



**mineral resources**

Department:  
Mineral Resources  
**REPUBLIC OF SOUTH AFRICA**

## **SCOPING REPORT**

### **FOR LISTED ACTIVITIES ASSOCIATED WITH AND/OR BULK SAMPLING ACTIVITIES INCLUDING TRENCHING IN CASES PROSPECTING.**

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

**NAME OF APPLICANT: Bila Civil Contractors (Pty) Ltd**

**TELNO: 011 261 0241**

**FAX NO: 011 261 2061**

**POSTAL ADDRESS: P. O. Box 6995, Halfway House 1685**

**FILE REFERENCE NUMBER SAMRAD: NW30/5/1/1/2/12236PR**

## IMPORTANT NOTICE

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

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

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

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

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

## OBJECTIVE OF THE SCOPING PROCESS

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

## SCOPING REPORT

1) Contact Person and correspondence address

a) **Details of:**

i) **The EAP who prepared the report**

Name of the Practitioner: DERA Environmental Consultants (Pty) Ltd.  
Mr. Daan Erasmus  
Tel No.: 018-468 5355  
Fax No. : 018-468 4015  
E-mail address: daane@dera.co.za

ii) **Expertise of the EAP.**

(1) **The qualifications of the EAP**

(With evidence attached as).

See next page for copy of qualification, **Figure 1.**

Figure 1 – Copy of Qualification

# TECHNIKON PRETORIA



## BACCALAUREUS TECHNOLOGIAE

LANDBOU: VOORLIGTING

AGRICULTURE: EXTENSION

Toegeken aan

Awarded to

**DANIEL ELARDUS ERASMUS**

91004437

1970-09-07

met ingang van

with effect from

1997-01-01

Registrateur (Akademies)  
Registrar (Academic)

Rektor/Rector

Nr. 97/206



Uspesnik namu kvalifikacij, razvle izredno izdano na Tehnikon Pretoria na 24.01.1997. godine, u skladu sa Zakonom o Tehnikonima, 1996. (Act 28 of 1996).  
Awarded with the approval of the Certification Council for Technikon Education (SARTRIC) in terms of section 17 of the Certification Council for Technikon Education Act, 1996 (Act 28 of 1996).

TECHNIKON  
PRETORIA



TECHNIKON  
PRETORIA

## NASIONALE NATIONAL DIPLOMA

LANDBOU: HULPBRONBENUTTING

AGRICULTURE: RESOURCE UTILIZATION

Toegeken aan

Awarded to

DANIEL ELARDUS ERASMUS

91004437

7009075033088

met ingang van

with effect from

1994-01-01

Die volgende is voltooi

The following were completed

(Die onderliggende aan)

(The items mentioned)

Landbou-ekonomie I, II en III  
Voorligtingsmetodiek I en II  
Akkerbou I, II en III  
Weidingkunde A  
Bodembepanning I en II  
Bodembewaring I  
Grondkunde I en II  
\*Meganisasie  
Fisiese Wetenskap  
Melkproduksietegnologie  
Vleisheesproduksietegnologie  
Kleinveeproduksietegnologie  
Grondklassifikasie III

Agricultural Economics I, II and III  
Extension Method I and II  
Field Husbandry I, II and III  
Pasture Science A  
Land Use Planning I and II  
Soil Conservation I  
Soil Science I and II  
Mechanisation\*  
Physical Science  
Milk Production Technology  
Beef Production Technology  
Small Stock Production Technology  
Soil Classification III

\*\*\*\*\*

Minimum Opleidingstydperk: 3 Jaar  
Minimum Training Period : 3 Years

  
SERTEC  
Uitvoerende Direkteur/  
Executive Director

Nr./No. ND1117/94

  
TECHNIKON  
Rektor/Rector

**(2) Summary of the EAP's past experience.**

(Attach the EAP's curriculum vitae as Figure 2)

See **Figure 2** below Curriculum Vitae of D. E. Erasmus.

27 Lewis Street  
Wilkoppies  
Klerksdorp

Phone +2718-468-6365  
Fax +2718-468-4015  
E-mail: dera@xsinet.co.za

## **DAAN ERASMUS**

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### **Curriculum Vitae Daniël Elardus Erasmus**

February 2015

**Personal Information**

Name: Daniël Elardus Erasmus  
 Date of Birth: 7 September 1970  
 Place of Birth: Ottosdal, North West Province, South Africa  
 Marital Status: Married with two children

**Secondary & Post Secondary Education**

**1983-1988** Wolmaransstad High School, North West, SA  
 Higher School Certificate – with Full Exemption

Subjects: English Afrikaans  
 Mathematics Science  
 Geography Accounting

**1989-1990** Military Service, Potchefstroom, SA  
 Artillery Division  
**Officers Course: II Lieutenant**

**1991-1994** Technikon Pretoria, Pretoria, SA  
**National Diploma**  
 Agriculture: Resource Utilization

Subjects: Agricultural Economics I, II and III  
 Extension Method I, II and III  
 Field Husbandry I, II and III  
 Pasture Science A  
 Land Use Planning I and II  
 Soil Conservation I  
 Soil Science I and II  
 Mechanization  
 Physical Science  
 Milk Production Technology  
 Beef Production Technology  
 Small Stock Production Technology  
 Soil Classification III  
 Computer Application I

**1996** Technikon Pretoria, Pretoria, SA  
**Baccalaureus Technologiae**  
 Agriculture: Extension  
 Agricultural Resource Conservation Act in the North West Province of SA; management of personnel and personnel related matters; management of budget of regional office in Potchefstroom; monitoring mine rehabilitation and environmental management out of agricultural point of view; management and control of declared weeds and invader species.

**2003-Present** Began own company – DERA Environmental Consultants. Main scope of business: Compiling and submission of mining related applications; Manage and compile legal environmental documents. Further doing monitoring work to evaluated compliance to environmental legislation; evaluating outstanding rehabilitation liabilities for mining companies.  
 Assist legal companies in determining environmental damage. Do assessment for closure applications. Give guidance in rehabilitation practices. Compile applications and basic assessment reports for chicken broilers and feed lots based on experience form management of the natural resources and the mitigation of impacts.



b) **Description of the property.**

Farm Name:	Makplaats 283 KP (the farm) Lennokkraal 943 KP ✓ (Portion 0) ✓ (Portion 1) ✓ (Portion 2)
Application area (Ha)	4370.7942 ha
Magisterial district:	Rustenburg
Distance and direction from nearest town	Approximately 98 km north-west of Rustenburg
21 digit Surveyor General Code for each farm portion	T0KP00000000028300000 T0KP00000000094300000 T0KP00000000094300001 T0KP00000000094300002

c) **Locality map**

(Show nearest town, scale not smaller than 1:250000 below as Figure 3)

Locality Map, see Appendix 1(a).

d) **Description of the scope of the proposed overall activity.**i) **Listed and specified activities**

Provide a plan drawn to a scale acceptable to the competent authority but not less than 1:10 000 that shows the location, and area (in hectares) of all the aforesaid main and listed activities, and infrastructure to be placed on site and attach as Appendix 1.

## Appendix 1 – Infrastructure Map.

Table 1: Listed Activities

NAME OF ACTIVITY (All activities including activities not listed) (E.g. 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, beams, roads, pipelines, power lines, conveyors, etc., etc., etc.)	Aerial extent of the Activity Ha or m <sup>2</sup>	LISTED ACTIVITY Mark with an "X" where applicable or affected.	APPLICABLE LISTING NOTICE (GNR544, GNR 545 or GNR546) / NOT LISTED
Bulk sampling (Activity 21, Listing 2)	1 ha	X	GNR 325
Prospecting with processing (Activity 20 Listing 1)	0.5 ha	X	GNR 327
Clearing of an area more than 1 ha (Activity 27 Listing 1)	1.5	x	GNR 327

ii) **Description of the activities to be undertaken**

(Describe Methodology or technology to be employed, and for a linear activity, a description of the route of the activity)

Table 2: Description of Activities to be followed

ITEM	DESCRIPTION
<b>Environmental attributes.</b> Describe how the Environmental attributes associated with the development footprint will be determined.	The site will be visited and a proper foot survey will be conducted. The activities that will be conducted by the applicant will be discussed on site as described in the Prospecting Works Programme. The environmental setting on site and surrounding with the experience of the EAP will give an idea and lead to environmental attributes.
<b>Identification of impacts and risks.</b> Describe the process that will be used to identify impacts and risks.	The activities will take place according to the Prospecting Works Programme will be discussed in detail with the applicant on site. With the specific environmental setting in mind and more specifically, the type of soil, soil depth, land use, vegetation type, and distances to open water and structures, the EAP will be able to identify potential impact areas where significant impacts might occur and the risks thereof. The methods of rehabilitation that need to be done, in order to meet the objective of the final land use will also be taken in consideration.
<b>Consideration of alternatives.</b> Describe how alternatives, and in particular the alternatives to the proposed site layout and possible alternative methods or technology to be applied will be determined.	The prospecting will be done in 3 phases namely: Phase 1 - Geological surveys Phase 2 - Test pits & drilling Phase 3 - Bulk sampling through trenching. The site will be visited before the EMP/EIA is compiled. The different site alternatives will be discussed with the applicant on site. The entire application area will be visited and areas that might be environmentally sensitive will be identified. The proposed impacts and mitigations will also be discussed.
<b>Process to assess and rank impacts.</b> Describe the process to be undertaken to identify, assess and rank the impacts and risks each individual activity.	The site will be visited again before the EMP/EIA is compiled. The different site alternatives will be discussed with the applicant on site. The entire application area will be visited and areas that might be environmentally sensitive will be identified. The proposed impacts and mitigations will also be discussed. The EAP (with 21 years' experience in prospecting and mining activities) will assess the specific site for possible impacts. The assessment of impacts will be done according to a synthesis of the following assessment criteria: - Nature of the impact - Extent (spatial scale) - Duration - Magnitude or intensity of the impact (severity) - Probability The criteria that will be used to determine significance as described below. Nature of the impact: This is an appraisal of the type of effect the activity would have on the affected environment. The description includes how and what is being affected, whether it is positive or negative, as well as whether it is direct or indirect.

<b>Contribution of specialist reports.</b> Describe how specialist reports, if required, will be taken into consideration and inform the impact identification, assessment and remediation process.	No specialist reports required at this stage, unless specifically requested.
<b>Determination of impact management objectives and outcomes.</b> Describe how impact management objectives will be determined for each activity to address the potential impact at source, and how the impact management outcomes will be aligned with standards.	The Nature of the impact: This is an appraisal of the type of effect the activity would have on the affected environment. The description includes how and what is being affected, whether it is positive or negative, as well as whether it is direct or indirect. Each impact will be assessed and quantified, and management objectives according to the first two steps, will be set. The management of the objectives will be aligned with the significance of the impact, as well as to ensure a positive outcome. The outcomes will be aligned with standards on environmental management and rehabilitation of mining areas according to Department Mineral Resources.

### e) Policy and Legislative Context

<b>APPLICABLE LEGISLATION AND GUIDELINES USED TO COMPILE THE REPORT</b> <small>(a description of the policy and legislative context within which the development is proposed including an identification of legislation, policies, plans, guidelines, spatial tools, municipal development planning frameworks and instruments that are applicable to the activity and are to be considered in the assessment process)</small>	<b>REFERENCE WHERE APPLIED</b>
National Environmental Management Act, 1998 (Act 107 of 1998) (NEMA)	Submitted for Environmental Authorizations in terms of the National Environmental Management Act, 1998 and the National Environmental Management Waste Act, 2008 in respect of Listed Activities that has been triggered by applications in terms of the Minerals and Petroleum Resources Development Act, 2002 (As mentioned).
National Environmental Management Act, 1998 (Act 107 of 1998) (NEMA)	EA Authorization and BAR
National Environmental Management Act, 1998 (Act 107 of 1998): Environmental Impact Assessment Regulations, 2014 (G38282 – R982-985)	Compliance to Act and Regulations during course of activities.
World Heritages Convention Act, 1999 (Act 49 of 1999)	Compliance to Act and Regulations during course of activities.
Conservation of Agricultural Resources Act, No. 43 of 1983	Compliance to Act and Regulations during course of activities.

### f) Need and desirability of the proposed activities.

(Note the need and desirability of the proposed development including the need and desirability of the activity in the context of the preferred layout)

The farm portions over which the application is applied for is currently utilized as natural grazing for cattle. There are signs of cultivated field, but this also looks like it was withdrawn from cultivation. The structures found on site are various entrance roads, livestock water points, the Vlakplaas community and dry riverbed (in which cultivation was done and earth dam. See Figure 3 for Google Earth Images below. Access to the application area is gained by the various existing roads from the Christiana tar road. Only a small portion of the grazing land will be impacted upon at any given time and land use on the rest of the area can proceed normally. The prospecting focus area will be clearly demarcated. The area applied for is over the entire portions but the main prospecting focus area will be on the grazing land area. After prospecting the land will be used for grazing.

See Figure 3: Google Earth Images



### g) Period for which the environmental authorization is required

Five (5) years.

### h) Description of the process followed to reach the proposed preferred site.

NB! — This section is not about the impact assessment itself; it is about the determination of the specific site layout having taken into consideration (1) the comparison of the originally proposed site plan, the comparison of that plan with the plan of environmental features and current land uses, the issues raised by interested and affected parties, and the consideration of alternatives to the initially proposed site layout as a result.

The prospecting area was identified through aerial photographs. The extent of the prospecting area will be 4370 hectares. Information from Geological surveys will be used in order to determine where the drilling and test pits will



take place. This will in turn help to determine the boundaries of the proposed prospecting area for more detailed surveying.

➤ **PHASE 1:**

Geological surveys will be undertaken by means of desktop studies and available geological maps. **6 months area needed for this phase.**

➤ **PHASE 2:**

**Diamond Drilling Method**

Phase 2 consists of reconnaissance drilling. The proposed drilling program consisting of 15 holes. Using a variety of drilling rigs, rods and bits, the ore body can be evaluated by drilling intersecting holes at locations predetermined by the Geologist. Drilling is done in phases, over anomalous target areas, using reconnaissance lines or a grid of 250x250m depending on the level of confidence in the targets and the level of information required. The holes will be approximately 30 metres deep depending on local depth to bedrock. The core will be drilled using a Diamond drilling rig, with a rotating diamond cutting head that will cut the core. The core will be drilled with NQ rods, and will be extracted every 3m. Water will be pumped into the core barrel to ensure the quality of the recovery of the core. Thereafter it will be packed out in core trays, marked and sampled to retrieve the necessary information. The ore body model will be generated in Surpac or Minesight software – further prospecting requirements and sampling will be based on this model. **The drilling will take 12 months.** In Phase 2 test pits will be made (3 m x 3 m x ± 10m deep), on a grid of 100 x 100meters and where necessary on a 50 x 50 meters grid where the gravel outcrops. This test pits are made with a 30 ton excavator, to determine if any chrome or manganese ore does occur. This test pits will be closed up immediately before the excavator move on to the next one. It is envisaged that at least 100 test pits will be excavated. **12 Months are needed for Phase 2.**

➤ **PHASE 3**

In order to determine the grade of the manganese and chrome the ore needs to be taken out and tested, by putting it through the washing/sampling process. Trenching will be used to open the ore in order to get a representative sample for testing. The trenches will be 10 x 40 x ± 10 m (deep). In one trench ± 4000m<sup>3</sup> (8000ton) ore will be exposed and tested with a plant at a rate of 6m<sup>3</sup> (10 ton) a hour. The total prospecting area is 434 hectares, thus it is anticipated that a total of 50 000m<sup>3</sup> (100 000ton) will be tested by making trenches on different locations over the whole prospecting area, where the possibility of ore were identified with the test pits. Taken at an 8 hour working day, 5 days a week and 20 days a month, the applicant will be able to process 960m<sup>3</sup> a month. The processing of 50 000m<sup>3</sup> will take about 42 months for Phase 3.

**i) Details of all alternatives considered.**

With reference to the site plan provided as Appendix 1 and the location of the individual activities on site, provide details of the alternatives considered with respect to:

Alternative is not applicable. The specific land applied for is the area to believe that minerals can be explored. The current land is used as grazing land for cattle farming. The option to explore the possibility for mining is already in itself an alternative land use. The applicant, **Bila Civil Contractors (Pty) Ltd** is not interested in any other alternative land use over this land aside of diamond bearing gravel exploration, or any other activity, or method use other than mining for sand in the conventional way, which is the most cost effective.

(a) the property on which or location where it is proposed to undertake the activity  
There are no alternative for the property as the application is for this farm portion.

(b) the type of activity to be undertaken  
The type of activity is in line with the submitted Prospecting Programme.

(c) the design or layout of the activity  
The layout of the activity will and can only be on the application area as per sketch plan.

(d) the technology to be used in the activity  
The technology used in the activity will as described in the Prospecting Programme and the best options will be determined by the applicant.

(e) the operational aspects of the activity, and  
The operational aspect is only the prospecting of Chrome ore on this specific area.

(f) the option of not implementing the activity

This option might only be possible if the applicant decide to abandon the project.

## ii) Details of the Public Participation Process Followed

Describe the process undertaken to consult interested and affected parties including public meetings and one on one consultation. NB the affected parties must be specifically consulted regardless of whether or not they attended public meetings. (Information to be provided to affected parties must include 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)

The process as described by NEMA for Environmental Authorization was followed. See Table 3 below for the identification of Interested and Affected Parties to be consulted with. The landowner (Republic of South Africa) and the direct neighbours and community were consulted personally and through a letter that was given to them by hand. A site notice will be placed at the entrance gate of the farm. With this site notice all passers-by are requested to submit any written comments to be forwarded to the consultant (still awaiting response). A notice will also published in the Rustenburg Herald . See proof of consultation under Appendix 2. The Public Participation process is still on-going and the documents will be updated as more feedback is received back.

### Appendix 2 – Proof of consultation.

The EIA/EMPR was send to all the State Departments and no comments were received after the 30 day period.

### Appendix 2 – Proof of consultation.

**Table 3: Description of process to be undertaken to consult interested and affected parties**

IDENTIFICATION CRITERIA	Mark with an X where applicable	
	YES	NO
Will the landowner be specifically consulted?	X	
Will the lawful occupier on the property other than the Landowner be consulted?	X	
Will a tribal authority or host community that may be affected be consulted?		X
Will recipients of land claims in respect of the area be consulted?	X	
Will the landowners or lawful occupiers of neighbouring properties been identified?	X	
Will the local municipality be consulted?	X	
Will the Authority responsible for power lines within 100 meters of the area be consulted?		X
Will Authorities responsible for public roads or railway lines within 100 meters of the area applied for be consulted?		X
Will authorities responsible for any other infrastructure within 100 meters of the area applied for be consulted? (Specify)		X
Will the Provincial Department responsible for the environment be consulted?	X	
Will all of the parties identified above be provided with a description of the proposed mining /prospecting operation as referred above?	X	
Will all the parties identified above be requested in writing to provide information as to how their interests (whether it be socio-economic, cultural, heritage or environmental) will be affected by the proposed mining project? Other, Specify	X	

**Table 4: Furthermore the details of the engagement process to be followed are as reflected below.**

Steps to be taken to notify interested and affected parties (Describe the process to be undertaken to consult interested and affected parties including public meetings and one on one consultation. NB the affected parties must be specifically consulted regardless of whether or not they attended public meetings. Photographs of notice and copies of advertisements and notices notifying potentially interested and affected parties of the proposed application are attached as Appendix 2).	PROVIDE DESCRIPTION HERE
Information to be provided to Interested and Affected Parties.	The landowner will be consulted with in person and a surface lease agreement will be signed between the applicant and parties to set the terms of reference. The neighbours will be informed personally, consulted by the applicant and confirmed in the writing. A consultation letter will be sent to the Local Municipality. An advertisement was placed in the local newspaper for comments and a public meeting will be organized.
Information to be required from Interested and Affected Parties.	<b>Compulsory</b> The site plan. List of activities to be authorized Scale and extent of activities to be authorized Typical impacts of activities to be authorized (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) <b>Other, specify:</b> a prospecting works programme
	<b>Compulsory</b> To provide information on how they consider that the proposed activities will impact on them or their socio-economic conditions To provide written responses stating their suggestions to mitigate the anticipated impacts of each activity To provide information on current land uses and their location within the area under consideration To provide information on the location of environmental features on site to make proposals as to how and to what standard the impacts on site can be remedied, requested to make written proposals To mitigate the potential impacts on their socio economic conditions to make proposals as to how the potential impacts on their infrastructure can be managed, avoided or remedied). <b>Other, Specify</b>

### iii) Summary of issues raised by I&AP's

(Complete the table summarizing comments and issue raised, and reaction to those responses)

Interested and Affected Parties List the names of persons consulted in this column, and Mark with an "X" where those who must be consulted were in fact consulted.	Date sent and/or Comments Received	Issues raised	EAP's response to the applicant
<b>AFFECTED PARTIES</b> (Landowner)	X	Consultation still in process	
Lawful occupier/s of the land			
Landowners or lawful occupiers on adjacent properties (Neighbours)	X	Consultation still in process	
Municipal councillor	X		
Municipality Rustenburg Local Municipality LED Manager: Innocent Sirowha, fax 014 597 0306 E-mail: innocents@bnmjala.gov.za	27 Nov 2017		
Organs of state (Responsible for infrastructure that may be affected Roads Department, Eskom, Telkom, DWA, Eskom			
Communities			
Dept. Land Affairs Mr. KeatbeswellMothupi, Office of the Regional Land Claims Commissioner, N W Province, Private Bag X08, Mmabatho, 2735, Fax: 018 389 9641	27 Nov 2017	E-mail sent	
Traditional Leaders			
N/A			
Dept. Rural, Environment and Agricultural Development Cuma Skosana Agricentre Building, Cnr James Moroka & Stadium Road, Mmabatho, 2735 E-mail: <a href="mailto:oskosana@nwppg.gov.za">oskosana@nwppg.gov.za</a>	11 Dec 2017	Scoping Report was sent with Fastway couriers for comments	
Dept. Water and Sanitation Comia Theunissen Private Bag X357, Hartbeespoort, 0216 Tel: 012 253 1026 E-mail: <a href="mailto:theunissen@dwa.gov.za">theunissen@dwa.gov.za</a>	11 Dec 2017	Scoping Report was sent with registered post for comments.	
Dept. Agriculture, Forestry and Fisheries Maurice Vuyega Louis le Grange Building, Cnr Pater Mokaba & Wolmarans street,3 <sup>rd</sup> Floor, Office nr 318, Potchefstroom, 2520	11 Dec 2017	Scoping Report was sent with Fastway couriers for comments.	
Dept. Rural Development and Landform Poppe/Monqae Private Bag X74, Mmabatho, 2735 Tel: 018 397 9700			
Other Competent Authorities	X		

Provincial Heritage Resources Agency J.Dipale Corner Tillard & Warren Street, Mafikeng, 2745 Tel: 018 381 2032 E-mail: <a href="mailto:jdipale@mh.sahra.org.za">jdipale@mh.sahra.org.za</a> <b>OTHER AFFECTED PARTIES</b>  <b>INTERESTED PARTIES</b>	11 Dec 2017	Scoping Report was sent with Fastway couriers for comments.	

#### iv) The Environmental attributes associated with the sites

##### (1) Baseline Environment

###### Introduction:

The purpose of this section is to provide information on the environment in which the proposed prospecting activities will take place, with a view to identify sensitive issues/areas, which need to be considered when conducting the impact assessment.

The application is over *the farm Vlakplaats 283 KP & the Remaining Extent, Portion 1 and Portion 2 of the farm Lennokskraal 943 KP*. This area consists of 100% natural veld, withdrawn cultivated land and the Vlakplaats (Mogoditshane villages).

###### Magisterial District:

Rustenburg.

###### Direction from neighbouring town:

The driving direction and distance to proposed application area is 1 h 29 min (97.4 km) via R565 from the SAPS Rustenburg, 94 Beyers Naude Drive & Kruis Street, Rustenburg, 0300. Head southwest on Beyers Naude Drive toward Kruis Street for 700 m. Turn right onto Nelson Mandela Street (R104). Continue to follow R104 for 10.4 km. Turn right and drive for 10.0 km. At the roundabout, take the 1st exit onto R565, continue for 23.3 km. Continue straight for 51.9 km. Turn right the proposed prospecting areas will be on the left after 1.1 km.

###### Longitude (approximate centre of mining site):

6.896760 E

###### Latitude (approximate centre of mining site):

-24.964931S

###### Existing Surface Infrastructure:

The structures found on site are various entrance roads, livestock water points, the Vlakplaats community (Mogoditshane villages) and dry riverbed (in which cultivation was done and earth dam

##### (a) Type of environment affected by the proposed activity.

(its current geographical, physical, biological, socio-economic, and cultural character).

###### Climate:

Summer rainfall with very dry winters. MAP ranges from about 500-600 mm. This unit has the highest mean annual potential evaporation of savanna vegetation units outside the two Kalahari bioregions. Frost is fairly frequent in winter.

###### Geology and Soils:

Vertic black ultramafic clays which developed from norite and gabbro, also locally in small depressions along streams. Some areas have less clay. Some with high base status and eutrophic red soils. Underlying geology is an Archaean granite-gneiss terrane of the Swazian Erathem that is covered in parts by the mainly clastic as well as chemical sediments and volcanics of the Rayton and Silverton Formation, both of the Pretoria Group (Transvaal Supergroup). Mafic intrusive rocks of the Rustenburg Layered Suite, Bushveld Igneous Complex (Late Vaalian) are present in the east and include the Bierkraal Manette Gabbro. Bronzite, harzburgite, norite and anorthosite are the major mafic rocks of the Rustenburg Suite. Land types mainly Ea and Ae.

###### Vegetation [Flora] and Landscape Features:

Distribution: Limpopo and North-West Provinces: Flats north of the Dwarsberge and associated ridges mainly



west of the Crocodile River in the Dwaalboom area but including a patch around Sentrum. South of the ridges it extends eastwards from the Nietverdiend area, north of the Pilanesberg to the Northam area. Altitude 900-1 200 m.

**Vegetation & Landscape Features:** VEGMAP (2006) classified this area as part of the Central Bushveld, (SVcb 1) Dwaalboom Thornveld. VT 13 Other Turf Thornveld (58%) (Acocks 1953). LR 14 Clay Thorn Bushveld (48%), LR 18 Mixed Bushveld (43%) (Low & Rebelo 1996). Plains with layer of scattered, low to medium high, deciduous microphyllous trees and shrubs with a few broad-leaved tree species, and an almost continuous herbaceous layer dominated by grass species. *Acacia tortilis* and *A. nilotica* dominate on the medium clays (at least 21% clay in the upper soil horizon but high in the lower horizons). On particularly heavy clays (>55% clay in all horizons) most other woody plants are excluded and the diminutive *A. tenuispina* dominates at a height of less than 1 m above ground. On the sandy clay loam soils (with not more than 35% clay in the upper horizon but high in the lower horizons) *A. erubescens* is the most prominent tree (Pauw 1988). The alternation of these substrate types creates a mosaic of patches typically 1-5 km across, for example in the unit west of Thabazimbi.

**Important Taxa - Tall Tree:** *Acacia erioloba*. **Small Trees:** *Acacia erubescens* (d), *A. nilotica* (d), *A. tortilis* subsp. *heteracantha* (d), *A. fleckii*, *A. mellifera* subsp. *detinens*, *Combretum imberbe*, *Rhus lancea*, *Ziziphus mucronata*. **Tall Shrubs:** *Acacia hebeclada* subsp. *hebeclada*, *Combretum hereroense*, *Diospyros lycioides* subsp. *lycioides*, *Euclea undulata*, *Grewia flava*, *Tarchonanthus camphoratus*. **Low Shrubs:** *Acacia tenuispina* (d), *Abutilon austro-africanum*, *Aptosimum elongatum*, *Hirpicium bechuanense*, *Pavonia burchellii*, *Solanum delagoense*. **Succulent Shrubs:** *Kalanchoe rotundifolia*, *Talinum caffrum*. **Herbaceous Climber:** *Rhynchosia minima*. **Graminoids:** *Aristida bipartita* (d), *Bothriochloa insculpta* (d), *Digitaria eriantha* subsp. *eriantha* (d), *Ischaemum afrum* (d), *Panicum maximum* (d), *Cymbopogon pospischilii*, *Eragrostis curvula*, *Sehima galpinii*, *Setaria incrassata*. **Herbs:** *Heliotropium ciliatum*, *Kohautia caespitosa* subsp. *brachyloba*, *Nidorella hottentotica*. [See Figure 4 below].

**Remarks:** Contains some very clayey soils that swell when wet and shrink when dry. On the clays, woody plant biomass is generally low and productivity of woody plants is usually lower than that of herbaceous plants. These areas with ultramafic soils are, contrary to Sekhukhuneland, low in species diversity and in endemic species. References Coefzee (1971), Morris (1972), Van der Meulen (1980), Van der Meulen & Westfall (1980), Pauw (1988), Rutherford (1993), Winterbach (1998).

**Figure 4: The VEGMAP classification: Western Highveld Sandy Grassland [Gh 14]**



**Conservation status:**

Least threatened. Target 19%. Some 6% statutorily conserved, mostly within the Madikwe Game Reserve in the



west. About 14% transformed mainly by cultivation. Erosion is very low to low. Main use is extensive cattle grazing.

**Animal Life [Fauna]:**

Small animals common in this area are: Steenbuck, Duiker, Jackal and Meer cats.

**Topography:**

The mine site has one terrain type, which is characterised as being plains with layer of scattered, low to medium high. The slope varies around <0.1% to not more than 3%.

**Surface Water:**

This application area fall within the water management area of the Crocodile (West) and Marico (3) and secondary catchment area A22 and tertiary drainage region A22F. Mining on this site are not foreseen to have any direct influence of impact on this surface water body. There are some seasonal dams and stream note on the rest of the application area.

**Ground Water:**

There is one borehole on the application area used for stock watering by the landowner. The water uses will be 10m<sup>3</sup> a day for the cooling of the drills in the bulk sampling phase.

**Air Quality:**

The impact on air quality will only start with the bulk sample where dust from excavating and from the roads will occur. This impact will be low and will be monitored and mitigated trough wetting of the roads.

**Noise:**

The impact of noise will only start with the bulk sample where noise from the mining equipment will be generated. This operation will only be in day time working hours and will have a low impact on current surroundings.

**Sites of Archaeological and Cultural Interest:**

If any graveyard was identified on the application area but also within the envisaged bulk sample area. The graves are currently fenced off and all activities will be 20m away from the graves and the fence will be maintained at all times.

According to Section 36(3) of the National Heritage Resources Act 25 of 1999 no person may, without a permit issued by SAHRA or a provincial heritage resources authority—

- (a) destroy, damage, alter, exhume or remove from its original position or otherwise disturb the grave of a victim of conflict, or any burial ground or part thereof which contains such graves;
- (b) destroy, damage, alter, exhume, remove from its original position or otherwise disturb any grave or burial ground older than 60 years which is situated outside a formal cemetery administered by a local authority; or
- (b) bring onto or use at a burial ground or grave referred to in paragraph (a) or (b) any excavation equipment, or any equipment which assists in the detection or recovery of metals.

It is recommended that the graveyard is included in the overall management plan of the mine development. Preservation of the site will require that the area is properly demarcated with at least a 20m buffer zone placed around the graveyard in order to avoid potential damage during mining activities. It will be necessary to ensure that the graveyard is accessible to the relatives of the deceased.

There are no major archaeological grounds to halt the proposed development. However, the potential occurrence of unmarked graves or subsurface finds not recorded during this survey can never be excluded, so it is advised that SAHRA and a qualified archaeologist are informed immediately if archaeological objects are uncovered.

**Sensitive Landscapes:**

There were no sensitive landscapes identified on the site visit.

**Visual Aspects:**

These prospecting activities will not be partly visible from the community.

**Social:**

The proposed activity will employ 5 people, of which a few are resident around the operation. Various social amenities are available close to the operation. These include schools, hospitals churches, recreation facilities as well as a Police Station at Rustenburg, which is located approximately 97 km south, south-east of the operation.

**(b) Description of the current land uses.**

The current land use is natural grazing for cattle. There are signs of cultivated field, but this also looks like it was withdrawn from cultivation. The majority of the application area is used for grazing; however the natural grasslands and biodiversity have been affected and altered by other mining activities.

**(c) Description of specific environmental features and infrastructure on the site.**

Please refer to Section 2 (d)(ii) **Table 2** for a description of the activities and the infrastructure which are foreseen to form part of the proposed activity. The structures found on site are various entrance roads, livestock water points, the Vlakplaas community and dry riverbed (in which cultivation was done and earth dam.

**(d) Environmental and current land use map.**

(Show all environmental and current land use features)

Current land use of the application area consists of natural veld. The land is mostly utilized as communal grazing land. See **Figure 3 [Google Earth Images]** for more detail.

**v) Impacts identified**

[Provide a list of the potential impacts identified of the activities described in the initial site layout that will be undertaken, as informed by both the typical known impacts of such activities, and as informed by the consultations with affected parties together with the significance, probability and duration of the impacts]

The proposed project is anticipated to impact on a range of biophysical and socio-economic aspects of the environment. The main purpose of the Scoping Report is to identify and evaluate the significance of these potential impacts and determine how they can be minimized or mitigated.

It should be noted that a comprehensive Environmental Management Program (EMPr) will be developed and implemented to regulate and minimize the direct, indirect and cumulative impacts during the construction and operational phases. The potential environmental impacts identified during the Scoping Phase, which will be investigated further in the Impact Assessment Phase of the project are summarized in **Table 5** on the next page.



PHASE	Components	A	B	C	D	E	F	E	F	G	H	I	J	K	L	M	N
		Geology	Topography	Soil	Land capability	Land use potential	Surface water	Ground water	Air quality	Noise	Vegetation	Wildlife	Sensitive landscapes	VISUAL	Archaeological & cultural sites	Socio-economic impacts	Affected parties
12	Activity, Product or Service Construction of boordijk site		H+	H+	H+	H+	H+			L						H+	H+
13	Reduce and spread all typical events over boordijk sites			H+	H+	H+	H+	H+	H+	L	H+	H+		H+		H+	H+
14	Establishment of vegetation cover			H+	H+	H+	H+	H+	H+		H+	H+		H+		H+	H+
15	Removal of all temporary & demolition of all permanent structures (Section 4.4 of the VPMO).			H+	H+	H+	H+	H+	H+	L	H+	H+		H+		H+	H+
16	Rehabilitation of all access roads, connected areas, etc.			H+	H+	H+	H+	H+	H+	L	H+	H+		H+		H+	H+

## vi) Methodology used in determining the significance of environmental impacts

(Describe how the significance, probability, and duration of the aforesaid identified impacts that were identified through the consultation process were determined in order to decide the extent to which the initial site layout needs revision).

### I. Introduction:

Table 9 describes and evaluates the effects of the different prospecting projects and the associated activities on the natural and social environments. The different environmental components, on which the project (can/may) have an impact, are:

- |                    |                                       |
|--------------------|---------------------------------------|
| 1. Geology         | 9. Ground Water                       |
| 2. Topography      | 10. Air Quality                       |
| 3. Soil            | 11. Noise                             |
| 4. Land Capability | 12. Archaeological and Cultural sites |
| 5. Land Use        | 13. Sensitive Landscapes              |
| 6. Vegetation      | 14. Visual Aspects                    |
| 7. Wildlife        | 15. Socio-economic Structure          |
| 8. Surface Water   | 16. Interested and Affected Parties   |

### IMPACT ASSESSMENT

Before the impact assessment could be done the different project activities were identified:

#### ACTIVITIES:

2. Access Roads (Existing farm roads to be upgraded)
3. Temporary office, workshops, ablution facility, water tanks, diesel tanks and other temporary buildings
4. Prospecting equipment ( conveyor, crusher/ screen, generator)
5. Stockpiles
6. Overburden dumps
7. Opencast trenches (as part of bulk sampling)

### II. Environmental Impact Assessment Summary:

- **Environment likely to be affected by the prospecting operation. (See Appendix 1 for location)**

Environmental aspect	Affected		Not affected
	Negligible	Substantial	
1. GEOLOGY		X	
2. TOPOGRAPHY	X		
3. SOIL		X	
4. LAND CAPABILITY		X	
5. LAND USE	X		
6. VEGETATION		X	
7. WILDLIFE	X		
8. SURFACE WATER			X
9. GROUND WATER	X		
10. AIR QUALITY	X		
11. NOISE	X		
12. SENSITIVE LANDSCAPES			X
13. VISUAL ASPECTS	X		
14. SOCIO ECONOMICS	X		
15. INTERESTED &	X		
16. ARCHAEOLOGICAL			X

- **Environment likely to be affected by the alternative land use**

Prospecting will be a new land use over this area. The site that is earmarked for prospecting represents  $\pm 1\%$  of the total area applied for. And it is further not foreseen that prospecting activities would disturb an area of more than 1 ha at any given time. The rest of the terrain would continue to be used for agriculture purposes by the landowner.

- **Assessment of the impacts created by the prospecting activity**

Before any assessment can be made the following evaluation criteria need to be described:

**Explanation of probability of impact occurrence**

Probability of	Explanation of probability
Very low	<20% sure of particular fact or likelihood of impact occurring.
Low	20 to 39% sure of particular fact or likelihood of impact occurring.
Moderate	40 to 59% sure of particular fact or likelihood of impact occurring.
High	60 to 79% sure of particular fact or likelihood of impact occurring.
Very high	80 to 99% sure of particular fact or likelihood of impact occurring.
Definite	100% sure of particular fact or likelihood of impact occurring.

**Explanation of extent of impact**

Extend of	Explanation of extend
Site specific	Direct and indirect impacts limited to site of impact only.
Local	Direct and indirect impacts affecting environmental elements within the Rustenburg area.
Regional	Direct and indirect impacts affecting environmental elements within North West Province.
National	Direct and indirect impacts affecting environmental elements on a national level.
Global	Direct and indirect impacts affecting environmental elements on a global level.

**Explanation of duration of impact**

Duration of	Explanation of duration
Very short	Less than 1 year
Short	1 to 5 years
Medium	6 to 12 years
Long	13 to 50 years
Very long	Longer than 50 years
Permanent	Permanent

**Explanation of impact significance**

Impact significance	Explanation of significance
No impact	There would be no impact at all - not even a very low impact on the system or any of its parts.
Very low	Impact would be negligible. In the case of negative impacts, almost no mitigation and/or remedial activity would be needed, and any minor steps, which might be needed, would be easy, cheap and simple. In the case of positive impacts, alternative means would almost all likely to be better, in one or a number of ways, than this means of achieving the benefit.
Low	Impact would be of a low order and with little real effect. In the case of negative impacts, mitigation and/or remedial activity would be either easily achieved or little would be required, or both. In case of positive impacts, alternative means for achieving this benefit would likely be easier, cheaper, more effective, less time-consuming, or some combination of these.
Moderate significance	Impact would be real but not substantial within the bounds of those which could occur. In the case of negative impacts, mitigation and/or remedial activity would be both feasible and fairly easily possible. In the case of positive impacts, other means of achieving these benefits would be about equal in time, cost and effort.
High significance	Impacts of a substantial order. In the case of negative impacts, mitigation and/or remedial activity would be feasible but difficult, expensive, time-consuming or some combination of these. In the case of positive impacts, other means of achieving this benefit would be feasible, but these would be more difficult, expensive, time-consuming or some combination of these.
Very high significance	Of the highest order possible within the bounds of impacts which could occur. In the case of negative impacts, there would be no possible mitigation and/or remedial activity to offset the impact at the spatial or time scale for which it was predicted. In the case of positive impacts, there is no real alternative to achieving the benefit.

### III. Assessment of the nature, extent, duration, probability and significance of the potential environmental, social and cultural impacts of the proposed prospecting operation, including the cumulative environmental impacts.

ASPECT	IMPACTS				CUMULATIVE IMPACTS
<b>1. GEOLOGY</b>					
Nature of the impact	Geology will be destroyed during the opencast prospecting operation. During operation which will be for the next 5 years, the mineral resource (various minerals) will be extracted. Waste rock material/overburden material is disposed off/backfilled in existing excavations as part of the prospecting process.				
Extent	Site				Activity causing the impact
Duration	Permanent				An opencast prospecting method will be used to extract bulk samples. Therefore the original geology will be totally destroyed.
Probability	Definite				
Significance	High				
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure	
		X	X		

ASPECT	IMPACTS	CUMULATIVE IMPACTS							
<b>2. TOPOGRAPHY</b>									
Nature of the impact	<p><b>* Change in landform :</b></p> <p>* The prospecting site is situated on: level plains some relief.</p> <p><b>* Disturbance of the surface drainage:</b></p> <p>The prospecting of the Chrome ore will result in the creation of trenches (3x3 m or less), that act as depressions in the environment that captures run-off. Prospecting activities will be concentrated as indicated on <b>Appendix 1</b> on the application area (approximately 10 m depth).</p> <p>Normal surface drainage will be disturbed at a given point.</p> <p>Run-off if any will be diverted away from the specific site.</p>								
Extent	Site	Activity causing the impact							
Duration	Very long to Permanent	Bulk sampling trough trenches, etc.							
Probability	Definite								
Significance	High								
Phase responsible for the impact	<table border="1"> <thead> <tr> <th>Phase 1</th> <th>Phase 2</th> <th>Phase 3</th> <th>Closure</th> </tr> </thead> <tbody> <tr> <td></td> <td>X</td> <td>X</td> <td>X</td> </tr> </tbody> </table>		Phase 1	Phase 2	Phase 3	Closure		X	X
Phase 1	Phase 2	Phase 3	Closure						
	X	X	X						

3. SOIL	IMPACTS	CUMULATIVE IMPACTS							
Nature of the impact	The surface area is characterized by various soil depths. Any construction of infrastructure should be preceded by the removal of all available topsoil.								
Extent	Site	Activity causing the impact							
Duration	Long	In the process of removing topsoil the soil layers are mixed and the structure may be disturbed.							
Probability	High								
Significance	Moderate								
Phase responsible for the impact	<table border="1"> <thead> <tr> <th>Phase 1</th> <th>Phase 2</th> <th>Phase 3</th> <th>Closure</th> </tr> </thead> <tbody> <tr> <td></td> <td>X</td> <td>X</td> <td></td> </tr> </tbody> </table>		Phase 1	Phase 2	Phase 3	Closure		X	X
Phase 1	Phase 2	Phase 3	Closure						
	X	X							

3. SOIL	IMPACTS	CUMULATIVE IMPACTS							
Nature of the impact	<p>The establishment, construction, operation and eventually rehabilitation (demolition) of listed structures such as the access roads, stockpiles /tailings dumps, cause compaction of soil.</p> <p>All prospecting activities will be concentrated on the identified prospecting focus area where chrome deposits could be found.</p> <p>In the same time a certain surface area is therefore alienated. The active prospecting surface area (alienated) would be restricted within the ±0.7 ha at any given time (in relation to area of application of the prospecting right of 4370 ha) for the next 5 years.</p>								
Extent	Site	Activity causing the impact							
Duration	Long	Site preparation for additional prospecting sites and the construction, operation of listed infrastructure.							
Probability	High								
Significance	Moderate								
Phase responsible for the impact	<table border="1"> <thead> <tr> <th>Phase 1</th> <th>Phase 2</th> <th>Phase 3</th> <th>Closure</th> </tr> </thead> <tbody> <tr> <td></td> <td>X</td> <td>X</td> <td>X</td> </tr> </tbody> </table>		Phase 1	Phase 2	Phase 3	Closure		X	X
Phase 1	Phase 2	Phase 3	Closure						
	X	X	X						

ASPECT	IMPACTS	CUMULATIVE IMPACTS							
<b>3. SOIL</b>									
Nature of the impact	Soil erosion: Due to the fact that certain surface areas would become compacted and this would lead to lesser infiltration of rainwater and more run-off that could cause erosion on bare disturbed surfaces. Erosion would always be possible until such time a vegetation cover is provided during rehabilitation phase.								
Extent	Site	Activity causing the impact							
Duration	Very short	When removing topsoil during site preparation, little storm water control structures are in place. If a severe storm hits the area, it may lead to erosion on site. Topsoil stockpiles may be prone to erosion due to lack of vegetation cover. Water control structures may fail or severe rainstorms may cause excessive run-off. Surface compaction due to activities taking place.							
Probability	Very low								
Significance	Low								
Phase responsible for the impact	<table border="1"> <thead> <tr> <th>Phase 1</th> <th>Phase 2</th> <th>Phase 3</th> <th>Closure</th> </tr> </thead> <tbody> <tr> <td></td> <td>X</td> <td>X</td> <td>X</td> </tr> </tbody> </table>		Phase 1	Phase 2	Phase 3	Closure		X	X
Phase 1	Phase 2	Phase 3	Closure						
	X	X	X						



ASPECT	IMPACTS				CUMULATIVE IMPACTS
<b>3. SOIL</b>					
Nature of the impact	Potential of soil contamination.				None.
Extent	Site				Activity causing the impact
Duration	Long				Vehicle/equipment breakages and oil/lubricant /diesel spills may contaminate soil.
Probability	Moderate				
Significance	Moderate				
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure	
		X	X	X	

ASPECT	IMPACTS				CUMULATIVE IMPACTS
<b>3. SOIL</b>					
Nature of the impact	Loss of soil structure				None
Extent	Site				Activity causing the impact
Duration	Long				In the process of removing topsoil the soil layers are mixed and the structure may be disturbed.
Probability	High				
Significance	Moderate				
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure	
		X	X		

ASPECT	IMPACTS				CUMULATIVE IMPACTS
<b>3. SOIL</b>					
Nature of the impact	Loss of soil fertility				None
Extent	Site				Activity causing the impact
Duration	Short				The mixing of soil during site preparation, compaction and potential pollution (spillages form oil etc.) all may cause this situation.
Probability	Definite				
Significance	Low				
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure	
		X	X		

ASPECT	IMPACTS				CUMULATIVE IMPACTS
<b>4. LAND CAPABILITY</b>					
Nature of the impact	<b>Temporary loss of land capability to support grazing.</b> The small area (0.7 ha) where the active prospecting activities occur (trenches, stock piles, prospecting equipment) etc. will thus be temporary alienated, until the area is rehabilitated. All trenches would be rehabilitated as part of the prospecting process during which trenches are back-filled. The rest of the application area will still be used by the landowner as agricultural land.				
Extent	Site				Activity causing the impact
Duration	Long				Site preparation for additional prospecting sites and the construction, operation of listed infrastructure, the land capability of the active prospecting area will be totally destroyed.
Probability	Definite				
Significance	Moderate				
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure	
		X	X	X	

ASPECT	IMPACTS				CUMULATIVE IMPACTS
<b>5. LAND USE</b>					
Nature of the impact	This is a new prospecting operation and therefore will lose its land use to support grazing on a certain portion of the 4370 ha during the next 5 years. Only a small portions of land (0.7 ha at a time) would be affected by the prospecting operation relation to the total prospecting right application area of 4370 ha. All trenches would be rehabilitated as part of the prospecting process during which excavations are back-filled.				
Extent	Site				Activity causing the impact
Duration	Long to permanent				Site preparation for prospecting and the construction, operation of listed infrastructure
Probability	Definite				
Significance	Moderate				
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure	
		X	X		



ASPECT	IMPACTS				CUMULATIVE IMPACTS
<b>6.VEGETATION</b>					
Nature of the impact	Vegetation clearance, disturbance and trampling. Destruction of habitats for vegetation. Due to a disturbed ecosystem, bare ground and spreading of exotics can follow.				
Extent	Site				Activity causing the impact
Duration	Long				The site preparation for new sites, construction of listed infrastructure will cause destruction of habitats for vegetation. Due to a disturbed ecosystem, bare ground and invasion of exotics could further spread. The vegetation needs to be cleared to remove the topsoil.
Probability	Definite				
Significance	High				
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure	
		X	X		

ASPECT	IMPACTS				CUMULATIVE IMPACTS
<b>6.VEGETATION</b>					
Nature of the impact	Habitat change, loss of species, spread of alien and invasive species.				
Extent	Site				Activity causing the impact
Duration	Permanent				The change in the current habitat will be mitigated during final rehabilitation.
Probability	High				
Significance	Moderate				
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure	
		X	X		

ASPECT	IMPACTS				CUMULATIVE IMPACTS
<b>6.VEGETATION</b>					
Nature of the impact	Dust coverage of plants.				None
Extent	Site				Activity causing the impact
Duration	Long				Heavy trucks and other vehicles on dirt roads, stockpiling, dumping of tailings are mainly responsible for this impact.
Probability	High				
Significance	Low				
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure	
		X	X		

ASPECT	IMPACTS				CUMULATIVE IMPACTS
<b>7. WILDLIFE</b>					
Nature of the impact	Wildlife or wildlife habitat destruction /change / disturbance.				None
Extent	Site				Activity causing the impact
Duration	Permanent				The flora which normally serves as habitat for animals would be destroyed during site preparation. The increase in activity will temporarily scare other animals. The area will serve as a new habitat after rehabilitation.
Probability	Very High				
Significance	Moderate				
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure	
		X	X		

ASPECT	IMPACTS				CUMULATIVE IMPACTS
<b>7. WILDLIFE</b>					
Nature of the impact	Injury and death to wildlife.				None
Extent	Site				Activity causing the impact
Duration	Short				The movement of vehicles may kill certain insects, rodents and possible birds. Most of the remaining animal life will however move away due to noise.
Probability	Very low				
Significance	Low				
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure	
		X	X		

ASPECT	IMPACTS				CUMULATIVE IMPACTS
<b>7. WILDLIFE</b>					
Nature of the impact	Restoration of habitat.				None
Extent	Site				Activity causing the impact
Duration	Short				As rehabilitation progresses the habitat of certain species will be restored/created (Closure objective) Animals will probably only move back when human movement is limited.
Probability	Low				
Significance	Low				
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure	
		X	X	X	

ASPECT	IMPACTS				CUMULATIVE IMPACTS
<b>8. SURFACE WATER</b>					
Nature of the impact	Increased silt load. Clearing topsoil for footprint areas can increase infiltration rates of water to the groundwater system and decrease buffering capacity of soils to absorb contaminants from spills on surface. This can increase the risk of contamination of the groundwater system (increases aquifer vulnerability).				
Extent	Local				Activity causing the impact
Duration	Short				The clearance of vegetation and the traffic on access roads will all contribute to an increase in the silt load on the prospecting area.
Probability	Moderate				
Significance	Moderate				
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure	
		X	X	X	

ASPECT	IMPACTS				CUMULATIVE IMPACTS
<b>8. SURFACE WATER</b>					
Nature of the impact	Change in surface water quality. Spillages from vehicles and also surface water run-off that is not adequately diverted away from the active prospecting excavations could end-up in the excavations creating problems regarding water quality and hindering the prospecting process. Surface run-off from active prospecting sites (overburden dumps & tailings dam/dump) if not adequately contained on site could end-up in the adjacent undisturbed natural veld. If the natural surface run-off is not adequately diverted in the case of the dry-water course area, prospecting sections it could become silted-up.				
Extent	Local				Activity causing the impact
Duration	Short				"Dirty / Clean" water systems at facilities like the overburden dumps, roads, trenches, etc. may impact on the quality of the surface water. The water should be contained in the surface runoff control measures provided therefore.
Probability	Moderate				
Significance	High				
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure	
		X	X		

ASPECT	IMPACTS				CUMULATIVE IMPACTS
<b>8. SURFACE WATER</b>					
Nature of the impact	Change in surface water quantity: <b>Water management area (3) : Crocodile (West) and Marico</b> <b>Stream name: The mine falls under the primary drainage region C22 and in quaternary sub-catchment C22F.</b> Notwithstanding the above-mentioned facts, it is not expected that prospecting operations will have any effect on the boundaries or the general water flow of the catchment. Standing water in trenches could as the result of rain/ surface run-off ending up in shallow depressions.				
Extent	Site				Activity causing the impact
Duration	Long				It is an operational objective to contain or divert all surface run-offs from the active prospecting trenches area mainly due to pollution (sediment) potential. This will reduce the run-off quantity, although small in comparison with the drainage area in total.
Probability	High				
Significance	High				
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure	
		X	X		

ASPECT	IMPACTS				CUMULATIVE IMPACTS
<b>9. GROUND WATER</b>					
Nature of the impact	Reduction of groundwater quality Prospecting activities are not likely to impact on local ground-water quality. No chemicals area used during the prospecting process. Handling of waste and transport of building material can cause various types of spills (domestic waste, pit latrines, hydrocarbons) which can infiltrate and contaminate of the groundwater system.				
Extent	Site				Activity causing the impact
Duration	Long				
Probability	Definite				
Significance	High				
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure	
		X	X	X	

9. GROUND WATER				
Nature of the impact	Even though abstraction is likely to have a minimal effect on the surrounding groundwater users, this is a new use, and groundwater levels are expected to continue current trends. Groundwater will be abstracted for potable water supply and prospecting processes. The volume of water needed is small (12 000 Lit/hr) in comparison to other water use and will have a small impact on the surrounding aquifer.			
Extent	Site			
Duration	Long			
Probability	Low			
Significance	High			
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure
		X	X	X
Activity causing the impact Opencast prospecting operation.				

ASPECT	IMPACTS				CUMULATIVE IMPACTS
<b>10. AIR QUALITY</b>					
Nature of the impact	Dust will be generated during the prospecting operation (loading with an excavator on to a dump truck) and transportation to the plant (conveyor, drum screen/crusher) and on gravel/dirt/farm roads. The processing of the gravel is a wet process and therefore minimum dust is generated.				
Extent	Site				Activity causing the impact
Duration	Long				Initial construction work with regard to infrastructure (roads) that involves earth moving equipment. During the phase 2, dust could be generated as indicated during prospecting.
Probability	Moderate				
Significance	Moderate				
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure	
		X	X	X	

ASPECT	IMPACTS				CUMULATIVE IMPACTS
<b>11. NOISE POLLUTION</b>					
Nature of the impact	Noise will be generated during the prospecting operation (loading with an excavator on to a dump truck) and transportation to the plant (conveyor, drum screen/crusher). The mine itself is located in rural landscape. The impact would be of more importance regarding the direct worker environment that should adhere to the requirements in terms of the Mine Health and Safety Act.				
Extent	Local				Activity causing the impact
Duration	Long				Earth moving equipment and vehicles (trucks).
Probability	Definite				
Significance	Moderate				
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure	
		X	X	X	

ASPECT	IMPACTS				CUMULATIVE IMPACTS
<b>12. ARCHAEOLOGICAL AND CULTURAL SITES</b>					
Nature of the impact	The terrain is not archaeologically vulnerable. It is unlikely that the proposed development will result in any significant archaeological impact at the site.				
Extent	Site				Activity causing the impact
Duration	Permanent				
Probability	Definite				
Significance	High				
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure	
		X			

ASPECT	IMPACTS				CUMULATIVE IMPACTS
<b>13. SENSITIVE LANDSCAPE</b>					
Nature of the impact	No sensitive landscapes identified.				
Extent	Not applicable				Activity causing the impact
Duration	Not applicable				
Probability	Not applicable				
Significance	Not applicable				

Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure	
<b>ASPECT</b>	<b>IMPACTS</b>				<b>CUMULATIVE IMPACTS</b>
<b>14. VISUAL ASPECTS</b>					
Nature of the impact	Prospecting will only be visible to the neighbours living there. The operation is not visible to from any tourist road.				
Extent	Site				Activity causing the impact
Duration	Long				Diamond prospecting operation.
Probability	Definite				
Significance	Low				
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure	
		X	X	X	

ASPECT	IMPACTS	CUMULATIVE IMPACTS			
<b>15. SOCIO ECONOMICS</b>					
Nature of the impact	Increase in Socio – economic activity at local level. The project in itself would ensure that approximately 5 workers would be assured of a job for some time. Job creation plays a major role in increasing the economic well being of employees and their dependants in the Rustenburg district. Once all prospecting operations have ceased it would definitely have a negative impact.	The increase in socio-economic activity will add to the current growth and development in Rustenburg already created by industry and prospecting.			
Extent	Local	Activity causing the impact			
Duration	Long	Additional employment opportunities created.			
Probability	Definite				
Significance	High				
Phase responsible for the impact	Phase 1		Phase 2	Phase 3	Closure
		X	X	X	

ASPECT	IMPACTS	CUMULATIVE IMPACTS			
<b>15. SOCIO ECONOMICS</b>					
Nature of the impact	The main impact on the landowners is visual impact and the small area of 0.7 ha at a time that will not be available for agricultural activities at any given time for 5 years. The applicant is also the landowner.	The economic benefits in terms of investment and the delivery of services in the North West province will get an additional benefit from the project.			
Extent	Regional	Activity causing the impact			
Duration	Very Long				
Probability	High				
Significance	Moderate				
Phase responsible for the impact	Phase 1		Phase 2	Phase 3	Closure
		X	X	X	

ASPECT	IMPACTS	CUMULATIVE IMPACTS			
<b>16. INTERESTED &amp; AFFECTED PARTIES</b>					
Nature of the impact	Impact of activities on I&AP's Temporary loss of utilization of the prospecting focus areas for agricultural purposes. The long-term benefits far out-weigh the current benefits from the current use. Loss of cattle due to falling of animals in mine workings if not fenced. No negative impact is expected that could be appropriately mitigated, such as the eventual rehabilitation of the excavations.				
Extent	Local	Activity causing the impact			
Duration	Long				
Probability	High				
Significance	High				
Phase responsible for the impact	Phase 1		Phase 2	Phase 3	Closure
		X	X	X	

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

(Provide a discussion in terms of advantages and disadvantages of the initial site layout compared to alternative layout options to accommodate concerns raised by affected parties)

In terms of the EIA regulations, consideration must be given to alternatives. Alternatives are different approaches and ways of meeting the need, purpose and objectives of a proposed activity. Alternatives may include a location site alternative, activity alternatives, processes or technology alternatives, temporal alternatives etc. the no-go alternative or option is also considered, as it provides the baseline against which the impacts or other alternatives may be compared. However, for this specific project, no alternatives have been investigated, with the exception of

the no-go alternative. The reason for this being that the prospecting right is being applied for the sole purpose of mining Chrome ore. The no-go option entails the continuation of the current land use (natural grazing) on the study site. The project will contribute towards providing continued jobs for current staff. Should the proposed project therefore not be authorized to proceed, it is anticipated that current employment opportunities will be terminated once the mineral reserves have been depleted.

The no-go option is therefore not a feasible option in this case, as it suggests that the mineral reserves should not be exploited and current employment opportunities should not materialize or be prolonged.

See **Point vi)** for more detail.

### viii) The possible mitigation measures that could be applied and the level of risk.

(With regard to the issues and concerns raised by affected parties provide a list of the issues raised and an assessment/ discussion of the mitigations or site layout alternatives available to accommodate or address their concerns, together with an assessment of the impacts or risks associated with the mitigation or alternatives considered).

Refer to the results of consultation contained as **Appendix 2** for the issues that were raised by I&AP's and stakeholders during the review period of the Consultation phase of the Scoping Report, as well as the response to those issues made by the Environmental Assessment Practitioner.

The mitigation measures and technical management action plans which address potential impacts are discussed below.

Environmental Component	Geology
<b>Environmental Management/Mitigation Measures/Action Plans/Commitments</b>	
<ul style="list-style-type: none"> <li>No mitigation exists except to backfill the excavations with the rock waste material and fine tailings.</li> <li>As prospecting progressed and the excavation has been back-filled, a certain amount of overburden material and topsoil would be placed on these areas. This will not restore the geology, but will mitigate the impact.</li> <li>Planned, systematic and thorough prospecting of the mineral resource (Chrome ore) should take place.</li> <li>Optimal utilization of the mineral resource should take place within the boundaries of the prospecting terrain.</li> <li>Strip, remove and store soil and overburden as far as practical in an orderly fashion and replace as far as possible on back-filled areas, in the reverse order once decision have been taken that no further prospecting would take place in a particular section or which might still be traversed by vehicles and disturbed in the process. Cognisance should be taken of the fact that bulk sampling would take place by means of an opencast mining method until such level is reach / cut-off point is reach where rehabilitation could begin.</li> <li>Care must be taken that the removal of Chrome deposits by means of earthmoving equipment is restricted to what is really necessary to achieve the objective.</li> </ul>	
<b>EMP Performance Assessment &amp; Monitoring Reporting</b>	
To be included in EMP/EIA.	
<b>Closure Objective</b>	
Optimal exploration of the mineral resource in order to ensure to facilitate better rehabilitation planning. The overburden and topsoil (where available) must be replaced in a responsible and planned manner in order to achieve some conformity with the surrounding undisturbed area.	

Environmental Component	Topography
<b>Environmental Management/Mitigation Measures/Action Plans/Commitments</b>	
<ul style="list-style-type: none"> <li>All trenches should be back-filled with waste tailings material and eventually overburden material, covered with a shallow layer of topsoil (if available).</li> <li>Access to all active bulk sampling excavation areas should be controlled. The active bulk sampling area should be fenced off. The necessary warning signs should be put in place. All prospecting activities should be restricted to the fenced-off area.</li> <li>Surface run-off control should be put in place at active trenches (preventing water from entering) and also rehabilitated tailings dumps and overburden dumps in order to prevent the loss of growth medium on top of the dumps.</li> </ul> <p>Prospecting would be done according to a definite PWP (only disturbing an area that is really necessary). As part of the PWP the handling of tailings material, overburden material, construction of dumps and back-filling of trenches should also form part of it.</p> <p>Rehabilitation of the new topographical landscape in such a way that it would blend in with the surrounding landscape and allow normal surface drainage to continue. As soon as a section of the prospecting site would not be explored anymore it should be rehabilitated (planned and phased manner).</p>	
<b>EMP Performance Assessment &amp; Monitoring Reporting</b>	
To be included in EMP/EIA.	
<b>Closure Objective</b>	
Rehabilitation of the new topographical landscape in such a way that it would blend in with the surrounding landscape and allow normal surface drainage to continue. Rehabilitation in such a way that the new landscape features would be stable and would not pose any safety hazard to human and animal anymore.	



<b>Environmental Component</b>	<b>Soil (topsoil &amp; access roads)</b>
<b>Environmental Management/Mitigation Measures/Action Plans/Commitments</b>	
<p><b>Handling of topsoil as a natural resource:</b> Any future expansion of the trenches or construction of infrastructure should be preceded by the removal of all available topsoil. The surface of any new areas to be disturbed must be kept to a minimum. All available topsoil/overburden material should be removed and stockpiled for rehabilitation purposes.</p> <p><b>Access roads, etc:</b> The clearing of soil surface areas would be restricted to what is really necessary for the construction of infrastructure. Wherever possible all topsoil should be removed and stockpiled for rehabilitation purposes. Overburden material should also be stockpiled separately if practically possible. Topsoil and overburden material should be transported to an area earmarked for rehabilitation.</p>	
<b>EMP Performance Assessment &amp; Monitoring Reporting</b>	
To be included in EMP/EIA.	
<b>Closure Objective</b>	
The topsoil removed in the site preparation process should be replaced during the rehabilitation exercise.	

<b>Environmental Component</b>	<b>Soil (soil compaction)</b>
<b>Environmental Management/Mitigation Measures/Action Plans/Commitments</b>	
<p><b>Soil compaction:</b> The prospecting operation should only be restricted to what is really required (demarcated area of exploitation) within the fenced-off area. <b>Access roads</b> towards the sites would be restricted only to the roads (existing farm roads &amp; roads established in consultation with the surface owner). No land would be disturbed unnecessarily. Prospecting &amp; rehabilitation should be done in a well-planned manner (according to a PWP) and in the process ensuring that activities are only restricted to surface areas really required. Compaction of soil surface areas would be alleviated once rehabilitation of certain area starts. Certain roads would probably remain for access (in consultation with the surface owner). Those that would not be required would be ripped and rehabilitated.</p>	
<b>EMP Performance Assessment &amp; Monitoring Reporting</b>	
To be included in EMP/EIA.	
<b>Closure Objective</b>	
Alleviation of compaction of soils would be done during rehabilitation of the prospecting terrain, including roads.	

<b>Environmental Component</b>	<b>Soil (Soil erosion)</b>
<b>Environmental Management/Mitigation Measures/Action Plans/Commitments</b>	
<p><b>Soil Erosion:</b> To take preventive steps against land disturbance like erosion. Implement and maintain cut-off trenches/berms to prevent erosion. <b>Re-vegetation of exposed soil surfaces</b> (man-made surfaces on tailings dumps, overburden dumps, disturb surfaces in excavated sites, roads, etc) should happen as soon as a particular activity has ceased in order to act as a sufficient erosion prevention measure.</p>	
<b>EMP Performance Assessment &amp; Monitoring Reporting</b>	
To be included in EMP/EIA.	
<b>Closure Objective</b>	
No soil erosion must be visible and no potential for soil erosion must be present at closure.	

<b>Environmental Component</b>	<b>Soil (Soil contamination)</b>
<b>Environmental Management/Mitigation Measures/Action Plans/Commitments</b>	
<p><b>Potential for soil contamination:</b> Vehicles to be inspected to ensure no oil and hydraulic fluid leaks occur. All oil spills on soil to be removed and bio-remediate immediately (certain commercial products are available such as Terrasorb or it could be rehabilitated by means of the application of fertilizer and turn with a spade from time to time in order to enhance the natural occurring soil microbial activity). No servicing of vehicles must occur except on a concrete floor or over PVC lined area in an area allocated for that. Training w.r.t pollution hazards and their impact on the environment must be given as part of induction training. An incidence register for this purpose must be kept. Drip trays must be available and used where emergency repairs is done.</p>	
<b>EMP Performance Assessment &amp; Monitoring Reporting</b>	
To be included in EMP/EIA.	
<b>Closure Objective</b>	
No soil contamination must be visible or known before closure can be given.	

<b>Environmental Component</b>	<b>Soil (Soil structure)</b>
<b>Environmental Management/Mitigation Measures/Action Plans/Commitments</b>	
<p><b>Change in Soil structure:</b> Ensure that all available (if any) topsoil is carefully removed in different areas. The soil must also be compacted as backfilling is done.</p>	

No unnecessary driving outside the active prospecting area is allowed due to soil compaction that may occur. Use organic material e.g. manure to restore the soil structure during rehabilitation. Ensure that the rehabilitation plan makes provision for ripping of roads and spreading of organic material and that this is used during rehabilitation.
<b>EMP Performance Assessment &amp; Monitoring Reporting</b>
To be included in EMP/EIA.
<b>Closure Objective</b>
No compaction of any roads or any other area must be present during closure. If the soil structure is disturbed mitigation measures e.g. the use of organic material, lime and fertilizers must be implemented to restore the soil structure.

<b>Environmental Component</b>	<b>Soil (Soil fertility)</b>
<b>Environmental Management/Mitigation Measures/Action Plans/Commitments</b>	
<b>Soil fertility:</b> Little can be done to preserve the moisture status of the soil once it is exposed. The soil must be used for rehabilitation as quickly as possible. The soil on the rehabilitated area must be analysed to determine the deficiencies and fertilizer and lime must be ploughed into the soil to restore its fertility, if necessary. Ensure that stockpiled soil is kept clean and where possible ensure that the topsoil is treated with organic material and fertilized. Do not use stockpiled soil for any other purpose but for rehabilitation. Do not use topsoil to construct roads. Ensure the rehabilitation plan makes provision for fertiliser. Make sure rehabilitated topsoil is analyzed in a laboratory. The type of fertilizer would depend on a soil analyses and fertilizer recommendation.	
<b>EMP Performance Assessment &amp; Monitoring Reporting</b>	
To be included in EMP/EIA.	
<b>Closure Objective</b>	
The soil must be fertile enough to sustain vegetation.	

<b>Environmental Component</b>	<b>Land Capability</b>
<b>Environmental Management/Mitigation Measures/Action Plans/Commitments</b>	
The disturbance of land must be restricted (kept to a minimum) to the planned fenced-off, active prospecting site only. Remove topsoil where it is available. Take care that roads needed are restricted to one entry to the area for prospecting purposes. If new land is used for roads to enter the area it must be done in consultation with the surface owner. All rehabilitation will be done according to the final rehabilitation plans after approval by the Department of Mineral Resources (DMR). Topsoil will be placed in areas where it was removed and the areas will be re-vegetated accordingly. Ensure that the rehabilitation plan is implemented.	
<b>EMP Performance Assessment &amp; Monitoring Reporting</b>	
To be included in EMP/EIA.	
<b>Closure Objective</b>	
Rehabilitated to the state that it is suitable for the predetermined and agreed land capability.	

<b>Environmental Component</b>	<b>Land Use</b>
<b>Environmental Management/Mitigation Measures/Action Plans/Commitments</b>	
The disturbance of land must be restricted (kept to a minimum) to the planned active, fenced-off prospecting site only. Remove topsoil where it is available. Take care that roads are the only areas used to enter the area for prospecting purposes. If new land is used for roads to enter the area it must be done in consultation with surface owner. All rehabilitation will be done according to the final rehabilitation plans after approval by the Department of Mineral Resources (DMR). Topsoil will be placed in areas where it was removed and the areas will be re-vegetated accordingly. Ensure that the rehabilitation plan is implemented.	
<b>EMP Performance Assessment &amp; Monitoring Reporting</b>	
To be included in EMP/EIA.	
<b>Closure Objective</b>	
The opencast section requires the land to be totally disturbed. The replacement of tailings material, overburden and topsoil would ensure that the land is able to support some grazing.	

<b>Environmental Component</b>	<b>Vegetation</b>
<b>Environmental Management/Mitigation Measures/Action Plans/Commitments</b>	
No mitigation exists except to replace the vegetation by reseeded of grasses and natural growth. Prospecting should be done in a well-planned manner (according to a PWP) and in the process ensuring that activities are only restricted to surface areas really required.	
<b>EMP Performance Assessment &amp; Monitoring Reporting</b>	
To be included in EMP/EIA.	

Environmental Component	Vegetation
<b>Closure Objective</b>	
During rehabilitation indigenous vegetation cover comprising of local plant species should be established in order to ensure a well-adapted sustainable plant cover that would be able to prevent erosion of the replaced topsoil on the disturbed prospecting site exposed surfaces, tailings dumps, etc.)	

Environmental Component	Vegetation
<b>Environmental Management/Mitigation Measures/Action Plans/Commitments</b>	
Habitat change, loss of species, spread of alien and invasive species: No mitigation exists except to replace the vegetation by reseeded of grasses. Prospecting should be done in a well-planned manner (according to a PWP) and in the process ensuring that activities are only restricted to surface areas really required. <b>Develop and implement an invasive and alien control programme to control the spread of weeds and other invasive species.</b> Eradicate exotic weeds and invader species if it invades the terrain. All illegal invader plants and weeds shall be eradicated as required in terms of Regulation 15 & 16 of the Act on the Conservation of Agricultural Resources, 1983 (Act no. 43 of 1983) which list the plants. An invasive and alien control programme must be implemented by the mine.	
<b>EMP Performance Assessment &amp; Monitoring Reporting</b>	
To be included in EMP/EIA.	
<b>Closure Objective</b>	
No invasive and alien species must be present after closure. A post-closure control program must also be implemented.	

Environmental Component	Vegetation
<b>Environmental Management/Mitigation Measures/Action Plans/Commitments</b>	
Ensure that all roads on the prospecting site (utilized by prospecting vehicles) are daily sprayed with water to control dust. Site inspections to ensure the spraying are done.	
<b>EMP Performance Assessment &amp; Monitoring Reporting</b>	
To be included in EMP/EIA.	
<b>Closure Objective</b>	
No excessive dust must be present during the normal growth season after closure.	

Environmental Component	Wildlife (habitat)
<b>Environmental Management/Mitigation Measures/Action Plans/Commitments</b>	
Wildlife or wildlife habitat destruction /change / disturbance : To take care that no new or unnecessary destruction of habitats, other than the demarcated prospecting site should take place. <b>Restoration of habitat:</b> Ensure the rehabilitation plan is implemented.	
<b>EMP Performance Assessment &amp; Monitoring Reporting</b>	
To be included in EMP/EIA.	
<b>Closure Objective</b>	
The animal life habitat must be restored after decommissioning. Success will be measured against the extent to which the animals return to the area.	

Environmental Component	Wildlife (injury and death)
<b>Environmental Management/Mitigation Measures/Action Plans/Commitments</b>	
<b>Injury and death to wildlife:</b> Re-establish trees and grass cover as soon as possible during and after prospecting. Fence area off to ensure that no person can enter without permission. Ensure that the rehabilitation plan is compiled and executed. Keep incidence register on killings and disturbances.	
<b>EMP Performance Assessment &amp; Monitoring Reporting</b>	
To be included in EMP/EIA.	
<b>Closure Objective</b>	
The animal life habitat must be restored after decommissioning. Success will be measured against the extent to which the animals return to the area.	

Environmental Component	Wildlife
<b>Environmental Management/Mitigation Measures/Action Plans/Commitments</b>	
Make game catching, traps, snares, poaching and any other unnecessary disturbance of animals a disciplinary offence. All staff must undergo basic environmental awareness lecture during induction training. Machine operators and drivers to undergo appropriate level of environmental impact training to ensure they understand their impact on the environment. Ensure all staff working on the opencast section undergo basic lecture during induction phase. Introduce the actions as listed above into disciplinary code as offence.	



<b>EMP Performance Assessment &amp; Monitoring Reporting</b>	
To be included in EMP/EIA.	
<b>Closure Objective</b>	
The post-closure phase must be suitable for further restoration of the newly man-made animal habitat. The area must be stable and acceptable for the return of animal- and plant life.	

<b>Environmental Component</b>	<b>Surface Water (quality)</b>
<b>Environmental Management/Mitigation Measures/Action Plans/Commitments</b>	
<p><b>Change in surface water quality:</b>  Storm water control measures must be implemented to divert clean water away from the active prospecting site and keep contaminated water contained. Water control structures must be well designed and constructed to ensure a minimum down wash of topsoil. Vegetation disturbance must be as little as possible. The PWP must be strictly adhered to. Re-vegetation to be done as quickly as possible. Final re-vegetation to be done as per rehabilitation plan.</p>	
<b>EMP Performance Assessment &amp; Monitoring Reporting</b>	
To be included in EMP/EIA.	
<b>Closure Objective</b>	
The post closure water run-off may in no circumstance impact negatively on the water quality.	

<b>Environmental Component</b>	<b>Surface Water (quantity)</b>
<b>Environmental Management/Mitigation Measures/Action Plans/Commitments</b>	
<p><b>Change in surface water quantity:</b> Once the area is rehabilitated the surface run-off will be restored and normal clean water run-off will end-up in the drainage system. Once the area is rehabilitated the normal surface run-off drainage will be restored according to rehabilitation plan. The disturbed surface area must be rehabilitated to ensure some normal drainage. Minimal run-off should end-up in trenches. Final rehabilitation will be done according to the final rehabilitation plans after approval by the Department of Mineral Resources.</p>	
<b>EMP Performance Assessment &amp; Monitoring Reporting</b>	
To be included in EMP/EIA.	
<b>Closure Objective</b>	
Ultimately rehabilitation of the disturbed prospecting site and the construction of run-off control structures in a planned and phased manner would ensure normal drainage and stability of rehabilitated site.	

<b>Environmental Component</b>	<b>Ground Water (quality)</b>
<b>Environmental Management/Mitigation Measures/Action Plans/Commitments</b>	
<p><b>Reduction of groundwater quality:</b> Storm water control measures must be implemented to divert clean water away from the site and keep (silt) contaminated water contained. Vehicles to be inspected to ensure no oil and hydraulic fluid leaks occur. All oil spills on soil to be removed and bio-remediate immediately. No servicing of vehicles must occur except at the workshops. Training w.r.t pollution hazards and their impact on the environment must be given as part of induction training. Storage of fuel and oil should be done according to best practices, within a bunded area and in containers of which the integrity is sound. The prospecting processes will not introduce any harmful or toxic substances and the most likely sources of pollution to the groundwater system would be associated with the infrastructure and / or workshop area. The most likely contaminants is therefore nitrate and bacteria (from sewage / pit latrines), as well as hydrocarbons (from vehicle accidents, diesel storage and the workshop area). An incidence register for this purpose must be kept. Drip trays must be available and used where emergency repairs is done. All waste must be stored according to best practices and disposed at an authorized waste disposal facility.</p>	
<b>EMP Performance Assessment &amp; Monitoring Reporting</b>	
To be included in EMP/EIA.	
<b>Closure Objective</b>	
Post water quality need to indicate a positive trend/improvement.	

<b>Environmental Component</b>	<b>Ground Water (quantity)</b>
<b>Environmental Management/Mitigation Measures/Action Plans/Commitments</b>	
<p><b>Reduction of groundwater quantity, lowering of groundwater level:</b> Water levels in the boreholes that are used for prospecting activities should be recorded monthly. Water volumes should be recorded continuously to ensure compliance with the water use authorization for abstraction.</p>	
<b>EMP Performance Assessment &amp; Monitoring Reporting</b>	
To be included in EMP/EIA.	
<b>Closure Objective</b>	

Post water quality need to indicate a positive trend/improvement.

Environmental Component	Air Quality
<b>Environmental Management/Mitigation Measures/Action Plans/Commitments</b>	
<p><b>Dust:</b> The prospecting method will serve as mitigation measure because prospecting will limit dust to the active prospecting area (area where the excavator and the trucks are operating). Daily spraying of roads with water. Inspection should be done on a daily basis. If new roads are constructed, in coordination with surface owner, dust pollution must be mitigated by means of spraying the roads with water.</p>	
<b>EMP Performance Assessment &amp; Monitoring Reporting</b>	
To be included in EMP/EIA.	
<b>Closure Objective</b>	
Dust count must be the same as before prospecting. Rehabilitation of the bulk sampling site would ensure that no dust is generated from exposed surfaces.	

Environmental Component	Noise
<b>Environmental Management/Mitigation Measures/Action Plans/Commitments</b>	
<p>Ensure the required silencers are placed on all engines and compressors. No mitigation to reverse hooters is allowed due to safety standards. Inspection of vehicles and machinery to ensure silencers are fitted. Ensure that a complaints register is created, managed and maintained. Vehicles and earthmoving equipment should be equipped with the necessary silencers and regularly maintained in a good working condition.</p>	
<b>EMP Performance Assessment &amp; Monitoring Reporting</b>	
To be included in EMP/EIA.	
<b>Closure Objective</b>	
No noise attributed to prospecting will be generated from the site after closure anymore. During decommissioning and closure phase some earth moving equipment and trucks would be utilized for rehabilitation.	

Environmental Component	Archaeological and Cultural Sites
<b>Environmental Management/Mitigation Measures/Action Plans/Commitments</b>	
<p>No graves were identified on site. All grave yards need to be avoided if found. However, the potential occurrence of unmarked graves or subsurface finds not recorded during this survey can never be excluded, so it is advised that SAHRA and a qualified archaeologist are informed immediately if archaeological objects are uncovered.</p>	
<b>EMP Performance Assessment &amp; Monitoring Reporting</b>	
To be included in EMP/EIA.	
<b>Closure Objective</b>	
No site of archaeological importance should be disturbed or damaged until the necessary permit from SAHRA has been issued.	

Environmental Component	Sensitive Landscapes
<b>Environmental Management/Mitigation Measures/Action Plans/Commitments</b>	
None	
<b>EMP Performance Assessment &amp; Monitoring Reporting</b>	
To be included in EMP/EIA.	
<b>Closure Objective</b>	

Environmental Component	Visual Aspects
<b>Environmental Management/Mitigation Measures/Action Plans/Commitments</b>	
<p>Visual impact would be addressed by means of; * re-vegetation of disturbed areas with grasses; * Removal of any temporary building, scrap, domestic waste, etc. that would otherwise contribute to a negative visual impact. Concurrent rehabilitation should be done simultaneously as prospecting activities progress.</p>	
<b>EMP Performance Assessment &amp; Monitoring Reporting</b>	
To be included in EMP/EIA.	
<b>Closure Objective</b>	
No residual visual impacts will remain after closure. The terrain should blend in with the surrounding landscape.	

Environmental Component	Socio-Economics
<b>Environmental Management/Mitigation Measures/Action Plans/Commitments</b>	
There will be a very small increase in Socio – economic activity at local level, because of the size of this prospecting activity.	
<b>EMP Performance Assessment &amp; Monitoring Reporting</b>	
To be included in EMP/EIA.	
<b>Closure Objective</b>	
The economic development must deliver a multiplier effect that will contribute to the local economy long after closure.	

Environmental Component	Interested and Affected Parties
<b>Environmental Management/Mitigation Measures/Action Plans/Commitments</b>	
Access control should always be a priority. Active prospecting site should be fenced off and also any deep water holes. If any problem should arise, meetings will be held with the landowners and affected parties to consult them on certain matters like permission to prospect and pollution. No prospecting should be conducted under or near Eskom power line (10 m distance should be kept) ( <i>Permission of Inspector of Mines should be obtained.</i> )	
<b>EMP Performance Assessment &amp; Monitoring Reporting</b>	
To be included in EMP/EIA.	
<b>Closure Objective</b>	
Not to be an economic, social or environmental liability to the local community or the state now or in the future. The company will ensure that the interest of all interested and affected parties will be considered.	

**ix) The outcome of the site selection Matrix. Final Site Layout Plan**

*(Provide a final site layout plan as informed by the process of consultation with interested and affected parties)*

Please see **Appendix 1(b)** for more detail.

**x) Motivation where no alternative sites were considered.**

**Alternative is not applicable.** The current land use is agricultural and is being utilized as natural grazing by the landowner. The option to explore the possibility for mining is already in itself an alternative land use. The applicant, **Bila Civil Contractors (Pty) Ltd**, is not interested in any other alternative land use over this land aside of chrome exploration, or any other activity, or method use other than prospecting for chrome ore in the conversional way, which is the most cost effective.

Please note that no additional infrastructure will be established, and therefore no alternatives for the location of infrastructure were identified.

**xi) Statement motivating the preferred site.**

*(Provide a statement motivation the final site layout that is proposed)*

The prospecting operation will not be a static operation, the mobile plant will move as prospecting progress, thus the whole application is to determine a potential site for when the mining phase is reached. The feasibility of mining the diamond material from an environmental, social and economic perspective also plays a role.

**(i) Plan of study for the Environmental Impact Assessment process**

**i Description of alternatives to be considered including the option of not going ahead with the activity**

**Alternative is not applicable.** For this specific project, no alternatives have been investigated. The activities included in this application are determined by the location of the mineral reserves in the study area, and the proposed prospecting method to be employed as was assessed. The current land use is agricultural and is being utilized as natural grazing at percent by the landowner.

The option to explore the possibility for mining is already in itself an alternative land use. The applicant, Bila

Civil Contractors (Pty) Ltd. is not interested in any other alternative land use over this land aside of chrome exploration, or any other activity, or method use other than prospecting for chrome ore in the conventional way, which is the most cost effective.

The No-Go option entails the continuation the current land use (natural grazing) on the application area without exploiting the mineral reserves. The prospecting activities will contribute towards the achievement of providing employment opportunities for members of the surrounding communities, thus aiding socio-economic development. Should the project therefore not be authorized to proceed, the current employment opportunities will be terminated. Therefore, the No-Go alternative is not a feasible option in this case, as it suggests that the mineral reserves should not be exploited and current employment opportunities should not be prolonged.

Alternative is not applicable for the application area. The current land use is agricultural and is being utilized as natural grazing by the landowner.

## ii. **Description of the aspects to be assessed as part of the environmental impact assessment process**

(The EAP must undertake to assess the aspects affected by each individual mining activity whether listed or not, including activities such as blasting, loading, hauling and transport, and mining activities such as Excavations, stockpiles, discard dumps or dams, water supply dams and boreholes, accommodation, offices, siltation, stores, workshops, processing plant, storm water control, berms, roads, pipelines, power lines, conveyors, etc., etc., etc.)

The aspects that will be assessed as part of the proposed project and its area include:

- Geology
- Soil Erosion
- Rehabilitation of previously disturbed areas
- Fauna [Wildlife/Wildlife habitat destruction]
- Changes in surface water quality
- Dust
- Noise
- Archaeological/Cultural Sites

### **Geology:**

Chrome deposits will be destroyed during the opencast prospecting operation.

During operation which will be for the next 5 years, the mineral resource (various minerals) will be extracted. Waste rock material/overburden material is disposed off/backfilled in existing excavations as part of the backfilling process.

### **Soil erosion:**

Due to the fact that certain surface areas would become compacted and this would lead to lesser infiltration of rainwater and more run-off that could cause erosion on bare disturbed surfaces. Erosion would always be possible until such time a vegetation cover is provided during rehabilitation phase.

Temporary loss of land capability to support grazing. The small area (0.7 ha) where the active prospecting activities occur (trenches, tailings dumps, stock piles, prospecting equipment) etc. will thus be temporary alienated, until the area is rehabilitated.

All trenches would be rehabilitated as part of the prospecting process during which trenches are back-filled. The rest of the application area will still be used by the landowner as agricultural land.

### **Rehabilitation:**

The rehabilitation of the historically disturbed areas will have a positive impact on land use. This is a new prospecting operation and therefore will lose its land use to support grazing on a certain portion of the 4370 ha during the next 5 years. Only a small portions of land (0.7 ha at a time) would be affected by the prospecting operation relative to the total prospecting right application area of 4370 ha. All trenches would be rehabilitated as part of the prospecting process during which excavations are back-filled.

**Wildlife or wildlife habitat destruction/change / disturbance:**

Increase silt load. Clearing topsoil for footprint areas can increase infiltration rates of water to the groundwater system and decrease buffering capacity of soils to absorb contaminants from spills on surface. This can increase the risk of contamination of the groundwater system (increases aquifer vulnerability).

**Change in surface water quality:**

Spillages from vehicles and also surface water run-off that is not adequately diverted away from the active prospecting excavations could end-up in the excavations creating problems regarding water quality and hindering the prospecting process.

Surface run-off from active prospecting sites (overburden dumps & tailings dam/dump) if not adequately contained on site could end-up in the adjacent undisturbed natural veld.

If the natural surface run-off is not adequately diverted in the case of the dry-water course area, prospecting sections it could become silted-up.

**Dust:**

Dust will be generated during the prospecting operation (loading with an excavator on to a dump truck) and transportation to the plant (conveyor, drum screen/crusher) and on gravel/dirt/farm roads. The processing of the gravel is a wet process and therefore minimum dust is generated.

**Noise:**

Dust will be generated during the prospecting operation (loading with an excavator on to a dump truck) and transportation to the plant (conveyor, drum screen/crusher).

The mine itself is located in rural landscape. The impact would be of more importance regarding the direct worker environment that should adhere to the requirements in terms of the Mine Health and Safety Act.

**Archaeological/Cultural Sites:**

The terrain is not archaeologically vulnerable. It is unlikely that the proposed development will result in any significant archaeological impact at the site. No graves were identified on site.

iii. **Description of aspects to be assessed by specialists**

As this is only a prospecting application and no sensitive areas or heritage areas of significance were noted on the application area there will be no specialist studies. All impacts noted will be mitigated.

iv. **Proposed method of assessing the environmental aspects including the proposed method of assessing alternatives**

A thorough foot survey and site inspection was done by the EAP and further visit will be done before compiling the EIA. Each aspect was then assessed individually with the 21 year experience of the EAP.

v. **The proposed method of assessing duration significance**

The assessing of the duration is done on hand of the different phases as described in the Prospecting Works Program (PWP) which is also described under **Point ii) h)**. The significance is assessed from experience and from the actual situation on the specific site. Please see **Point vi)** for detail.

vi. **The stages at which the competent authority will be consulted**

Consultation with all competent authorities will be done. The Scoping Report will be send to them from the office of the EAP.



vii. **Particulars of the public participation process with regard to the Impact Assessment process that will be conducted**

1. **Steps to be taken to notify interested and affected parties.**

(These steps must include the steps that will be taken to ensure consultation with the affected parties identified in (h) (ii) herein).

The landowner, as well as the competent authorities will be consulted. Please see **Table 3** for more detail on public participation process.

2. **Details of the engagement process to be followed.**

(Describe the process to be undertaken to consult interested and affected parties including public meetings and one on one consultation. NB the affected parties must be specifically consulted regardless of whether or not they attended public meetings and records of such consultation will be required in the EIA at a later stage).

See **Table 3**.

3. **Description of the information to be provided to Interested and Affected Parties.**

(Information to be provided must include the initial site plan and sufficient detail of the intended operation and the typical impacts of each activity, to enable them to assess what impact the activities will have on them or on the use of their land).

See **Table 3**.

viii. **Description of the tasks that will be undertaken during the environmental impact assessment process**

Site inspection by foot survey, discussions with applicant and landowner as well as discussions with competent authorities where necessary. Completion of the EIA template.

ix. **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.**

This will be kept in mind with the site inspection where each impact will again be evaluated and the mitigation and management thereof will be confirmed on site. The risk of each impact will be evaluated and if any residual risks the management thereof.

i) **Other Information required by the competent Authority**

i) **Compliance with the provisions of sections 24(4)(a) and (b) read with section 24 (3) (a) and (7) of the National Environmental Management Act (Act 107 of 1998). The EIA report must include the:-**

**(1) Impact on the socio-economic conditions of any directly affected person.**

(Provide the results of investigation, assessment, and evaluation of the impact of the mining, bulk sampling or alluvial diamond prospecting on any directly affected person including the landowner, lawful occupier, or, where applicable, potential beneficiaries of any land restitution claim, attach the investigation report as Appendix 2.19.1 and confirm that the applicable mitigation is reflected in 2.5.3, 2.11.5, and 2.12 here)

The bulk sampling was thoroughly discussed with the landowner and as long as the main focus area will be on the grazing area the socio impact on the landowner will be minimal. The landowner only request that the disturbed areas be rehabilitated back to grazing potential.

**(2) Impact on any national estate referred to in section 3(2) of the National Heritage Resources Act.**

(Provide the results of investigation, assessment, and evaluation of the impact of the mining, bulk sampling or alluvial diamond prospecting on any national estate referred to in section 3(2) of the National Heritage Resources Act, 1999 (Act No. 25 of 1999) with the exception of the national estate contemplated in section 3(2)(i)(vi) and (vii) of that Act, attach the investigation report as Appendix 2.19.2 and confirm that the applicable mitigation is reflected in 2.5.3, 2.11.5, and 2.12 herein).

No graves identified.

j) **Other matters required in terms of sections 24(4)(a) and (b) of the Act.**

(The EAP managing the application must provide the competent authority with detailed, written proof of an investigation as required by section 24(4)(b)(i) of the Act and motivation if no reasonable or feasible alternatives, as contemplated in sub-regulation 22(2)(f), exist. The EAP must attach such motivation as Appendix 2).

There are no alternatives, as the application area applied for is the area where applicant believes is potential for chrome deposits.

k) **UNDERTAKING REGARDING CORRECTNESS OF INFORMATION**

**I 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 have been correctly recorded in the report.**



D E Erasmus

**Signature of the EAP**

**DATE: 11/12/2017**

**-END-**

## APPENDIX 2 – PROOF OF CONSULTATION

Interested and Affected Parties List the names of persons consulted in this column, and Mark with an "X" where those who must be consulted were in fact consulted.	Date sent and/or Comments Received	Issues raised	EAP's response to the applicant
<b>AFFECTED PARTIES</b>			
(Landowner)	X 27 Nov 2017	Consultation still in process	
Lawful occupier/s of the land			
Landowners or lawful occupiers on adjacent properties	X	Consultation still in process	
(Neighbours)			
Municipal councillor			
Municipality	X		
Rustenburg Local Municipality	27 Nov 2017		
LED Manager: Innocent Sirovha, fax 014 597 0306			
e-mail: innocents@bonjalia.gov.za			
Organs of state (Responsible for infrastructure that may be affected Roads Department, Eskom, Telkom, DWA.			
Eskom			
Communities			
Dept. Land Affairs	X		
Mr. Keabeswe Muthupi, Office of the Regional Land Claims Commissioner, N W	27 Nov 2017	E-mail sent	
Provinces: Private Bag X08, Mmabatho, 2735;			
Fax: 018 389 9641			
Traditional Leaders			
N/A			
Dept. Rural, Environment and Agricultural Development	X		
Ourma Skosana	11 Dec 2017	Scoping Report was sent with Fastway couriers for comments	
Agricentre Building, Cnr James Moroka & Stadium Road, Mmabatho, 2735			
E-mail: oskosana@nwpp.gov.za			
Dept. Water and Sanitation	X		
Cornia Theunissen	11 Dec 2017	Scoping Report was sent with registered post for comments.	
Private Bag X357, Hartebeespoort, 0216			
Tel: 012 253 1026 E-mail: theunissen@dwa.gov.za			
Dept. Agriculture, Forestry and Fisheries	X		
Maurice Vuyega	11 Dec 2017	Scoping Report was sent with Fastway couriers for comments.	
Louis le Grange Building, Cnr Peter Mokaba & Wolmarans street, 3 <sup>rd</sup> Floor, Office nr 318,			
Potchefstroom, 2520			
Dept. Rural Development and Landform			
Poppi Monagae			
Private Bag X74, Mmabatho, 2735			
Tel: 018 397 9700			
E-mail: poppimonagae@drdlr.gov.za			
Other Competent Authorities	X		



## APPENDIX 2 – PROOF OF CONSULTATION

Provincial Heritage Resources Agency J.Dipale Corner Tlilard & Warren Street, Matielkeng, 2745 Tel: 018 381 2032 E-mail: jdpale@nh.sahra.org.za	11 Dec 2017	Scoping Report was sent with Fastway couriers for comments.
<b>OTHER AFFECTED PARTIES</b>		
<b>INTERESTED PARTIES</b>		





FLAMWOOD  
2572

Cell. 082 895 3516  
Tel. 018-468 5355  
Fax. 018-468 4015  
Fax2mail. 086 578 3085  
E-mail: dera@xsinet.co.za

.....  
**DERA**

Environmental Consultants

To: **Rustenburg Local Municipality : LED  
Manager – Innocent Sirovha** Fax: **014 590 3006/3481**

From: **Daan Erasmus** Date: **27 November 2017**

Re: **Proposed Prospecting Right application** Pages: **1 + 2**

CC:

Urgent

For Review

Please Comment

Please Reply


Please Recycle

Please find attached the consultation letter of Bila Civil Contractors for a Prospecting Right application on the farms Vlakplaats 283 KP & Lennokskraal 943 KP, in the Rustenburg district.

The Departement of Mineral Resources requested that we inform the Rustenburg Local Municipality of the proposed prospecting right as part of the Public Participation process with interested and/or affected parties.

It would be highly appreciated if you could sign the attached consultation letter and return it to Dera Environmental Consultants at fax: 018 468 4015 or e-mail it to [daane@dera.co.za](mailto:daane@dera.co.za) or [dera.office@dera.co.za](mailto:dera.office@dera.co.za).

Should you have any questions regarding the above, please call Mr. Erasmus at 082 895 3516

Thank you.  
P.P.   
Daan Erasmus

.....

# DERA

27 November 2017

## Environmental Consultants

To whom it may concern

**CONSULTATION WITH INTERESTED AND AFFECTED PARTIES WITH REGARD TO AN APPLICATION FOR A PROSPECTING RIGHT IN TERMS SECTION 16 OF THE MINERALS AND PETROLEUM RESOURCES DEVELOPMENT ACT, 2002 (ACT 28 OF 2002) AND NEMA, EIA 2014 OVER: THE FARM VLAKPLAATS 283 KP AND LENNOKSKRAAL 943 KP, MAGISTERIAL DISTRICT OF RUSTENBURG.**

You are herewith informed that **Bila Civil Contractors (Pty) Ltd.** has submitted an application in terms of Section 16 of the Minerals and Petroleum Resources Development Act, 2002 (Act 28 of 2002), and NEMA, EIA 2014 to the Regional Manager: Mineral Regulation, Northern West Region in respect of **Platinum Group Metal (PGM), Phosphate ore, Nickel ore, Chrome ore, Manganese ore and Vanadium** in the magisterial district of Rustenburg.

**Bila Civil Contractors (Pty) Ltd.** is in the process of compiling the Scoping Report, which needs to be submitted at the Regional Office of DMR. After acceptance of the application is received an Environmental Management Programme (EMP) & Environmental Impact Report need to be submitted at the Regional Office of DMR within 106 days from date of acceptance of the Scoping Report. The above documents will be available on request for I&AP's for comments.


In terms of Section 10 of the Minerals and Petroleum Resources Development Act, 2002 (Act 28 of 2002), and in terms of Regulation 39(1) of the regulations published in the Government Notice No. R10328 (of 4 December 2014) under Chapter 6 of the NEMA, EIA 2014, the landowner or legal occupier of the land, as well as any other interested party must be notify and must be consulted with in terms of the proposed project.

**Bila Civil Contractors (Pty) Ltd.** deem it necessary to consult with inter alia yourself / your company/ your organization, and you are therefore kindly requested to comment very clearly and unambiguously with regard to the proposed prospecting project. You are requested to put in writing any interest/ objection and/or comments you may have and send it back to the appointed consultants (**Reference no. NW30/5/1/1/2/12236PR**) within 30 days from the date of receipt of this letter. If no correspondence is received from you within the mentioned period, the applicant shall accept that you have no objection in the proposed prospecting activities.

Please call me if any further information is needed.

Your co-operation will be appreciated.

Yours faithfully

P.P.   
Daan Erasmus

DERA Environmental Consultants

.....

:

**REGISTRATION FORM AND COMMENT FOR THE PUBLIC PARTICIPATION PROCESS  
PROPOSED PROSPECTING RIGHT APPLICATION ON THE FARM VLAKPLAATS 283 KP & LENNOKSKRAAL 943  
KP, MAGISTERIAL DISTRICT OF RUSTENBURG.**

:

Daan Erasmus  
P.O. Box 6499  
KLERKSDORP  
2572

Tel. 018-468 5355  
Fax: 018-468 4015  
Mobile: 082 895 3516  
E-mail: [dera.office@dera.co.za](mailto:dera.office@dera.co.za) or [daane@dera.co.za](mailto:daane@dera.co.za)

**PERSONAL INFORMATION:**

Title/Titel:..... Initials/Voorletters: ..... First Name/Eerste naam:.....

Surname/Van.....

E-mail/E-pos.....

Telephone/Telefoon..... Fax/Faks.....

Organisation (if applicable)/Organisasie(indien van toepassing): .....

Capacity (member, etc.)/Kapasiteit (lid ens): .....

Landowner/Grondseigneur/Neighbour/Buurman/Intersted and/or affected party on the farm/op die plaas.....

Postal Address/ Posadres .....

Town/City/Dorp/Stad: ..... Code/Kode: .....

**COMMENT/OBJECTION:**

1. What is the nature of your interest in the proposed project/Wat is u belang in die voorgename projek?  
.....  
.....

2. Do you have any ground for objection or do you support the proposed project/Het u enige gronde tot beswaar of ondersteun u die bogenoemde projek?  
.....  
.....

**YES/NO JA/NEE**

If "Yes", please list shortly/Indien 'JA', lys asseblief kortliks.  
.....  
.....

3. Do you foresee that this activity will have a negative impact on yourself or the environment/Voorsien u dat die voorgename projek 'n negatiewe inpak kan he op uself of die omgewing?

**YES/NO JA/NEE**

If "Yes", please descibe shortly/Indien 'JA', verduidelik asseblief kortliks.  
.....  
.....

Filled in on/Ingevol op..... day of /dag van..... (month)/(maand) 2017

**Name and Surname/ Company**

**Signature/Handtekening**

**Naam en Van/Maatskappy**

.....



.....  
**DERA**

27 November 2017

## Environmental Consultants

Departement of Land Affairs & Rural Development

Attention: Keabetswe Mothupi

Re: **Verification of Land Claims**

We are Environmental Consultants situated in Klerksdorp and has applied on behalf of Bila Civil Contractors (Pty) Ltd. for a prospecting right on the following farm in the Rustenburg district.

- **Vlakplaats 283 KP**
- **Lennoxkraal 943 KP**

Could you please be so kind to verify if there are any land claims over the farms as mentioned above?

It would be highly appreciated if you could help us in this matter as soon as possible.


Please feel free to contact the office of Dera Environmental Consultants or Mr. Erasmus on his cell: 082 895 3516 for any further information.

Yours truly,

p.p. 

Daan Erasmus

.....



**Office**

Locardia telefonies bewesing

**From:** Office <dera.office@dera.co.za>  
**Sent:** Thursday, December 07, 2017 1:14 PM  
**To:** locardia@bila.co.za  
**Subject:** Consultation letters - Vlakplaats & Lennokskraal  
**Attachments:** Scan\_20171206\_155814.pdf

Good day Locardia

Find attached the consultation letters to be signed by the landowners and surrounding neighbours for the prospecting right application on the farms Lennokskraal & Vlakplaats - NW12236PR

Please note that our office will be closed from 14th December 2017 until 8th January 2018.

Regards.

Ns/pp Gerda Els

Daan Erasmus

Dera Environmental Consultants/Dera Omgewingskonsultante P.O. Box 6499, Flamwood 2572 VAT No: 464 020 4881

Tel: 018 468 5355

Fax: 018 468 4015

Cell: 082 895 3516

Fax2mail: 086 578 3085

e-mail: [dera.office@dera.co.za](mailto:dera.office@dera.co.za) or [daane@dera.co.za](mailto:daane@dera.co.za)

Scan\_20171206\_155814.pdf;

## Office

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**From:** Office <dera.office@dera.co.za>  
**Sent:** Wednesday, December 06, 2017 4:22 PM  
**To:** 'locardia@bila.co.za'  
**Cc:** richard@bila.co.za  
**Subject:** Consultation letters - Vlakplaats & Lennokskraal  
**Attachments:** Scan\_20171206\_155814.pdf

Good day Locardia & Richard

Find attached the consultation letters to be signed by the landowners and surrounding neighbours for the prospecting right application on the farms Lennokskraal & Vlakplaats - NW12236PR

Please note that our office will be closed from 14th December 2017 until 8th January 2018.

Regards.

Ns/pp Gerda Els

Daan Erasmus

Dera Environmental Consultants/Dera Omgewingskonsultante P.O. Box 6499, Flamwood 2572 VAT No: 464 020 4881

Tel: 018 468 5355

Fax: 018 468 4015

Cell: 082 895 3516

Fax2mail: 086 578 3085

e-mail: [dera.office@dera.co.za](mailto:dera.office@dera.co.za) or [daane@dera.co.za](mailto:daane@dera.co.za)

Scan\_20171206\_155814.pdf;

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# DERA

27 November 2017

## Environmental Consultants

To whom it may concern

**CONSULTATION WITH INTERESTED AND AFFECTED PARTIES WITH REGARD TO AN APPLICATION FOR A PROSPECTING RIGHT IN TERMS SECTION 16 OF THE MINERALS AND PETROLEUM RESOURCES DEVELOPMENT ACT, 2002 (ACT 28 OF 2002) AND NEMA, EIA 2014 OVER: THE FARM VLAKPLAATS 283 KP AND LENNOKSKRAAL 943 KP, MAGISTERIAL DISTRICT OF RUSTENBURG.**

You are herewith informed that **Bila Civil Contractors (Pty) Ltd.** has submitted an application in terms of Section 16 of the Minerals and Petroleum Resources Development Act, 2002 (Act 28 of 2002), and NEMA, EIA 2014 to the Regional Manager: Mineral Regulation, Northern West Region in respect of **Platinum Group Metal (PGM), Phosphate ore, Nickel ore, Chrome ore, Manganese ore and Vanadium** in the magisterial district of Rustenburg.

**Bila Civil Contractors (Pty) Ltd.** is in the process of compiling the Scoping Report, which needs to be submitted at the Regional Office of DMR. After acceptance of the application is received an Environmental Management Programme (EMP) & Environmental Impact Report need to be submitted at the Regional Office of DMR within 106 days from date of acceptance of the Scoping Report. The above documents will be available on request for I&AP's for comments.

In terms of Section 10 of the Minerals and Petroleum Resources Development Act, 2002 (Act 28 of 2002), and in terms of Regulation 39(1) of the regulations published in the Government Notice No. R10328 (of 4 December 2014) under Chapter 6 of the NEMA, EIA 2014, the landowner or legal occupier of the land, as well as any other interested party must notify and must be consulted with in terms of the proposed project.

**Bila Civil Contractors (Pty) Ltd.** deem it necessary to consult with inter alia yourself / your company/ your organization, and you are therefore kindly requested to comment very clearly and unambiguously with regard to the proposed prospecting project. You are requested to put in writing any interest/ objection and/or comments you may have and send it back to the appointed consultants (**Reference no. NW30/5/1/1/2/12236PR**) within 30 days from the date of receipt of this letter. If no correspondence is received from you within the mentioned period, the applicant shall accept that you have no objection in the proposed prospecting activities.

Please call me if any further information is needed.

Your co-operation will be appreciated.

Yours faithfully

  
**Daan Erasmus**

**DERA Environmental Consultants**

.....

:  
REGISTRATION FORM AND COMMENT FOR THE PUBLIC PARTICIPATION PROCESS  
PROPOSED PROSPECTING RIGHT APPLICATION ON THE FARM VLAKPLAATS 283 KP & LENNOKSKRAAL 943  
:  
KP, MAGISTERIAL DISTRICT OF RUSTENBURG.  
:

Daan Erasmus  
P.O. Box 6499  
KLERKSDORP  
2572

Tel. 018-468 5355  
Fax: 018-468 4015  
Mobile: 082 895 3516  
E-mail: [dera.office@dera.co.za](mailto:dera.office@dera.co.za) or [daane@dera.co.za](mailto:daane@dera.co.za)

**PERSONAL INFORMATION:**

Title/Titel:..... Initials/Voorletters: ..... First Name/Eerste naam:.....

Surname/Van.....

E-mail/E-pos.....

Telephone/Telefoon..... Fax/Faks.....

Organisation (if applicable)/Organisasie(indien van toepassing): .....

Capacity (member, etc.)/Kapasiteit (lid ens): .....

Landowner/Grondeienaar/Neighbour/Buurman/Intersted and/or affected party on the farm/op die plaas.....

Postal Address/ Posadres .....

Town/City/Dorp/Stad: ..... Code/Kode: .....

**COMMENT/OBJECTION:**

1. What is the nature of your interest in the proposed project/Wat is u belang in die voorgename projek?

---

---

2. Do you have any ground for objection or do you support the proposed project/Het u enige gronde tot beswaar of ondersteun u die bogenoemde projek?

---

---

**YES/NO JA/NEE**

If "Yes", please list shortly/Indien 'JA', lys asseblief kortliks.

---

---

3. Do you foresee that this activity will have a negative impact on yourself or the environment/Voorsien u dat die voorgename projek 'n negatiewe inpak kan he op uself of die omgewing?

**YES/NO JA/NEE**

If "Yes", please descibe shortly/Indien 'JA', verduidelik asseblief kortliks.

---

---

Filled in on/Ingevu op..... day of /dag van..... (month)/(maand) 2017

**Name and Surname/ Company**

**Signature/Handtekening**

**Naam en Van/Maatskappy**

.....



:

**REGISTRATION FORM AND COMMENT FOR THE PUBLIC PARTICIPATION PROCESS  
PROPOSED PROSPECTING RIGHT APPLICATION ON THE FARM VLAKPLAATS 283 KP & LENNOKSKRAAL 943  
KP, MAGISTERIAL DISTRICT OF RUSTENBURG.**

:

Daan Erasmus  
P.O. Box 6499  
KLERKSDORP  
2572

Tel. 018-468 5355  
Fax: 018-468 4015  
Mobile: 082 895 3516  
E-mail: [dera.office@dera.co.za](mailto:dera.office@dera.co.za) or [daane@dera.co.za](mailto:daane@dera.co.za)

**PERSONAL INFORMATION:**

Title/Titel:..... Initials/Voorletters: ..... First Name/Eerste naam:.....

Surname/Van.....

E-mail/E-pos.....

Telephone/Telefoon..... Fax/Faks.....

Organisation (if applicable)/Organisasie(indien van toepassing): .....

Capacity (member, etc.)/Kapasiteit (lid ens): .....

Landowner/Grondseienaar/Neighbour/Buurman/Intersted and/or affected party on the farm/op die plaas.....

Postal Address/ Posadres .....

Town/City/Dorp/Stad: ..... Code/Kode: .....

**COMMENT/OBJECTION:**

1. What is the nature of your interest in the proposed project/Wat is u belang in die voorgename projek?

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2. Do you have any ground for objection or do you support the proposed project/Het u enige gronde tot beswaar of ondersteun u die bogenoemde projek?

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**YES/NO JA/NEE**

If "Yes", please list shortly/Indien 'JA', lys asseblief kortliks.

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3. Do you foresee that this activity will have a negative impact on yourself or the environment/Voorsien u dat die voorgename projek 'n negatiewe inpak kan he op uself of die omgewing?

**YES/NO JA/NEE**

If "Yes", please descibe shortly/Indien 'JA', verduidelik asseblief kortliks.

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Filled in on/Ingevol op..... day of /dag van..... (month)/(maand) 2017

**Name and Surname/ Company**

**Signature/Handtekening**

**Naam en Van/Maatskappy**

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Filled in on/Ingevol op..... day of /dag van..... (month)/(maand) 2017

Name and Surname/ Company

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Signature/Handtekening

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## PUBLIC NOTICE

### APPLICATION FOR AN ENVIRONMENTAL AUTHORIZATION FOR THE PROPOSED ACTIVITIES.

Notice is given for the following application:

- 1) Environmental authorization application for prospecting.

- **Proponent:** The applicant is Bila Civil Contractors (Pty) Ltd.
- **Ref. no:** NW30/5/1/1/2/12236PR
- **Property description:** The proposed prospecting area is over the farm Vlakplaats 283 KP & Lennokskraal 943 KP, in the district of Rustenburg. The total extent of the prospecting area is 4370.7942 hectares. (21 SG digital codes: T0KP0000000094300000; T0KP0000000028300000)
- **Location:** The property is situated ±98 km north-west of Rustenburg.
- **Project description:** The purpose of the application is to obtain the required authorisation from the Department to successfully: undertake Geological surveys, test pits, drilling & bulk sampling.
- **Activity applied for:** the following activities as listed in terms of NEMA (Act No. 107 of 1998) as amended and EIA Regulations, 2014 was applied for under Listing Notice 2 – GNR 325 of 2014, Activity & 21; Listing Notice 1 – GNR 327 of 2014, Activity 20 Listing Notice 2 – GNR 327 of 2014, Activity 27
- **Minerals applied for:** Platinum Group Metals (PGM), Phosphate ore, Nickel ore, Chrome Ore, Manganese ore and Vanadium.
- **Date submitted:** 17 November 2017
- **Stakeholder involvement:** Stakeholders are invited to register as interested and affected parties and to participate in the application process by identifying issues of concern and suggestions for consideration in the Scoping Report & EMPr/EIA and can contact Dera Environmental Consultants for any further information. Please submit your written comments by mail, fax or e-mail in this 30 day of this notice to:

Mr. Daan Erasmus of DERA Environmental Consultants  
PO Box 6499                      E-mail: daane@dera.co.za  
Flamwood                        Fax2Mail:086 578 3085  
2572                                Fax: 018 468 4015  
    Cell: 082 895 3516;

- Date of advertisement: Friday ..... 2017