental authorisation

NAME OF ASSIGNMENT/PROJECT: BASIC ASSESSMENT FOR LOW LEVEL BRIDGES – DWARSRIVIER MINE

YEAR: From: 2010 To: 2010

LOCATION: South Africa
CLIENT: Dwarsrivier Mine

MAIN PROJECT FEATURES: EIA and Social Facilitation

POSITIONS HELD: EAP

ACTIVITIES PERFORMED: Project planning, management and execution for environmental authorisation

NAME OF ASSIGNMENT/PROJECT: ENVIRONMENTAL IMPACT ASSESSMENT FOR UG2 EXPANSION PROJECT

YEAR: From: 2010 To: 2010

LOCATION: South Africa
CLIENT: Dwarsrivier Mine

MAIN PROJECT FEATURES: EIA and Social Facilitation

POSITIONS HELD: EAI

ACTIVITIES PERFORMED: Project planning, management and execution for environmental authorisation

NAME OF ASSIGNMENT/PROJECT: BASIC ASSESSMENT (EIA) GOMPIES - DWAF - CHROMORE POWERLINE

(70 KM) AND SUBSTATIONS (2)

YEAR: From: 2011 To: 2011

LOCATION: Limpopo, South Africa
CLIENT: Eskom Holdings Distribution
MAIN PROJECT FEATURES: EIA and Social Facilitation

POSITIONS HELD: EAP

ACTIVITIES PERFORMED: Project planning, management and execution for environmental authorisation

NAME OF ASSIGNMENT/PROJECT: BASIC ASSESSMENT (EIA) THULAMELA SUBSTATION AND POWERLINE

YEAR: From: 2012 To: 2012

LOCATION: Limpopo, South Africa
CLIENT: Eskom Holdings Distribution
MAIN PROJECT FEATURES: EIA and Social Facilitation

POSITIONS HELD: EAP

ACTIVITIES PERFORMED: Project planning, management and execution for environmental authorisation

NAME OF ASSIGNMENT/PROJECT: BASIC ASSESSMENT (EIA) 30 KM 132 KV POWERLINE FROM GEMSBOK TO BIG

TREE SUBSTATIONS PROJECT

YEAR: From: 2012 To: 2012

LOCATION: Mpumalanga, South Africa
CLIENT: Eskom Holdings Distribution
MAIN PROJECT FEATURES: EIA and Social Facilitation

POSITIONS HELD: EAP

ACTIVITIES PERFORMED: Project planning, management and execution for environmental authorisation

NAME OF ASSIGNMENT/PROJECT: BASIC ASSESSMENT (EIA) 30 KM 132 KV POWER LINE FROM NORMANDIE TO

**KEMP SUBSTATIONS PROJECT** 

YEAR: From: 2012 To: 2012

LOCATION: Mpumalanga, South Africa
CLIENT: Eskom Holdings Distribution
MAIN PROJECT FEATURES: EIA and Social Facilitation

POSITIONS HELD: EAI

ACTIVITIES PERFORMED: Project planning, management and execution for environmental authorisation

NAME OF ASSIGNMENT/PROJECT: SECTION 24G APPLICATION FOR ENVIRONMENTAL AUTHORISATION ON A

LOW LEVEL BRIDGE CROSSING

YEAR: From: 2012 To: 2012

LOCATION: South Africa
CLIENT: Dwarsrivier Mine

MAIN PROJECT FEATURES: EIA and Social Facilitation

POSITIONS HELD: EAP

ACTIVITIES PERFORMED: Project planning, management and execution for environmental authorisation

NAME OF ASSIGNMENT/PROJECT: BASIC ASSESSMENT (EIA) 12.5 KM 132 KV TAUNG GOLD POWERLINE AND

SUBSTATION PROJECT MPUMALANGA PROVINCE

YEAR: From: 2012 To: 2012

LOCATION: Mpumalanga, South Africa
CLIENT: Eskom Holdings Distribution
MAIN PROJECT FEATURES: EIA and Social Facilitation

POSITIONS HELD: EAP

ACTIVITIES PERFORMED: Project planning, management and execution for environmental authorisation

NAME OF ASSIGNMENT/PROJECT: BASIC ASSESSMENT (EIA) 66 KM 132 KV POWERLINE FROM LEEUDRAAI TO

SANARI SUBSTATIONS PROJECT LIMPOPO PROVINCE

YEAR: From: 2012 To: 2012

LOCATION: Limpopo, South Africa
CLIENT: Eskom Holdings Distribution
MAIN PROJECT FEATURES: EIA and Social Facilitation

POSITIONS HELD: EAP

ACTIVITIES PERFORMED: Project planning, management and execution for environmental authorisation

NAME OF ASSIGNMENT/PROJECT: SCHOONOORD WATER SUPPLY PROJECT EIA
YEAR: From: 2004 To: 2005

LOCATION: Limpopo Province, South Africa

CLIENT: Limpopo Public Works (Enviroxcellence)

MAIN PROJECT FEATURES: Conducting site investigations and applications for environmental approval

POSITIONS HELD: Project Manager

ACTIVITIES PERFORMED: Project planning, management, reporting and execution

NAME OF ASSIGNMENT/PROJECT: NAGANANG WATER SUPPLY PROJECT EIA

YEAR: From: 2004 To: 2005

LOCATION: Limpopo Province, South Africa

CLIENT: Limpopo Public Works (Enviroxcellence)

MAIN PROJECT FEATURES: Conducting site investigations and applications for environmental approval

POSITIONS HELD: Project Manager

ACTIVITIES PERFORMED: Project planning, management, reporting and execution

NAME OF ASSIGNMENT/PROJECT: MAGAKADIMENG WATER SUPPLY PROJECT EIA
YEAR: From: 2004 To: 2005

LOCATION: Limpopo Province, South Africa

CLIENT: Limpopo Public Works (Enviroxcellence)

MAIN PROJECT FEATURES: Conducting site investigations and applications for environmental approval

POSITIONS HELD: Project Manager

ACTIVITIES PERFORMED: Project planning, management, reporting and execution

NAME OF ASSIGNMENT/PROJECT: TLHOTLHOKWE WATER SUPPLY PROJECT EIA

YEAR: From: 2004 To: 2005

LOCATION: Limpopo Province, South Africa
CLIENT: Limpopo Public Works (Enviroxcellence)

MAIN PROJECT FEATURES: Conducting site investigations and applications for environmental approval

POSITIONS HELD: Project Manager

ACTIVITIES PERFORMED: Project planning, management, reporting and execution

NAME OF ASSIGNMENT/PROJECT: TSHABALANE WATER SUPPLY PROJECT EIA

YEAR: From: 2004 To: 2005

LOCATION: Limpopo Province, South Africa

CLIENT: Limpopo Public Works (Enviroxcellence)

MAIN PROJECT FEATURES: Conducting site investigations and applications for environmental approval

POSITIONS HELD: Project Manager

ACTIVITIES PERFORMED: Project planning, management, reporting and execution

NAME OF ASSIGNMENT/PROJECT: GA-MASEMOLA WATER SUPPLY PROJECT EIA

YEAR: From: 2004 To: 2005

LOCATION: Limpopo Province, South Africa

CLIENT: Limpopo Public Works (Enviroxcellence)

MAIN PROJECT FEATURES: Conducting site investigations and applications for environmental approval

POSITIONS HELD: Project Manager

ACTIVITIES PERFORMED: Project planning, management, reporting and execution

NAME OF ASSIGNMENT/PROJECT: LUCKAN WATER SUPPLY PROJECT EIA

YEAR: From: 2004 To: 2005

LOCATION: Limpopo Province, South Africa
CLIENT: Limpopo Public Works (Enviroxcellence)

MAIN PROJECT FEATURES: Conducting site investigations and applications for environmental approval

POSITIONS HELD: Project Manager

ACTIVITIES PERFORMED: Project planning, management, reporting and execution

### TRAINING AND COACHING

NAME OF ASSIGNMENT/PROJECT: UNIVERSITY OF LIMPOPO (PART-TIME)

YEAR: From: 2017 To: 2017

LOCATION: South Africa

CLIENT: University of Limpopo MAIN PROJECT FEATURES: Senior Lecturer

POSITIONS HELD: Senior Lecturer (Part-time)

ACTIVITIES PERFORMED: Proving lectures and supervision of students

NAME OF ASSIGNMENT/PROJECT: TRAINING ON DRINKING WATER AND WASTE WATER TREATMENT PLANTS

YEAR: From: 2019 To: 2019

LOCATION: South Africa

CLIENT: Dwarsrivier Chrome Mine

MAIN PROJECT FEATURES: Appointment as a service provider to train operators on all water treatment

works on site

POSITIONS HELD: Project Manager

ACTIVITIES PERFORMED: Planning, management and leading

# HYDROCARBON AND LAND REHABILITATION MANAGEMENT

NAME OF ASSIGNMENT/PROJECT: LAND REHABILITATION (OIL SPILL RECOVERIES) (+50 SITES) - ESKOM

YEAR: From: 2005 To: 2013

LOCATION: South Africa
CLIENT: Eskom Holdings

MAIN PROJECT FEATURES: Oil spill clean up and rehabilitation of contaminated sites

POSITIONS HELD: EAP

ACTIVITIES PERFORMED: Project planning, management and execution

NAME OF ASSIGNMENT/PROJECT: RIO TINTO EXPLORATION WORK LAND REHABILITATION (+30 SITES)

YEAR: From: 2008 To: 2008

LOCATION: South Africa

CLIENT: Rio Tinto Mining and Exploration
MAIN PROJECT FEATURES: Site clean up and rehabilitation

POSITIONS HELD: EAP

ACTIVITIES PERFORMED: Project planning, management and execution

NAME OF ASSIGNMENT/PROJECT: LAND REHABILITATION AND COAL WASTE DISPOSAL - RIO TINTO

YEAR: From: 2009 To: 2009

LOCATION: South Africa
CLIENT: Rio Tinto Mining

MAIN PROJECT FEATURES: Site clean up and rehabilitation

POSITIONS HELD: EAP

ACTIVITIES PERFORMED: Project planning, management and execution

NAME OF ASSIGNMENT/PROJECT: ENVIRONMENTAL CLEANING POLOKWANE WAREHOUSE - ESKOM

YEAR: From: 2010 To: 2010

LOCATION: Polokwane, South Africa
CLIENT: Eskom Holdings Distribution

MAIN PROJECT FEATURES: Oil spill clean up and rehabilitation of contaminated sites

POSITIONS HELD: EAP

ACTIVITIES PERFORMED: Project planning, management and execution

NAME OF ASSIGNMENT/PROJECT: ENVIRONMENTAL CLEANING TZANEEN FSC AREA - ESKOM

YEAR: From: 2010 To: 2010

LOCATION: South Africa

CLIENT: Eskom Holdings Distribution

MAIN PROJECT FEATURES: Oil spill clean up and rehabilitation of contaminated sites

POSITIONS HELD: EAF

ACTIVITIES PERFORMED: Project planning, management and execution

NAME OF ASSIGNMENT/PROJECT: ESKOM ENVIRONMENTAL CLEANING MPUMALANGA/LIMPOPO PROVINCE

YEAR: From: 2011 To: 2013

LOCATION: Limpopo, South Africa CLIENT: Eskom Holdings

MAIN PROJECT FEATURES: Oil spill clean up and rehabilitation of contaminated sites

POSITIONS HELD: EAP

ACTIVITIES PERFORMED: Project planning, management and execution

# GEOTECHNICAL AND GEOHYDROLOGICAL INVESTIGATIONS

NAME OF ASSIGNMENT/PROJECT: GEOTECHNICAL INVESTIGATIONS, FOUNDATION DESIGN AND COSTING,

**INSPECTIONS AND ISSUING OF CERTIFICATES (FETAKGOMO)** 

YEAR: From: 2005 To: 2005

LOCATION: South Africa

CLIENT: Local Government and Housing

MAIN PROJECT FEATURES: Soil analysis for foundation stability and designs

POSITIONS HELD: Project Manager

ACTIVITIES PERFORMED: Project planning, management and reporting

NAME OF ASSIGNMENT/PROJECT: GEOTECHNICAL INVESTIGATIONS, FOUNDATION DESIGN AND COSTING,

**INSPECTIONS AND ISSUING OF CERTIFICATES (MUSSINA-NANCEFIELD)** 

YEAR: From: 2006 To: 2006

LOCATION: Mussina-Nancefield, South Africa CLIENT: Local Government and Housing

MAIN PROJECT FEATURES: Soil analysis for foundation stability and designs

POSITIONS HELD: PROJECT MANAGER

ACTIVITIES PERFORMED: Project planning, management and reporting

NAME OF ASSIGNMENT/PROJECT: GEOTECHNICAL INVESTIGATIONS, FOUNDATION DESIGN AND COSTING,

INSPECTIONS AND ISSUING OF CERTIFICATES (MUSSINA-

DAMBONI/MADIMBO/MALALE)

YEAR: From: 2006 To: 2006

LOCATION: South Africa

CLIENT: Local Government and Housing

MAIN PROJECT FEATURES: Soil analysis for foundation stability and designs

POSITIONS HELD: Project Manager

ACTIVITIES PERFORMED: Project planning, management and reporting

NAME OF ASSIGNMENT/PROJECT: GEOTECHNICAL INVESTIGATIONS AND FOUNDATION DESIGNS ON THE

CONSTRUCTION OF SCHOOLS-LIMPOPO PROVINCE

YEAR: From: 2006 To: 2006

LOCATION: Limpopo, South Africa

CLIENT: Public Works

MAIN PROJECT FEATURES: Soil analysis for foundation stability and designs

POSITIONS HELD: Project Manager

ACTIVITIES PERFORMED: Project planning, management and reporting

NAME OF ASSIGNMENT/PROJECT: GEOTECHNICAL INVESTIGATIONS, FOUNDATION DESIGN, WATER AND

SEWER RETICULATION, COSTING INSPECTIONS AND ISSUING OF

**CERTIFICATEES: MOKOPANE NURSING COLLEGE** 

YEAR: From: 2007 To: 2007

LOCATION: Mokopane, Limpopo, South Africa

CLIENT: Public Works

MAIN PROJECT FEATURES: Soil analysis for foundation stability and designs

POSITIONS HELD: Project Manager

ACTIVITIES PERFORMED: Project planning, management and reporting

NAME OF ASSIGNMENT/PROJECT: GEOTECHNICAL INVESTIGATIONS, FOUNDATION DESIGN, WATER AND

SEWER RETICULATION, COSTING INSPECTIONS AND ISSUING OF

**CERTIFICATEES (CAPRICORN HOSPITALS STAFF ACCOMMODATION)** 

YEAR: From: 2007 To: 2007

LOCATION: South Africa CLIENT: Public Works

MAIN PROJECT FEATURES: Soil analysis for foundation stability and designs

POSITIONS HELD: Project Manager

ACTIVITIES PERFORMED: Project planning, management and reporting

NAME OF ASSIGNMENT/PROJECT: GEOTECHNICAL INVESTIGATIONS AND FOUNDATION DESIGNS ON THE

CONSTRUCTION OF EMERGENCY MEDICAL SERVICES - WATERBURG

**DISTRICT-LIMPOPO PROVINCE** 

YEAR: From: 2007 To: 2007

LOCATION: Limpopo, South Africa

CLIENT: Public Works

MAIN PROJECT FEATURES: Soil analysis for foundation stability and designs

POSITIONS HELD: Project Manager

ACTIVITIES PERFORMED: Project planning, management and reporting

NAME OF ASSIGNMENT/PROJECT: GEOHYDROLOGICAL INVESTIGATIONS AND POLLUTION CONTROL IN

**EXPLORATION AREAS (CHAPUDI AND SPRINGBOK FLATS)** 

YEAR: From: 2007 To: 2007

LOCATION: South Africa
CLIENT: Rio Tinto Mining

MAIN PROJECT FEATURES: Underground water analysis and modelling for pollution control planning

POSITIONS HELD: Project Manager

ACTIVITIES PERFORMED: Project planning, management and reporting

NAME OF ASSIGNMENT/PROJECT: GEOHYDROLOGY FOR SSCHOOLS WATERBERG DISTRICT DEPARTMENT OF

**EDUCATION LIMPOPO PROVINCE (+10 SCHOOLS)** 

YEAR: From: 2011 To: 2012

LOCATION: Limpopo, South Africa

CLIENT: Mvula Trust

MAIN PROJECT FEATURES: Borehole drilling, and underground water analysis for equipping drilled

boreholes.

POSITIONS HELD: Project Manager

ACTIVITIES PERFORMED: Project planning, management, reporting and execution

### PROJECT MANAGEMENT

NAME OF ASSIGNMENT/PROJECT: DESIGN AND SUPERVISION FOR THE TARRING OF THE PHOKWANE ROAD

YEAR: From: 2008 To: 2008

LOCATION: South Africa

CLIENT: Makhudutamakga Local Municipality

MAIN PROJECT FEATURES: Civil Engineering and Environmental compliance

POSITIONS HELD: EAP

ACTIVITIES PERFORMED: Project planning, management and execution for environmental compliance

NAME OF ASSIGNMENT/PROJECT: PROPOSALS ON CLEAN DEVELOPMENT MECHANISM YEAR: From: 2006 To: 2006

LOCATION: South Africa

CLIENT: Limpopo Province Municipalities

MAIN PROJECT FEATURES: Generation of various proposals for CDM while in the DNA Subcommittee for

Limpopo province

POSITIONS HELD: DNA Subcommittee Member
ACTIVITIES PERFORMED: Compilation of proposals

NAME OF ASSIGNMENT/PROJECT: DELTA BEVERAGES (COCA-COLA)

YEAR: From: 2001 To: 2003

CLIENT: Delta Beverages (Coca-Cola)

MAIN PROJECT FEATURES: Ensuring product quality, development and implementation of the ISO9001,

ISO14001 and TCCQ systems

POSITIONS HELD: Acting Quality Assurance Manager/Quality Environmental Systems

**Coordinator/Quality Assurance Chemist** 

ACTIVITIES PERFORMED: Section/Department Management

NAME OF ASSIGNMENT/PROJECT: OLIVINE INDUSTRIES

YEAR: From: 1998 To: 2001

CLIENT: Olivine Industries

MAIN PROJECT FEATURES: Ensuring product quality and implementation of the ISO9001 system

POSITIONS HELD: Chemist

ACTIVITIES PERFORMED: Analysis of in-process products and raw materials to ensure final product

quality

# **PUBLICATIONS:**

SADC Climate Change Yearbook 2016