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PROPOSED DEVELOPMENT OF EVENING STAR OPENCAST ALLUVIAL DIAMOND MINE AND ASSOCIATED INFRASTRUCTURE , NORTHERN CAPE PROVINCE

FINAL SCOPING REPORT

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

NAME OF APPLICANT:	EVENING STAR TRADING 553 (PTY) LTD
TEL NO:	082 924 5965
POSTAL ADDESS:	18 Cambell Street, Douglas, 8730

FILE REFFERENCE NUMBER SAMRAD: NC 30/5/1/2/2/10147 MR

PREPARED BY: NDI GEOLOGICAL CONSULTING SERVICES (PTY) LTD

DATE: DECEMBER 2018

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IMPORTANT NOTICE

In terms of the Mineral and Petroleum Resource 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 environment"

Unless an Environmental Authorisation can be granted following the evaluation of Environmental Impact Assessment and Environmental Management Programme report in terms of the National Environmental Management Act (Act 107 of 1998) (NEMA), it can 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 to the submission of applications.

It is therefore an instruction that the prescribed reports required in respect of application for an environmental authorisation for listed activities triggered by an application for a 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 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*

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un-interpreted information and that it unambiguously represents the interpretation of the applicant.

OBJECTIVES OF THE SCOPING REPORT

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 ranking process of all identified alternatives focusing on the geographical, physical, biological, social, economic, and cultural aspects of the environment;*
(e) *Identify 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, consequences, 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 needs to be managed and monitored.*

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EXECUTIVE SUMMARY

Background

This is the application for the Environmental Impact Assessment (EIA) for the proposed mining of alluvial diamonds on portion 1 and portion 8 of the farm Avoca 85 located within the Herbert Magisterial District in the Northern Cape Province. The lodged application was submitted to the Department of Mineral Resources (DMR) on 27th of September 2018 and the following reference number NC30/5/1/2/2/10147 MR was issued by the DMR.

The application includes various activities that are listed in terms of GNR listing number 983 and GNR listing 984 as promulgated in terms of the National Environmental Management Act 107 of 1998 (NEMA), as amended, requiring environmental authorisation. These listed activities cover the necessary infrastructure that would make the proposed mining activities to be feasible.

The process that was followed is a regulated process in terms of the NEMA for all EIAs. While the process is at scoping phase, it is important to note that the entire process will include an integrated public participation process, scoping report, environmental impact report and an environmental management plan before any decision can be taken or made on whether to permit the development or not.

Scoping and Environmental Impact Assessment (S&EIA) process

A S&EIA is conducted in two phases. The first phase is scoping and the second phase is the EIA/EMPr report compilation. The scoping phase will commence once the application has been submitted with the competent

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authority and the following tasks will be undertaken: identify interested and affected parties (I&APs) and stakeholders, identify relevant policies and legislation; consider the need and desirability of the project; consider alternative technologies and sites; identify the potential environmental issues; determine the level of assessment and public participation process required for the EIA phase; and identify preliminary measures to avoid, mitigate or manage potential impacts. The objectives of the EIA phase will be to assess the potential impacts associated with the preferred project alternatives as per the terms of reference for the assessment that are set out in the scoping report. The EIA/EMPr report will document the assessment findings and will detail the measures required to avoid, mitigate and/or manage the potential impacts. The requirements for the S&EIA process are specifically contained in Chapter 4 Part 3 of the NEMA Reg No 326 (amended on 7 April 2017). The EIA process can take up to 300 days to complete (87 days for scoping phase, 106 days for EIA phase, and 107 days for competent authority to review).

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LIST OF APPENDICES

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ACRONYMS AND ABBREVIATIONS

LIST OF ABBREVIATIONS

BID: Background Information Document

DEA: Department of Environmental Affairs

DMR: Department of Mineral Resources

DWS: Department of Water and Sanitation

EA: Environmental Authorisation

EIA: Environmental Impact Assessment

EIAR: Environmental Impact Assessment Report

EMPr: Environmental Management Programme

GN: Government Notice

HIA: Heritage Impact Assessment

I&AP: Interested & Affected Party

MPRDA: Minerals and Petroleum Resources Development Act, 2002

NEM: WA: National Environmental Management: Waste Amendment Act, 2008

NEMA: National Environmental Management Act, 1998 (Act No. 107 of 1998)

NHRA: National Heritage Resources Act, 1999 (Act No. 25 of 1999)

NWA: National Water Act, 1998 (Act No. 36 of 1998)

PPP: Public Participation Process

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1. INTRODUCTION

Background and Introduction

This is the application for the Environmental Impact Assessment (EIA) for the proposed mining of alluvial diamonds on portion 1 and portion 8 of the farm Avoca 85 located within the Herbert Magisterial District in the Northern Cape Province. The lodged application was submitted to the Department of Mineral Resources (DMR) on 27th of September 2018 and the following reference number NC30/5/1/2/2/10147 MR was issued by the DMR.

The application includes various activities that are listed in terms of GNR listing number 983 and GNR listing 984 as promulgated in terms of the National Environmental Management Act 107 of 1998 (NEMA), as amended, requiring environmental authorisation. These listed activities cover the necessary infrastructure that would make the proposed mining activities to be feasible.
The process that was followed is a regulated process in terms of the NEMA for all EIAs. While the process is at scoping phase, it is important to note that the entire process will include an integrated public participation process, scoping report, environmental impact report and an environmental management plan before any decision can be taken or made on whether to permit the development or not.

1.1 SCOPING PHASE

The scoping phase is conducted as the precursor to the Environmental Impact Assessment (EIA) process during which:
Project and baseline environmental information is collated. Baseline information for the scoping report is gathered through visual inspections during field visits of the proposed project area and surroundings, desktop studies

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which include GIS mapping, and review of existing reports, guidelines and legislation.

- Landowners, adjacent landowners, local authorities, environmental authorities, as well as other stakeholders which may be affected by the project, or that may have an interest in the environmental impacts of the project are identified.
- I&APs are informed about the proposed project.
- Environmental authorities are consulted to confirm legal and administrative requirements.
- Environmental issues and impacts are identified and described.
- Development alternatives are identified and evaluated, and non-feasible development alternatives are eliminated.
- The nature and extent for further investigations and specialist input required in the EIA phase is identified.
- The draft and final scoping reports are submitted for review by authorities, relevant organs of state and I&APs.
- Key I&AP issues and concerns are collated into an issues and response report for consideration in the EIA phase.

1.2 EIA PHASE PROCESS

After the initial scoping phase, the EIA phase of the application includes:

- Specialist investigations are undertaken in accordance with the terms of reference established in the scoping assessment (plan of study for EIA appended to the scoping report). The scope for specialist work is determined
- accordingly to the nature and scale of the project impacts.
- An evaluation of development alternatives and identification of a proposed option.
- An assessment of existing impacts (no-go development option), environmental impacts that may be associated with the proposed

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project option, and cumulative impacts using the impact assessment methodology.

- Identification of mitigation measures to address the environmental impacts and development of actions required to achieve the mitigation required.
- Consultation with I&APs.
- Incorporation of public comment received during scoping and the draft EIA into the final EIA report.

2 ENVIRONMENTAL ASSESSMENT PRACTITIONER (EAP)

2.1 Details of the EAP

Evening Star 553 (Pty) Ltd (Evening Star) has appointed Ndi Geological Consulting Services(Pty) Ltd (Ndi Geological Consulting) as an independent Environmental Assessment Practitioner (EAP) to undertake a Scoping and Environmental Impact Assessment (S&EIA) process relevant the application for a mining right.

Ndi Geological Consulting has experience in providing comprehensive Environmental and Mining services. Details of the EAP are detailed in Table 1

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Table 1: Details of the EAP

ITEM	**CONSULTANT CONTACT DETAILS (If applicable)**
Name	Ndi Geological Consulting Services (Pty) Ltd
Tel no	053-8420687
Fax no:	086-5381069
Cellular no	0827608420
E-mail address	E: ndi@ndigeoservices.co.za E: atshidzaho@gmail.com
Postal address	P O Box 10489 Beaconsfield Kimberley 8315
Expertise of the EAP	
The qualifications of the EAP	BSc (Hons) Earth Sciences in Mining and Environmental Geology. University of Venda
Summary of the EAP's past experience.	
Ndivhudzannyi graduated with an Honours degree in Earth Science majoring in Mining and Environmental Geology. She is a self-motivated and hardworking Geologist with 8 years' experience in the environmental, mining exploration, open cast work and consulting in the mining industry. She has proven leadership skills from supervising exploration rigs (Reverse Circulation and Percussion Drilling). Proven field experience in exploration i.e. mapping, borehole logging, borehole sampling, sample preparation for laboratory analysis and supervisory duties in the field. Ndivhudza also has experience in writing geological reports including Prospecting Work Programmes, Mining Work Programmes, Scoping Reports and Environmental Impact Assessment Reports, and handling of DMR documents in general. She has conducted environmental audits for mines. Ndivhudza's expertise also extends across annual reporting assessment, environmental authorizations and conducting public participation processes.	

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Please refer to Appendix B for a copy of the EAP's Curriculum Vitae

2.2 DESCRITION OF THE PROPERTY

The location of the property with reference to the nearest towns, the details of the farms and the extent of the application area are described in Table 2 below:

Table 2: Description of the property

Farm name:	Portion1 and portion 8 of the of the farm Avoca 85		
Application area Ha	1477.0895 ha		
Magisterial district	Herbert Magisterial District		
Distance and direction from nearest town	±10km east of Douglas town		
21 digit surveyor General Code	**Farm name**	**Portion**	**SG Code**
	Avoca 85	1	C03200000000008500001
	Avoca 85	8	C03200000000008500001

The proposed Mining Right application is located in an area east of Douglas in the Herbert District covering a combined area of 1477.0895 hectares to mine alluvial diamonds. The application runs on portions 1 and 8 of Avoca 85. Access to the property is via the R357 road that cuts across it on an east-west direction (Figure 1, Figure 2 and Figure 3).

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Locality map

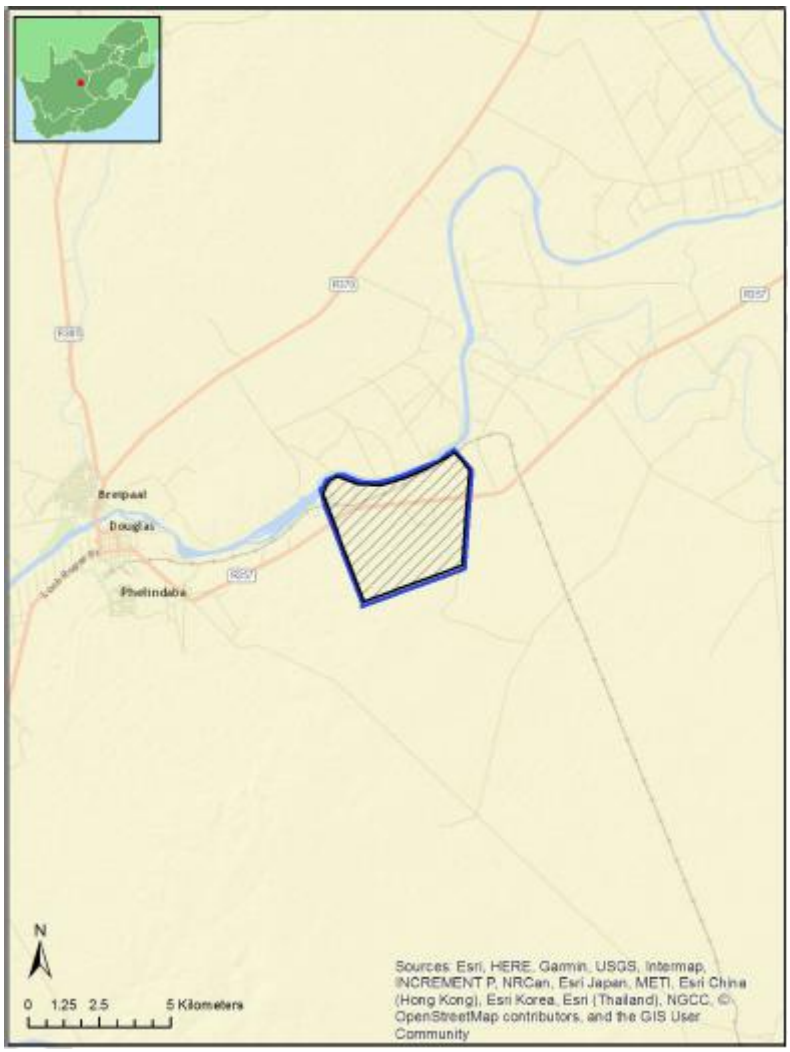

Figure 1: Location map of the proposed mining project

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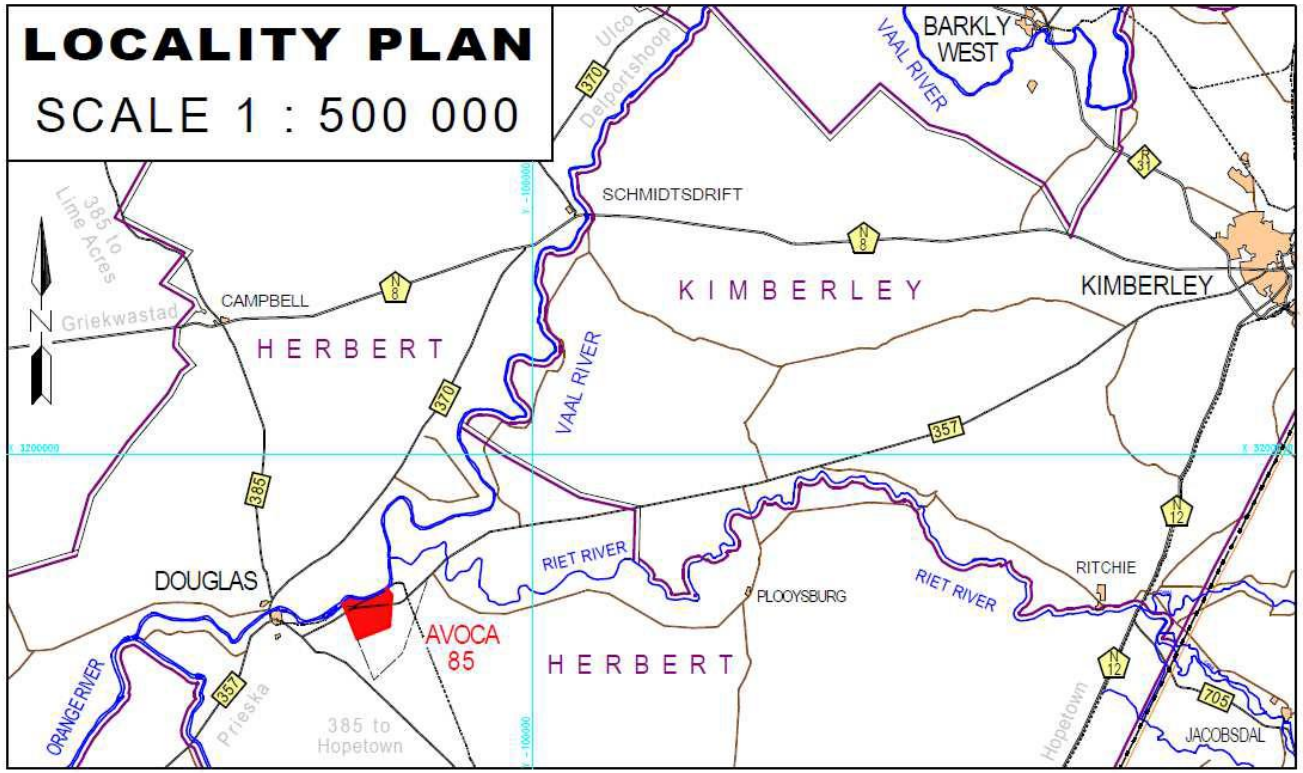

Figure 2: Location of the proposed mining project with reference to the nearest town

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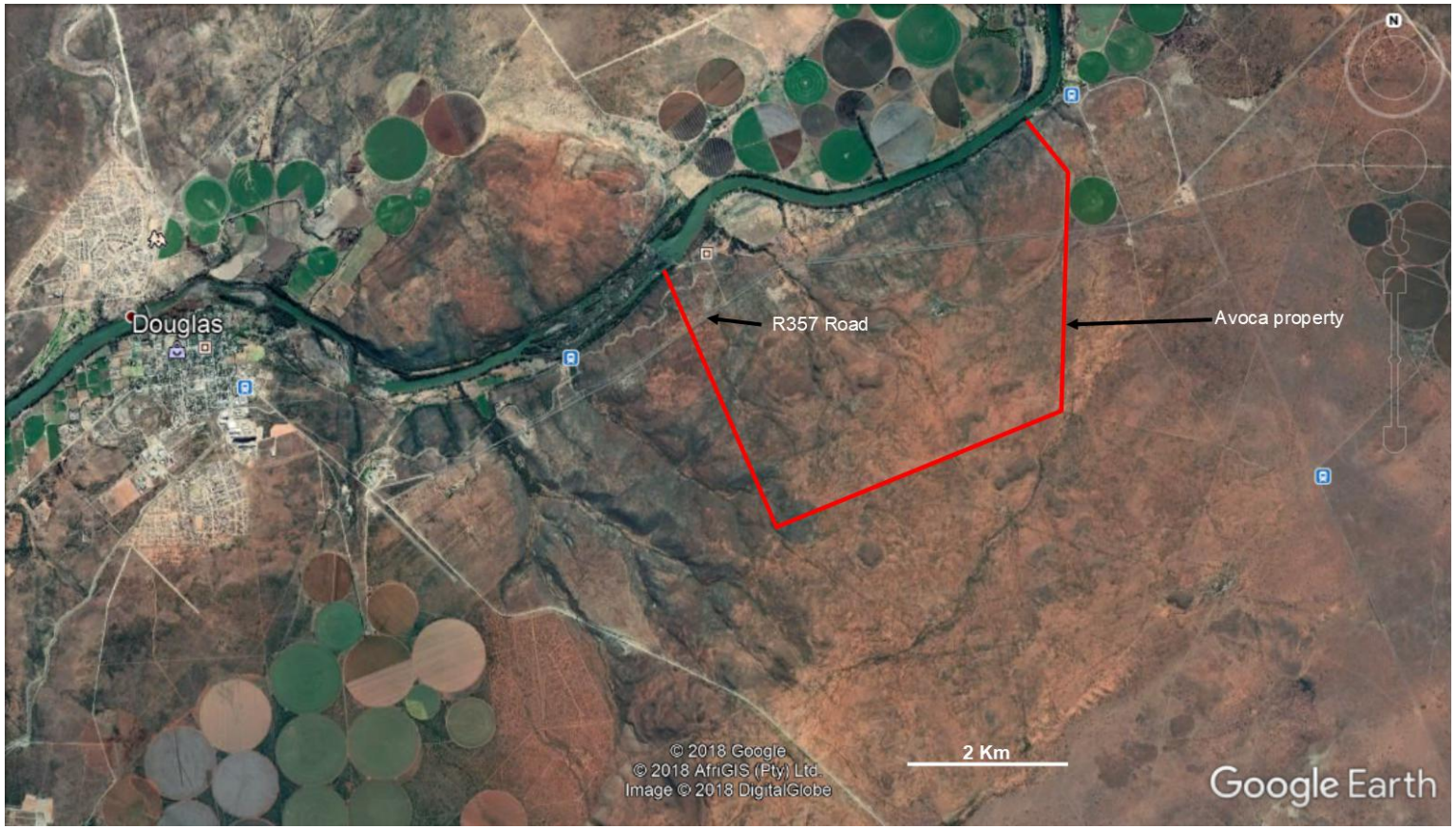

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Figure 3: Location map of the proposed mining project

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3 POLICY AND LEGISLATIVE CONTEXT

Applicable legislative and guidelines used to complete this report.

3.1 The constitution of the Republic of South Africa, 1996 (Act No.108 of 1996)

Under section 24 of the Constitution of the Republic of South Africa, it is clearly stated that:

Everyone has the right to (a) an environment that is not harmful to their health or well-being; and (b) to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that -

(i) Prevent pollution and ecological degradation;

(ii) Promote conservation; and

(iii) Secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.

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

The main aim of the National Environmental Management Act, 1998 (Act 107 of 1998) (NEMA) is to provide for co-operative governance by establishing decision-making principles on matters affecting the environment. In terms of the NEMA EIA regulations, the applicant is required to appoint an environmental assessment practitioner (EAP) to undertake the EIA, as well as conduct the public participation process. In South Africa, EIA became a legal requirement in 1997 with the promulgation of regulations under the Environment Conservation Act (ECA). Subsequently, NEMA was passed in 1998. Section 24(2) of NEMA empowers the Minister and any MEC, with the concurrence of the Minister, to identify activities which must be considered, investigated, assessed and reported on to the competent authority responsible

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for granting the relevant environmental authorisation. It was further amended in April 2017

3.3 Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002) (MPRDA)

In terms of the MPRDA, an application for a mining right must be supported by various documents, including a Scoping Report, EIA and EMP. A scoping report and EIA report will thus be compiled to meet the requirements of the MPRDA. This process will however run in parallel to this EIA process undertaken to meet the requirements of NEMA, NEM:WA and the NWA. In support of the application to obtain the mining right, Evening Star is required to conduct a Scoping Report, EIA /EMPr and I&AP consultation process that need to be submitted to the DMR for assessment.

3.4 National Environmental Management: Waste Act (No. 59 of 2008)

Waste management activities in respect of which a Waste Management Licence (WML) is required are to be undertaken in accordance with section 20 (b) of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) (NEM:WA). The Act lists activities triggered for the Evening Star mining

project and for the management of waste that will be generated thereof in order to prevent environmental pollution and littering. On 2 June 2014 the National Environmental Management: Waste Amendment Act came into effect. Waste is now subject to all the provisions of the National Environmental Management. It is now important to consider Section 16 of the NEMWA which states as follows:

A holder of waste must, within the holder's power, take all reasonable measures to-

- "Avoid the generation of waste and where such generation cannot be avoided, to minimise the toxicity and
- amounts of waste that are generated;

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- Reduce, re-use, recycle and recover waste;
- Where waste must be disposed of, ensure that the waste is treated and disposed of in an environmentally
- sound manner;
- Manage the waste in such a manner that it does not endanger health or the environment or cause a
- Nuisance through noise, odour, or visual impacts;
- Prevent any employee or any person under his or her supervision from contravening the Act; and
- Prevent the waste from being used for unauthorised purposes."

These general principles of responsible waste management will be incorporated into the requirements in the EMPr to be implemented for the proposed mining project. The NEM: WA provides for specific waste management measures to be implemented; as well as providing for the licensing and control of waste management activities. Waste management activities will be applicable to Category A, B and C according

- ◆ Category A describes waste management activities requiring a Basic Assessment process to be carried out in accordance with the EIA regulations supporting an application for a waste management licence.
  - ✧ Activity 13
- ◆ Category B describes waste management activities requiring an Environmental Impact Assessment process to be conducted in accordance with the EIA regulations supporting a waste management licence application.
  - ✧ Activity 7:
  - ✧ Activity 11
- ◆ Category C describes waste management activities that do not require a WML but these activities will have to comply with the prescribed requirements and standards as prescribed by the Minister, which includes

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the Norms and Standards for Storage of Waste, 2013. These activities include the storage of general waste at a facility with a capacity to store in excess of 100 m3; and storage of hazardous waste in excess of 80 m^3.

3.5 National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004) (NEM: AQA)

The National Environmental Management: Air Quality Act (NEM: AQA) (Act No. 39 of 2004 as amended) provides for the identification of priority pollutants and the setting of ambient standards with respect to these pollutants.

Where applicable, the project will have to conform to the rules of this law.

3.6 National Environmental Management: Biodiversity Act (No. 10 of 2004)

The National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004) (NEM: BA) regulates the protection of species and ecosystems that require national protection and also takes into account the management of alien and invasive species that may be removed or threatened by the proposed mining activities.

3.7 National Heritage Resources Act, 1999 (Act No. 25 of 1999) (NHRA)

The National Heritage Resources Act (NHRA) (Act 25 of 1999) clearly specifies that cultural heritage resources may not be disturbed without authorization from the relevant heritage authority. Section 34(1) of the NHRA states that, “no person may alter or demolish any structure or part of a structure which is older than 60 years without a permit issued by the relevant provincial heritage resources authority” A Heritage Impact Assessment Permit will need to be obtained before any heritage resource can be disturbed.

3.8 National Water Act (No. 36 of 1998)

The National Water Act (Act No. 36 of 1998) (NWA) administered by the Department of Water and Sanitation (DWS) regulates the sustainable and equitable use and protection of water resources.

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Regulations for the use of water for mining and related activities aimed at protected water resources (GNR. 704, June 1999) were promulgated in terms of Section 26 of the NWA. These provide for:

Restrictions on the locality with respect to residue deposits, dam or reservoirs as well as mining activities within the proximity of a watercourse.

Restriction on the use of material that can pollute a water resource for the purposes of construction.

Capacity requirements of clean and dirty water systems.

Protection of water resources from pollution sources at the mine in particular the separation of clean and dirty water and the prevention of spillages from dirty water containment facilities.

4 DESCRIPTION OF THE SCOPE OF THE PROPOSED OVERALL ACTIVITY

4.1 Mining operations

The proposed project involves the development of an opencast diamond mine and supporting infrastructure. The diamond material will be excavated from the pit using a bucket excavator and transported by an ADT to the overburden stockpile area. The proposed mine will require support infrastructure such Access roads, Chemical storage, Diesel storage, Domestic waste facility, Electricity, Fences, Office site, Plant site, Settling dam, Vehicle parking area, Waste dump, Water pipe lines and Water reservoir. Figure 4 shows the initial site plan for the proposed mining project.

4.1.1 Mining methodology

The project involves the development of an opencast diamond mine and supporting infrastructure. Due to the proximity of the diamond resources to the surface, an open cut method was the best option to extract the resources hence the diamonds will be mined through opencast using conventional truck

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and excavator mining methods. The mining blocks will be 100m by 50m and the benches 10m high. The area to be mined is approximately 1477.0895 ha.

4.1.2 Supporting infrastructure

Ablution facility

A small area of less than 16m^2 will be used for the ablution facilities.

Access roads

The property is accessed via the 357 Main Road from Douglas to Kimberley which links to a gravel road leading to the proposed project site. A haul road is proposed which will run from the pit to the plant area.

Chemical storage

A storage area of about 0.04ha will be necessary to store chemicals that will be used during the mining process. This facility will be adequately monitored in order to manage the potential risks of spillages, fire and /or explosion.

Diesel storage

A diesel storage area of about 0.02ha will be required. This facility will be adequately monitored in order to manage the potential risks of fire and /or explosion.

Domestic waste facility

General waste will have a demarcated area where the waste will be separated according to type. The rubbish bin containers will be labelled accordingly. When full, the waste will be disposed off in the right disposal area for such waste.

Electricity

The primary source of power will be generators supplying power to the mining operations and plant facilities. There are existing Eskom Distribution's power lines, Gryppoort/Klipfontein 1 22kV Overhead Line which traverses the

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proposed mining area. Permission to use electricity will have to be obtained should the need to use electricity arise.

Fences

A fence will be erected around the mining area for safety reasons. This will prevent animals from falling into the pits. This will also prevent unauthorised access within the mining area.

Office site

Office area of approximate 0.008 ha for storage of some stationary and for the field staff to work from will be erected on site.

Settling dam

A settling dam will be constructed adjacent to the processing plant.

Plant site

A plant will be required for processing the gravel mined from the pits.

Vehicle parking area

Vehicles and the other machinery used during mining will need a parking space of approximately 1 hectare.

Waste dump

All hazardous wastes will be stored and handled appropriately prior to being disposed of by a licensed hazardous waste disposal contractor.

Water pipelines

The main water source will be the Vaal River. Pipes and pumps will be constructed to pump water from the river directly to the process plant. Process water will be managed and re-used throughout the operations of the project via clean and dirty water separation system, which shall include separate drains.

Water reservoir

A water reservoir will be required for the processing of diamonds and for other uses in the mine. A space of about 0.5ha will be sufficient to accommodate it.

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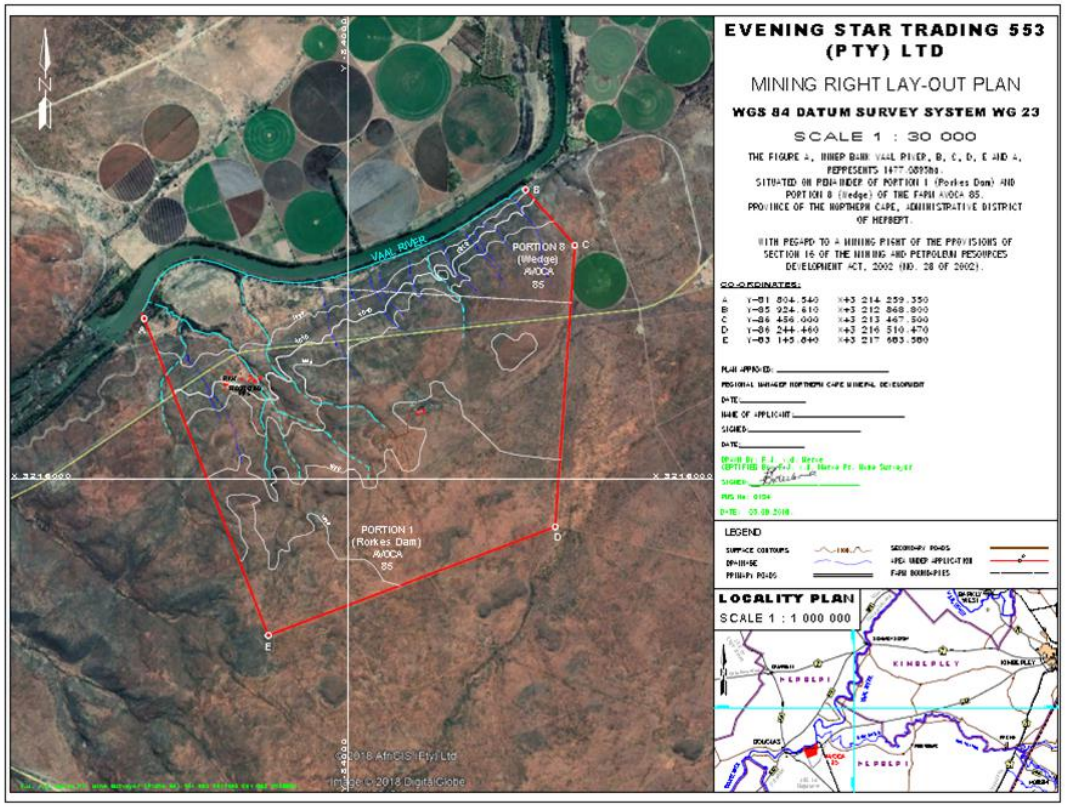

Figure 4: Initial layout of the proposed Evening Star Diamond Mine

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4.2 Listed and specified activities

Table 3: Listed and specified activities

NAME OF ACTIVITY **E.g. For prospecting - drill site, site camp, ablution facility, accommodation, equipment storage, sample storage, site office, access route etc…etc…etc E.g.for mining,- excavations, blasting, stockpiles, discard dumps or dams, Loading, hauling and transport, Water supply dams and boreholes, accommodation, offices, ablution, stores, workshops, processing plant, storm water control, berms, roads, pipelines, power lines, conveyors, etc…etc…etc.)**	**Aerial extent of the activity in Ha or m²**	**Listed activity** **mark with an x where applicable or affected**	**Applicable listing** **notice *(GNR 983,GNR 984 or GNR 985 or NOT LISTED***	**WASTE MANAGEMENT AUTHORISATION** **(Indicate whether an authorisation is required in terms of the Waste Management Act). (Mark with an X)**
Mining Area	1477 ha	X	GNR 984 (15, 17)	
Ablution facility	16m^2	X	GNR 983 (25)	
Topsoil Stockpile	1ha	X	GNR 983 (27)	
Access roads	5ha	X	GNR 983 (24, 27)	
Chemical storage	0.04ha	X	GNR 983 (14) GNR 984 (4)	
Diesel storage	0.02ha	X	GNR 983 (14) GNR 984 (4)	
Domestic Waste Facility	2ha	X	GNR 983	X Category

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			(27)	A (1, 3, 12)
Electricity	1ha	X	GNR 983 (2, 12) GNR 984 (2)	
Fencing	1ha	X	GNR 983 (27)	
Office site	0.08ha	X	GNR 983 (27)	
Settling dam	1ha	X	GNR 983 (13) GNR 984 (16)	X Category A (1, 3, 12)
Vehicle parking area	1ha	X	GNR 983 (27)	
Waste dump	1ha	X	GNR 983 (27)	X Category A (1, 3, 12)
Water pipelines	1.3ha	X	GNR 983 (9, 10,12, 19,)	
Water reservoir	0.5ha	X	GNR 983 (13)	

4.3 Staff requirements

The planned labour complement for Evening Star is expected to be 64 employees (mine employees). This proposed labour complement is considered adequate for the mining operation envisaged. Contractors will be required to honour commitments made in the SLP and also to comply with the Mining Charters requirement.

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5 NEED AND DESIRABILITY OF THE PROPOSED PROJECT

An analysis of the geological information for the study area has determined that the area has potential for diamond reserves. In order to ascertain the above and determine the nature, location and extent of the diamond reserves within the proposed mining area, exploration was conducted and it also confirmed the availability of diamonds In the study area.

The quantity of the reserves available within the proposed mining area has been determined hence Evening Star has entered into the Mining Right application process.

Should the application for a mining right be successful, Evening Star will be able to mine the available reserves. This will result in job creation and a boost to Herbert District Municipality economy and subsequently boost the province and the country's economy as well.

Evening Star has made a commitment to develop the community through a Social and Labour Plan (SLP) which outlines the Local Economic Development (LED) programmes set for the Siyancuma and Herbert communities. The main priority of the LED programmes is to improve the education, provide mentorship to the surrounding communities with the main focus being on Historically Disadvantaged South African (HDSA) employees. Should Evening Star not be given a licence to mine, the plan to develop the community will not be realised.

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6 PERIOD FOR WHICH ENVIRONMENTAL AUTHORISATION IS REQUIRED

The Mining Right will be required for a period of 10 years.

7 PROCESS FOLLOWED TO REACH THE PROPOSED PREFERRED SITE

Project alternatives must be considered in terms of Section 28 of the EIA Regulations (2010), With reference to the site plan provided as Appendix F and the location of the individual activities on site, provide details of the alternatives considered with respect to:

(a) The property on which or location where it is proposed to undertake the activity;
(b) The type of activity to be undertaken;
(c) The design or layout of the activity;
(d) The technology to be used in the activity;
(e) The operational aspects of the activity; and
(f) The option of not implementing the activity or no-go alternative

7.1 Location alternatives

Evening Star has applied for a mining right on portion 1 and portion 8 of Avoca 85. These property has potential for diamond mineralisation due to the nature of the geology that covers it. The farm consists of sedimentary rocks like sand, calcrete, shale and tillite. The site is therefore regarded as the preferred site and no alternatives have been considered.

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7.2 The type of activity to be undertaken

Opencast mining of diamonds will take place on the proposed site using conventional truck and excavator mining methods. The mining blocks will be 100m by 50m and the benches 10m high.

7.3 The design or layout of the activity

Supporting structures plan provided is not necessarily final, this may change after specialist studies have been conducted and the results suggest that sensitive areas may be affected.

7.4 The technology to be used in the activity

Overburden stripping and resource mining will be done using excavators, creating and maintaining mine using bulldozer and grader, managing material around the stockpiles using front end loader a front-end loader, as well as transportation of material from the mine to the plant and vice versa using dump trucks. Water trucks will be used to transport water and to spray on the ramps and roads to reduce dust emission. Generators for will be required to supply power in the mine and plant areas.

7.5 The operational aspects of the activity

The main source of water that will be used in the mining and processing plant areas will be the river. Pipelines will be installed in order to supply water from the river to the processing plant. A water reservoir will also be put in place for collection of water. Generators will be the main source of power both in the mining and processing plant facilities. Access roads will also be constructed in areas where there are no existing access routes and for the haul trucks to be able to transport mined out material to the stockpile and plant areas.

7.6 The No-Go alternative

By not implementing mining, it means that the current land use of the proposed study area will remain the same. This means that no disturbance to the environment will be caused by this particular project. It has been proven that there are diamond resources on the property. If mining does not take place,

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this will result in financial loss to Evening Star and a lost opportunity to contribute to the economy. More people in the Herbert area will stay jobless as a chance to create more jobs will have been lost.

8 PUBLIC PARTICIPATION PROCESS (PPP)

Public Participation is an integral part of the EIA process and is regarded as a way of empowerment and as a vital part of our democratic governance. Ndi Geological Consulting has been appointed by Evening Star as a main independent consultant to undertake the EIA process as required in terms of the NEMA.

Public participation is defined as a process that leads to a joint effort by stakeholders, technical specialist, the authorities and the proponent to work together to produce better decisions than if they had acted independently.

8.1 PPP Objectives

Some of the key EIA requirements with regards to public participation include the following:

- Mining Application and EIA must be publicly advertised (e.g. on site and or in newspaper);
- Public consultation during scoping phase to identify issues of concern which needs to be considered during the EIA phase of the project;
- Public to review the Scoping Report and EIA Report;
- Public may appeal within 21 days after the Environmental Authorization has been issued by the authority.

8.1 Public participation in EIA

NEMA supports the engagement of all stakeholders in environmental governance. Consultation in the EIA process achieves the following aspects:

- Inform and raise awareness of the proposal;

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- Increase understanding amongst stakeholders;
- Identify and learn from local sources of information;
- Inform and improve decision-making.

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8.2 Consultation methods

Announcement Phase

I&APs were notified using relevant guidelines applicable to public participation process as contemplated in section 24J of the Act. Notifications which relate to this mining right application were done after the acceptance of the mining right application and Environmental Authorisation application. I&APs parties were consulted in one of the following forms:

Newspaper advertisement

A newspaper advertisement was placed in the Diamond Fields Advertiser newspaper on the 18th of October 2018 in English. A second advertisement was placed in the Volksblad newspaper in Afrikaans on the 17th of October 2018. Both of the advertisements were notifying the public of the EIA process and requesting I&APs to register with, and submit their comments to Ndi Geological Consulting. I&APs were given 30 calendar days to submit their comments on the proposed mining project.

Site notices

Site notices were placed on site on the 15th of September 2018 to further inform the stakeholders and the public in general about the proposed mining activities.

Scoping Phase

Direct notification and circulation of the Draft Scoping Report to identified stakeholders

Contact details for key stakeholders were requested and confirmed telephonically. Letters were then sent to the key stakeholders via email on the 22nd of October 218. Background Information Document (BID) were also sent to the stakeholders. The BID had a comments sheet attached to it for

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registered I&APs to submit their comments on the project. The key stake holders were also informed about the availability of the Draft Scoping Report which could be sent via email. Comments and concerns from the stakeholders will be documented and addressed. Stakeholders requested to be registered as I&APs as well as requested documents relating to the project. A stakeholder engagement meeting was also held on the 27th of October 2018 at Bongani Community Hall from 9am.

EIA Phase

This phase begins once the Scoping Report has been submitted and accepted by DMR within 43 days. The stakeholders will be given 30 days to review and comment on the EIA/EMPr documentation. The EIA/EMPr must be submitted to the DMR within 106 days for review. The DMR will then review the documents within 107 days and make a decision on the application.

Appeal Phase

The stakeholders will be notified of the DMR decision. Information on how to appeal the decision made by the DMR will be made available to the stakeholders.

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8.3 Summary of issues raised by I&APs

Issues raised by I&APs will be documented, addressed and attached as part of the Final Scoping Report.

Table 4: Issues raised by I&APs

Interested and affected parties. List the names of person consulted in this column, and mark with an X where those who must be consulted were in fact consulted		Date comments received	Issues raised	EAPs response to issues as mandated by the applicant.	Section and paragraphs reference in this report where the issues and or response were incorporated
INTERESTED AND AFFECTED PARTIES **Land owners**					
Mr Engelbrecht	**X**	27 October 2018	How many members of the community are employed at this project?	Enquired from the attendees if there was any one working for Evening Star on the prospecting project, 4 people raised their hand and indicated that there is a total of 6 employees, 4 where from	No specific section or paragraph of the Scoping

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				Douglas and 2 outside of Douglas.	report.
Mr Engelbrecht	**X**	27 October 2018	For clarity, is this mine only going to employ 6 people?	According to the Social and Labour Plan, Evening Star proposed that 64 employment opportunities where going to be created (64 people will be employed). The labour sending areas is going to be Douglas and Kimberley.	No specific section or paragraph of the Scoping report.
Mr Engelbrecht		23 October 2018	Digging/mining ner the Vaal River, including Holiday Resort. Community value including the impact on small farmers. Impact on recreational activities including The Douglas Holiday Resort and the neighbouring Broadwater River Estate. Utilising and training of members of Siyancuma Municipal area. Rehabilitation of prospect- or mining areas. Responsible party on communal land. The role of DME regarding rehabilitation (reference to mining areas around the town of Douglas). Influence of nearby mining on the water	If mitigation measures are implemented as indicated in the Environmental Impact Assessment Report, the geohydrological Report and the Wetland Assessment Report there will be very low impact on the Douglas Holiday Resort and the Broadwater River Estate. The planned labour complement for Evening Star is expected to be 64 employees (mine employees). This proposed labour complement is considered adequate for the mining operation envisaged. Contractors will be required to honour commitments made in the SLP and also	

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			quality of the Vaal River.	to comply with the Mining Charters requirement. The rehabilitation plan of the prospected area is being drafted and will be forwarded to you once finalised. Section 8 of the attached wetland Assessment report details the impacts and proposed mitigation measures. Please refer to concerns regarding other mining activities in the area to the Regional Manager of the Department of Mineral Resources which is the custodian of minerals and manages the rights (legal/illegal). As a concerned citizen you can take the responsibility by reporting illegal miners to the DMR so that they are prosecuted. The DMR can further indicate on their plan regarding the lack of rehabilitation of other miners. The influence of the mining activity on the water quality of the Vaal River.	

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				There will be no impact in the water quality of the Vaal River from this activity, this activity only involves taking very minimal amount of water for diamond washing and dust suppression. The projects that have direct impact in the water quality of the Vaal River are mainly municipality sewage and pesticides from agricultural farms, this project does not result in disposal of water or any waste into the Vaal River. The Department of Water Affairs and Forestry Internal Strategic Perspective for the Lower Orange reads as thus: Water Quality Both the flow regime and water quality in the Orange River have been severely impacted upon by extensive upstream developments. Salinity in the Orange River has increased due to the transfer of high quality water out of the Orange River (in Lesotho and the Upper Orange WMA) and as a result of high salinity irrigation return flows along the Orange River. Poor quality water from the Vaal River, which contains a high proportion of irrigation return flows as well as treated urban effluent, also enters the Orange. Salinity is at present still moderate along the main stem of the Orange River. Deterioration	

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				can be expected with increased upstream irrigation and the situation must be closely monitored. There are algal blooms experienced in the main stem due to a combination of irrigation return flows, diffuse sources, and poor quality water from the upstream Vaal WMAs. These algal blooms are potentially toxic and very dangerous to both aquatic and human health. DWAF has instituted a monitoring programme, with communication and management protocols to handle toxic blooms. This remains a very serious risk. Studies and monitoring programmes are underway to understand the current algae behaviour. Groundwater quality varies from good to unacceptable in terms of potable standards. The groundwater quality is one of the main factors affecting the development of available groundwater resources. Although there are numerous problems associated with water quality, some of which are easily corrected, total dissolved solids (TDS), nitrates (NO3 as N) and fluorides (F) represent the majority of serious water quality problems that occur. Water quality issues that need to be addressed	

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				include diffuse pollution sources from agriculture, management of local sanitation problems at small towns, and the algae problem on the Orange River main stem. (DWAF, 2004)	
Resident	**X**	27 October 2018	My 1st question is. Is your Social Labour Plan aligned to the Siyancuma Municipal IPD because if that was the case, the mine should employ people based on the information on the IDP.	Lesego explained that they got the Municipal IDP from Mr Groenewald and the information on the SLP is information on the IDP. But in term of employment, Evening Star cannot be guided by the IDP because the number of employees will depend on the job categories at the operation. Whereas, the projects where selected from the IPD. These projects where forwarded to him for proposal, but we never received any comments from him. From the unfunded projects on the municipal IDP, the following 2 where selected? 1. Soup Kitchen 2. Upgrading of Hospital Both these projects will amount to R1000 000.00 over a period of 5 years.	No specific section or paragraph of the Scoping report.

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				Mrs Mofokeng further mentioned that, up until today, we have not received approval of these projects from the Municipality.	
Resident	**X**	27 October 2018	2nd question, on the farms where the applications is, does it include the Pleasure Resort?	Mrs Mofokeng explained that the resort is appearing at the bottom of the map but a specialist will be appointed that will come to the farm. There is where we are going to talk about the buffer zone and where it will be determined if the operation will take place close to the resort or not.	No specific section or paragraph of the Scoping report.
Mr Morolong	**X**	27 October 2018	But now what if the border of the area in application includes the resort, what is going to happen if the mining right is granted?	According to the legislation, (NEMA) states that you cannot have an operation within 500m to the resort, therefore the specialist is the one that will be able to can advice on the proximity of the resort to the mining operation. On the next meeting for Environmental Authorisation, we will be	No specific section or paragraph of the Scoping report.

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				having the report from the specialist with his recommendations, even when the resort is in the arear of application, he will advice on how far they can go(buffer zone). Should the specialist say, 500m. It is your responsibility as the community to ensure that they comply.	
Mr Xola Ndanda	**X**	27 October 2018	As the community of Douglas, we have experienced this before. Companies who have interests in mining in our community will come and say all these good things that they will do and that will benefit the community, but at the end of the day nothing happens. 1. I don't think that the consultation meets the requirements as per legislation. We were supposed to have copies of your presentation as the community so that we can be able to read and understand what you have been presenting. You cannot come to us and tell us that you have consulted with the Municipality on the IDP and have	When we started at the beginning of this meeting**, I** mention on the <u>purpose of the meeting</u> that the reason we are here was to listen to the concerns and comments for both parties to can assist each other. Yes, previously people used to do that. But now with the new legislations, like the NEMA, mining charter that is being reviewed, people are protected. In terms of the SLP, the legislation does not say we my consult with the community, we are guided by the municipal IDP that has been presented and approved by the community. As consultants we must come	No specific section or paragraph of the Scoping report.

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			identified soup kitchens and the upgrading of hospitals. We have taken a decision as the community of this area that no one is going to take us for granted again, and we are serious. Everyone can agree with me here that anyone, can apply to social development for a soup kitchen and give people soup. People cannot come to our areas and take our minerals and give us soup kitchen in return. We really do not have a situation of food shortages. 2. We would like to have a proper consultation, because hat is happening now is that you came here with your laptops, taking recording and the next thing you will be going to the DMR submitting that people participated in the meeting. At his moment there's a ruling on the case of Xulubeng mine and the community and that ruling becomes a case law. We have a right as community to stop a mining operation. Tomorrow you'll be coming here, putting small drums on the side of the road and claim that you have complied. We are not going to be taken for granted.	to the community and indicate projects that we identified on the IDP. The soup kitchen is in the Siyancuma IDP document and it was approved by you, the community.	

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			If there is an SLP, the community should have been properly consulted that is acceptable to the community without soup kitchens and hospital. We are going to have the hospitals, we have ways to see to it that the government gives us a hospital and it's in the process. You cannot come to us and tell us this is what people want. We as the community, will tell you what we want, and it cannot end there. One thing for sure is that we know what is due to us. We are not going to be lenient in demanding. What we are asking for is proper consultation. 3. Don't come and tell us that you have consulted with Groenewald, he is not even an accounting officer of the Municipality. There was no Soup kitchen on the IDP you are referring too, we know the contents of that IDP.		
Mr Xola Ndanda	**X**	27 October	My question is, out of that IDP document, why did you have to single out the soup	Remember that we have different scales of mines. We have small, medium and large	No specific section or

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		2018	kitchen from the list of projects on the IDP	mines. Projects are identified based on the budgeted amount for SLP by the company over a period of 5 years.	paragraph of the Scoping report.
Ritchard Maketlo	**X**	27 October 2018	Remember that we have different scales of mines. We have small, medium and large mines. Projects are identified based on the budgeted amount for SLP by the company over a period of 5 years. 2. Coming to the issue of the IDP, currently the IDP you are referring to was never approved by the community. It was approved by the councillors that submitted it to the council. 3. Looking at the proximity of this mining operation, on the R357 on your left-hand side, there are emerging farmers farming there. Where they consulted because I have tried to call them, they don't know about this meeting because they are not even here, only one. and they are the	I will not be able to answer all your concerns but I believe that you covered everyone's concern that is the reason why I allowed you to talk so long. On the issue of the notification of stakeholders, we get tittle deeds of the farm owners and we notify them using the information on the tittle deeds. We even go as far as driving to their homes in some cases. So as a consultant, when I'm sitting at the office this and compile this document. I am not aware that the IDP is not approved by the community because the constitution says that the Municipality if the mouth piece of the community. That is why people need to participate in these meetings by raising their approval or objections to the mining projects and those comments must be recorded. You need to state you objections	No specific section or paragraph of the Scoping report.

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			people that will be mostly affected by this mining operation. 4. There is infrastructure like pipes and dams already on the area you are applying for. I don't want you to come and lie to our people to say that the operation is not unfolding because prospecting in the true sense is mining. Does not matter if you're just prospecting, the facts that you are taking tons of gravel our of the place, because you are excavating, that on its own is mining. 5. Last year when we raised the issue of operations taking place at that area with Mr Groenewald, he said they didn't give permission. I'm glad that today, you are confirming that there is operations. We where even going to lock the gates of Evening Star, and they said to us, these people are not operating and then immediately after we've been to the premier's office, the legal adviser at the premier's office called the Municipality. He again denied that there was operations, as we drove back to	or approval in writing, stating your reasons clearly also providing solutions.	

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			Kimberley, the operation was shut like nothing was happening. It's clear that there is something sinister happening, but no one wants to take responsibility for it, For those who might not be aware, we know what is happening at this exploration. I'm just happy that you guys have come out of the cocoon now. Finally. 6. Two things, you have Broadwaters on the one side and the Pleasure resort on the other side, we have been saying that the resort will be mined and everyone said we are lying. Looking at the map and the proximity of the code key, its on the bank of the river which means the resort is covered also at the area where they used to have irrigation system at, it's also covered in the area to be mined. That is why the first permit holder sold that permit, I don't know to who. 7. As the community, we want projects that will speak to us, we don't need a soup kitchen. These people (Consultant and applicat) should go back and		

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			arrange a proper meeting. We will mobilise the community and we will inform you as a community of what we think is in the best interest for the community. Regarding the SLP, we raised it in 2016 when we asked Rockwell, where is their SLP, answer was Municipality. The Municipality/councillors are the representatives of the community but they cant make decisions on behalf of the community. If we didn't give them a mandate, they cannot proceed with any development. But it has been happening all along but now we are saying, enough is enough. We have stopped that. So if you don't want to see a situation whereby a good idea that you come with becomes a farlass to yourself, better do ti the right way. Consulting the community, nothing fo Siyancuma, without Siyancuma by Siyancuma. 8. In your presentation, you mentioned that labour will be sourced from Kimberley and Douglas. Kimberley is in the Frances Baard District Municipality and Douglas is in the Pixley ka Seme		

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			District Municipality. There is no way we can have a Kimberley situation in Siyancuma. In terms of labour brokers, who ever will be responsible for the operation. If they want to see that road closed, they must continue with these tendencies. The simple thing that I'm saying is that there are other stake holders that are affected, people will get jobs but these mines when they employ members of the community, is only for two positions, general labourer or security. I once said to Jerry that we as an NGO, we can apply for discretionary grants at the MERSETA and train people in skills like operator so that our people can be employable instead of employing people outside of Douglas. Why not train our young people on these skills? Eventually, our people can get decent jobs. As the community, we will raise our objections in the application of this project and state our facts. When you come back, come with the SLP so that		

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			we can sit as the community. You've seen buildings that have been burned down, you've seen the roads infrastructure, but then u chooses the soup kitchen as an LED project. As for the hospital, you must take it out of the SLP. The is a tender out already for the refurbishment of the hospital. For an example, that money that you where going to channel to those identified projects can be used to extend the clinic in Breipal. That clinic is too small for the growing community in that area. How did you decide on the soup kitchen? We might look poor, but we are not stupid. The last thing is that, who ever comes with money into this town and think that they will buy us into agreeing with whatever it is that they are saying, we've been fine without money and we can still stay without money. The important thing is the development of our people. There are people on that mining area that are farming, and I have also been training people on how to grow crops cultivating plants. Douglas is an agricultural area		

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			and mining companies wants to come and mine, after they have gone nothing will grow on that land again. These mines when they come they bring people from outside Douglas who will only bring drugs and leave our sisters with fatherless children.		
Mr Morolong	**X**	27 October 2018	I want to state it now that I am going to object to this mining operation. I am a farmer on a small portion very close to where the application is. I have been applying for this part of the land from the Municipality for almost 10 years and I have still not been assisted. Next to the farm is also where the resort is.	Thank you Mr Morolong, kindly put you comments/objections on the form that we have provided you with so that they can be recorded, and we will add you as an interested and affected party and include you on further communications regarding the project.	No specific section or paragraph of the Scoping report.
Mr Richard Maketlo	**X**	27 October 2018	Can we know w the BEE partners for Evening Star are?	Mr Phiri, Richard Joseph (the son is the one holding the shares because the father has paased away), Denzel Kruger, Daniel Visser	No specific section or paragraph of the

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					Scoping report.
Mr Richard Maketlo	**X**	27 October 2018	The former CFO of the Municipality, who does not have interest in this town, Daniel Visser is an employee of the Municipality. There are people here who are not part of this meeting, we will have to see them. The company that's applying for this right must come and explain. For those of you working at this prospecting project, we are not fighting with you. We just want what will benefit the broader community. I am fighting for the emerging farmers that are currently farming in areas where these applications are being made because they are the ones affected.	just to give clarity on how we identify who do we have to notify. On the deeds office, we get information on the farm owner and with that information, we use our lawyer who will then get on their database to get the contact details on a system that only them can access. So in some cases you find that we get information on the owners of the farm, where as maybe they are no longer owning the farmer or they have leased or given the employees the farm. Like in the case of the case you are referring to, maybe these emerging farmers are not registered as the farm owners because they do not appear on the tittle deed.	No specific section or paragraph of the Scoping report.
Johannes Baard	**X**	27 October	I am currently employed at Evening Star and I would like to say that I will be	Your comment is been noted and recorded.	No specific section or

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		2018	negatively affected should the operation not continue with the other employees. So we want this operation to continue.		paragraph of the Scoping report.
Ms Haas	**X**	27 October 2018	May I should just give clarity, those working at Evening Star, we are not fighting with you. All we are saying is that let the broader community of Douglas benefit and not only certain individual. We cannot be expected to just sit and do nothing because we know certain individuals who are currently benefiting. In the past, things would just happen without the involvement of the community. We have taken a stand that no development will ever take place in Siyancuma without the community. We are even going to go to the office of the Municipal Manager to enquire on how you can do consultation with them present and even Mr Groenewald. That IDP that you are referring to, is a document that was typed by a person into the system and some information on	On Monday, kindly follow up with Geraldine regarding the notifications because we've sent the emails to her as the Municipal's PA. That is the challenge that we are also faced with when communicating with the Siyancuma Municipality. We don't get feedback, we would call the office requesting to speak to Chantel and it's always this and that. Even with the SLP, Groenewald never gave us the approval for it.	No specific section or paragraph of the Scoping report.

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			it could have been changed because we do not know of any soup kitchen on the IPD. We are surprised to even hear that there is building of hospitals because those facilities are at provincial level, how can a Municipality be responsible of this when they can't even fix our roads. We are saying, when these developments take place, out of 100, why do we only have to be 10 people. It's time that we stand together as the community and stop taking bribes that will cost of people's lives. We want a proper consultation where we need to engage properly on the land in application on how its going to affect us as the community, can't that application be withdrawn on the areas in question or should the project continue, who is going to benefit out of this project, the land of the emerging farmers will be left alone, the resort will not be mined and people will get jobs because we know it for a fact that we do have operators in Douglas, and not people from Kimberley. So that we walk out, we know that all these		

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			issues where addressed, and all stake holders are covered. We will mobilise the community to ensure that they raise all their concerns and people are well informed.		
			Just to caution you, don't communicate with the municipality on email, you will never get response. You must drive from Kimberley and ask for Adams or the Municipal Manager. Geraldine is not the PA anymore that is why they don't respond.		
Richard	**X**	27 October 2018	Just to caution you, don't communicate with the municipality on email, you will never get response. You must drive from Kimberley and ask for Adams or the Municipal Manager. Geraldine is not the PA anymore that is why they don't respond.	Your comments have been noted Ms Haas and yes, we will go back to the client to inform them that the community is requesting another consultation process.	No specific section or paragraph of the Scoping report.

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Mr Xola Ndanda	**X**	27 October 2018	As the community we are not desperate, we only want what is due to us. As the community of Siyancuma, we not that our situation has been compromised by the Municipality. I am on elderly person but I want to speak on behalf of our youth. I have seen many projects coming to our community but our children are not being employed because of 聽 their educational back ground. Most of our children only went to school until Grade 7 or 8 because their parents could not afford to send them to school. Mining companies comes and goes and still our children are not being hired instead they do all these things that destroy their lives like drugs, drinking alcohol and stealing. Are these mines only going to employ		No specific section or paragraph of the Scoping report.

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			people with Grade 12? There should be an entry level that will include also those with lower grades and training should also be provided to develop their skills. We also have children in our community that went to school and even went to tertiary, but they too are not being employed. There they are building a school and only certain people are being employed to work there. Currently there is a small scale mine operating where they are building the school. How possible is it they people will dig next to a construction site because the foundation of the construction needs to be solid? The Municipality is there to guard against such things.		

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			Job opportunities need to be created, for the youth and training should also be provided for our youth.		
Mr Morolong	**X**	27 October 2018	Evening STAR is saying that they are going to employ 64 people. On the piece of land that I'm farming, I can employ more people and they will be working there for years where as the mine is not going to be there for years. Even after the live, that land will not be rehabilitated for farming again.	Please put you comment in black and white and don't let your emotions take over. Put your objections clearly in writing so that it shows professionalism.	No specific section or paragraph of the Scoping report.
Lizelle Beukes (CEO OVWUA)	**X**	22 November 2018	We refer to our letter head and confirm that the above named Oranje Vaal Water Users Association is a water user association established in terms of the National Water Act No. 36 of 1998 which constitutes a body corporate and has the powers of a natural person of full	**1. The promotion of Administrative Justice (PAJA)** *"The promotion of Administrative Justice (PAJA) Act 3 of 2003: To give effect to the right to administrative action that is lawful, reasonable and procedurally fair and to the right to written reasons for administrative action as contemplated in Section 33 of the*	No specific section or paragraph of the Scoping

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			capacity We are a co-operate association of individual water users who wish to undertake water related activities for our mutual benefit. In terms of the above act water use includes: 1) taking water from a water resource 2) Storing water; 3) Impending or diverting the flow of water in a watercourse 4) Engaging in a stream flow reduction activity contemplated in section 36; 5) Engaging in a controlled activity identified as such in section 37 (1) or declared under section 38(1);	*Constitution of the Republic of South Africa, 1996; and to provide for matters incidental thereto."* With that said Evening Star Pty Ltd is kindly expecting the Department of Mineral Resources and the Department of Water and Sanitation to adhere to the requirements of PAJA before granting a decision. Evening Star Pty Ltd is in the process of ensuring conformity with the Mineral and Petroleum Resource Development Act (Act 28 of 2002), National Environmental Management Act (Act 107 of 1998) and the National Water Act (act 36 of 1998). **2. Mineral and Petroleum Resource Development Act (Act 28 of 2002), National Environmental Management Act (Act 107 of 1998)**	report.

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			6) Discharging waste or water containing waste into a water resource through a pipe, canal, sewer, sea outfall or other conduit; 7) Disposing of waste in a manner which may detrimentally impact on a water resource; 8) Disposing in any manner of water which contains waste from, or which has been heated in, any industrial or power generation process; 9) Altering the bed, banks, course or characteristics of a watercourse; 10) Removing, discharging or disposing of water found underground if it is necessary for the efficient continuation of an activity or for the safety of people; and 11) Using water for recreational	I&APs were notified using relevant guidelines applicable to public participation process as contemplated in section 24J of the Act. Notifications which relate to this mining right application were done after the acceptance of the mining right application and Environmental Authorisation application. I&APs parties were consulted in one of the following forms: Newspaper advertisement A newspaper advertisement was placed in the Diamond Fields Advertiser newspaper on the 18th of October 2018 in English. A second advertisement was placed in the Volksblad newspaper in Afrikaans on the 17th of October 2018.	

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			purposes <u>Mining</u> It came to our attention that a company going by the name of Evening Star Trading 553 (Pty) Ltd (registration number unknown) is applying for a mining right on the Farm Avoca 85, Portions 1 & 8, which farm falls in or Association's jurisdiction and is apparently the property of the local Municipality namely Siyancuma Municipality. We reported this mining activities to the Department of Water and Sanitation, and as far as we know they already held an inspection at the mining site which includes investigation for the possibility of illegal mining (unfortunately they have not yet issued their findings).	Both of the advertisements were notifying the public of the EIA process and requesting I&APs to register with, and submit their comments to Ndi Geological Consulting. I&APs were given 30 calendar days to submit their comments on the proposed mining project. Site notices Site notices were placed on site on the 15th of September 2018 to further inform the stakeholders and the public in general about the proposed mining activities. <u>Scoping Phase</u> Direct notification and circulation of the Draft Scoping Report to identified	

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			Water The Oranje Vaal Water Users Associations wish to raise concerns/ objections to the above activities and this application in general, but more specifically with reference to the following: 1. Ablution facility- it is not clear where this facility will be erected, and how far it will be from the Vaal River/ Douglas Weir, and what the dangers of pollution are specifically should floods or extreme rainfalls occur 2. Access roads- it is not clear where these roads will be made and what the effect will be referring to erosion during heavy rains and/or flooding of the Vaal River. 3. Chemical storage- it is not clear what	stakeholders Contact details for key stakeholders were requested and confirmed telephonically. Letters were then sent to the key stakeholders via email on the 22nd of October 218. Background Information Document (BID) were also sent to the stakeholders. The BID had a comments sheet attached to it for registered I&APs to submit their comments on the project. The key stake holders were also informed about the availability of the Draft Scoping Report which could be sent via email. Comments and concerns from the stakeholders will be documented and addressed. Stakeholders requested to be registered as I&APs as well as	

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			chemicals are being referred to and where and how they will be stored especially referring to the danger of pollution during floods or heavy rainfall. 4. Diesel storage- it is not clear where and how diesel especially referring to the danger of pollution during floods or heavy rainfall. 5. Domestic waste facility- it is not clear where the facility will be erected and thus the possibility of flooding of the Vaal River and/or heavy rains is not addressed. 6. Settling dam- it is not clear where the dam will be erected, and thus the possibility of pollution during flooding of the Vaal River and/or heavy rains is not addressed. 7. Waste dump- it is not clear where the	requested documents relating to the project. A stakeholder engagement meeting was also held on the 27th of October 2018 at Bongani Community Hall from 9am. **2. National Water Act (act 36 of 1998)** **"Public trusteeship of nation's water resources** (3) The National Government, acting through the Minister, has the power to regulate the use, flow and control of all water in the Republic." An application for a water use licence has been lodged with the Department of Water and Sanitation (see attached letter of acceptance). The consultant Ndi Geological Services has consulted with the Department of Water and Sanitation to get an indication of what will be required for DWS to be able to work on the	

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			dump facility will be erected, and thus the possibility of flooding of the Vaal River and/or heavy rains is not addressed. 8. Water pipe lines - it is not clear where these pipelines will run and where exactly the water will be extracted from, referring to the Vaal River/ Douglas Weir and under which water right or license, if at all. 9. Water reservoir - the current use of water in the area is at maximum capacity and the system under extreme strain as every drop of water has to be pumped from the Orange River at great cost. 10. Plant site - it is not clear as to where the exact site will be erected referring to currently being regarded as a dumping place for waste and sewage rendering the water quality as almost unfit for	application, as advised by DWS the information required was submitted. At this stage the application for a licence is being worked on by DWS. All mining activities will be practised above the 1:100 year floodline, a delineation will be made before commencement of the mining right to ensure that floods do not tamper with mine facilities. Attached is a master plan map with location of water courses and the proposed mine facilities. It should be noted that the non perennial drainage lines run dry throughout the year. All options take into account the 1:100 year floodline. Kindly note that Evening Star Pty Ltd has an obligation to comply with the Department of Water and sanitation Government Notice No.704 of 4 June 1999 (Government Gazette No. 20119) which disallows location of facilities that will harm the river without approval of the DWS, as a result this Regulation will not be breached. Three options have been presented with the	

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			farming purposes. 11. Pollution in general and rehabilitation of the above facilities and impact on the total water system. The association believes that most of the Farmers, shore dwellers and water users for recreational purposes, in its area of jusridiction will voice similar concerns and is therefore of the opinion that it is the duty of the Department of Mineral Resources to reject the application of Evening Star Trading 553 (Pty) Ltd. Lastly we refer to the letter of Ndi Geological Consuting Services, dated the 24th of October 2018, and shall appreciate it to learn from you what transpired at the meeting held on the 27th of October 2018 at Bongani Hall in Douglas.	foresaid facilities and their proposed location. A water use licence has been lodged with the Department of Water and Sanitation for the licence authorisation of the following water uses: **Taking water from a water resource-**Water to be used in the diamond washing plant for diamond retrieval **Impeding or diverting the flow of water in watercourse-digging trenches** for gravel in the non-perennial drainage lines crossing the property. Access roads crossing the non perennial drainages in the property. **Disposing of waste in a manner which may detrimentally impact on a water resource-**slimes to be discarded into the slimes dam **Altering the bed, banks, course or characteristics of a watercourse-** digging trenches in the non-perennial drainage lines crossing the property. Access roads crossing the non perennial drainages in the property.	

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				1. ABLUTION FACILITY- Chemical toilets will be used and will be serviced bi monthly by an accredited waste collector to be disposed into the waste water treatment works, this is to ensure that sewage waste at site is at a very minimal in a given time. **Impacts** The impacts on soil and water will be minimal provided that mitigation is done. **Mitigation Measures proposed** a) The toilets facilities-Options 1 and 2 have all infrastructure and proposed activities south of the R357 road. b) The chemical toilets will be erected above a bounded concrete slab with a containment facility. The toilets are serviced to avoid spillages, should an incident happen it will be reported to the	

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				Department of Water and Sanitation according to Section 19 of the National Water Act (Act 36 of 1998). There will be a lime kit on site to clean pollution and rehabilitation of contaminated areas will be done. The impacts from the floods will be detailed in the spillage report and a rehabilitation plan will be submitted to DWS and implemented. **2. ACCESS ROADS** There would be no crossing of the Vaal River or location of the access roads within the 1:100 year floodline. Options 1 and 2 have all infrastructure and proposed activities south of the R357 road and therefore all proposed roads for this option are within the floodline. No proposed access road is within the floodline even for option 3 where the facilitities are north of R357 but south of the railway.	

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				3. CHEMICALS The chemicals referred herein in will be the lime kits for treatment of soils when there is a pollution which will be stored safely inside the storerooms (steel containers), these lime kits are of very minor quantity and do not have harm in the environment as lime improves the quality of water and stabilises the pH of the soil. There will be no dangerous chemical that will be kept on site. **4. DIESEL STORAGE** **f** Evening Star Pty Ltd has an obligation to comply with requirements of different applicable competent authorities. According to the National Environmental Management: Waste Act 59 of 2008, the disposal of	

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				general waste and that of hazardous waste will be carried out in an environmentally safe way as to prevent and/or minimise the potential for pollution on the environment and water. Diesel will be kept above a bounded concrete slab with water and oil collection sump, once the sump is full oil waste will be collected by an accredited oil collector for further safe disposal. Water inside the bound will not be allowed to come in contact with the environment. Vehicles will fill diesel at the bound with collects to the sump should there be a spillage, the slab wherein vehicles stop will be at a slope to allow draining towards the sump. The bound of the oil storage will have a free board of 0.8 m which is the allowable	

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				measure by the Department of Water and Sanitation in case where there is a potential flood, the free board will ensure that waste around the bound does not spill to the environment. **5. DOMESTIC WASTE FACILITY** Attached is the plan with location of domestic waste facility. Evening Star Pty Ltd has an obligation to comply with requirements of different applicable competent authorities. According to the National Environmental Management: Waste Act 59 of 2008, the disposal of general waste and that of hazardous waste will be carried out in an environmentally safe way as to prevent and/or minimise the potential for pollution on the environment	

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				and water. **6. SETTLING DAM** The settling dam will have a free board of 0.8 m to ensure that a 1:50 year flood is accommodated. Water will be recycled continuously back to the plant to ensure that the slimes run dry most of the time. The slimes facilities will be stabilised at most times and the dry material will be taken back to the excavated pit for concurrent rehabilitation. Options 1 and 2 have the settling dam south of the R357 road and therefore away from the 1:50 floodline, and for option 3 with facilities between the railway and R357, care has been taken to ensure the 1:50 floodline is not crossed.	

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				7. WASTE DUMP The waste dump at a given time will be very minimal due to concurrent rehabilitation. The waste dump material at site will be demarcated and kept next to the excavated area. **9. WATER PUMPS** The pumps will take water from the point that would be nearest to the site, however the taking of water will not be in the Douglas weir. **10. WATER RESERVOIR**	

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				Kindly note that jojo tanks will be used to store the water since open and ground storage results in water loss through evaporation and seepage into the ground. Should the licence be granted only the amount recommended by DWS will be taken, a meter reading will be at the pumps to make sure that only what is licenced is taken. Kindly note that during the pre consultation meeting with DWS it was advised that should the licence be granted internal reports will be used to determine water availability, and pollution prevention. At this stage the Evening Star Trading Pty Ltd does not have a guarantee that the mining right	

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				and the water licence will be granted, however the Departments have afforded the Evening Star Trading Pty Ltd to make a representation before a decision is taken **11. PLANT SITE LOCATION** Attached is the plan with location of the plant site, kindly also refer to the points above address such concerns. **12. POLLUTION AND REHABILITATION** The risk from this type of the mining activity on the water resource is suspended solids and physical water quality (pH, turbidity etc). The protection	

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				of water quality will be ensured by adherering with DWS licence conditions and following the mitigation measures. Also note that the location of the mine away from the demarcated floodline ensures that minimal pollution into the river happens. There will be silt traps and a stormwater management plan that will be approved by DWS to ensure that sediments and any type of waste from site does not come in contact with the river. **Rehabilitation** Topsoil from the area that is cleared will be stored next to the excavations and used for concurrent and final rehabilitation. When stockpiling the	

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				topsoil the organic matter in vegetation with the topsoil will be preserved. The topsoil stockpile will not be left for a period longer than 3 months to prevent erosion. Waste rock will be transported back to the excavation on a concurrent basis to do backfilling, no stockpiles will be created for this purpose. The areas being disturbed during the operation (i.e. excavation of gravel, establishment of roads, use of existing roads, process plant, etc.) will be kept at a minimum as far as possible. Opened pits will be backfilled after the excavation of the gravel with dried slimes, gravel processed in the plant and overburden.	

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				After backfilling, the trenches will be covered with topsoil to ensure that natural vegetation re-establishment. The Process Plant will be demolished and removed from the site during closure and the disturbed area will be levelled and rehabilitated by ripping all hardened surfaces. The concrete slabs will be ripped and disposed on at the nearest landfill site. **13. Conclusion** Unless if the Department of Mineral Resources and the Department of Water and Sanitation has reasonable grounds not to approve the activity according to their regulations, which has to be communicated with the client. It is highly	

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				unfair for Oranje Vaal Water User Association to impose the rejection of the mining right.	
KM Makale (For Land and Development Manager: Eskom)	**x**	05 December 2018	This notice affects the existing Eskom Distribution's power lines, Gryppoort/Klipfontein 1 22kV Overhead Line which traverses the proposed mining area. The approximate positions of these services are indicated on the attached locality Map. Eskom Distribution will raise no objection to the proposed Mining operations on the above mentioned properties provided Eskom's rights and services are acknowledged and respected at all times. Eskom's rights are protected by	Noted	No specific section or paragraph of the Scoping report.

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			Wayleave Agreements and Servitudes. The approximate positions of these services are indicated on the attached sketches. Further to the above the following conditions must be adhered to and accepted in writing before any development and or construction: A.1 Access and egress Eskom shall at all times retain unobstructed access to and egress from its servitudes and services. A.2 Approvals A.2.1 Eskom's consent doesn't relieve the applicant from obtaining the necessary statutory, land owner or municipal approvals. A.2.2 The applicant will adhere to all		

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			relevant environmental legislation. Any cost incurred by Eskom as a result of non-compliance will be charged to the applicant. A.3 Eskom Cables Eskom's underground cables affected must be placed in sleeves encased in concrete across the width of the servitude, at the applicant's expense. Materials to be used and relevant dimensions shall be determined as required. A.4 Dimensions No construction or excavation work shall be executed within 11 metres from any Eskom power line structure, and/or within 11 metres from any stay wire. A.5 Earthing All work within Eskom's servitude areas shall comply with the relevant Eskom standards in force at the		

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			time. A.6 Expenditure If Eskom has to incur any expenditure in order to comply with statutory clearances or other regulations as a result of the applicant's activities or because of the presence of his equipment or installation within the servitude or wayleave area, the applicant shall pay such costs to Eskom on demand. A.7 Ground level variations Changes in ground level may not infringe statutory ground to conductor clearances or statutory visibility clearances. After any changes in ground level, the surface shall be rehabilitated and stabilised so as to prevent erosion. The measures taken shall be to Eskom's requirements. A.8 Indemnity Eskom shall not be liable		

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			for the death of or injury to any person or for the loss of or damage to any property whether as a result of the encroachment or of the use of the servitude area by the applicant, his/her agent, contractors, employees, successors in title, and assigns. The applicant indemnifies Eskom against loss, claims or damages including claims pertaining to consequential damages by third parties and whether as a result of damage to or interruption of or interference with Eskom's services or apparatus or otherwise. Eskom will not be held responsible for damage to the applicant's equipment. The applicant's attention is drawn to the Electricity Act, 1987, (Act 41 of 1987, as amended in 1994), Section 27(3), which stipulates that the applicant can be fined and/or imprisoned as a result of damage to Eskom's apparatus.		

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			A.9 Machinery No mechanical equipment, including mechanical excavators or high lifting machinery, shall be used in the vicinity of Eskom's apparatus and/or services, without prior written permission having been granted by Eskom. If such permission is granted the applicant must give at least seven working days prior notice of the commencement of work The Eskom's authorised area representative for the Barkley West CNC: Sylvester Mandabane 053 531 6604/082 376 8308, email address: MandabSL@eskom.co.za. This allows time for arrangements to be made for supervision and/or precautionary instructions to be issued. A.10 Permission to do work A.10.1 No work shall commence unless Eskom has received the applicant's written		

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			acceptance of the conditions specified in the letter of consent and/or permit. A.10.2 Eskom's rights and duties in the servitude shall be accepted as having prior right at all times and shall not be obstructed or interfered with. Note: Where an electrical outage is required, at least fourteen work days is required to arrange same. A.11 Remedial action Under no circumstances shall rubble, earth or other material be dumped within the servitude or Way Leave restriction area. The applicant shall maintain the area concerned to Eskom's satisfaction. The applicant shall be liable to Eskom for the cost of any remedial action which has to be carried out by Eskom. A.12 Safety A.12.1 The clearances		

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			between Eskom's live electrical equipment and the proposed construction work shall be observed as stipulated by Regulation 15 of the Electrical Machinery Regulations of the Occupational Health and Safety Act, 1993 (Act 85 of 1993). A.12.2 Equipment shall be regarded electrically live and therefore dangerous at all times. A. 12.3 In spite of the restrictions stipulated by Regulation 15 of the Electrical Machinery Regulations of the Occupational Health and Safety Act, 1993 (Act 85 of 1993), as additional safety precaution, Eskom will not approve the erection of Houses, or structures occupied or frequented by human beings under the power lines and only after consideration of all		

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			alternatives, within the servitude area. A. 12.4 Eskom may stipulate any additional requirements to illuminate any possible exposure to Customers or Public to coming into contact or be exposed to any dangers of Eskom plant. A. 12.5 It is required of the applicant to familiarize him/herself with all safety hazards related to Electrical plant. B.1 Blasting, opencast mining and undermining B.1.1 A specific document of permission in respect of the blasting or mining activity as issued by the Inspector of Mines must be submitted to Eskom before commencement of operations. [refer to the Minerals Act, 1991 (Act 50 of 1991) Regulation 9.33.5 – Permission to fire more than one shot hole at a time within 500m from surface structures]		

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			B.1.2 Blasting in close proximity to Eskom's overhead power lines or substations is prohibited unless the following precautions are met [refer to the Mine Health and Safety Act, 1996 (Act 29 of 1996) Regulation 17.6(a) - 100m and above ● a blasting plan submitted with the document of permission referred to in B.1.1 above, ● a Peak Particle Velocity (PPV) to be kept below 75 mm/s, for lines and 50 mm/s for buildings, ● a seismic control device is set up to record the readings, ensure fly rock and air blast control by means of adequate matting, in the interest of air blast control, only single shot blasting shall be allowed.		

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			● Permission for blasting will be strictly as stipulated in the Blasting Design by the Blasting Consultants and blasting should be done away from the power lines. B.1.3 The applicant will be held liable for damage to Eskom's towers or substation equipment, as a result of blasting activities. B.1.4 Costs incurred by Eskom to comply with statutory requirements in terms of an applicant's (or his contractors) works, equipment or plant in the servitude area, shall be paid to Eskom on demand. B.1.5 Eskom may charge the applicant appropriately for time on site during blasting operations. B.1.6 Eskom reserves the right to		

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			withdraw its consent if the blasting process becomes hazardous and likely to result in power interruptions. B.1.7 If and whenever the applicant apply and if permission for the blasting process is granted the applicant must give at least fourteen work days prior notice of the commencement of blasting to The Eskom's authorised area representative for Barkley West CNC: Sylvester Mandabane 053 531 6604/082 376 8308, email address: MandabSL@eskom.co.za. This allows time for arrangements to be made for supervision of and/or precautionary instructions to be issued in terms of the blasting operation. B.1.8 General Conditions B.1.8.1 Firing near the power lines		

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			should be along a free face, facing away from the power lines, as the Mine has suggested. B.1.8.2 The Mine should prepare a proper analysis of the rock structure and any geological anomalies prior to blasting. B.1.8.3 The "safe distance of 25m" from Eskom pylons should be indicated on the blasting plan. Existing geological faults, decomposed zones and fractured rock structures could have destabilising effects on founding material as a result of the firing, especially when developing an open face next foundations and below founding level. These conditions should be taken into account when deciding on the method and plan of blasting near the Eskom power line pylons.		

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			B.1.8.4 Eskom retains the right to appoint any specialist at any time on behalf of the Mine, to inspect Eskom structures for deformation. B.1.8.5 The mining depth near Eskom pylons should carefully be controlled for stability and adjustments being made when so instructed by Eskom. B.1.8.6 Upon receiving the letter of consent from the inspector of the mine to blast below 100m, the applicant must present to Eskom Technical Evaluation Forum L3 the blasting philosophy for final approval. Should the applicant or his contractor damage any of Eskom services during commencement of any work whatsoever, then Eskom's 24 hour Contact Centre		

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			Tel: 08600 37566 must be dialled immediately to report the incident. Any relocation of Eskom's services, due to this undermining, will be for the account of the Applicant. The Applicant will also be responsible for granting Eskom an alternative route for the power line. The Eskom Customer Contact Centre at 08600 37566 must be contacted in connection with any line deviation and costs.		
Thesesa Moss (Plooysburg Community)	**x**		To whom it may concern Re: Meeting held on 03 November 2018 (Plooysburg) As mentioned on above held meeting, that the relevant stakeholders of Maxwill Mine will consult with Douglas Municipality regards our needs as		

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			Plooysburg Community. Douglas Municipality does not render any service to us as Plooysburg Community. We are paying rent, which we heard we are paying it to Douglas Municipality. We are living as illegal foreigners, the houses in which we are staying, are in such conditions that the first best wind can blow them over. We don't have any toilet facilities. A granny of 101 years is staying in our community. She cant walk she has to crawl to the veld to use toilet which is dangerous mostly during summer as there are a lot of snakes which we are also paying for. And we had to sign an agreement on which we stated we are drinking water on own risk. If anything happens to us, no one will be		

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			held liable. We hope as a community the relevant people/stakeholders will look into the matters.		

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9 ENVIRONMENTAL ATTRIBUTES AND DESCRIPTION OF THE BASELINE RECEIVING ENVIRONMENT

9.1 Geology

Regional geology

The alluvial deposits of the Vaal River basin are almost exclusively preserved overlying lavas of the Ventersdorp Supergroup, where the Vaal, Orange, and Riet Rivers flow off the younger Karoo cover onto the basement. The deposits extend intermittently along the Vaal River from Windsorton in the north to Schmidts drift in the south. On the Orange River, they occur between Hopetown in the south and in the north, and continue intermittently for several tens of kilometers downstream of the Vaal-Orange confluence. A classic deposit is also developed on the Riet River on the farms Schutsekama 103 and Koppies Kraal 140. It is interesting to note that there is a downstream decrease in value per carat for each individual deposit. This reflects the decrease in average stone size, corresponding to the change from a proximal to distal facies in a braided river system. An example is the gravels at Waldeck's Plant (Pniel 281) that are the proximal equivalent to those on Longlands 350, Delport's Hope 355 and Than 280 in a mid-river alluvial fan.

The diamondiferous gravels of the Lower Orange River have been mined since 1966 and have a high intrinsic value, with the same high proportion of gem quality diamonds as the coastal deposits, but a larger average stone size. The main deposits, known as the Arriesdrift Gravel Formation, are located between Grasdrift and Bloeddrift in the Richtersveld and collectively comprise the Octha Mine operated by Trans Hex. Between 1973 and 1984, these deposits produced over 706,000carats at an average grade of 3.6 cpht. They are of probable Miocene to Pleistocene age on the basis of mammalian fossils. Gravels are preserved on both sides of the Orange River in a series of elevated terraces, each distinguished by a marked drop in elevation resulting from a lowering of the erosional base level. The basal gravels comprise locally-derived, well-rounded to sub-angular cobble and boulder-sized clasts dominated by Nama quartzite. Minor quartz, schist, limestone, lava, jasper, magnetite, haematite and almandine garnet. As in other

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alluvial deposits, the diamonds tend to be concentrated near the base of the gravel sequence particularly in association with bedrock irregularities such as potholes.

Local geology and mineralization

The geology of the property in Figure 5 is characterised by yellow calcrete (T-Qc), light yellow sand (Qs) adjacent to the river and in some parts of the farm away from the river, a small portion of grey tillite and shale (C-Pd) as well as dark green Lava (Ra). There is high potential for alluvial diamond (DA) mineralisation on the property.

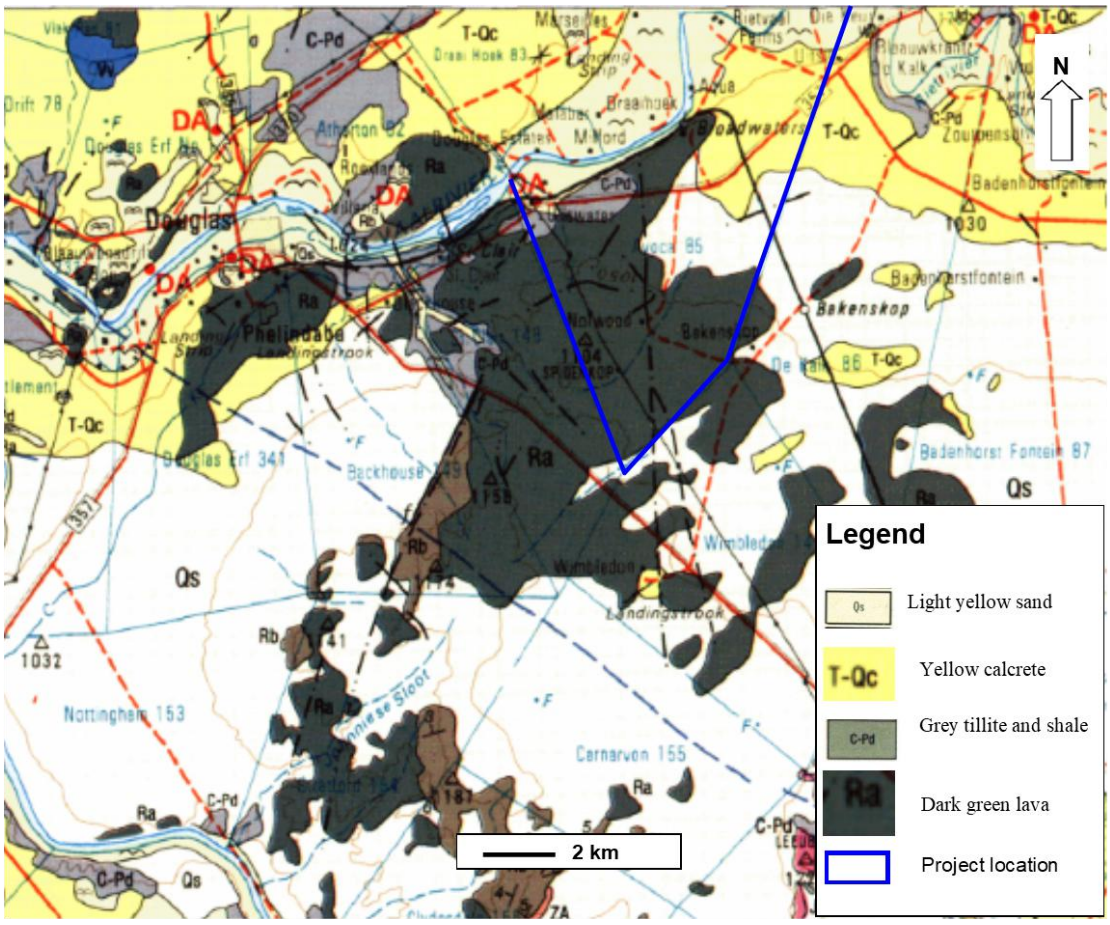

Figure 5: Geology map of the proposed Evening Star Diamond Mining Project

9.2 Climate

The climate in Siyancuma Local Municipality is considered to be a local steppe climate. There is little rainfall throughout the year. This location is classified as BSk by Köppen and

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Geiger. In a year, the average rainfall is 321 mm. The area lies within a summer/autumn rainfall area, with predominantly dry winters. The mean annual precipitation (MAP) is 371 mm. The region receives the lowest rainfall in June and July, and the highest in February and March. The average maximum temperatures for the region ranges from 16.7°C in June to 32°C in January, and the average minimum temperatures range from 0°C in June to 18°C in January. The temperature averages 16.5 °C.

9.3 Biodiversity

Based on Mucina & Rutherford‟s (2006) classification of South Africa‟s vegetation, the proposed area falls in the Kimberley Thornveld which according to those authors is regarded as Least Threatened. Vegetation clearing leading to habitat loss, degradation and fragmentation. Other noted impacts include inter alia, exotic species encroachment and dust generation. These impacts can similarly be mitigated through correct and active management. Proper rehabilitation and after-care of the mined area need to take place to prevent the colonisation of the areas by invader species.

The area along the Vaal River should not be mined as it is considered an important ecological area, as it is providing habitat for a variety of fauna and flora species on site. It is recommended that the management measures stipulated in this report be included into the proposed projects official EMP and that these are assessed for efficacy during all phases of the project and adapted accordingly to ensure minimal disturbance of the study areas‟ ecology. Figure 6 shows that the area under study falls under Critical Biodiversity Area Two.

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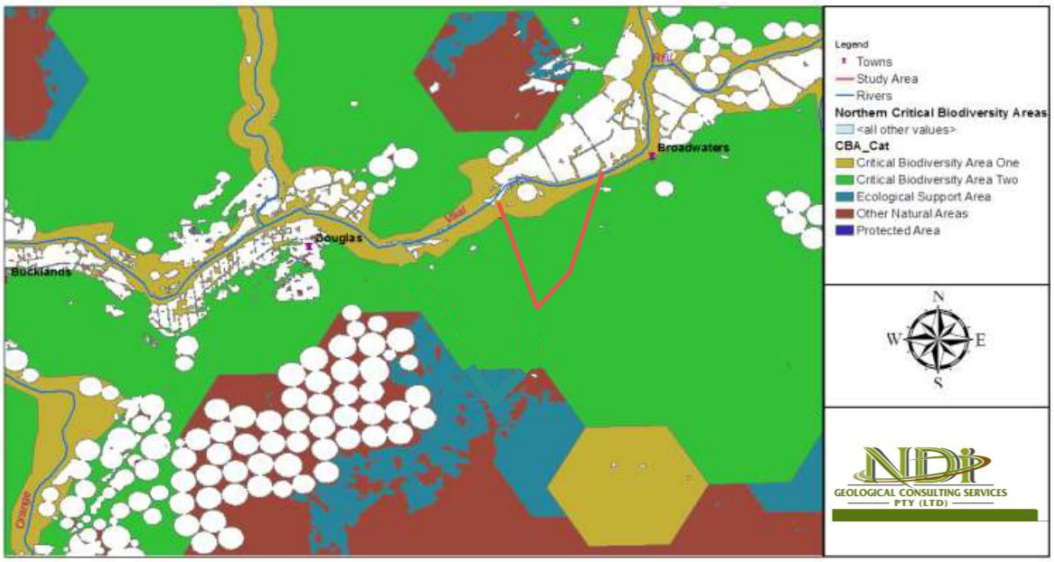

Figure 6: Vegetation map of the proposed Evening Star Mining Project

9.4 Water resources

The local hydrogeology within the study area is hosted by the mafic/ultramafic rock which includes the basalt and andesite rock types. The surrounding lithological units are classified as intergranular and fractured. The Vaal River recharges the surrounding aquifers estimated about 0.5 to 2.0l/s (Figure 7). These aquifer have potential to contain water and allow quack recharge resulting from the surface water from the Vaal River.

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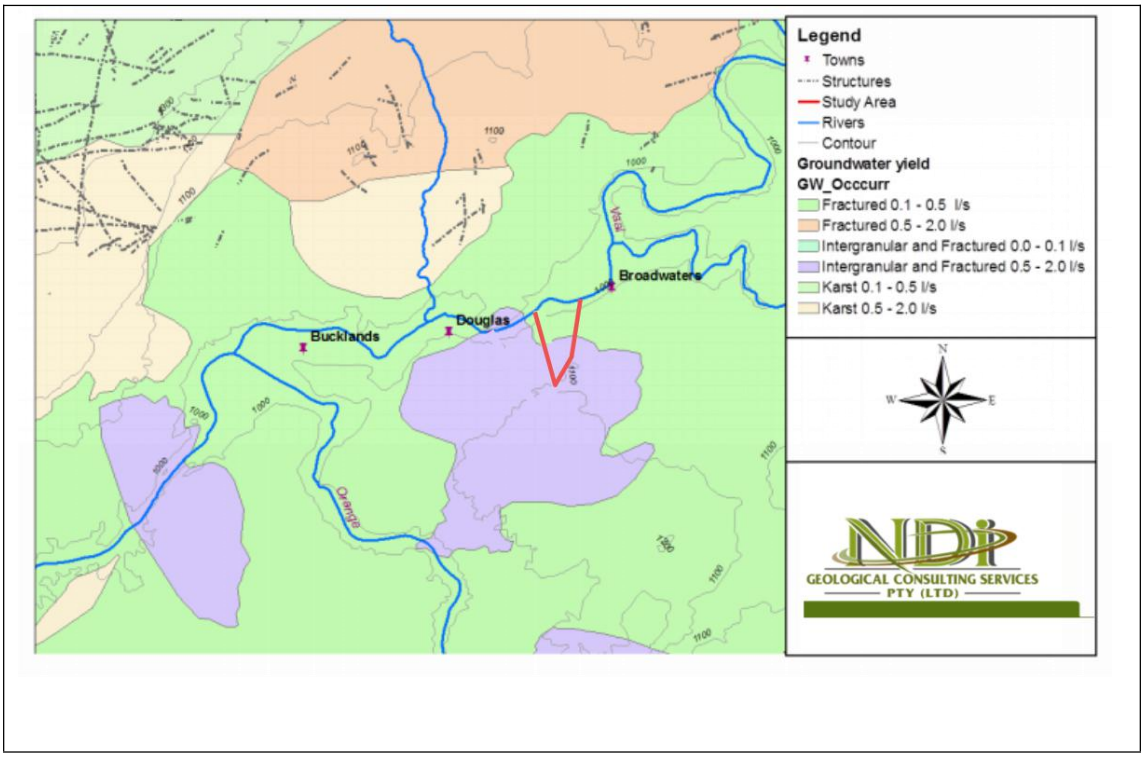

Figure 7: Groundwater yield within Avoca 85

9.5 Soil

Soil type refers to red and yellow well drained sandy soils with high base status soils that are more than 300 mm deep with no dunes. The soil pH ranges from 6.6 to 7.4. See Figure 8.

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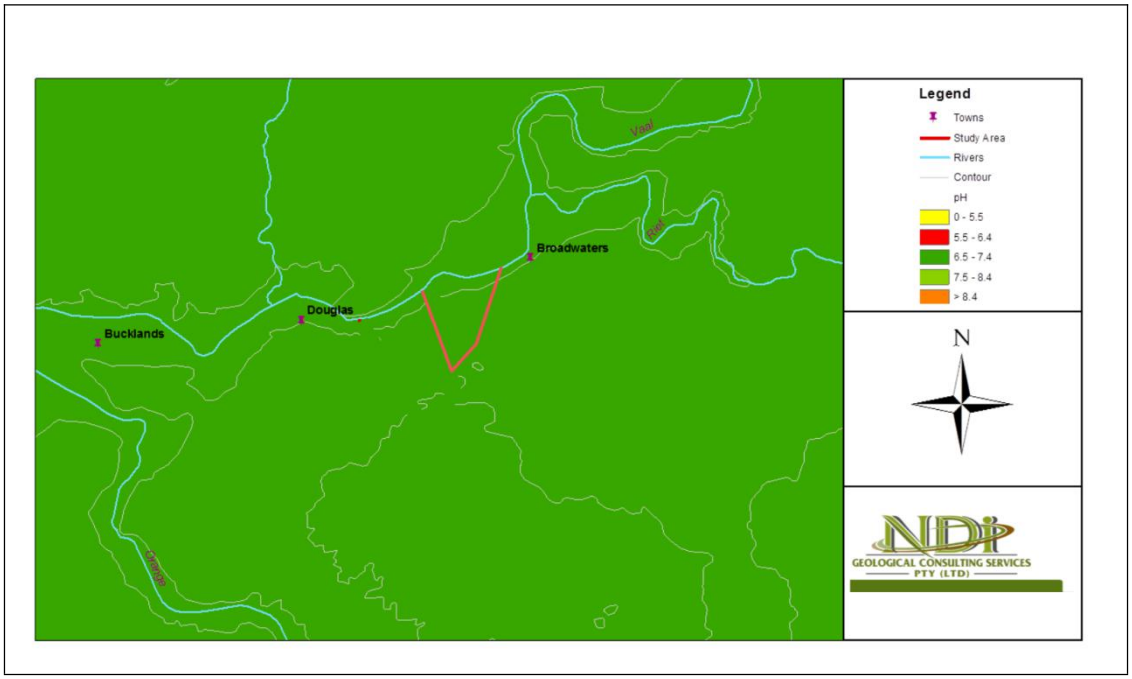

Figure 8: Avoca soil pH type map

9.6 Air quality

The movement of construction vehicles and earth moving machinery as well as the stripping of vegetation will likely result in an increase in nuisance dust. There is also potential for increase in carbon emissions and ambient air pollution due to the movement of vehicles and construction machinery. Map indicating proposed development footprint within applicable development incentive, restriction, exclusion or prohibition zones is shown in Figure 9.

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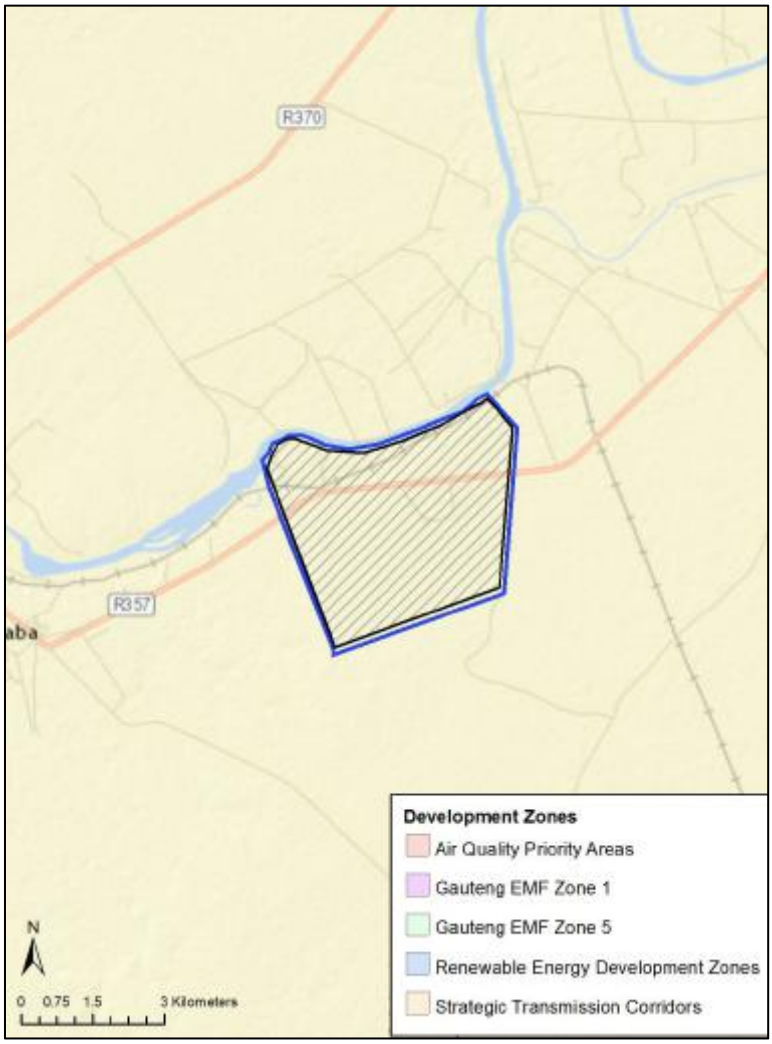

Figure 9: Map showing proposed mining project within applicable development incentive, restriction, exclusion or prohibition zones

9.7 Topography and drainage

The study area drains from the south toward the Vaal River on the north . Groundwater flow direction is expected to be towards the Vaal River on the north. Groundwater gradient usually mimic the topography and in this case, the

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topographic elevation lowers towards the north as indicated by the river course.

9.8 Socio-economic environment

The Siyancuma Local Municipality is situated within the Pixley Ka Seme DM of the Northern Cape Province. It is bordered by the ZF Mgcawu DM in the north and west, Frances Baard DM in the north, Siyathemba LM and Thembelihle LM in the south, and the Free State Province in the east. The municipality is incorporating three urban settlements (Douglas, Griekwastad and Campbell), three restitution areas (Schmidtsdrift, Bucklands and Kahlani/Maselsfontein), rural areas (Plooysburg, Salt Lake, Witput, Belmont, Graspan, Heuningskloof, Volop), commercial farming areas as well as small farming areas.

9.9 Population overview

Pixley ka Seme District Municipality has the third largest population in the Northern Cape and shows a slight increase of 9244 from 2011 to 2016. It represents 28,41 % of the Northern Cape population (Figure 10). From 2001 to 2011, the total population for Siyancuma Local Municipality showed a negative growth rate of -5.6% with the population decreasing from 39 275 to 37 076 (StatsSA 2011). A further negative growth rate of -3.1% was experienced from 2011 to 2016 when the population decreased from 37 076 to 35 938 (Community Survey 2016).

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PERCENTAGES OF POPULATION GROUPS	
Group	**Percentage**
Black African	32,1%
Coloured	58,3%
Indian/Asian	0,8%
White	8,0%
Other	0,9 %

Figure 10: Total population comparison of Siyancuma Local Municipality Source: StatsSA (2001), StatsSA (2011) & StatsSA Community Survey (2016)

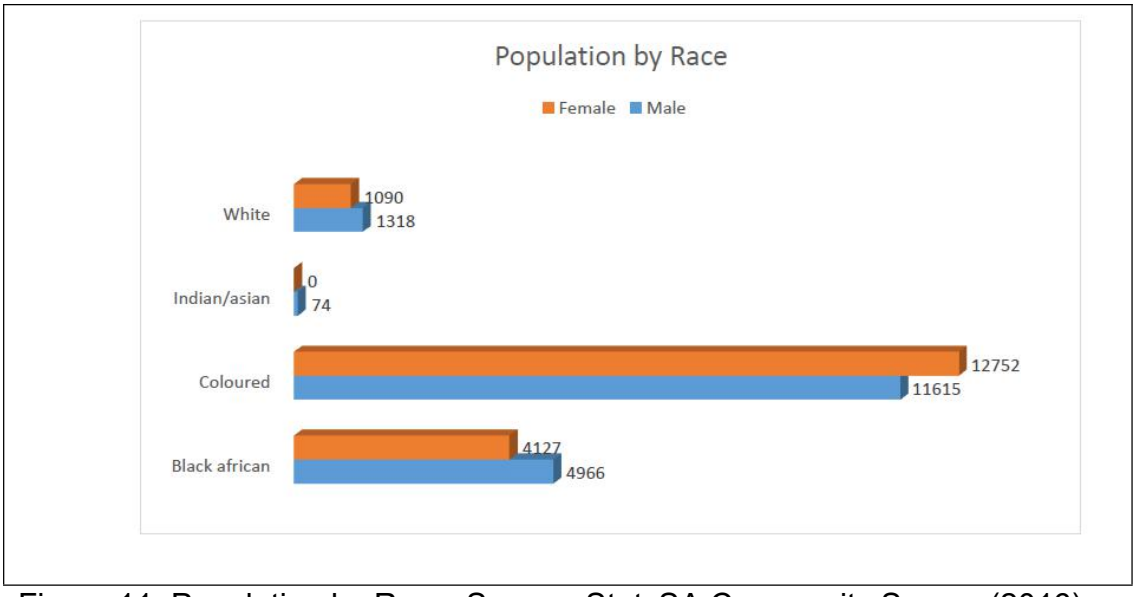

Figure 11: Population by Race. Source: StatsSA Community Survey (2016)

The Siyancuma Municipality's total population of 35 938 (2016) as shown in Figure 11 can be broken down as follows:

Coloured – 67,80 %

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African – 25,30 %

White – 6,69 %

Asian – 0,21 %

The overall sex ratio (male : female) is more or less 50:50, although it is 48:52 for Coloureds meaning that there are slightly more Coloured females than males.

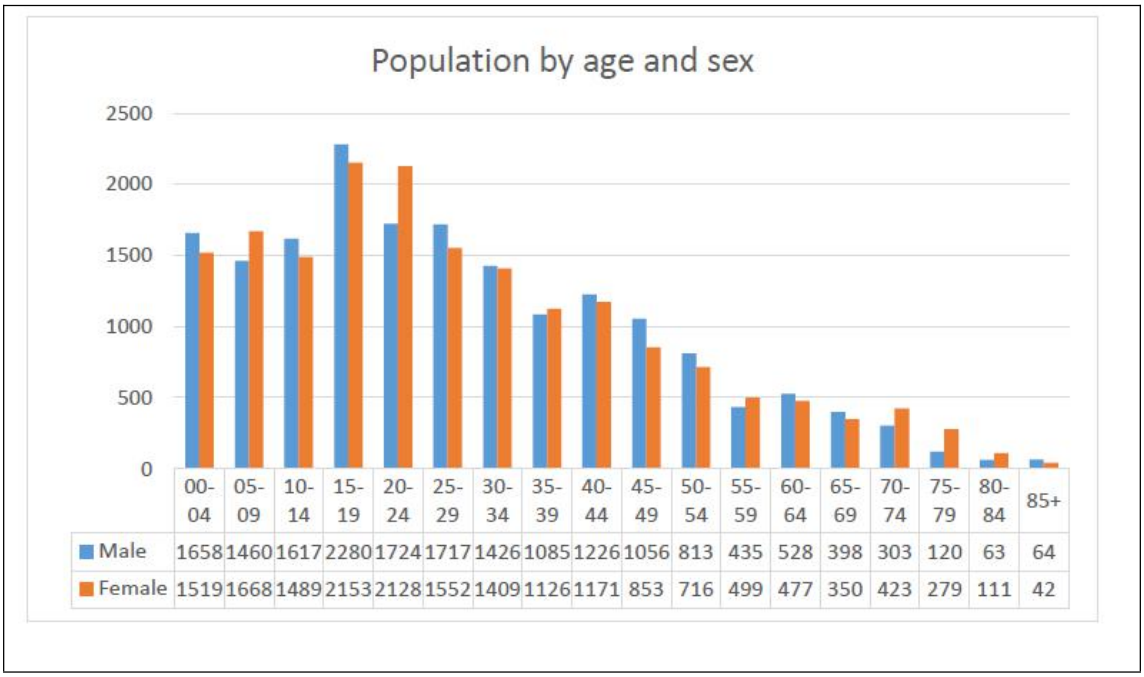
9.9.1 Population by age and sex

Demographic information from the 2016 Community Survey structured the Siyancuma total population as follow (Figure 12):

Population under 15: 26,2 %

Population 15 to 64: 67,8 %

Population over 64: 6,0 %



	00-04	05-09	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85+
Male	1658	1460	1617	2280	1724	1717	1426	1085	1226	1056	813	435	528	398	303	120	63	64
Female	1519	1668	1489	2153	2128	1552	1409	1126	1171	853	716	499	477	350	423	279	111	42

Figure 12: Population by age and sex. Source: StatsSA Community Survey (2016)

It is further evident from the information in the graph that:

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age group 15 – 19 is the highest. This group represents education grades 9 – 12, and forms 12,4 % of the total population. Age group 20 – 34 represents the youth component and forms 27,7 % of the total population. This group characterises the economically active group and will have an impact on the employment and income levels within the municipality.

9.10 Level of education

The table below presents the level of education of Siyancuma Municipality's labour force; the level of primary schooling is overall higher, Secondary education completed is overall lower than both the province and national level of education. The tertiary levels of education are the lowest, with 3% in the rural areas the highest for the municipality.

9.11 Service delivery

Energy Supply

Siyancuma Local Municipality is currently facing a big challenge in terms of electricity bulk supply due to the expansion of informal areas. Another challenge is the fact that electrical infrastructure, eg. transformers, are dilapidated and need to be repaired or replaced at very high costs.

According to the Community Survey of 2016, most households (7381) are using in-house prepaid meters, followed by in-house conventional meters (1334). A new trend is taking root where people are installing solar home systems, and 357 such systems were already installed in 2016.

Water supply

Most households in the Siyancuma Local Municipality area have access to water inside the house followed by taps inside the yard. However, many households are still dependant on communal taps.

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10 DESCRIPTION OF CURRENT LAN DUSE

The entire subject property and its immediate surrounds can be broadly define Nama Karoo. The land use on the study area can be defined as crop farming production and a smaller part as part for stock farming. Some 44% of the Nama Karoo in which the study area falls is transformed primarily by mines, urban settlement, road infrastructure. cattle, sheep and goat farming will be a viable post mining land use of the site as long as the field quality is maintained by never exceeding the grazing capacity.

Description of specific environmental features and infrastructure on the site

The proposed mining area is characterised by non-perennial rivers on the farm . The Vaal River traverses through the study area. The R357 Main Road from Douglas to Kimberley passes adjacent to the property. Figure 13 shows the environmental features in the study area.

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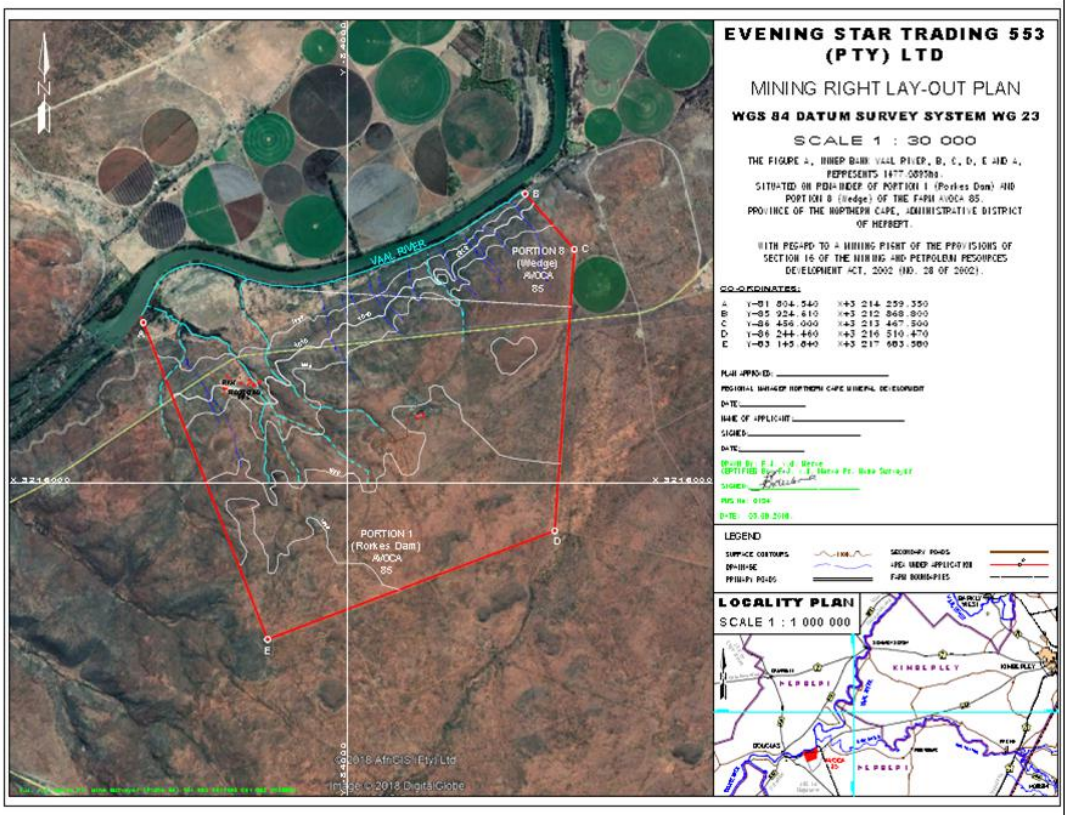

Figure 13: Environmental and current land use map

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12 IMPACTS ASSESSMENT

12.1 Methodology

This process describes how the significance, probability, and duration of the identified impacts that were identified through the consultation process was determined in order to decide the extent to which the initial site layout need revision.

Criteria of assigning significance to potential impacts

The assessment of the impacts has been conducted according to a synthesis of criteria required by the integrated environmental management procedure (Table 5) .

Nature of impact

This is an appraisal of the type of effect the activity would have on the affected environmental component. Its description should include what is being affected, and how. The impact may be positive or negative.

Extent

The physical and spatial size of the impact. This is classified as follows:

Local

The impacted area extends only as far as the activity, e.g. a footprint.

Site

The impact could affect the whole, or a measurable portion of the property.

Regional

The impact could affect the area including the neighbouring farms, transport routes and the adjoining towns.

Cumulative

The impact could have a cumulative effect with the surrounding land uses.

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Duration

The lifetime of the impact which is measured in the context of the lifetime of the proposed phase (i.e. construction or operation)?

Short term

The impact will either disappear with mitigation or will be mitigated through natural process in a short time period.

Medium term

The impact will last up to the end of the mining period, where after it will be entirely negated.

Long term

The impact will continue or last for the entire operational life of the mine, but will be mitigated by direct human action or by natural processes thereafter.

Permanent

Mitigation either by man or natural process will not occur in such a way or in such a time span that the impact can be considered transient.

Intensity

This describes how destructive, or benign, the impact is. Does it destroy the impacted environment, alter its functioning, or slightly alter it. These are rated as:

Low

This alters the affected environment in such a way that the natural processes or functions are not affected.

Medium

The affected environment is altered, but function and process continue, although in a modified way.

High

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Function or process of the affected environment is disturbed to the extent where it temporarily or permanently ceases. This will be a relative evaluation within the context of all the activities and the other impacts within the framework of the project.

Probability

This describes the likelihood of the impacts actually occurring. The impact may occur for any length of time during the life cycle of the activity, and not at any given time. The classes are rated as follows:

Improbable

The possibility of the impact occurring is very low, due either to the circumstances, design or experience.

Probable

There is a possibility that the impact will occur to the extent that provisions must be made therefore.

Highly probable

It is most likely that the impacts will occur at some or other stage of the development.

Definite

The impact will take place regardless of any preventative plans, and mitigation measures or contingency plans will have to be implemented to contain the impact.

Determination of significance

Significance is determined through a synthesis of impact characteristics. Significance is an indication of the importance of the impact in terms of both physical extent and time scale, and therefore indicates the level of mitigation required. The classes are rated as follows:

No significance

The impact is not likely to be substantial and does not require any mitigatory action.

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Low

The impact is of little importance, but may require limited mitigation.

Medium

The impact is of importance and therefore considered to have a negative impact. Mitigation is required to reduce the negative impacts to acceptable levels.

High

The impact is of great importance. Failure to mitigate, with the objective to reduce the impact to acceptable levels, could render the entire development option or entire project proposal unacceptable. Mitigation is therefore essential.

Table 5: Criteria of assigning significance to potential impacts

INTENSITY OF IMPACT	RATING
Insignificant: impact is of a very low magnitude	1
Low: impact is of low magnitude	2
Medium: impact is of medium magnitude	3
High: impact is of high magnitude	4
Very high: impact is of highest order possible	5

EXTENT OF THE IMPACT	RATING
Limited: impact affects the project site	1
Small: impact extends to the boundaries of the mining area	2
Medium: impact extends to neighbouring properties	3
Large: impact affects the surrounding communities	4
Very Large: The impact extends beyond the neighbouring communities	5

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DURATION OF THE IMPACT	RATING
Very short-term: impact lasts for a very short time (less than a month)	1
Short-term: impact lasts for a short time (months but less than a year)	2
Medium-term: impact lasts for the for more than a year but less than the life of operation	3
Long-term: impact occurs over the operational life of the proposed extension.	4
Residual: impact is permanent (remains after mine closure)	5

PROBABILITY	RATING
Highly Improbable: Likelihood of the impact arising is estimated to be negligible; <5%. 1	1
Improbable: Likelihood of the impact arising is estimated to be 5-35%. 2	2
Possible: Likelihood of the impact arising is estimated to be 35-65% 3	3
Probable: Likelihood of the impact arising is estimated to be 65-95%. 4	4
Highly Probable: Likelihood of the impact arising is estimated to be > 95%. 5	5

PROBABILITY	SEVERITY				
	1	2	3	4	5
1	L	L	L	L-M	L-M
2	L	L-M	M	M	M-H
3	L	M	M	M-H	H
4	L-M	M	M-H	H	H
5	L-M	M-H	H	H	H

12.2 Identified impacts

During this phase (Scoping) the following environmental aspects have been considered and potential impacts identified. Some of these will require further investigation during the EIA Phase:

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Air pollution;

Dust emissions from vehicle movement during mining will affect the quality of the air. Mitigation measures such as spraying the haul roads will be practised in order to reduce dust emission.

Biodiversity loss;

Vegetation clearance will result on some animals fleeing to other areas. As soon as the mining is done the fauna will move back to the area. Chances of biodiversity loss are high as a result of noise and vegetation clearance. Aquatic biodiversity combined sensitivity seems to be low as shown in Figure 14.

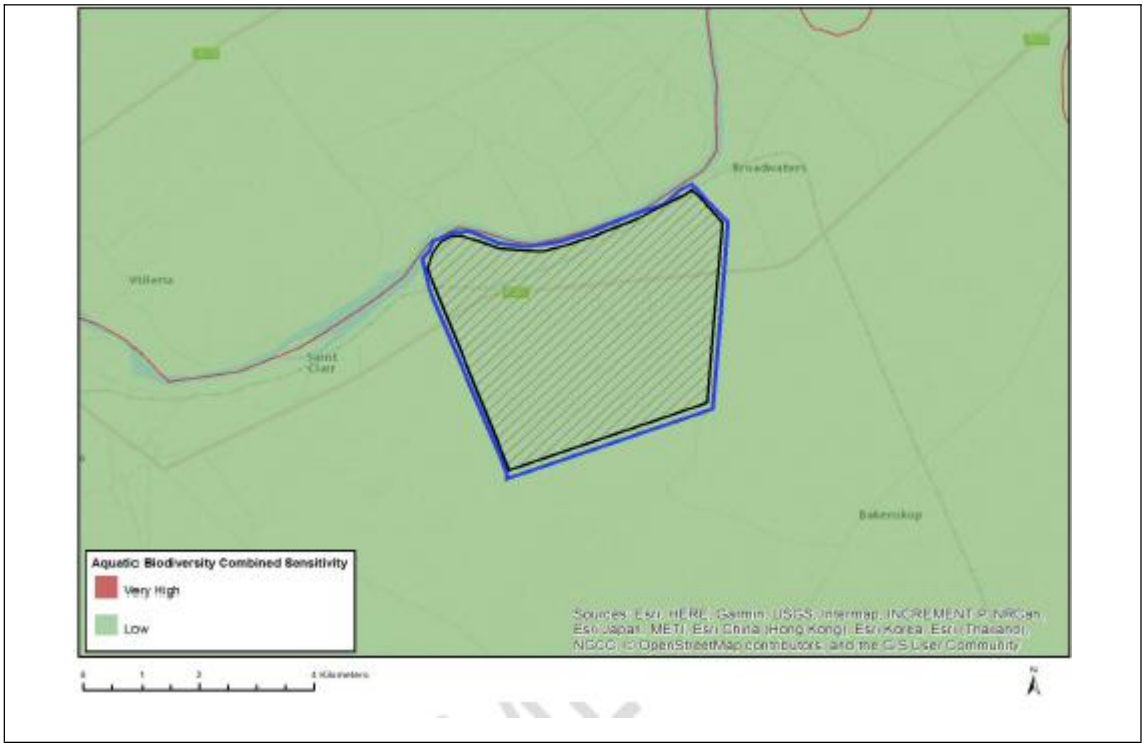

Figure 14: The current Aquatic Combined Biodiversity Sensitivity

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Noise;

Earthmoving machinery and vehicles produce considerable amounts of noise which will affect the farm owners, nearby communities and natural habitat. This impact will be felt during the day working hours.

Heritage site disturbances

Mining activities such as vegetation clearance moving vehicles and influx of people around the heritage resources can lead to accidental disturbance of these resources. The final layout plan will be in such a way that the mining activities and infrastructure will not affect the heritage resources. The archaeological and cultural heritage combined sensitivity of the study area is generally low, except for the area along the river and in some places towards the south boundary of the property (Figure 15).

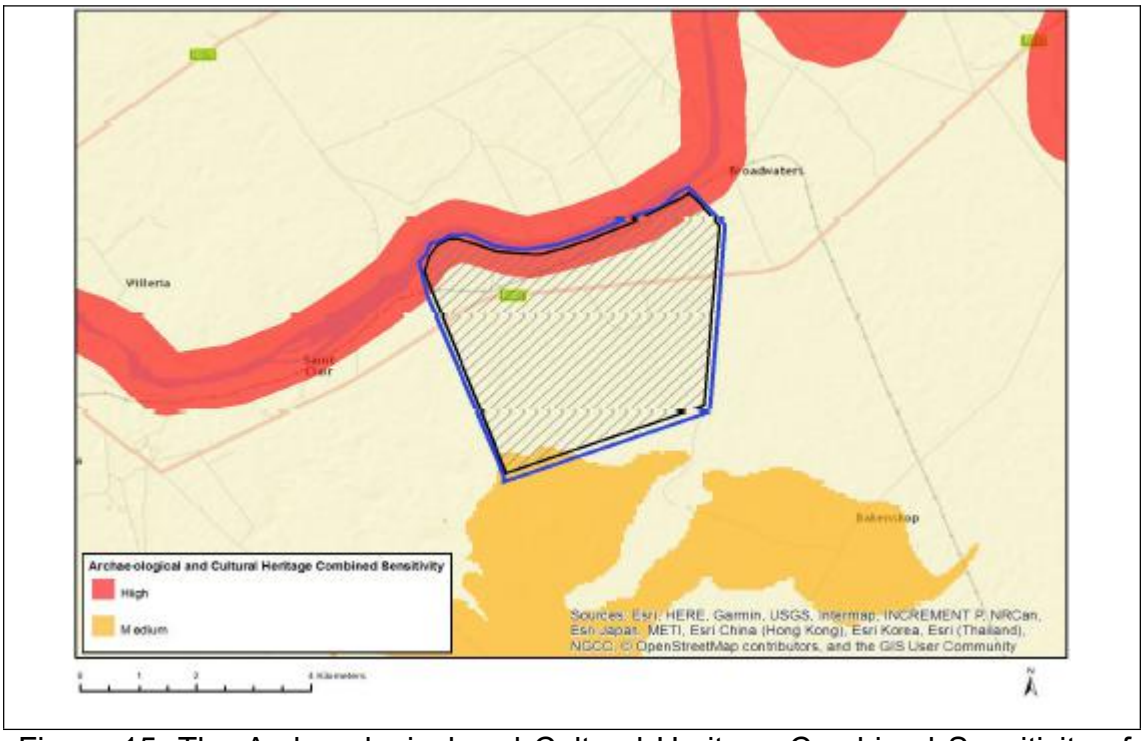

Figure 15: The Archaeological and Cultural Heritage Combined Sensitivity of the study area.

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Traffic impact assessment

Traffic in the study area will increase as a result of construction vehicles that will be moving in and out of the mining area. The possibility of this happening is high and the impact will be felt during the day working hours.

Socio-economic impacts.

Increased level of crime due to an influx of people entering the private property. Disturbance of day to day lives of the farmers due to mining activities. Damages to the farm owners' properties due to mining activities are likely to happen.

Land use conflict

Hydrocarbon spillages from earthmoving machineries and vehicles can lead to soil contamination. Increased movements by vehicles and humans can lead to compaction of the soil. Vegetation clearance also increases the chances of soil erosion.

Topographic change

Removal of top soil during bulk sampling can lead to a change in the topography of the area. After sampling, rehabilitation to the initial state of the surface should be done.

Soil pollution

Improper storage of hydrocarbon fuels lead to contamination of the soil. Leaking of these fuels from vehicles and machineries into the ground also lead to soil pollution.

Surface water contamination

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Mining close to the watercourses will contaminate surface water thereby affecting its quality. The effects of water contamination can last for a long time.

Ground water contamination

Spillages of hydrocarbons due to the use of machineries and vehicles that make use of hydrocarbon fuels can result in contamination of groundwater.

The potential impacts to the above listed environments as identified by the stakeholders will be recorded and discussed in order to come up with feasible mitigation measures. The Specialist studies will also aid in identifying the impacts as well as propose the recommended mitigation measures.

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

Potential negative and positive impacts associated with the proposed project will be identified, ranked and mitigation measures prescribed as part of the EIA phase of the project.

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

Mitigation measures must be implemented in order to minimise the impacts caused by the proposed project activities. The mitigation measures ensure that the project considers the environment and the predicted impacts in order to minimise impacts and achieve sustainable development. This will be assessed and discussed in more detail during the EIA phase.

12.5 The outcome of the site selection Matrix. Final layout plan

The site layouts as presented in Figure 4 is not necessarily final, this will sill be assessed to make sure that it does not coincide with the sensitive environmental features that will have been identified by the specialist studies

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such as the surface and ground water resources, heritage, biodiversity as well as infrastructure such as roads.

An alternative layout plan developed aimed at minimising such impacts will be developed as an outcome to the EIA for implementation.

12.6 Motivation where no alternatives sites were considered

Alternative infrastructure layout will be considered as part of the EIA Phase based on the outcomes of specialist studies and in consultation with the I&APs.

12.7 Statement motivating the preferred site

The preferred site has been chosen because of its potential to host diamond reserves. Mineral resource estimation of the proposed property has shown that there is sufficient resources that can be mined. A final layout plan will be created once the specialist studies have been conducted. The studies will point out which areas are to be avoided if any.These are areas with sensitive environments.

The stakeholder consultation process has not been finalised at this stage, and therefore the comments raised by the I&APs have not been incorporated in this section. This will be updated as part of the final report.

13 PLAN OF STUDY FOR THE ENVIRONMENTAL IMPACT ASSESSMENT PROCESS

13.1 Description of Alternatives to be Considered including the Option of Not Going Ahead with the Activity.

13.1.1 Mining site alternatives

The site has been selected because of its potential to host diamonds. A desktop study has shown that the proposed site is the best option due to the fact that there is diamond mineralisation. mining work conducted on the

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property so far has also supported the desktop study. The site is therefore regarded as the preferred site and alternatives are not considered.

13.1.2 Mining method alternatives

The diamond resources will be mined through opencast using conventional truck and excavator mining methods. The mining blocks will be 100m by 50m and the benches 10m high. The method has been chosen based on the success rate. Should better methods be discovered before mining starts, they will be considered.

13.1.3 Site layout plan alternative

The final location of the infrastructure will be determined based on the results of the specialist studies and the comments from the I&APs where the presence, location and the sensitivity of environmental attributes such as wetlands, watercourses, protected flora and graves will be determined..

13.1.4 No-go Alternatives

The no-go alternative will mean the current land use such as wetlands and important grassland biome will not be disturbed, that is, there will not be disturbance of the flora and fauna. All the potential negative impacts that would have been caused by mining activities will not be take place.

An opportunity to create jobs and contributing to the economy through mining will be lost. Poverty in the site area and its surrounds will stay the same if not get worse .

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

In order to assess the environmental, social and cultural impacts associated with the proposed project, inputs will be required from a number of specialists. The findings from these specialist studies will be reflected in the Final Scoping Report and the EIA Report.

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The following aspects will be assessed as part of the EIA Phase of the project:

- Mining;
- Vegetation clearance of less than ,
- Residue deposit,
- Storage area of hazardous substances (Diesel storage tanks, chemical storage containers),
- Storage of general waste (e.g. Domestic waste facility),
- Fencing,
- Access roads,
- Topsoil stock piles,
- Rehabilitation of overburden dumps,
- Water storage,
- Power supply,
- Loading and hauling,
- Ablution facility and
- Movement of vehicles.

13.3 Descriptions of aspects to be assessed by specialists include but not limited to:

The following aspects of the biophysical environment will be considered:

Surface water:

- Conduct a desktop study for the proposed site to identify surface water bodies including rivers and wetlands within the study area by examining existing national and provincial wetland databases;
- Identify all surface water bodies within the study area;
- Identify sensitive riparian areas where they occur;
- Where wetlands occur on or near site alternatives identified on site only, delineation is to be performed (according to the DWAF proposed

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methodology for the delineation of wetlands) and classification of the wetlands into wetland hydro geomorphic types using the hydrogeomorphic method must be undertaken;

- Identify very sensitive surface water areas, undertaking an analysis of whether surface waterbodies would contain endangered species, or would have high ecological or hydrological functionality;
- Identify potential impacts associated with the proposed development on nearby surface water resources.
- Undertake a site visit to 'ground-truth' the findings of the desktop assessment and delineate surface water resources where relevant; and
- Compile a comprehensive surface water specialist report and stipulating the mitigation measures.

Geohydrology:

- Conduct a desktop study of the geology and geohydrology of the study area with specific reference to the water production potential of the aquifers related to the catchment;
- A site visit to the proposed site and adjacent farms which could be impacted by the activities in order to observe the geology, specific features and rivers in the catchment. Identify features which have particular significance;
- Describe potential impact of mining activities on the receiving environment particularly as related to water production of the property and the catchment and also any pollution to the water in other properties;
- Include comment as to whether compaction related to mining activities and access routes could impact subsurface drainage significantly;
- List and rate any potential impact to indicate significance; and
- Indicate any mitigation measures and recommendations that would alleviate potential impact of the proposed mining activities on geohydrology of the study area and the catchment.

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Biodiversity;

- A list of the specific legislation and permit requirements that are relevant to these projects;
- A description of the vegetation occurring in, or in the area surrounding the study areas
- An assessment of the conservation importance of the vegetation in local and regional terms;
- Species checklists of flora occurring on these sites, indicating protected and endemic species as well as declared weeds and invaders;
- Lists of coordinates for all specimens of endangered and/or protected species found in the study areas;
- Maps indicating all listed coordinates;
- Description of the mammalifauna, herpetofauna and avifauna occurring or expected to occur in, or in the area surrounding the study areas;
- Checklists of species known or expected to occur within the study area, indicating protected, rare and endemic species as well as alien species, together with the probability of each species being found in the vicinity of the development sites, environmental sensitivity maps, indicating areas and habitats significant to the conservation of species within or in the area surrounding the development sites;
- All possible direct, indirect and cumulative ecological impacts that could result from the proposed projects indicating whether these impacts are related to the design, construction or operational phases of the proposed mining project, and recommending measures aimed at avoiding and/or mitigating each potential impact;
- A table, identifying all possible direct, indirect and cumulative ecological impacts that could result from the proposed project, indicating whether these impacts are related to the proposed mining activities;
- To determine whether there are likely to be any important archaeological remains that may be impacted by the proposed mining activities;

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- To indicate any constraints that would need to be taken into account in considering the mining activities;
- To identify potentially sensitive archaeological areas, and
- To recommend any further mitigation or management action

Soil, land use and land capability;

- Undertake a desktop study and site walkover visit to establish broad baseline soil
- conditions, land capability and areas of environmental sensitivity at all the proposed alternative sites in order to rate their sensitivity to the proposed development;
- Undertake a soil survey of the proposed subject property area focusing on all
- landscape features including potentially wet areas;
- Describe soils in terms of soil texture, depth, structure, moisture content, organic matter content, slope and land capability of the area;
- Describe and categorize soils using the South African Soil Classification Taxonomic System;
- Identify and assess potential soil, land use and land capability impacts resulting from the proposed mining project;
- Identify and describe potential cumulative soil, land use and land capability impacts resulting from the proposed development in relation to proposed and existing developments in the surrounding area; and
- Recommend mitigation and management measures to minimise impacts and/or
- optimise benefits associated with the proposed mining project.

Wetland study

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- The wetland areas will be delineated in accordance with the DWAF (2005) guidelines. The outer edges of the wetland areas are identified by considering the following four specific indicators:
- The Terrain Unit Indicator helps to identify those parts of the landscape where wetlands are more likely to occur.
- The Soil Form Indicator identifies the soil forms, as defined by the Soil Classification Working Group (1991), which are associated with prolonged and frequent saturation.
- The Soil Wetness Indicator identifies the morphological "signatures" developed in the soil profile as a result of prolonged and frequent saturation.
- The Vegetation Indicator identifies hydrophilic vegetation associated with frequently saturated soils.
- Vegetation is used as the primary wetland indicator, which must be present under normal
- circumstances. However, in practise the soil wetness indicator tends to be the most important,and the other three indicators are used in a confirmatory role.

Heritage and palaeontology study

- Identification and mapping of all heritage resources in the area.
- An assessment of the significance of such resources in terms of the standards of the heritage resources criteria
- An assessment of the impact on the heritage resources
- Evaluation of the impact of the development on the resources relative to sustainable social and economic benefits to derive from the development

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- Conduct consultation with local structures regarding areas of social and cultural significance within the study area.
- Results of the consultation with the communities affected by the proposed development and other affected parties regarding the impacts.

If the resource will be affected by the development, considered alternative.plans for the mitigation of any adverse affected during and after the completion of the proposed development.

Visual.

- Undertaking a field study to establish a baseline description of the visual characteristics of the landscape;
- Defining the visual resources and sense of the area;
- Identifying and mapping existing sensitive receptors, buffers, important viewpoints and view corridors;
- Identifying and screening potential visual concerns;
- Ensuring that the visual assessment will be in compliance with relevant standards, policies, laws and regulations; and
- Providing recommendations for the impact assessment phase.

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Social;

- Confirmation of study area;
- Review of available secondary data;
- Social and economic baseline description of the potentially impacted areas;
- Communication with landowners of alternative sites and conducting a site visit;
- Identifying and assessing potential direct, indirect and cumulative impacts, both positive and negative;
- Reviewing other specialist studies, as impacts that are not classified as social impacts can result in social impacts;
- Identifying measures to enhance positive social impacts and mitigate negative social impacts; and
- Making a recommendation on whether the project should proceed from a social point of view.

Traffic;

The broad methodology used for this specialist study is as follows:

- Site visit;
- Literature review and internet research; and
- Data collection and observation of existing traffic conditions

The need for other specialist studies will be determined by the comments and concerns raised by I&APs and the discussions with them thereof.

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13.3 Proposed method of assessing the environmental aspects including the proposed method of assessing alternatives

The main methods that will be used to assess the environmental aspect will be through site visit, appointment of specialists to conduct specialised studies and through consultation process. Criteria that will be used in assessing the environmental aspects will include, but not limited to: Nature of impact, extent, duration, probability, severity, intensity and significance.

13.4 The proposed method of assessing duration significance

Duration significance will be assessed using the following method or criteria:

Duration

The lifetime of the impact which is measured in the context of the lifetime of the proposed phase (i.e. construction or operation?)

Short term

The impact will either disappear with mitigation or will be mitigated through natural process in a short time period.

Medium term

The impact will last up to the end of the mining period, where after it will be entirely negated.

Long term

The impact will continue or last for the entire operational life of the mine, but will be mitigated by direct human action or by natural processes thereafter.

Permanent

Mitigation either by man or natural process will not occur in such a way or in such a time span that the impact can be considered transient.

Duration significance will be assessed before and after implementation of mitigating measures.

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13.5 The stage at which the competent authority will be consulted

Competent authorities will be consulted during all the stages, that is the notification period, the scoping phase, and during the EIA phase.

Application Consultation

Consultation on approval of Scoping Report

Consultation after submission of the EIA

Authority Site Visit

13.6 Particulars of the public participation process with regard to the impact assessment process that will be conducted

Steps to be taken to notify interested and affected parties.

The following steps were taken to notify I&APs:

- Letters with project location and description including Background Information Document (BID) were sent on the 22nd of October 2018 by email and registered post to the following parties:
  - Land owner of the site where the activity to which the application relates to;
  - The current occupier of the land;
  - Farmers farming within the application area;
  - Municipality which has jurisdiction in the area; and
- Advertisements in a local newspaper, Diamond Fields Advertiser and Volksblad newspapers were placed in English on the 18th of October 2018 and as well as in Afrikaans in the Volksblad newspaper on the 17th of October 2018. The advertisements described the project; its location, as well as inviting the public to register as I&APs.
- A notice with project description to notify the I&APs about the proposed project was placed on the notice boards in visible areas around the proposed mining site and high population areas around the site on the 15th of September 2018;

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Contact details were provided in all forms of notifications. BID document describes the location and the activities of the project. The legislative processes are also explained. The document also describes the process of registering as an I&AP. A comment sheet for I&APs to raise their comments and concerns was attached.

13.7 Details of the engagement process to be followed

Scoping Phase

The Draft Scoping Report (DSR) will be made available to registered I&APs for review and comment. A public meeting was held on the 27th of October 2018 at Bongani Community Hall from 9am. The comments raised by I&APs were recorded, addressed and will be incorporated into the Final Scoping Report.

EIA Phase

This phase begins once the Scoping Report has been submitted and accepted by DMR within 43 days. The stakeholders will be given 30 days to review and comment on the EIA/EMPr documentation. The EIA/EMPr must be submitted to the DMR within 106 days for review. The DMR will then review the documents within 107 days and make a decision on the application.

Appeal Phase

The stakeholders will be notified of the DMR decision. Information on how to appeal the decision made by the DMR will be made available to the stakeholders.

13.8 Description of the information to be provided to interested and affected parties

The following information will be presented to stakeholders in hard and soft copies

- ·The site plan.

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- List of activities to be authorised.
- Scale and extent of activities to be authorised.
- Typical impacts of activities to be authorised (e.g.surface disturbance, dust, noise, drainage, fly rock etc.).
- The duration of the activity.
- Sufficient detail of the intended operation to enable them to assess what impact the activities will have on them or on the use of their land)

During the EIR Phase, the following information will be disclosed in the EIAr:

- Impact assessment undertaken and results thereof;
- Management measures;
- Monitoring plans; and
- Closure objectives.

13.9 Description of the tasks that will be undertaken during the environmental impact assessment process

Once the Department accept the Draft Scoping Report, the proposed mining activities will proceed into the detailed EIA phase, which involves detailed specialist investigations (as described in earlier sections of this report). The EAP will produce a Draft EIA Report after the completion of the required specialist studies. The Draft EIA Report will provide a detailed assessment of all the identified key issues and associated impacts from the Scoping phase. Requirements as contemplated in the 2014 EIA Regulations will be included in the Draft EIA Report.

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13.10 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.

Table 6: Potential impact, mitigation type and potential residual risk

Activity Whether listed or not listed. (E.g. Excavations, blasting, stockpiles, discard dumps or dams, Loading, hauling and transport, water supply dams and boreholes, accommodations, offices, ablution, stores, workshops, processing plant, storm water control, berms, roads, pipelines, power lines, conveyors, etc.…etc…etc..)	**Potential impact** (e.g dust, noise, drainage surface disturbance, fly rock, surface water contamination, groundwater contamination, air pollution etc…etc…)	**Mitigation type** (modify, remedy, control, or stop) through (e.g. noise control measures, storm water control, dust control, rehabilitation, design measures, blasting controls, avoidance, relocation, alternative activity etc..etc) E.g. Modify through alternatives method, Control through noise control. Control through management and monitoring through rehabilitation.	**Potential for residual risk**
1. Site establishment -Vegetation clearance -Demarcation of the mining area such as topsoil storage area, temporal office site, storage of dumps and ablution area Temporary Camp Site -Moving of equipment and mobile	-Vegetation loss -Soil compaction -Dust -Loss of Fauna species -Negative visual impact -Loss of authentic values -Soil erosion	Rehabilitation of the disturbed areas Noise pollution control Air quality monitoring Reseeding Dust control measured erosion control measure	low

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infrastructure to site -Removal of topsoil -Construction of access roads.	Noise pollution Air pollution -Topographical disturbances		
Trenching	Vegetation loss	Rehabilitation of the disturbed areas	Low
	-Soil compaction	Avoidance	Low
	-Dust	Dust control measures	Low
	-Loss of Fauna species	Avoidance	Low
	Loss of authentic values	Control through management and monitoring	Low
	-Soil erosion	Rehabilitation	Low
	Noise pollution	Noise Control through management and monitoring	Low
	-Air pollution	Air quality monitoring	Low
	Surface disturbances	Rehabilitation Reseeding	Medium
	Soil pollution	Prevention of setting traps and hunting	Low
	Water pollution	Water pollution control measures	Low
	Impact on heritage site	avoidance	Low
	Land use impact or conflict	relocation	Low

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	Land degradation	Rehabilitation by backfilling of the trenches. Seeding.	Medium
Construction of Residue deposit area/slimes dam	Vegetation loss	Residue planning and pollution management control	Medium
	Water pollution	Pollution Control	Medium
	Impact on heritage site	Avoidance	Medium
	Land use impact or conflict	Rehabilitation	Medium
	Invader species	Removal of Invader Species	Medium
	Animal loss or injury	Avoidance	Medium
	Loss of authentic values		Medium
Storage of hazardous substances (Diesel storage tanks, chemical storage containers)	Soil pollution	Soil pollution control and management measures	Medium
	Water pollution	Water pollution control measures	Medium
	Land pollution	avoidance	Medium
Storage of general waste (e.g. Domestic Waste Facility)	Bad odour	Separation of waste according to hierarchy	Medium
	littering	Provision of waste bins	Medium
	Land pollution	Environmental awareness campaigns	Medium
	Soil contamination	Waste to be stored on closed containers	Medium
			Medium
Removal Of Sensitive Species	Vegetation loss	Rehabilitation of the disturbed areas	Medium
	Loss of authentic value	Control through management and	Medium

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		monitoring	
	Invader species	Management Control of aliens species	Medium
Fencing	Vegetation loss	Rehabilitation of the disturbed areas	Medium
Construction of Access and Mine Roads	dust	Spraying of dusty areas with water	low
	Loss of vegetation	Rehabilitation of the disturbed areas	low
	loss of Fauna	avoid	low
	Noise pollution	Installation of proper silencers on exhaust	Medium
	Surface disturbances	Rehabilitation and re-seeding	Medium
Topsoil and ore Stock piles	Vegetation loss	Rehabilitation of the disturbed areas	low
	Topographic change	Rehabilitation	low
	Soil pollution	Regular inspection, immediate rehabilitation	low
	Invader plants	Regular removal	low
	Air quality loss	Dust suppression	low
	Visual impact	Control through management and monitoring	low
Overburden and rehabilitation Dumps	Vegetation loss	Vegetation clearing control	
	Visual impact	Rehabilitation	low
	Air quality	Regular dust suppression	low
Vehicle parking	Soil contamination	Regular inspection, immediate	low

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		rehabilitation	
	Visual impact	Control through management and monitoring	low
	Loss of vegetation	Vegetation control	low
	Noise level	Noise level control	low

13.11 Other information required by the competent authority

13.11.1 Impact on the socio economic conditions of any directly affected persons.

After receiving all the comments from the stakeholders and the specialist studies have been conducted, there will be enough information to identify all the impacts that will be produced by the proposed mining activities as well as determining the mitigation measures that will be applied to manage the impacts. Impacts on socio economic conditions will be will be both negative and positive. Potential socio economic impacts will include:

- skills development through training that will be provided by Evening Star
- Alleviate poverty through employment opportunities,
- social development through improvement of social aspects of the community
- programmes, community upliftment and economic injection to the area.

Impacts such as noise, visual, security, safety, traffic, service delivery, and land use will be caused by this mining activity and the extent together with mitigation measures will be assessed and discussed during the EIA phase.

Impact on any national estate referred to in section 3 (2) of the National heritage resource act.

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A Heritage Impact Assessment (HIA) specialist will be appointed and the report will be attached on the draft EIA report. The HIA report will form part of the EIA phase.

13.12 Other matters required in terms of section 24(4)(a) and (b) of the act.

The motivation for not considering site alternatives, technology alternatives have been presented as part of this report and therefore no separate stand-alone report compiled.

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14 UNDERTAKING REGARDING CORRECTNESS OF INFORMATION

I, N. Mudau/Mofokeng herewith undertake that the information provided in the foregoing report is correct, and that the comments and inputs from stakeholders and interested and affected parties has been correctly recorded in the report.

Signature of the environmental assessment practitioner:

NDI Geological Consulting Services (Pty) Ltd

Name of company:

2018/10/31

Date:

-END-

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APPENDICES

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Appendix A: Environmental Assessment Practitioner Declaration of Interest

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Appendix B: EAP's Curriculum Vitae

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Appendix C: Location Map indicating Proposed Area

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Appendix D: Public Participation Comments

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Appendix E: Applicant letter of intent

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Appendix F: Site Plan

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