



mineral resources

Department:
Mineral Resources
REPUBLIC OF SOUTH AFRICA

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First Floor, Liberty Corner, 29-31 Curry Street, Kimberley 8301

From: Directorate: Mineral Regulation: Northern Cape **Date:** 26 January 2012

Enquiries: Ms. N.P Shandukani **E-Mail:** Patricia.shandukani@dmr.gov.za

Ref: NC 30/5/1/1/3/2/1/10242 EM

The Director
South African Heritage Resources Agency
PO Box 4637
CAPE TOWN
8000

*On Sahris
CaseID: 836*

*P-22 -
They are
planning to
check heritage*

Attention: Mrs Nonofho Ndobochani

CONSULTATION IN TERMS OF SECTION 40 OF THE MINERAL AND PETROLEUM RESOURCES DEVELOPMENT ACT 2002, (ACT 28 OF 2002) FOR THE APPROVAL OF AN ENVIRONMENTAL MANAGEMENT PLAN FOR PROSPECTING RIGHT ON THE FARMS BEESHOEK NO.448 AND OLYNFONTEIN NO.475, SITUATED IN THE MAGISTERIAL DISTRICT OF KURUMAN, NORTHERN CAPE REGION.

APPLICANT: RAZITA MINING RESOURCES (PTY) LTD.

Attached herewith, please find a copy of an EMP received from the above-mentioned applicant for your comments.

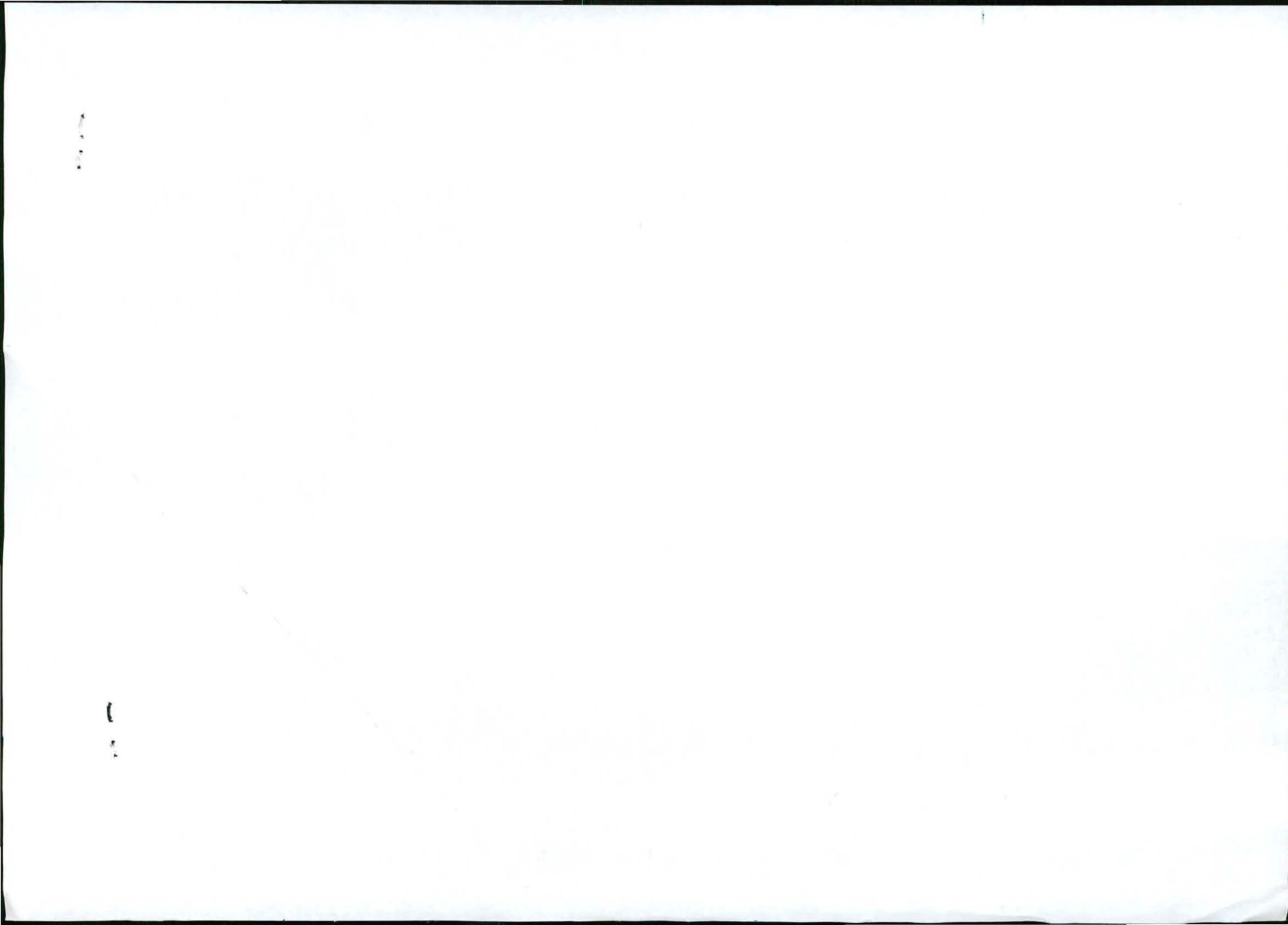
It would be appreciated if you could forward any comments or requirements your Department may have to this office and to the applicant before the **27 February 2012** as required by the Act.

Consultation in this regard has also been initiated with other relevant State Departments. In an attempt to expedite the consultation process please contact **Patricia Shandukani** of this office to make arrangements for a site inspection or for any other enquiries with regard to this application.

Your co-operation will be appreciated.

PP

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**REGIONAL MANAGER: MINERAL REGULATION
NORTHERN CAPE REGION**





mineral resources

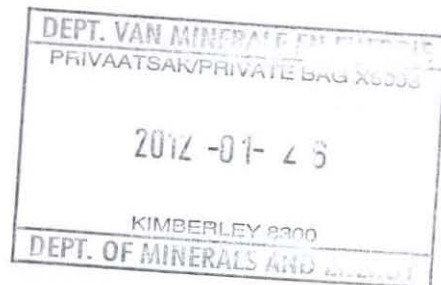
Department:
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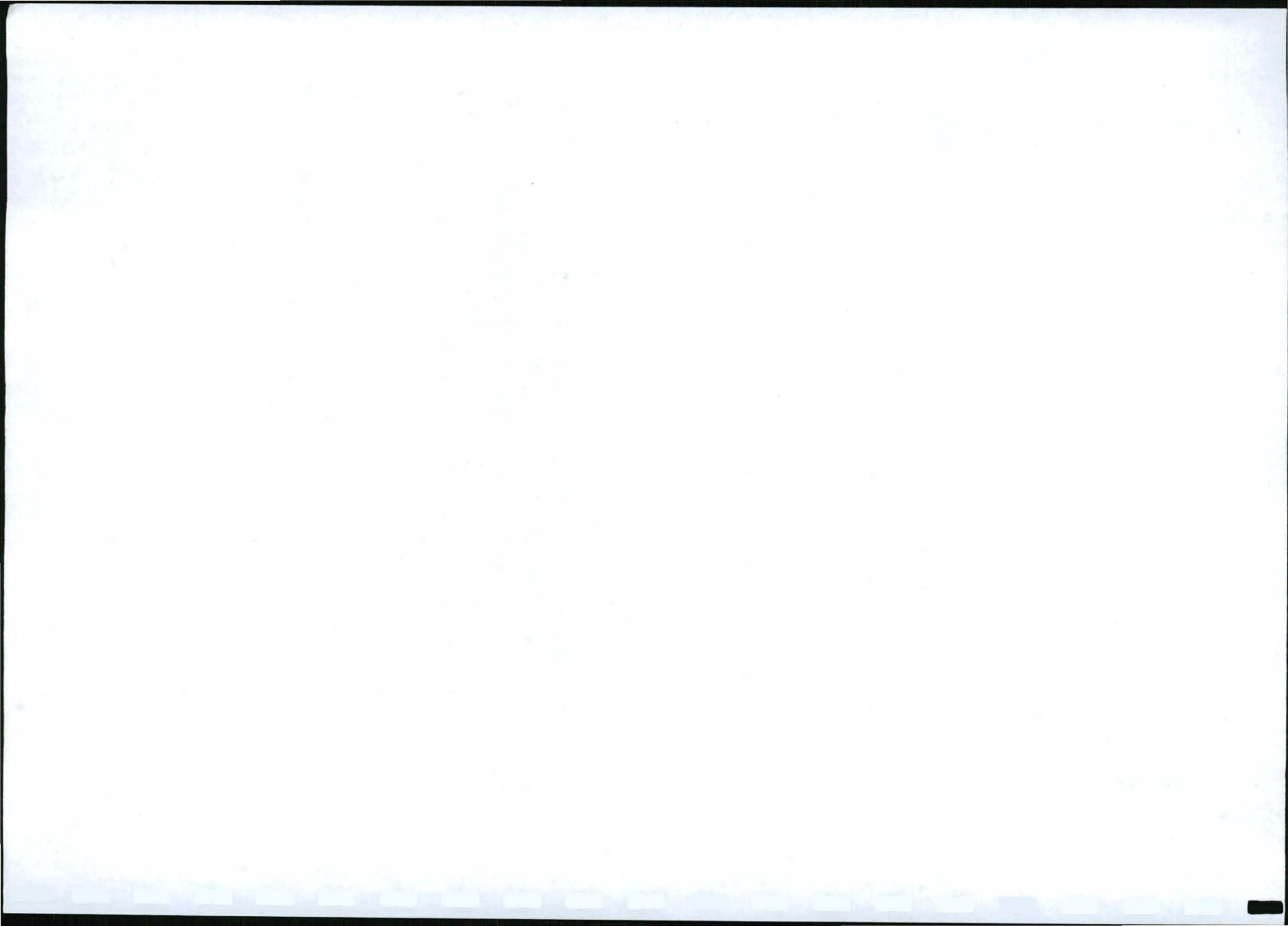
NAME OF APPLICANT: Razita Mining Resources (Pty) Ltd

REFERENCE NUMBER: (NC) 30/5/1/1/2/10242 PR

ENVIRONMENTAL MANAGEMENT PLAN

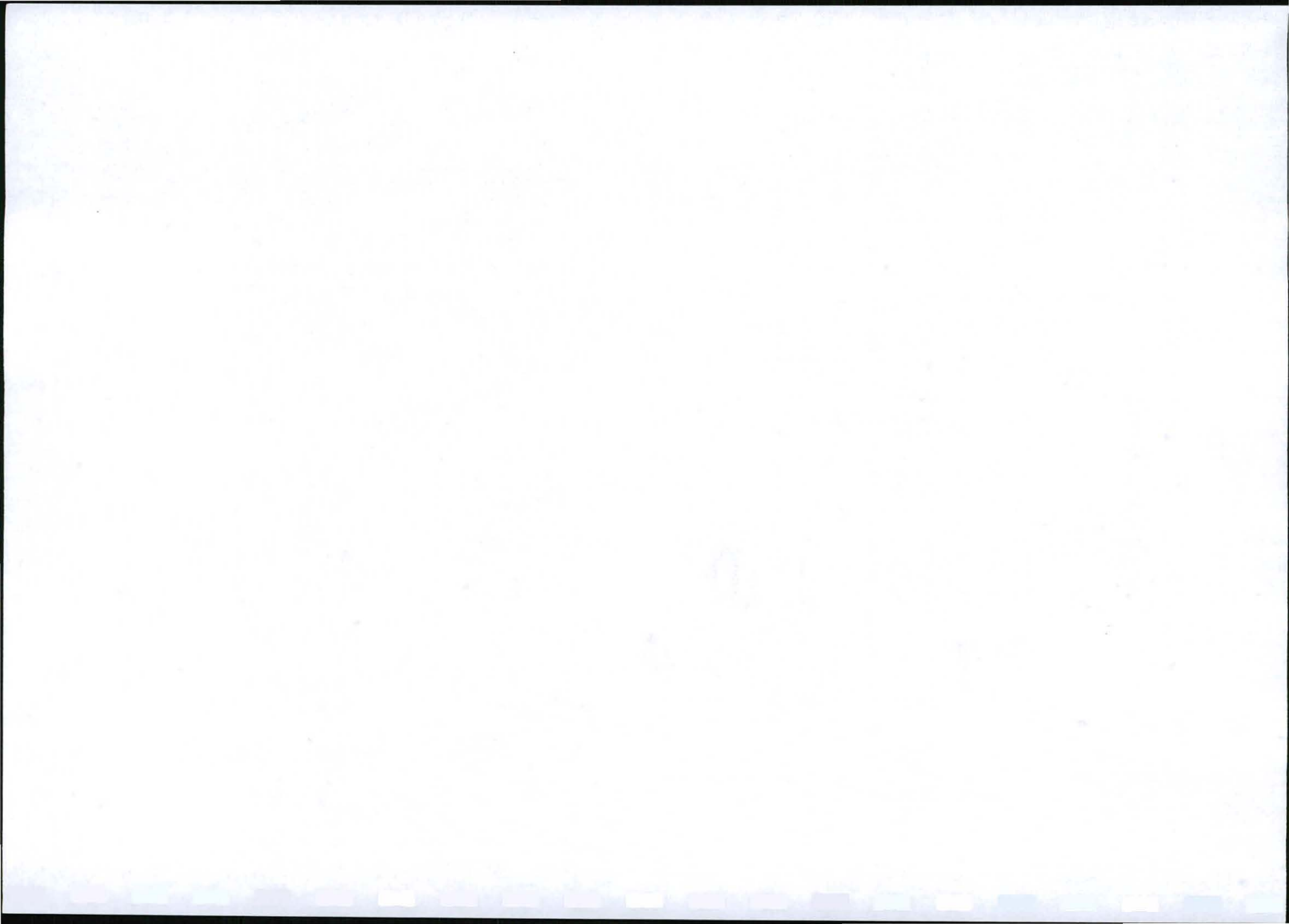
**SUBMITTED
IN TERMS OF SECTION 39 AND OF
REGULATION 52 OF THE MINERAL AND
PETROLEUM RESOURCES DEVELOPMENT ACT,
2002,
(ACT NO. 28 OF 2002) (the Act)**





STANDARD DIRECTIVE

Applicants for prospecting rights or mining permits, are herewith, in terms of the provisions of Section 29 (a) and in terms of section 39 (5) of the Mineral and Petroleum Resources Development Act, directed to submit an Environmental Management Plan strictly in accordance with the subject headings herein, and to compile the content according to all the sub items to the said subject headings referred to in the guideline published on the Departments website, within 60 days of notification by the Regional Manager of the acceptance of such application. This document comprises the standard format provided by the Department in terms of Regulation 52 (2), and the standard environmental management plan which was in use prior to the year 2011, will no longer be accepted.



IDENTIFICATION OF THE APPLICATION IN RESPECT OF WHICH THE ENVIRONMENTAL MANAGEMENT PLAN IS SUBMITTED.

ITEM	COMPANY CONTACT DETAILS
Name	Razita Mining Resources (Pty) Ltd
Tel no	(011) 656 5441
Fax no:	(011) 656 5456
Cellular no	082 357 5455
E-mail address	brian@nubj.co.za
Postal address	P O Box 786573, Sandton, 2146

ITEM	CONSULTANT CONTACT DETAILS (If applicable) (N/A)
Name	
Tel no	
Fax no:	
Cellular no	
E-mail address	
Postal address	

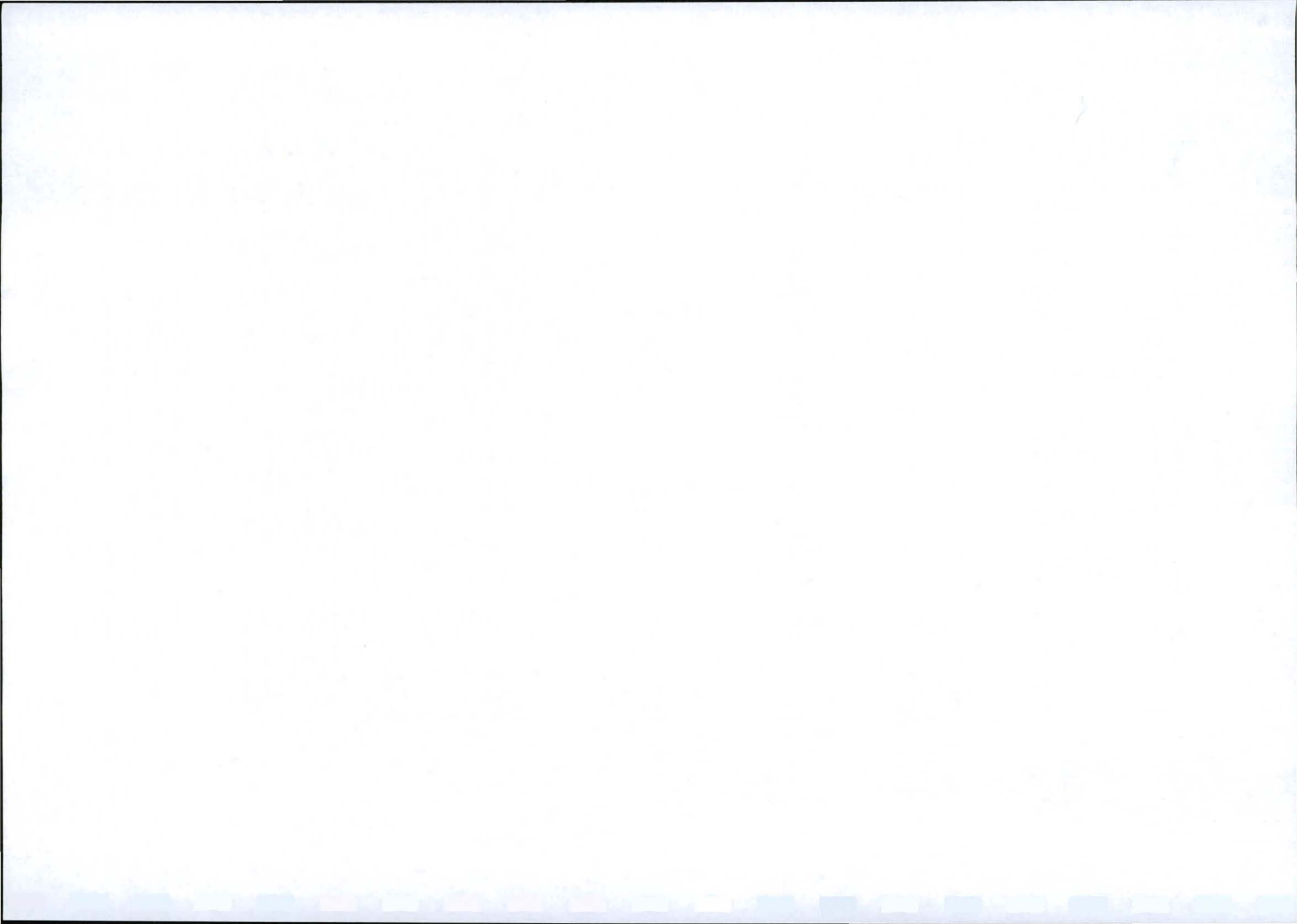
1 REGULATION 52 (2): Description of the environment likely to be affected by the proposed prospecting or mining operation

1.1 The environment on site relative to the environment in the surrounding area.

Beesthoek has mining activity taking place by Assmang Ltd since 1975 and very little environmental impact will be affected. Plaas 447 & Plaas 475 is grazing fRMSs and no environmental impact is expected.

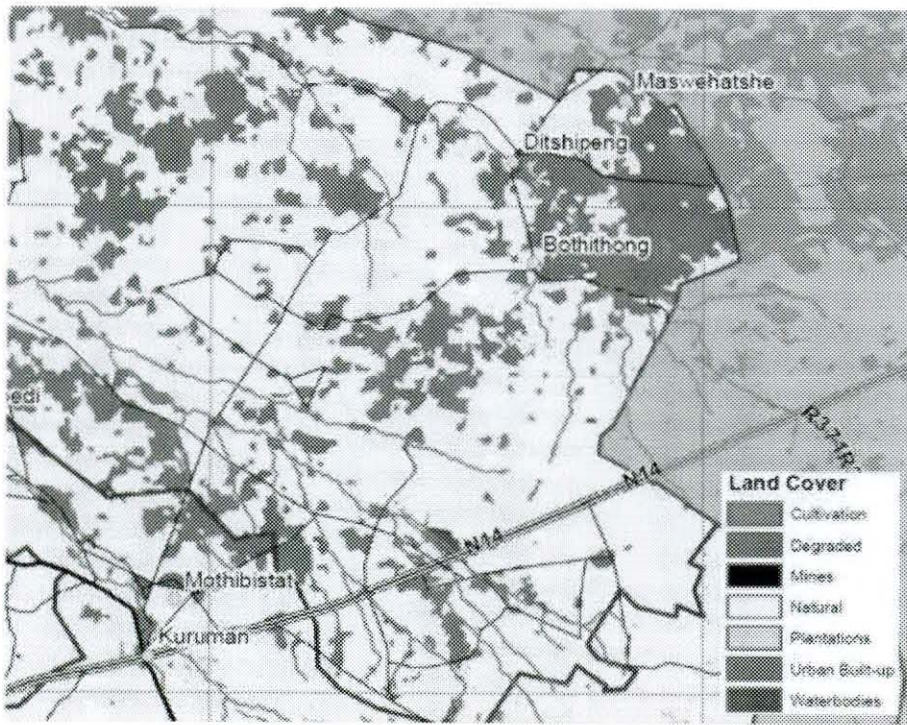
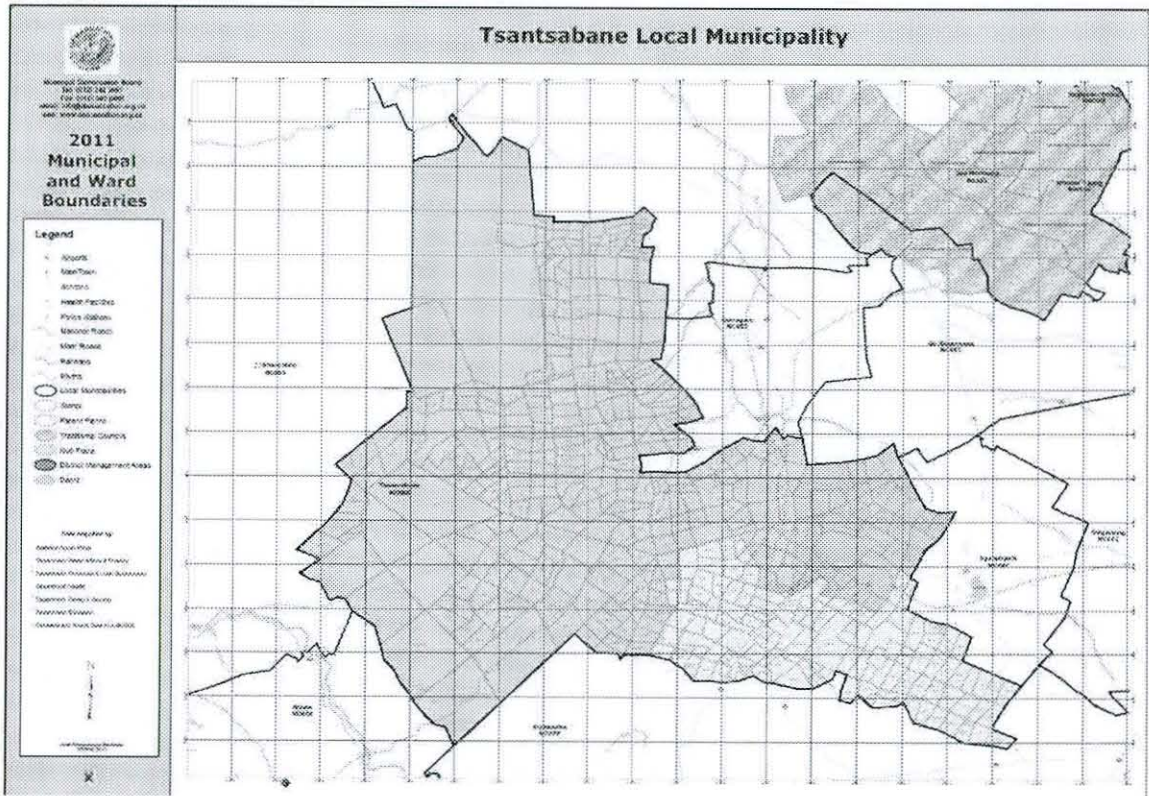
1.2 The specific environmental features on the site applied for which may require protection, remediation, management or avoidance.

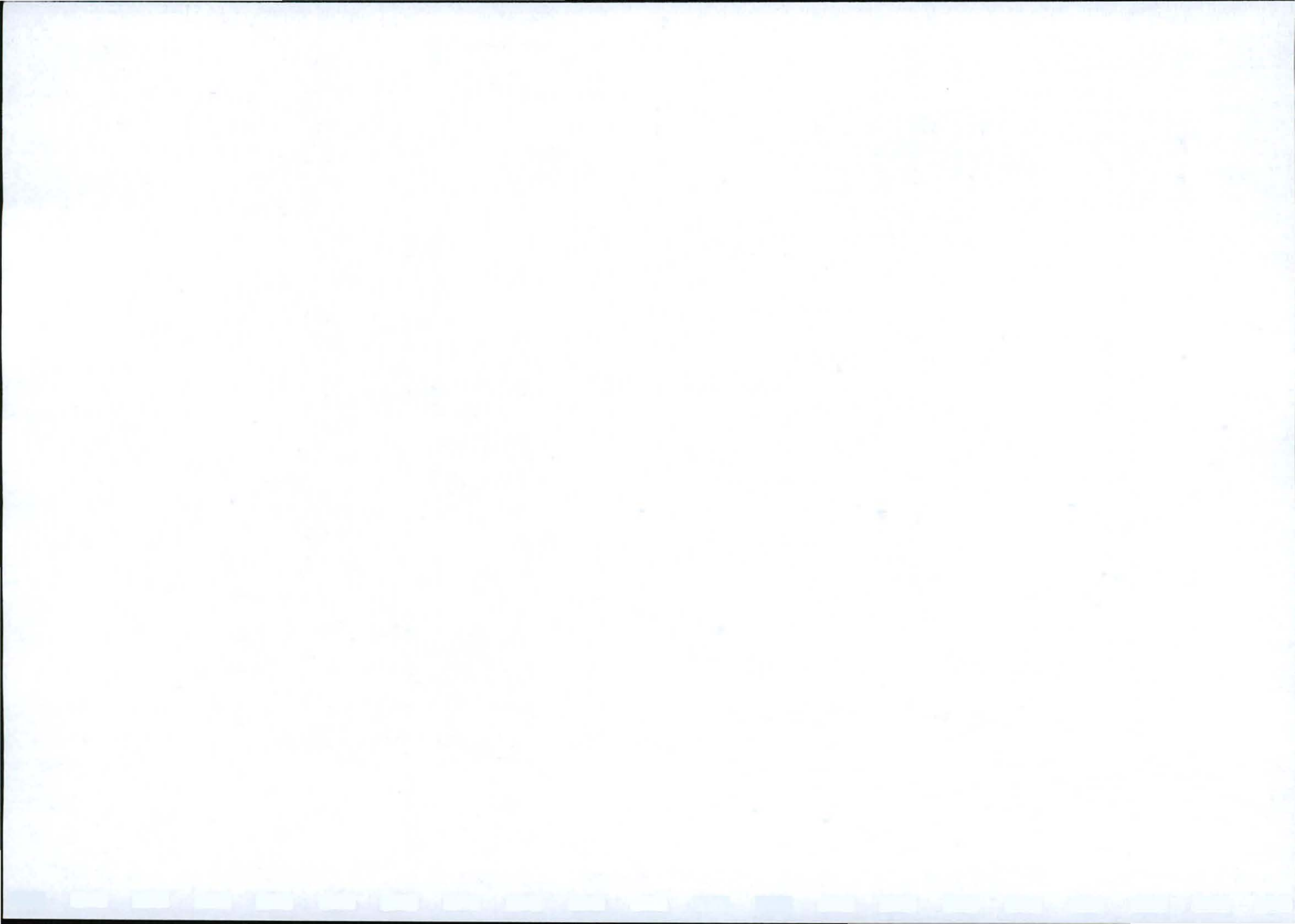
The proposed prospecting area is mainly covered with the soil type of Pedocutanic and Prisma-cutanic horizon. There is also an occurrence of melanic, vertic and red structured diagnostic horizon. Plinthic catena, upland duplex and margalitic soils common.

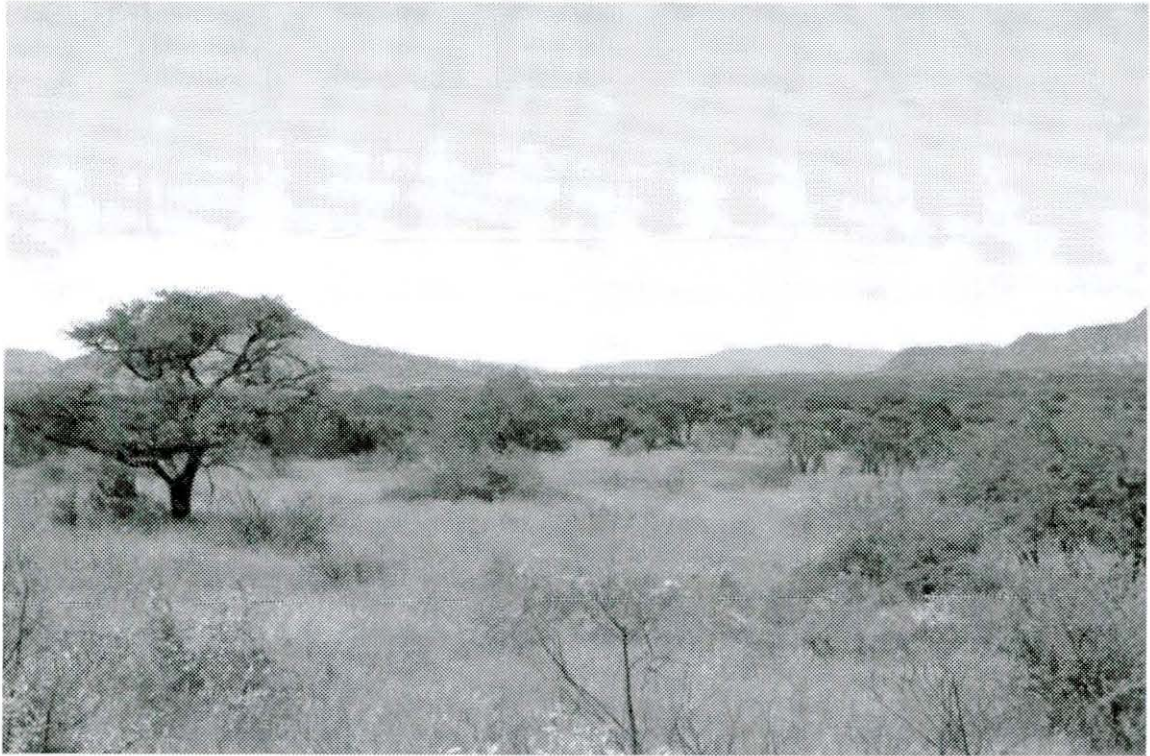


1.3 Map showing the spatial locality of all environmental, cultural/heritage and current land use features identified on site.

The Locality Map of the Beesthoek, Plaas 447 & 475 fRMSs:







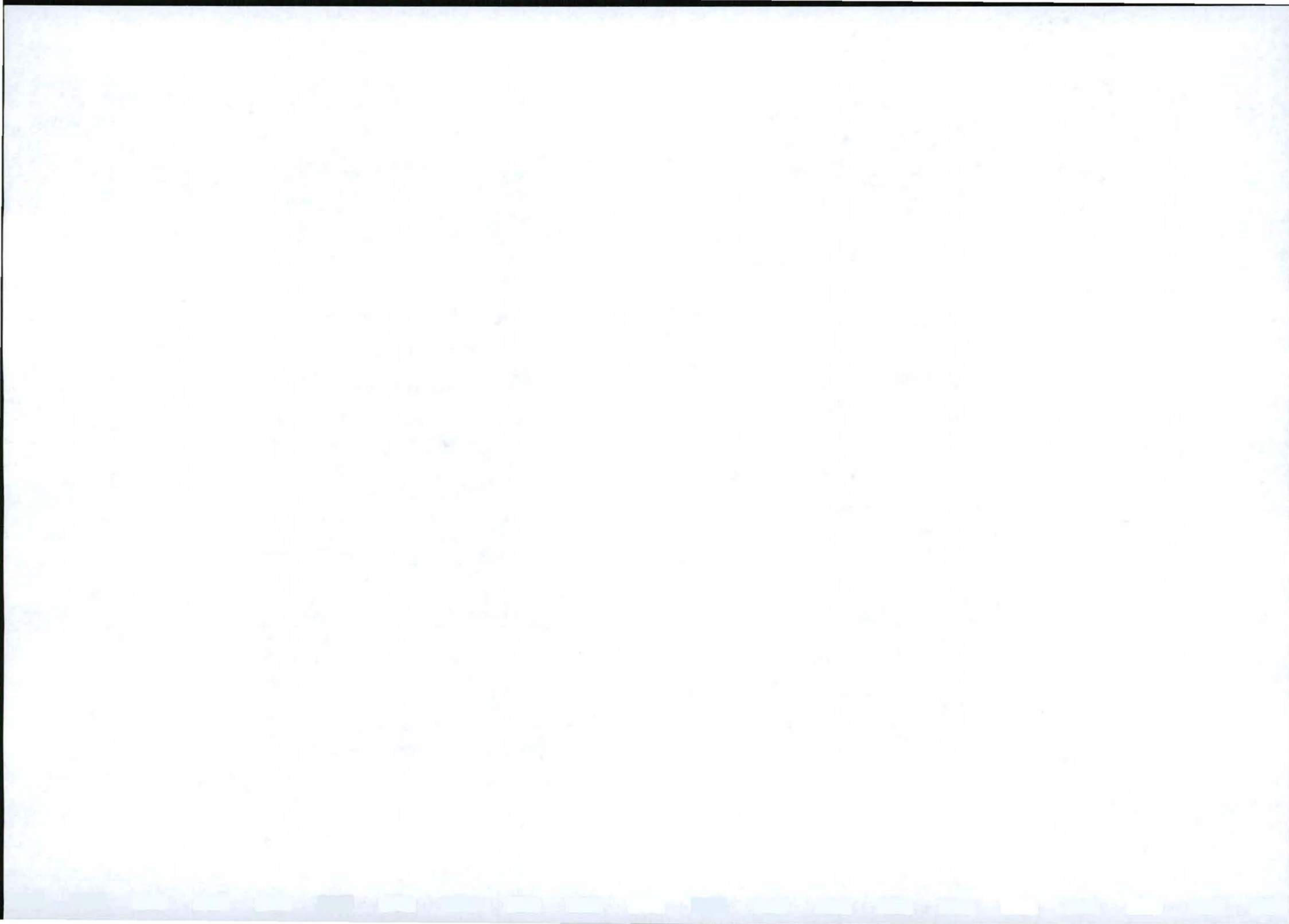
Plaas No. 447 Site Map

There is mining activity taking place on Beesthoek farms by Assmang Ltd and an aerial view is attached hereto, Iron ore and mineral pigments, are mined on a smaller scale at the Beeshoek Mine west of Postmasburg and at Rooinekke further to the south, while exploitation of the adjacent Postmasburg manganese field was discontinued in favour of the larger Kalahari field.:



—D [Beeshoek Mining Activity, Assmang Ltd

1.4 Confirmation that the description of the environment has been compiled with the participation of the community, the landowner and interested and affected parties,



The compilation of the description of the environment has been through government departments and excluding Assmang, which has objected to our Prospecting Right. There are ongoing consultation with the Affected Parties, including Assmang Ltd and hope a resolution will be found in future.

2 REGULATION 52 (2) (b): Assessment of the potential impacts of the proposed prospecting or mining operation on the environment, socio-economic conditions and cultural heritage.

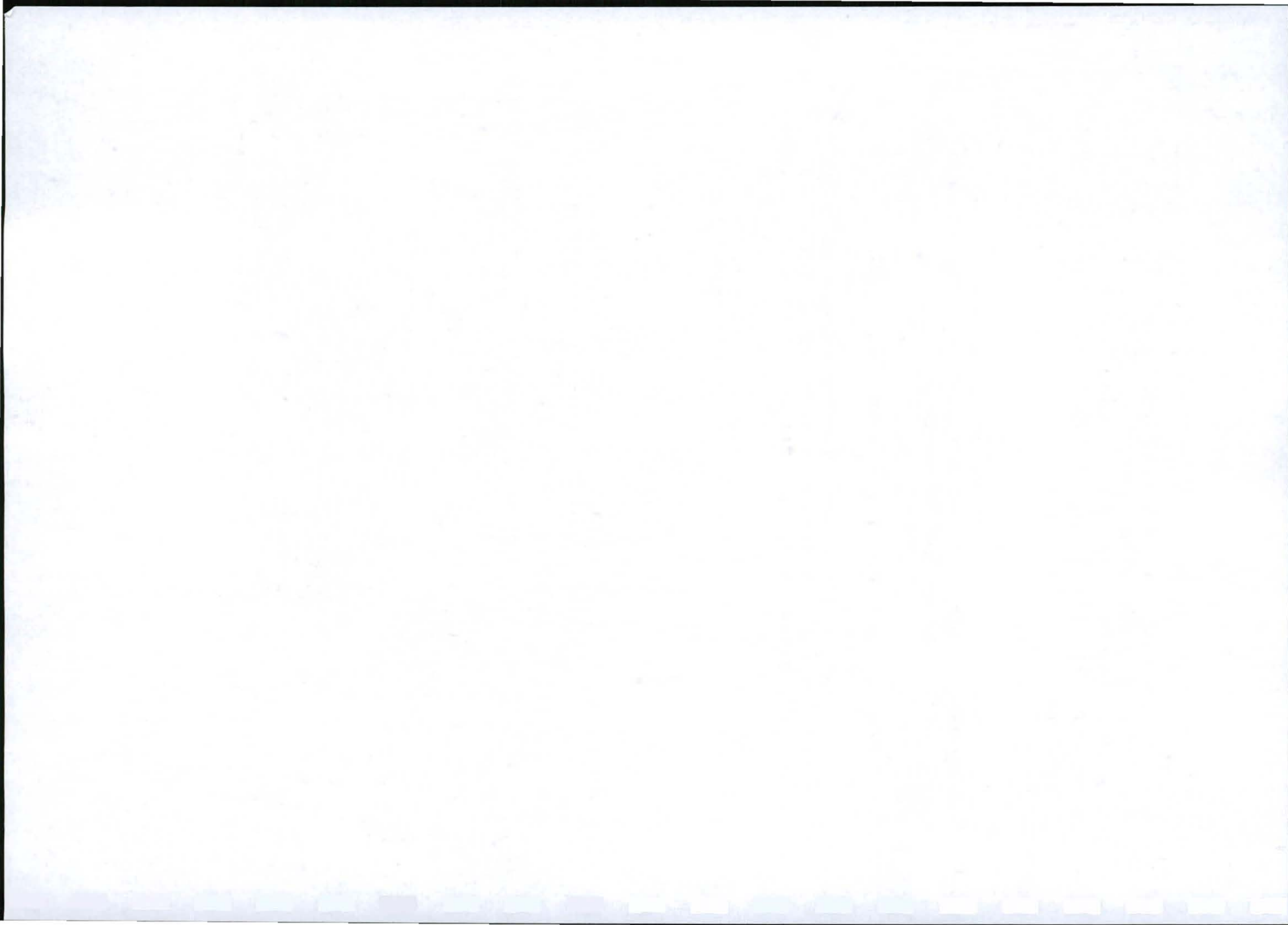
2.1 Description of the proposed prospecting or mining operation.

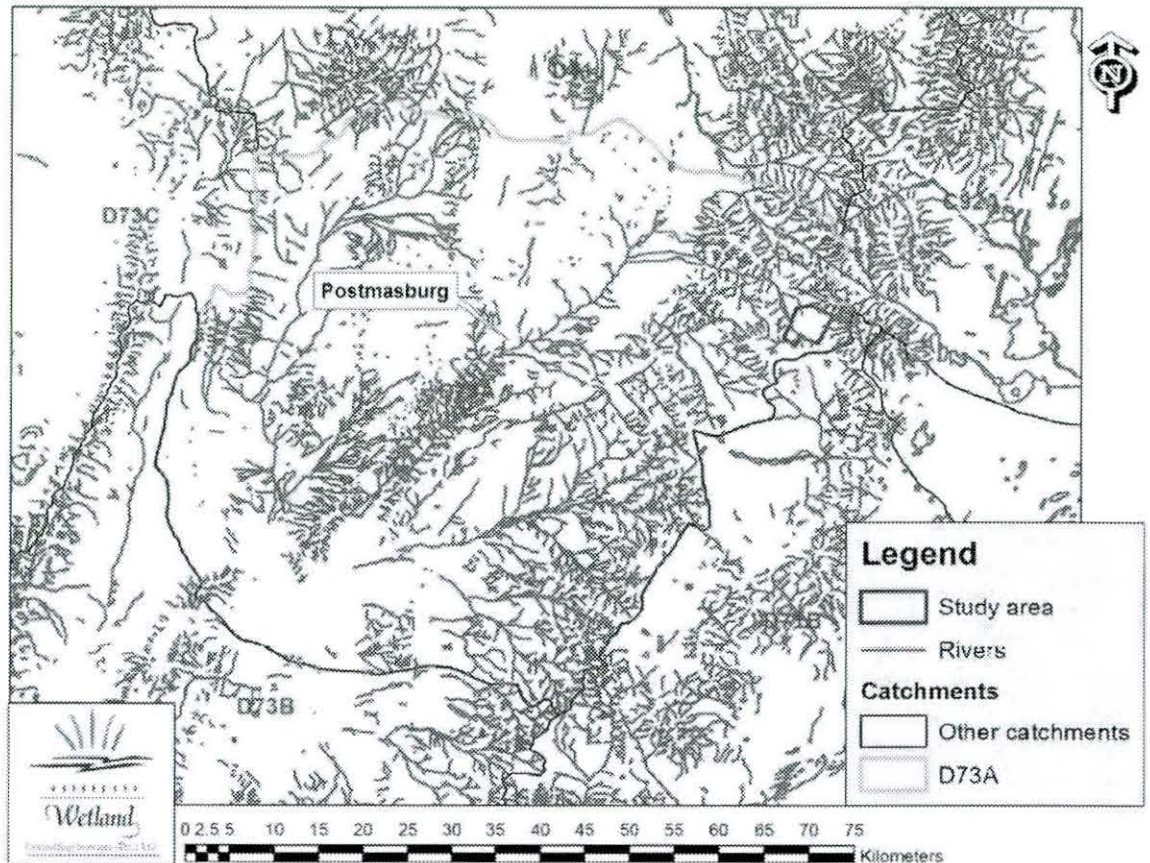
2.1.1 The main prospecting activities (e.g. access roads, topsoil storage sites and any other basic prospecting design features)

Beesthoek FRMS is located in Beeshoek, Postmasburg area of the Northern Cape. Access to the site shall be by means of permanent access roads. has mining activity



The Aerial Map of Beesthoek and Plaas 447 & 475 FRMSs



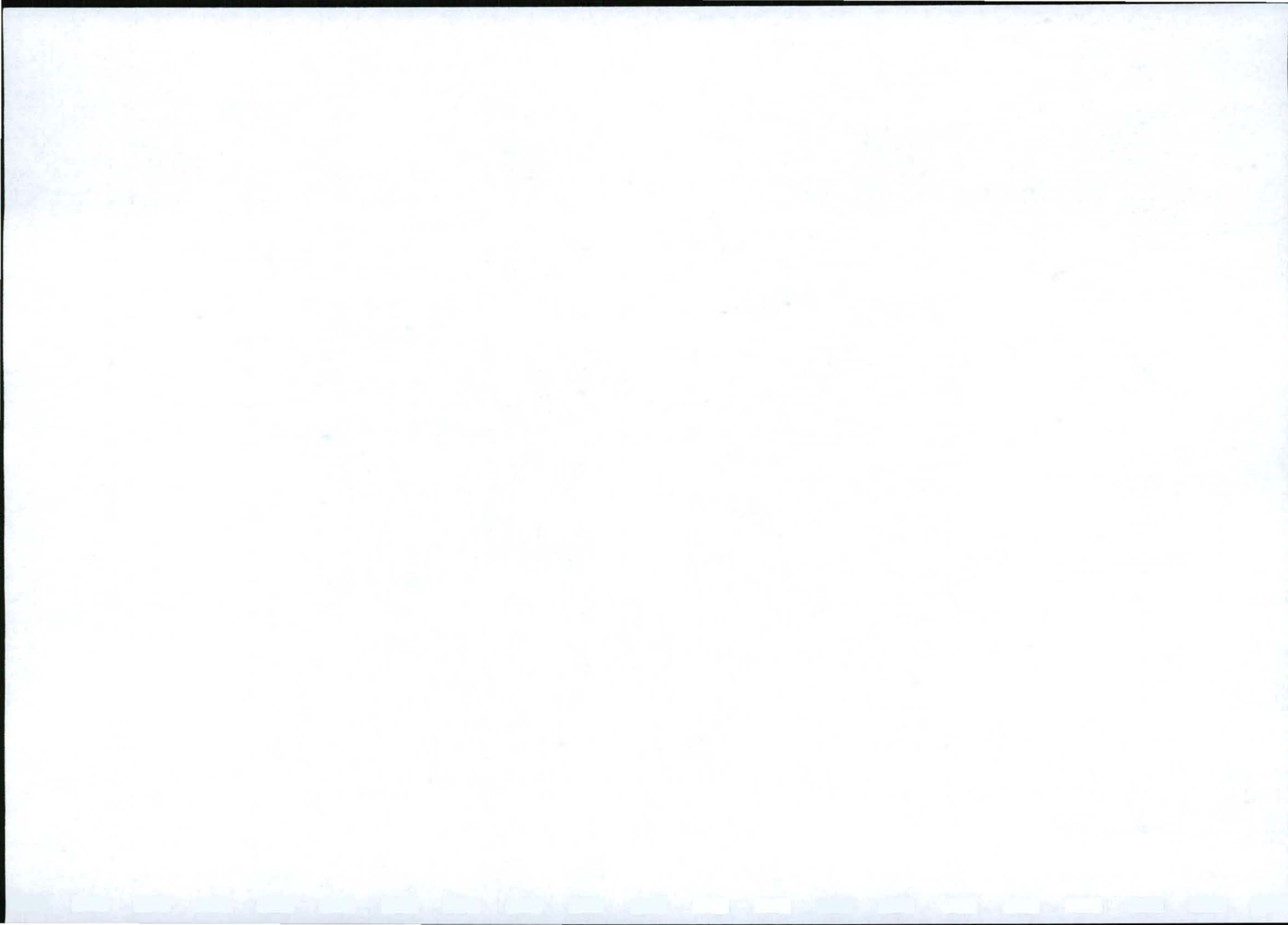


Aerial Map Beeshoek, Plaas 447 & Plaas 475 and catchments

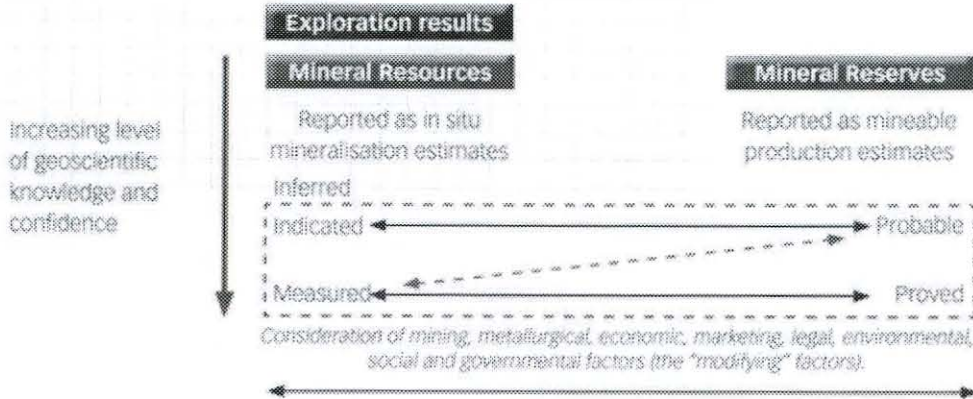
2.1.2 Plan of the main activities with dimensions

The Plan of the main activities on the fRMSs Beeshoek, Plaas 447 and Plaas 475 involves prospecting for Manganese Ore minerals and eventually conduct open cast Manganese Ore mining on the said fRMSs. Mining of Iron Ore was undertaken by Assmang Ltd as early as 1975. Beeshoek comprises an area of 5 685.6124 ha, Plaas 447 comprises an area of 1 4523.54 ha and Plaas 475 comprises an area of 2 165.2345 ha. The Manganese Ore deposits are contained within the sequence of early Proterozoic sediments of the Transvaal Supergroup. Two types of ore are present, viz laminated hematite or forming part of the Manganore Iron Formation and the conglomerate ore belonging to the Doornfontein Conglomerate Member at the base of the Gamagara Formation.

The methodology to be followed includes identifying targets initiated with geological mapping, followed by geophysics (ground magnetic and gravity). Percussion drilling will be used to pilot holes through overlying waste rock down the manganese ore bodies. Diamond drilling will be the next phase, which is usually on a 200 x 200m grid. A number of holes will be drilled as per our Prospecting Work Programme. Core samples will be logged and split by means of



diamond saw and half-cores will be sampled every 0.5m. Before submission for assaying, the half-cores will be crushed, split and pulverised. Samples with values larger than 60% will be included in the orebodies. Any lower grade samples inside the orebody will be defined as internal waste and modelled separately.



All holes will be analysed for density and blast holes in ore will be sampled and analysed for Mn, potassium oxide (K₂O), sodium oxide (Na₂O) and silica (SiO₂), aluminium oxide (Al₂O₃), phosphorus (P), sulphur (S), CaO, MgO, Fe and barium oxide (BaO). Volumetric titration will be used as verification method for the determination of total Manganese in the ore. International best practise will be implemented in determining the Manganese in the ore.

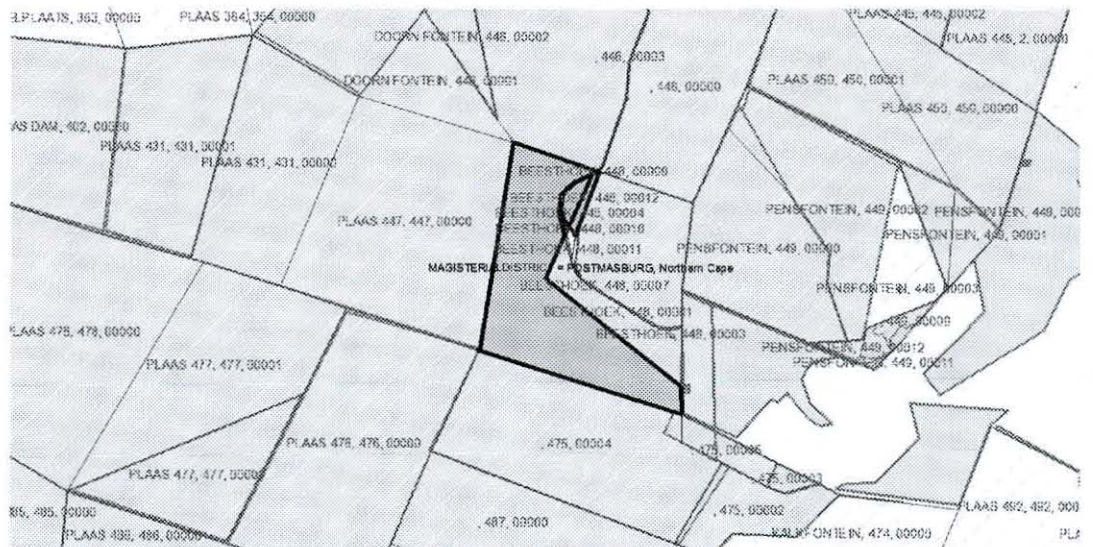
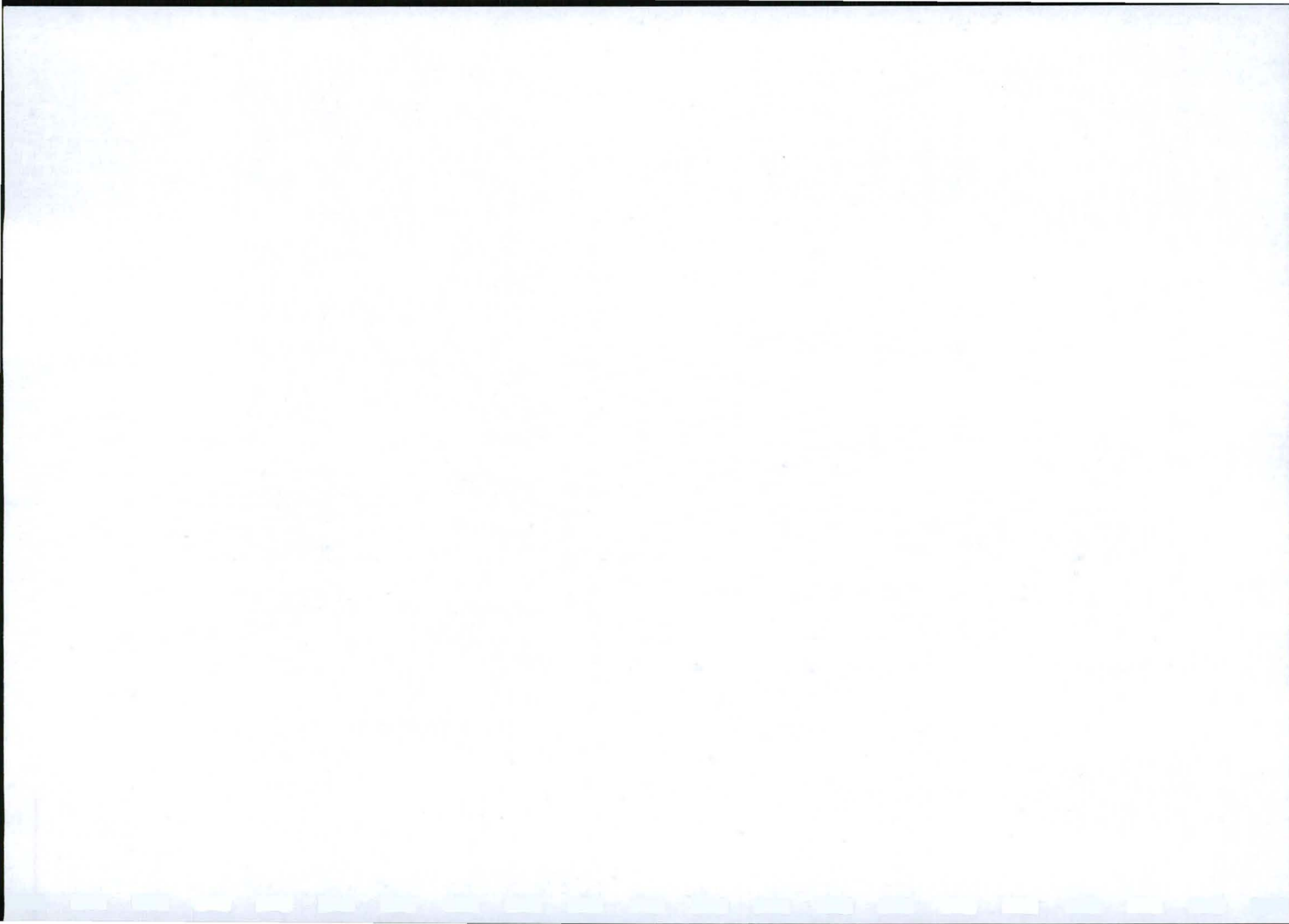


Figure 1 Beeshoek, Plaas 475 and Plaas 447 Locality Map



2.1.3 Description of construction, operational, and decommissioning phases.

Since we are applying for Prospecting Right, we do not anticipate any construction, operation and/or decommissioning any plant, until the Prospecting Right is confirmed and granted. We will be able to submit relevant information after the Prospecting Right for Manganese Ore has been granted.

2.3.1 Construction Overview

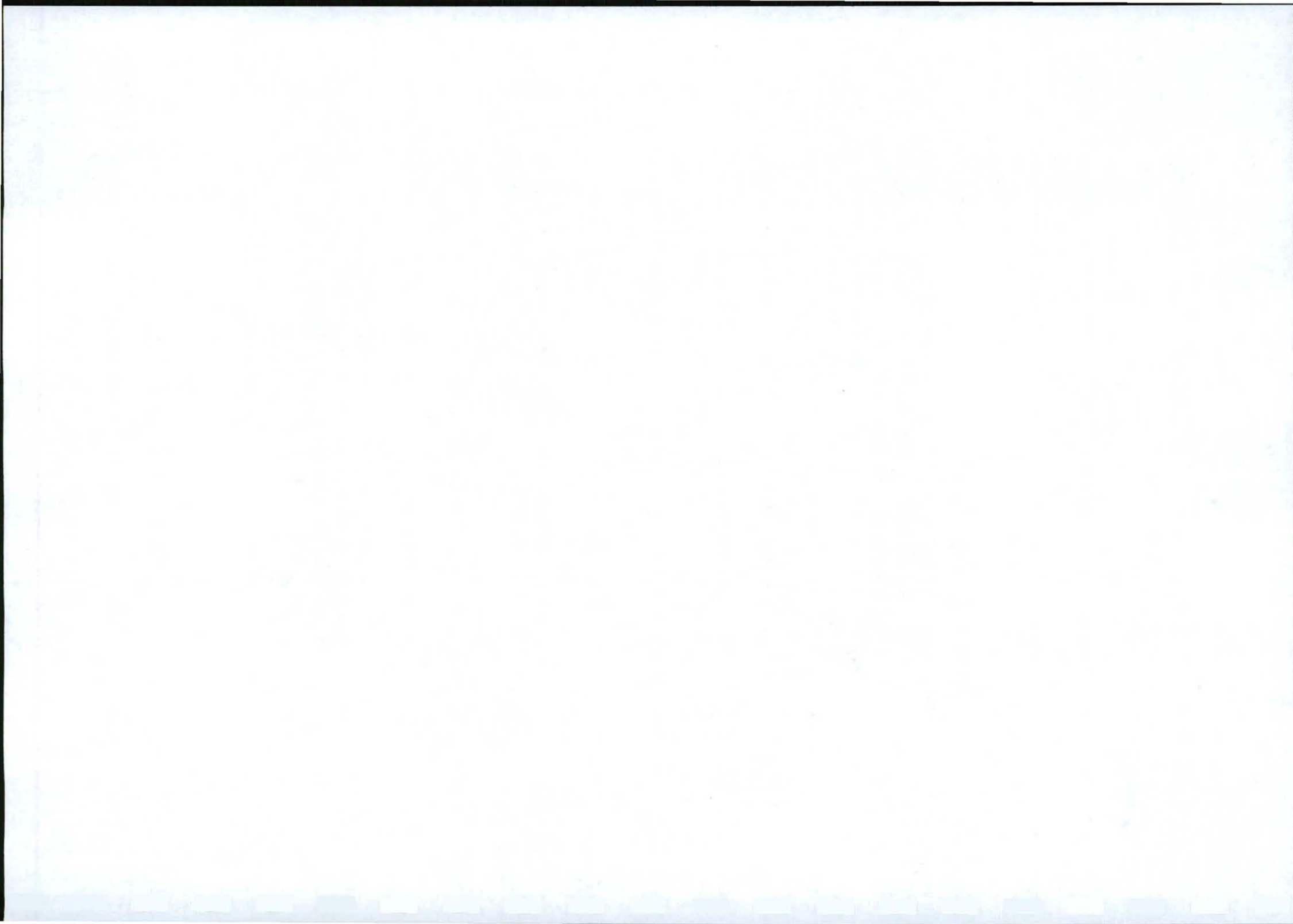
It is anticipated that a temporary contractor's housing facility will be utilised for the duration of the Prospecting Right period. It is estimated that in total approximately 15 persons will be employed during the prospecting phase, over the estimated 30 month construction period. Approximately 600 persons during the mining operation. Person to be employed on a full time basis will be confirmed during the detailed EIA phase. It is proposed that temporary/portable housing, ablution and sewer treatment facilities be procured from external service providers. Potable water for domestic use at the facility will be sourced from the Local Municipality of Hay and wastewater and sewage will be treated with the use of a modular sewer treatment plant with capacities to be confirmed during the EIAR phase. Primarily construction will entail amongst other the following activities:

- Site establishment and the construction of access roads if need be and services;
- drilling of holes in order to determine the level of seams and the type of minerals and no heavy earthworks during prospecting phase; and
- Construction, assembly and commissioning of screening, washing plant and processing plant.

2.3.2 Operation Overview

In simplified terms operation entails the blasting, sorting, screening, washing and processing the ore through the conversion & technological application. The inputs into the plant during operations include:

- Blasting & excavation of ore material;
- Water;
- Screening Plant;
- Washing Plant; and
- Sorting and Processing Plant



The four primary subsystems of the plant each comprises of a number of activities, systems and cycles and has to work in unison to produce Manganese Ore and each of these subsystems has to be kept and maintained in good working order to ensure that quality and according to specification Mn is produced, without any downtime during crucial operating hours. Although much of the plant and operations are automated operators and maintenance staff will be required to ensure that the plant is well maintained and functions optimally, Operation of the facility will entail the regular maintenance of the site and infrastructure, management of waste facilities and the replacement of consumable items and/or damaged equipment to ensure that the plant operates optimally. This maintenance will as far as possible be scheduled to times that the plant is not operational to improve productivity. Unscheduled repairs and maintenance will likely occur as a result of breakdowns and emergency situations.

2.3.3 Technology Overview

Technologically advanced and different Screening, washing & treatment and processing plants will be commissioned and with competent management support. Figure below indicates the flow process in mining Mn.

MANGANESE ORE BENEFICIATION PROCESS

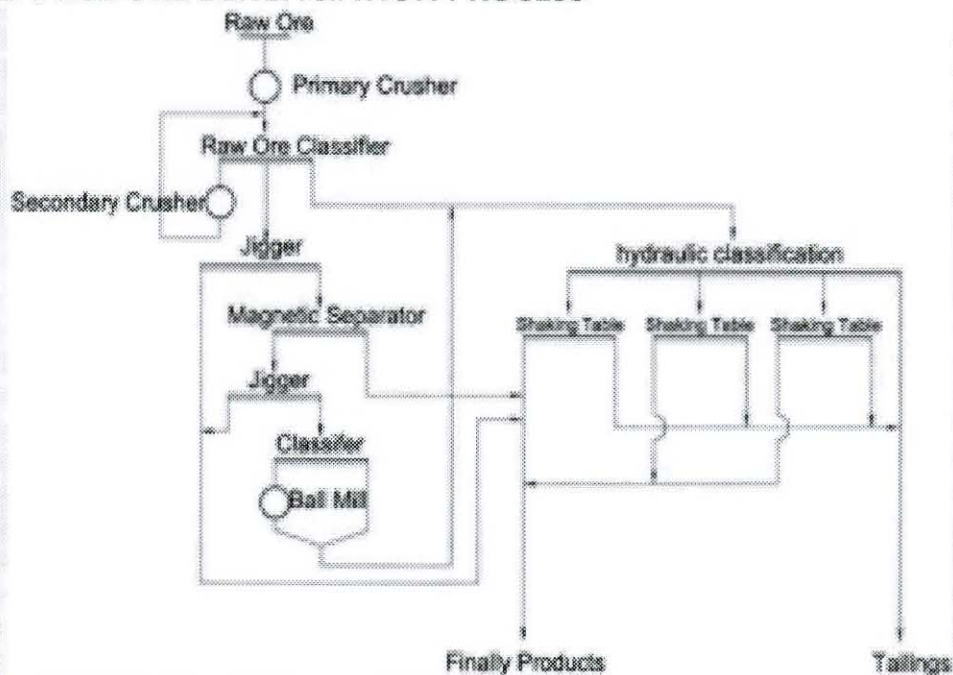


Figure 1, Manganese ore beneficiation process



The flow chart is not only for manganese ore, but also for gold, copper, iron ore and other common metal ore mining.

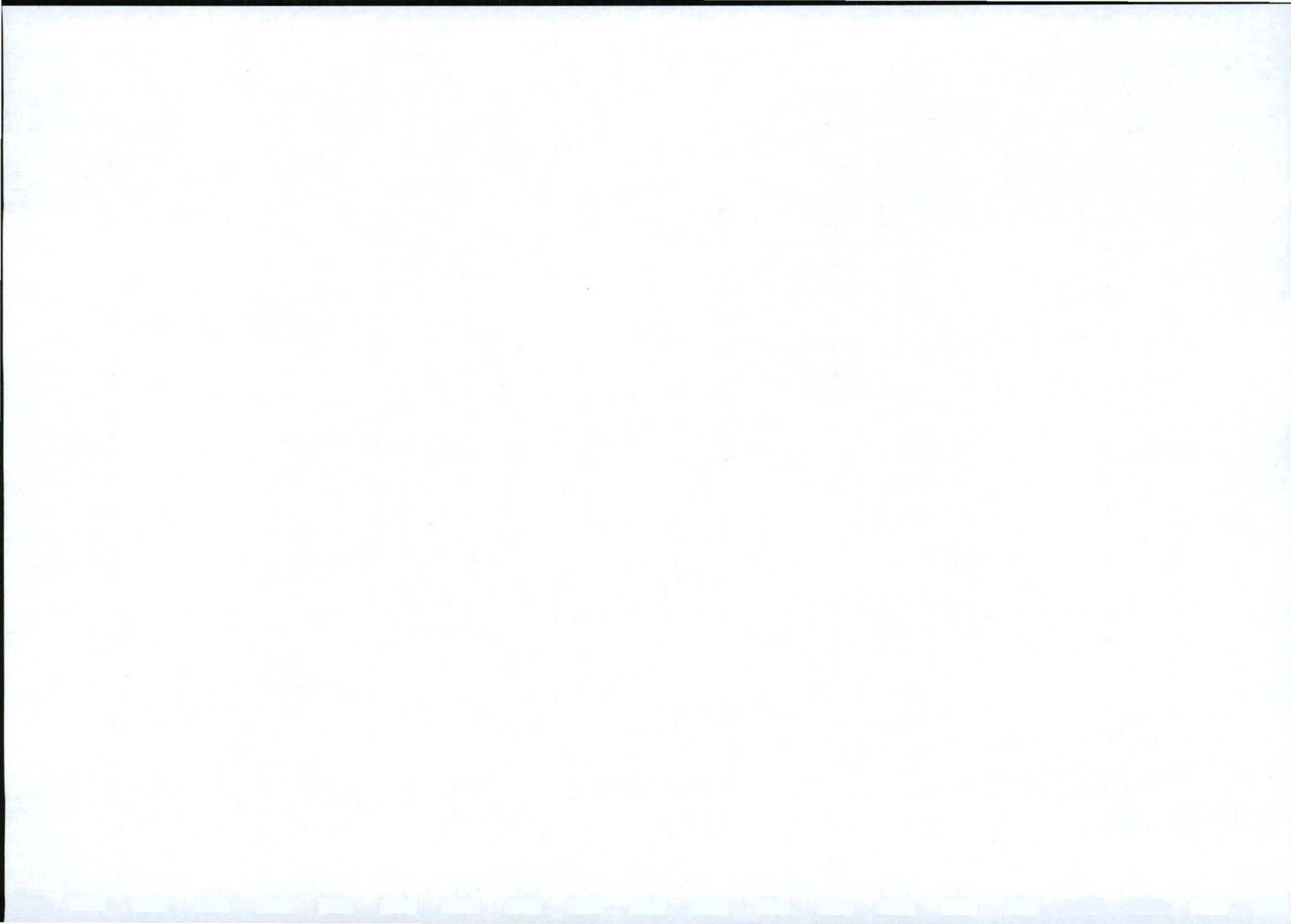
Beneficiation Processing Flowchart: The stone is sent to the jaw crusher to be crushed for the primary crushing. The material whose size is suitable for the feed size of the ball mill is sent regularly by the vibrating feeder to the ball mill, the material was crushing and grinding by the ball mill and then enter into next stage for classifying. The spiral classifier used to clean mud and classified mixed mineral according to the different grains have different specific gravity and sedimentation rates in liquid. The classified mineral grains will be separated by the magnetic separator. The magnetic materials will be sent to tailings ponds. Excluding magnetic materials will be entered into jigger for separating, the medium size grains. The other materials classified once again. The big size grains grinding and then classified, the classified materials will be separated and dewatering, the concentrate will be separated.

The project will consist of the following main components:

- Blasting & conveying of ore;
- Screening & washing of the ore material;
- Sorting, processing & testing of the Mn ore material per size;
- Loading and storage of the finished product;
- Water reticulation from the Sedibeng Bulk Water Supply Pipeline for industrial water use, and a water treatment system to provide water that will be treated for both domestic and process use. The use of groundwater will be considered if water is not available from the Sedibeng pipeline;

The general operation and mining of Manganese Ore is summarised in the Figure 1 above.

This technology will be implemented & commissioned upon Razita Mining Resources Pty Ltd being granted the Prospecting Right for Manganese Ore.



Achieving South Africa's commitment to reducing greenhouse gas emissions through the implementation of world leading technology and solar processing will be investigated in the prospecting phase.

Have the opportunity to partner with a world leading technology developer and backed by one of the premier technology companies in the world; and

2.3.4 Listed activities (in terms of the NEMA EIA regulations)

This Scoping Report has been compiled as part of the EIA process in accordance with the regulatory requirements stipulated in the EIA Regulations (2010), promulgated in terms of Section 24(5) of the National Environmental Management Act (NEMA) (Act No. 107 of 1998), as amended. This document serves to:

- Provide a description of the proposed activity.
- Provide possible alternatives for the proposed activity.
- Outline the legislative context.
- Provide a background study into the environmental setting of the proposed activity.

Need and desirability

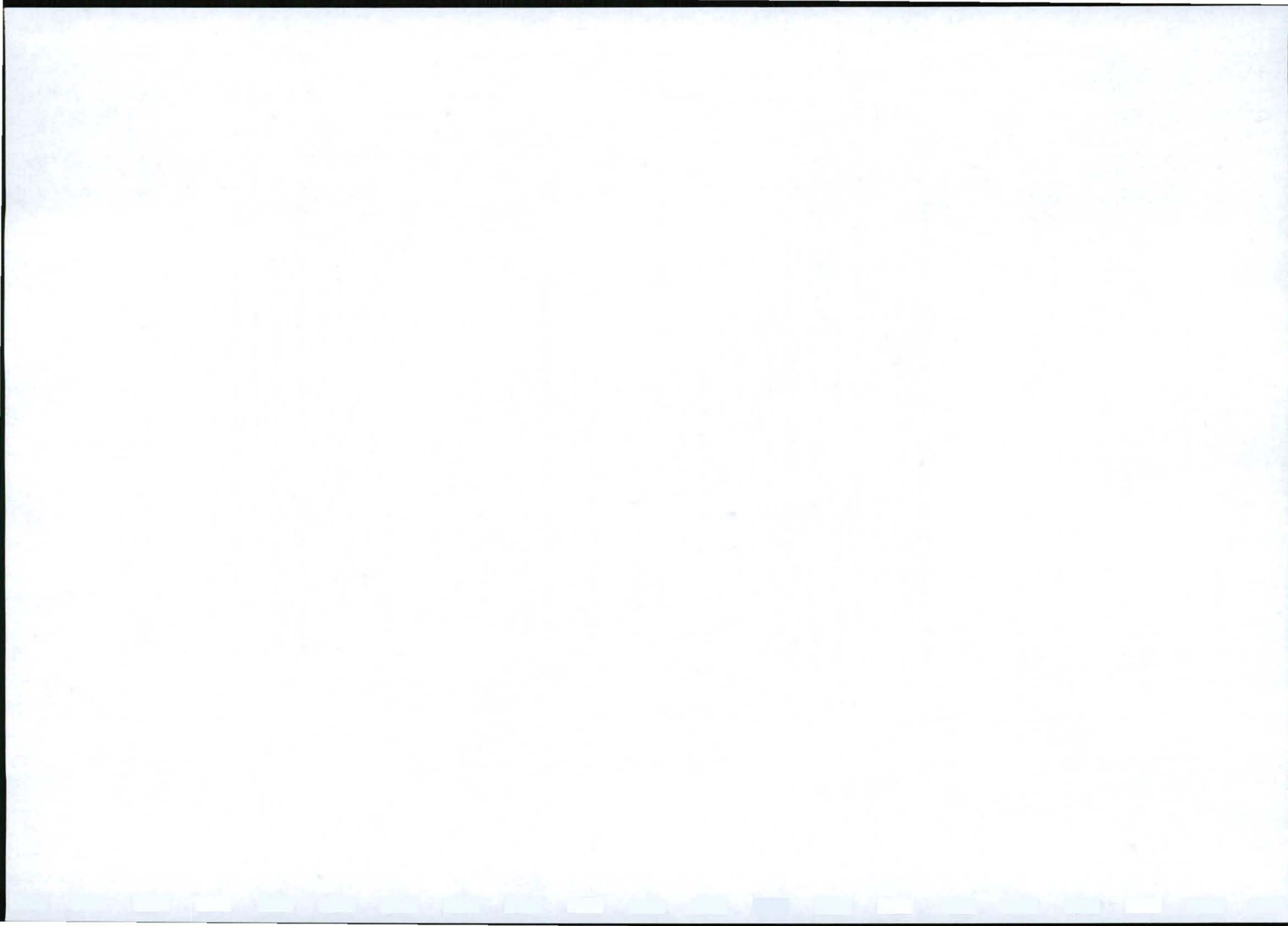
- Identify possible impacts of the proposed activity – positive and/or negative –on:

- o The natural environment;**
- o The social environment;**
- o The economic environment;**

- Identify issues/concerns/alternatives through a Public Participation Process; and
- Provide a Plan of Study for EIA.

A number of specialist assessments were conducted specifically for this scoping report but available and applicable specialist reports were also used to identify the impacts and to determine the additional specialist studies required to address/mitigate impacts. The following assumptions and limitations underpin the during the EIA phase.

An Environmental Impact Assessment (EIA) application will be lodged with the Department of Environmental Affairs (DEA) in terms



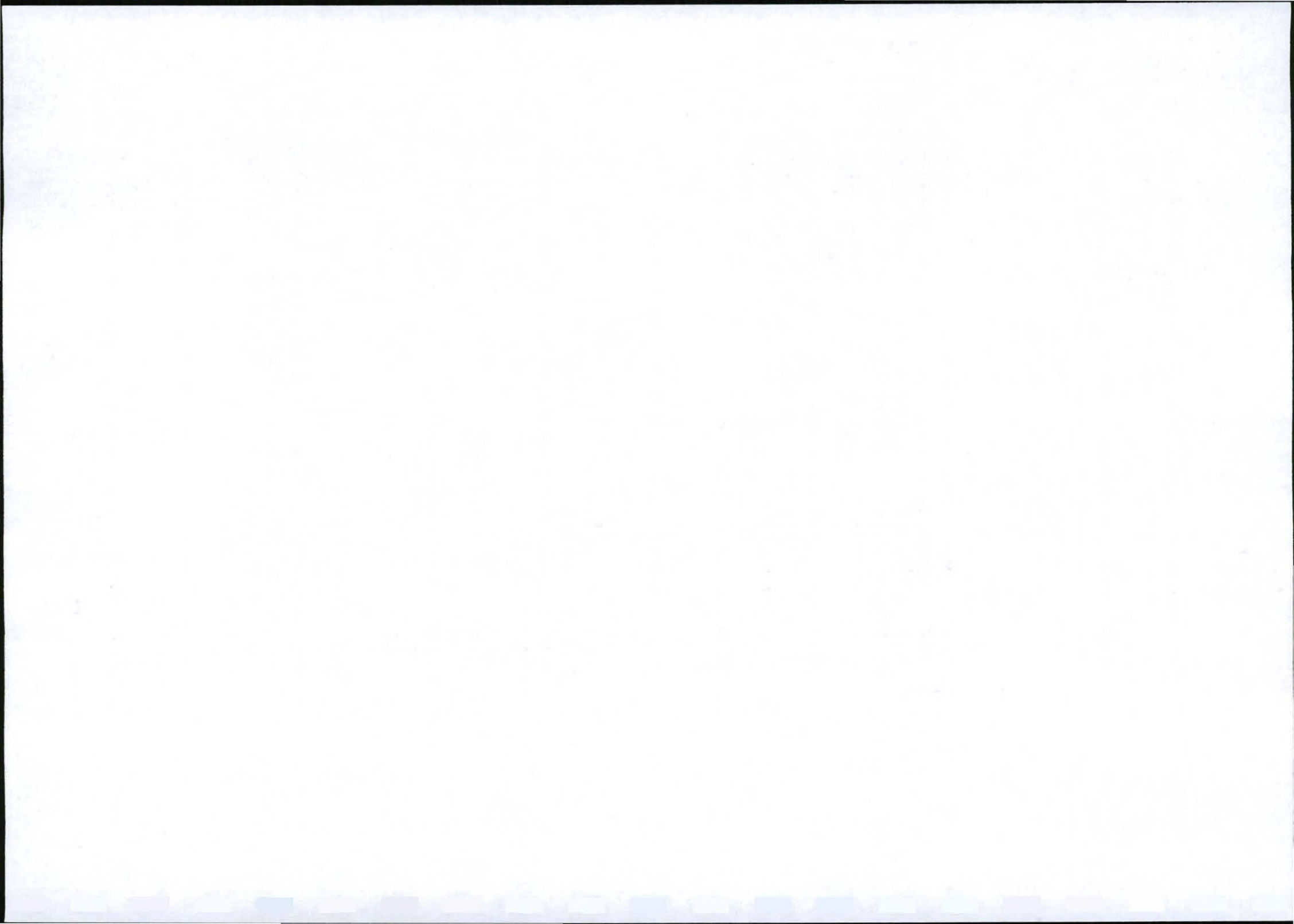
of the National Environmental Management Act (Act 107 of 1998) (NEMA) and the EIA Regulations. The EIA process will determine the potential impact of the facility and whether it can be sustainably constructed and operated by negating potential negative impacts through the identification and implementation of suitable mitigation measures. The proposed Prospecting Phase for Manganese Ore aims to utilise the best technology in determining the Mn resources on the said farms and whilst creating employment, skills development opportunities and stimulating the local and national economies. This Scoping Report provides the background to the project, describes the site, introduces the proposed technology and alternatives and identifies possible impacts on the environment. It also outlines the Public Participation Process that will be followed, presents the Plan of Study for EIA that will be adopted during the EIAR phase and makes recommendations to be considered during the EIAR process.

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- Provide a Plan of Study for EIA.

A number of specialist assessments were conducted specifically for this scoping report but available and applicable specialist reports were also used to identify the impacts and to determine the additional specialist studies required to address/mitigate impacts.

The following assumptions and limitations underpin the approach to this EIA study:



- The information received from the stakeholders, specialist assessments are current and valid at the time of the study;
- A precautionary approach was adopted in instances where baseline information was insufficient or unavailable;
- Assmang Ltd is mining Iron Ore on Beeshoek farms, on the same property is adjudicated independently from this EIA even though the cumulative impacts of both operations will be addressed in this EIA.
- Mandatory timeframes will apply to the review and adjudication of the reports by the competent authority and other government departments; and
- No land claims have been registered for the proposed site at the onset and registration of the study. Assmang Ltd has objected to the Prospecting Right for Mn, even though Assmang Ltd mine has reached its maximum lifespan.
- Due to the complexity of the technology to be implemented the Scoping Report will provide preliminary estimations on sizes and proposed infrastructure and or components. These items will only be finalised during the Environmental Impact Phase of the project. For this reason it needs to be kept in mind that all technical specifications will only be finalised during the EIAR Phase.

The Scoping Report Phases comprises the following aspects:

- The background and description of the various elements of the project;
- The legislative context of the study;
- The details of the proponent and EAP;
- The need and desirability of the project;
- A description of the scope of the project;
- The property description of the proposed site;
- A discussion of the alternatives;
- Baseline descriptions of all the biophysical and socioeconomic aspects;
- A description of the Public Participation Process conducted for the Scoping Phase;



- Impact identification; and
- A plan of study for EIA giving a detailed impact assessment methodology and timeframes.

2.4 Identification of potential impacts

2.4.3 Potential impacts per activity and listed activities.

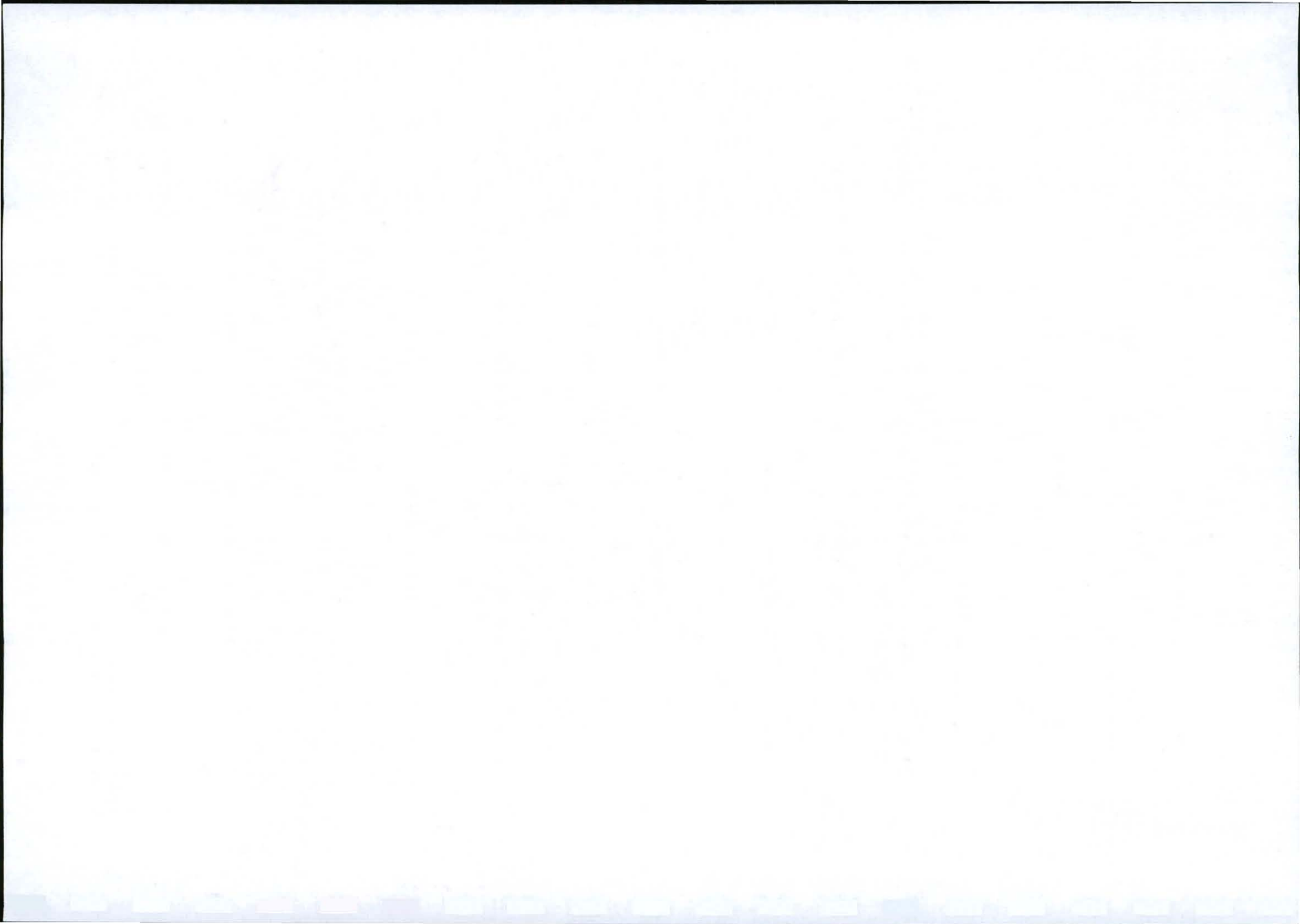
These four impacts per activities form the Scope of Work for the study and are described as follow:

2.2.1.1 EIA Process Development and Initiation

It is required that proper planning be conducted in order to ensure that the EIA is conducted according to the legislative requirements and that the process is sound. In order to develop a sound EIA process it is required that an extensive legal gap analysis is conducted and a proper program developed, scheduling all the required activities. The initiation of the EIA process must involve consultation with institutional stakeholders, including Assmang Ltd in order to identify potential impacts, alternatives and key burning points relating to the Prospecting for Manganese Ore early in the process. During the initiation of the EIA it is important that the project alternatives are identify and assessed.

2.2.1.2 The Scoping Process

The Scoping process must involve the identification of key issues, concerns, alternatives and impacts, over and above what was identified and assessed during the initiation phase. The vehicle for this process is the public participation process (PPP), whereby Interested and Affected Parties (I&APs) has to be identified and engaged with to exchange information and to establish a platform of engagement. The information needs to form the basis from which to prepare the Scoping Report (SR) as well as the various terms of reference for the required Specialist Studies. The environmental baseline needs to be determined from which to assess the likely impacts of the



proposed development. Issues raised in the course of scoping must be presented in both the Scoping Report and the Issues and Response Report.

2.2.1.3 Detailed Impact Assessment

The impacts, alternatives and issues identified during the scoping needs to be assessed during this phase of the process by means of the identified specialist assessments. Mitigation measures must be proposed and the likely residual impacts highlighted in the Environmental Impact Assessment Report (EIAR). It is crucial that the PPP be continued throughout this phase as well in order to involve I&APs and ensure transparency in the reporting.

2.2.1.4 Environmental Management Programme

A crucial aspect of the EIA process is the formulation of the Environmental Management Programme (EMP). This programme must be contained within the Environmental Impact Assessment Report and is a concurrent activity to the Detailed Impact Assessment phase of the project. It must state the actions to be implemented during the construction, operation and decommissioning phases of the proposed project in order to achieve the mitigation targets

2.4.4 Potential cumulative impacts.

A systematic approach will be adopted for the successful completion of the EIA in line with the regulated process, any potential cumulative impacts will be assessed in line with the Scoping Work. This is a Prospecting Phase and no cumulative impacts are anticipated.

2.4.5 Potential impact on heritage resources

There are no heritage sites identified on Beeshoek, Plaas 447 and 475 fRMSs, except graves that was not conclusively identified on the Plaas 447 & 475 farms.

With regards to the heritage resource management there are certain listed activities in Section 38 of the National Heritage Resources Act (NHRA) that require assessment of the potential



impact on the heritage resources. The applicable activities related to the proposed Mn mining development includes but are not limited to the following:

(1) Subject to the provisions of subsections (7), (8) and (9), any person who intends to undertake a development categorised as—

(a) the construction of a road, wall, power line, pipeline, canal or other similar form of linear development or barrier exceeding 300m in length;

(b) any development or other activity which will change the character of a site—

(i) exceeding 5 000 m² in extent; or

(ii) the costs of which will exceed a sum set in terms of regulations by SAHRA or a provincial heritage resources authority;

(c) the re-zoning of a site exceeding 10 000 m² in extent; or

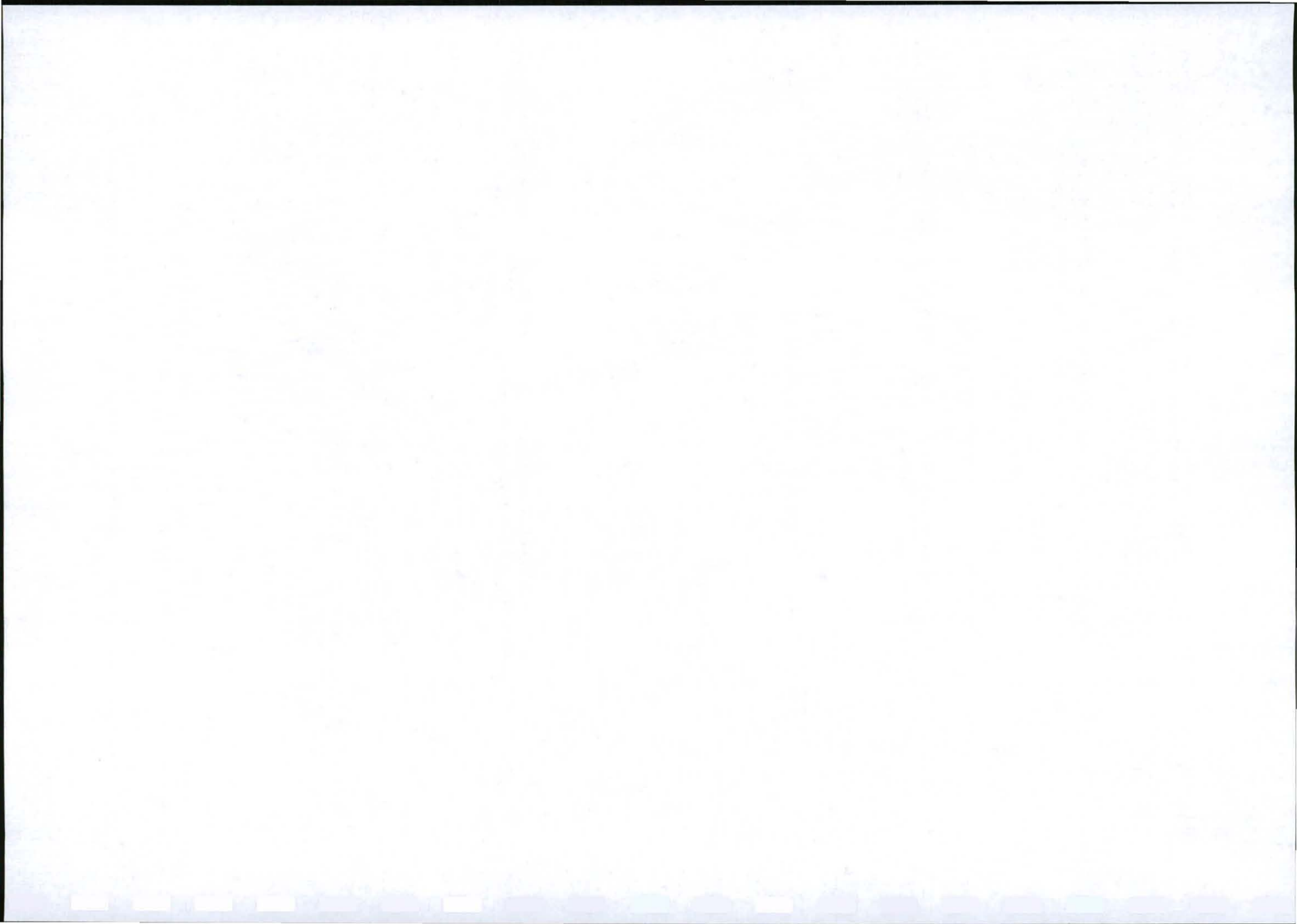
(d) any other category of development provided for in regulations by SAHRA or provincial heritage resources authority, must at the very earliest stages of initiating such a development, notify the responsible heritage resources authority and furnish it with details regarding the location, nature and extent of the proposed development

2.4.6 Potential impacts on communities, individuals or competing land uses in close proximity.

There are no potential impacts on communities, individuals or competing land uses in Plaas 447 and Plaas 475 fRMSs.

Assmang Ltd is mining Iron Ore in Beeshoek, however the Assmang Ltd mining operation has reached the end of its life span. A Prospecting Right model for Manganese Ore will be negotiated with Assmang Ltd, since the mineral prospecting for falls in the same ferrous seam, albeit different mineral and lot of Mn dumps on site.

2.4.7 Confirmation that the list of potential impacts has been compiled with the participation of the landowner and interested and affected parties,



The Potential Impacts can be classified as follows:

2.2.5.1 Water plays a vital role in the socio-economic growth and development of the country. This growth and development is founded in the national goals of Government as contained in the policy for Accelerated Shared Growth Initiative for South Africa (ASGISA).

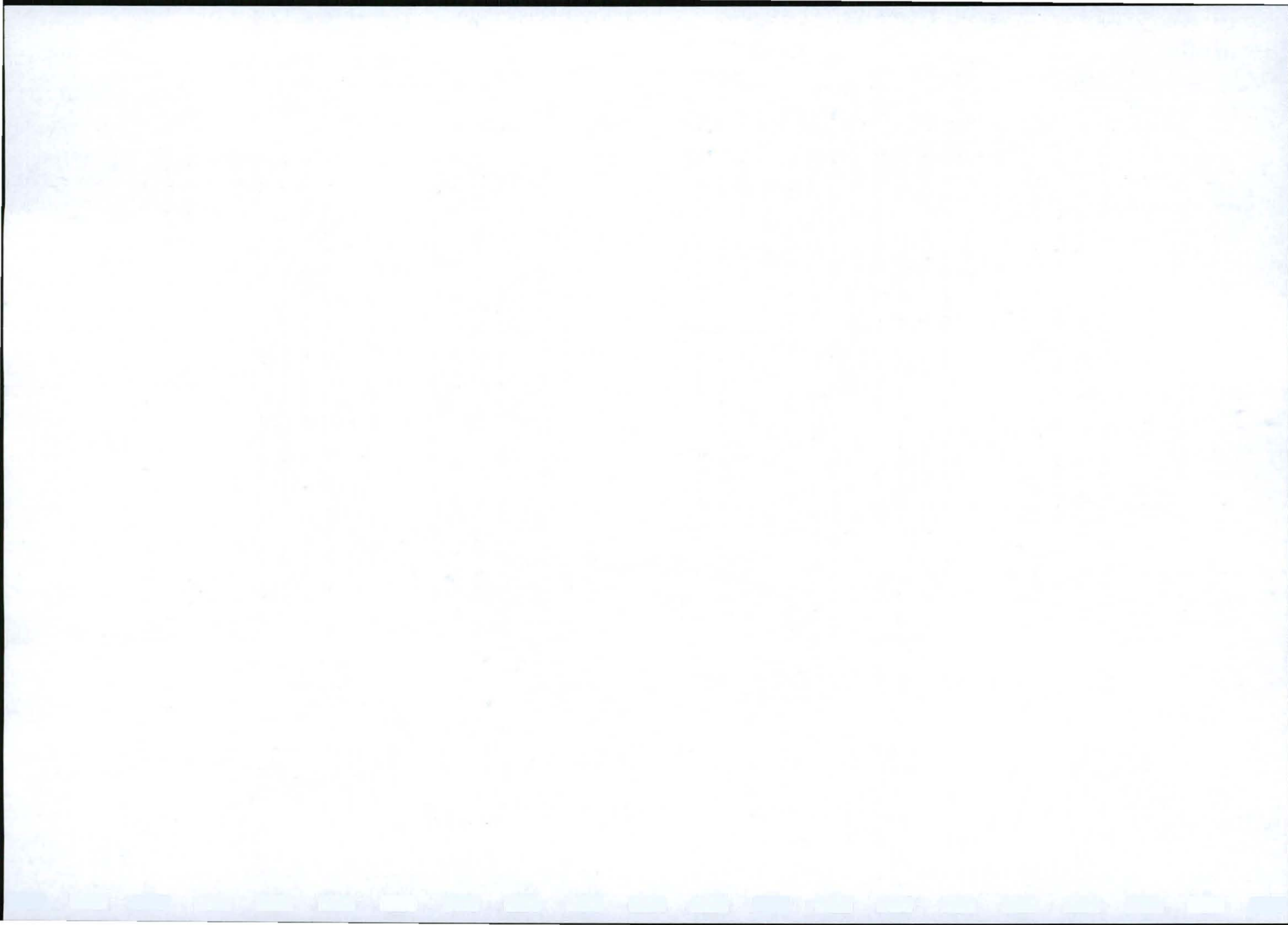
The indivisibility of water as part of the hydrological cycle is scientifically recognised and the **water resource** is defined in section 1 of the NWA as being all water found in the various phases of this hydrological cycle, including that portion of the water found underground. This ensures that the entire water resource is treated in an integrated fashion and as a resource that is common to all. 2. National Government, through the Minister of Water Affairs and Forestry, as the **public trustee** of this resource, must establish a *national water resource strategy* for the protection, use, development, conservation, management, and control of water resources (section 3). DWAF is therefore accountable for ensuring that decisions do not adversely affect the integrity of the resource, but are made in a **just and equitable** manner that promotes sustainability.

2.2.5.2 Flora and Fauna

The steep slopes of the valleys contain temperate mountain bushveld dominated by *Acacia erioloba* though many other woody species are present. At some moist localities invasion of *Populus alba* is taking place. *Proteawelwitschii* is often present on the plateau side of the slope. The steep slope areas are high in biodiversity and are sensitive to erosion. Further north, within the same system, *Faurea saligna* and *Protea roupelliae* are prominent.

2.2.5.3. Grassland with scattered woody outcrops

These grasslands with scattered bush clumps are situated on gradual slopes within the hilly countryside. The vegetation is mostly open grassland often with *Hyparrhenia hirta* dominant, indicating some over-utilisation in the past. The grass layer is however, well developed, with sour grasses dominant. Rocky outcrops are dominated by scattered *Acacia erioloba trees*, but a variety of other woody species are present. This community is rich in species with various endemic or red data species encountered.



2.2.5.4. Arid Bushveld on northern slopes

This area is situated in the northern part of the property. The Arid Bushveld occurs on the complex rocky, wRMS and arid northern slopes of the mountains, representing different. Habitat conditions on the smaller scale, with differences in species composition. *Faurea saligna*, *Aloe marlothii* and *Aloe castanea* are examples of local prominent species. At the foot of these slopes are deeper sandy soils with *Terminalia sericea* dominant. A large variety of trees and shrubs is present.

- Acacia Erioloba;
- Rhigozum Tree

2.2.5.5 Assmang Ltd Iron Ore Mining Activity

Initial discussions has been initiated with Assmang Ltd and they have vehemently objected to our proposed Prospecting Right application, during the EIA further consultation will be conducted with Assmang Ltd and hope a favourable conclusion will be determined.

2.4.8 Confirmation of specialist report appended.

The Specialist EIA study will form part of the Mining Right Application and has not been appended hereto.

3 REGULATION 52 (2) (c): Summary of the assessment of the significance of the potential impacts and the proposed mitigation measures to minimise adverse impacts.

3.3 Assessment of the significance of the potential impacts

A site visit was undertaken in the study area in order to obtain a cursory overview of the potential risks and key issues associated with the Prospecting for Manganese Ore. Risks and key issues associated with the construction and operational phase were identified and addressed in consultation with I&APs, through a review process based on desk top studies, specialist input and the site visit. The risks and key issues identified during scoping, which must be carried forward into the EIA phase, include:

- Impact on groundwater;
- Impact on storm water;
- Dust (health and nuisance);
- Visual impacts;
- Noise impacts;



- Social impacts;
- Economic impacts;
- Road traffic impact;
- Impact on electricity supply;
- Waste management and impacts on energy requirements;
- Cultural and heritage resources;
- Availability of water;
- Cumulative impacts of expanding the Manganese Ore terminal, especially in the historical context of previous upgrades.

The potential impacts of construction, operation and maintenance of screening and sorting facility/equipments each of the three proposed farms sites were identified in terms of the most important parameters applicable to environmental management and alternatives will be assessed in the EIA phase. These impacts are discussed in a preliminary way in this Scoping Report to obtain an overview of the issues associated with each alternative layout.

3.3.3 Criteria of assigning significance to potential impacts

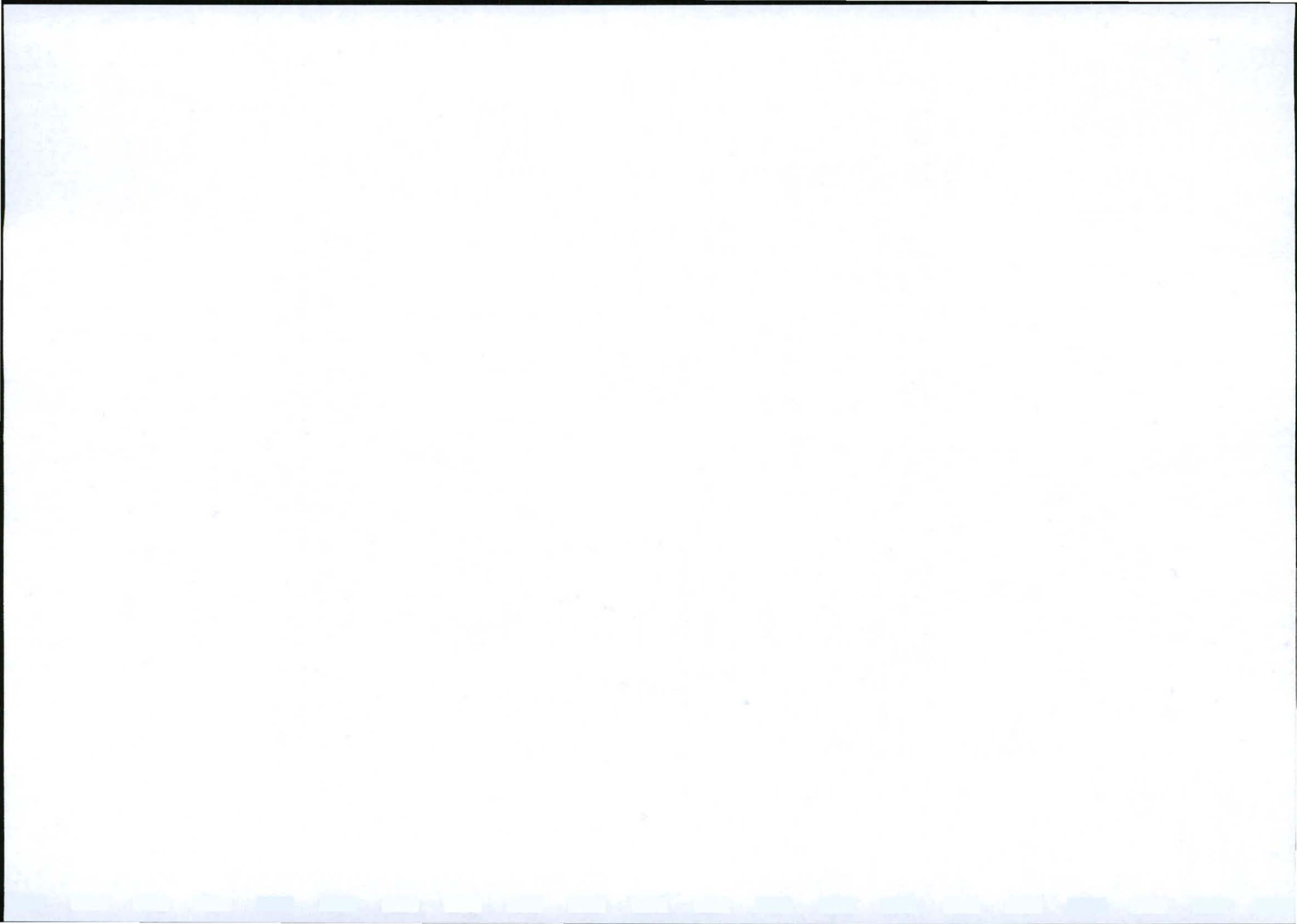
In order to assess in detail the impacts and issues identified, a number of specialist studies are proposed. The specialist investigations will include studies addressing the potential issues and impacts of the following aspects:

- Cultural heritage,
- Groundwater;
- Water Quality
- Social Impact Assessment;
- Economic Impact Assessment;
- Vegetation Impact Assessment;
- Traffic and Transportation;
- Energy Supply;
- Visual Impact Assessment;
- Health Impact Assessment (Dust); and

The Prospecting Right Phase layouts will be assessed in the environmental impact report. A variety of mitigation measures will be identified to reduce the scale, intensity, duration and significance of the impacts during the construction and operational phases of the Mining development. These measures will be developed in conjunction with the relevant specialists.

3.3.4 Potential impact of each main activity in each phase, and corresponding significance assessment

The Scoping stage identified the scope of work required for the assessment of the proposed expansion of the Manganese Ore mining activity on the



Beeshoek, Plaas 447 and Plaas 475 farms by identifying potential environmental issues and impacts related to the proposed mining operation. These impacts must now be assessed in further detail during the EIA phase and avoided or mitigated where possible. The process of identifying the preferred option will entail an analysis of the environmental impacts, technical constraints and socio-economic benefits or disadvantages of each alternative. The EIA phase will specifically identify:

- The impacts related to each alternative;
- Indicate possibilities of mitigation to acceptable levels; and
- Compare and contrast all alternatives to determine the preferred option.

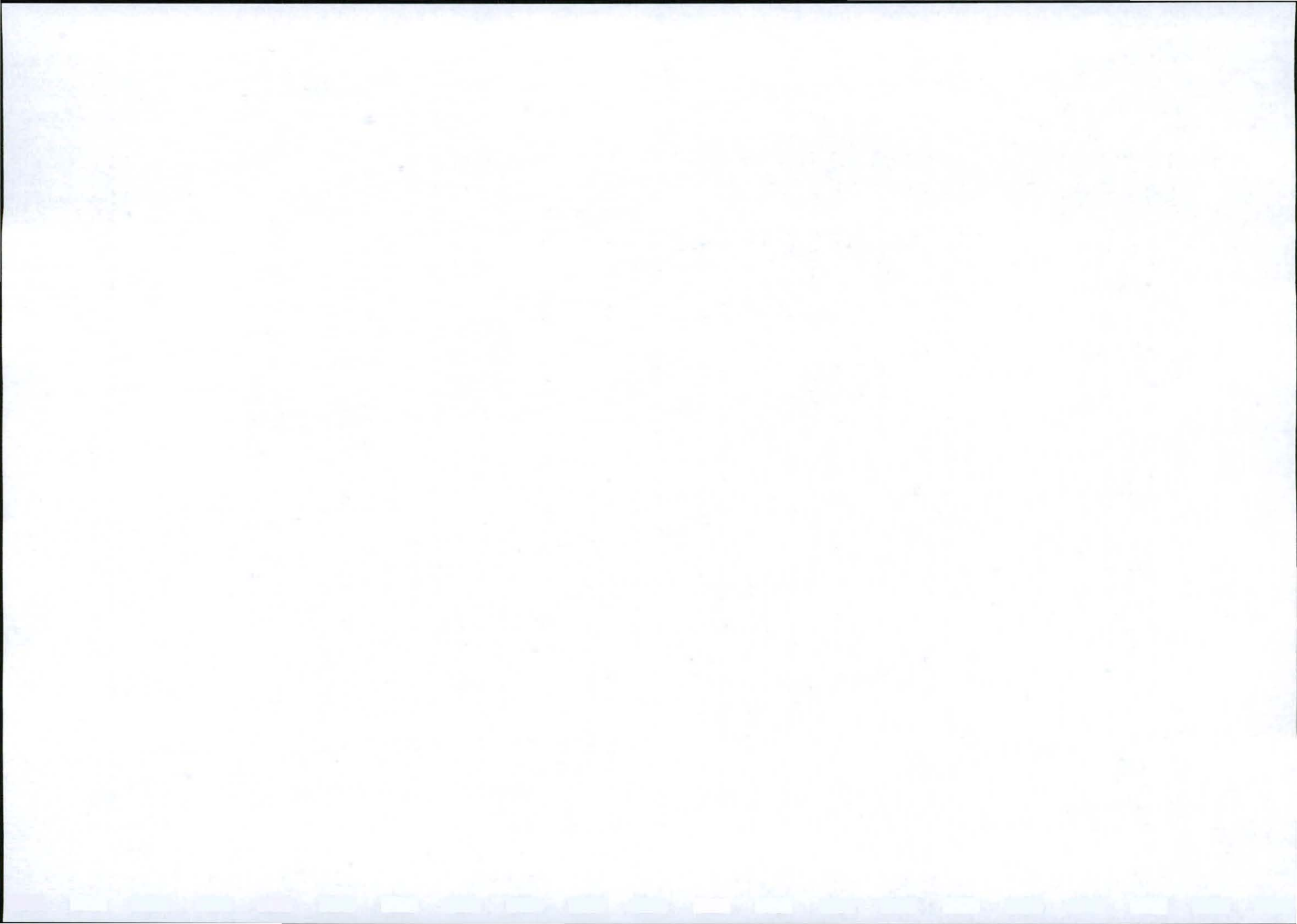
The project is to proceed to a detailed impact assessment stage to assess the impacts further, to provide feasible mitigation measures and to choose alternatives that would allow the expected economic benefits to be realised without resulting in unacceptable damages to the environment. A proposed Plan of Study detailing the terms of reference for the impact assessment phase will be provided. Central to the next phase is the completion of the specialist studies to assist in the assessment of the residual and cumulative impacts of the proposed mining activity. The final Plan of Study for the EIA Phase will be submitted together with the Final Scoping Report to Department of Environmental Affairs, Department of Mineral Resources and other relevant stakeholders. This Plan of Study outlines the terms of reference for the specialist studies; it proposes a strategy to continue the public participation process during the impact assessment phase, and it outlines the proposed impact assessment approach and methodology.

3.3.5 Assessment of potential cumulative impacts.

A conventional project and site-specific approach to environmental assessment has its limitations when it comes to assessing potential cumulative effects on environmental resources. This is because the impact of a particular project on an environmental resource may be considered insignificant when assessed in isolation, but may be significant when evaluated in the context of the combined effect of all past, present, and reasonably foreseeable future activities that may have or have had an impact on the resources in question. For these reasons, the explicit assessment of cumulative effects is now considered desirable in environmental assessment practice.

The process of analyzing cumulative effects is an enhancement of the traditional environmental assessment components:

- (i) scoping,
- (ii) describing the affected environment, and
- (iii) determining the environmental consequences.



3.4 Proposed mitigation measures to minimise adverse impacts.

For the time being, no mitigation has been proposed, as mitigation of the likely environmental effects that could arise from the Prospecting and Mining development has to be specific to the chosen farms site. When the final Mining layout site is chosen, the impact assessment will be completed, with site-specific mitigation measures recommended.

3.4.3 List of actions, activities, or processes that have sufficiently significant impacts to require mitigation.

In order to assess the impacts and issues identified in detail, a number of specialist studies are proposed to assess specific impacts. The specialist investigations will include studies addressing the potential issues and impacts of the following aspects:

- Avi-fauna and non-avian fauna;
- Cultural heritage,
- Groundwater;
- Social Impact;
- Economic impact;
- Vegetation;
- Noise;
- Traffic and Transportation;
- Electrical Power;
- Visual Impact Assessment;
- Health Impact Assessment (Dust); and
- Integrated Water and Waste Management, Potable Water, Storm water,
- Sanitation, Domestic Waste, Hazardous Waste, Construction Waste, Industrial Effluent/Wastewater. These will all be incorporated into an Integrated Waste and Water Management Plan (IWWMP).

A variety of mitigation measures will be identified to reduce the scale, intensity, duration and significance of the impacts during the construction and operational phases of the mining operation and/or prospecting phase. These measures will be developed by the relevant specialists.

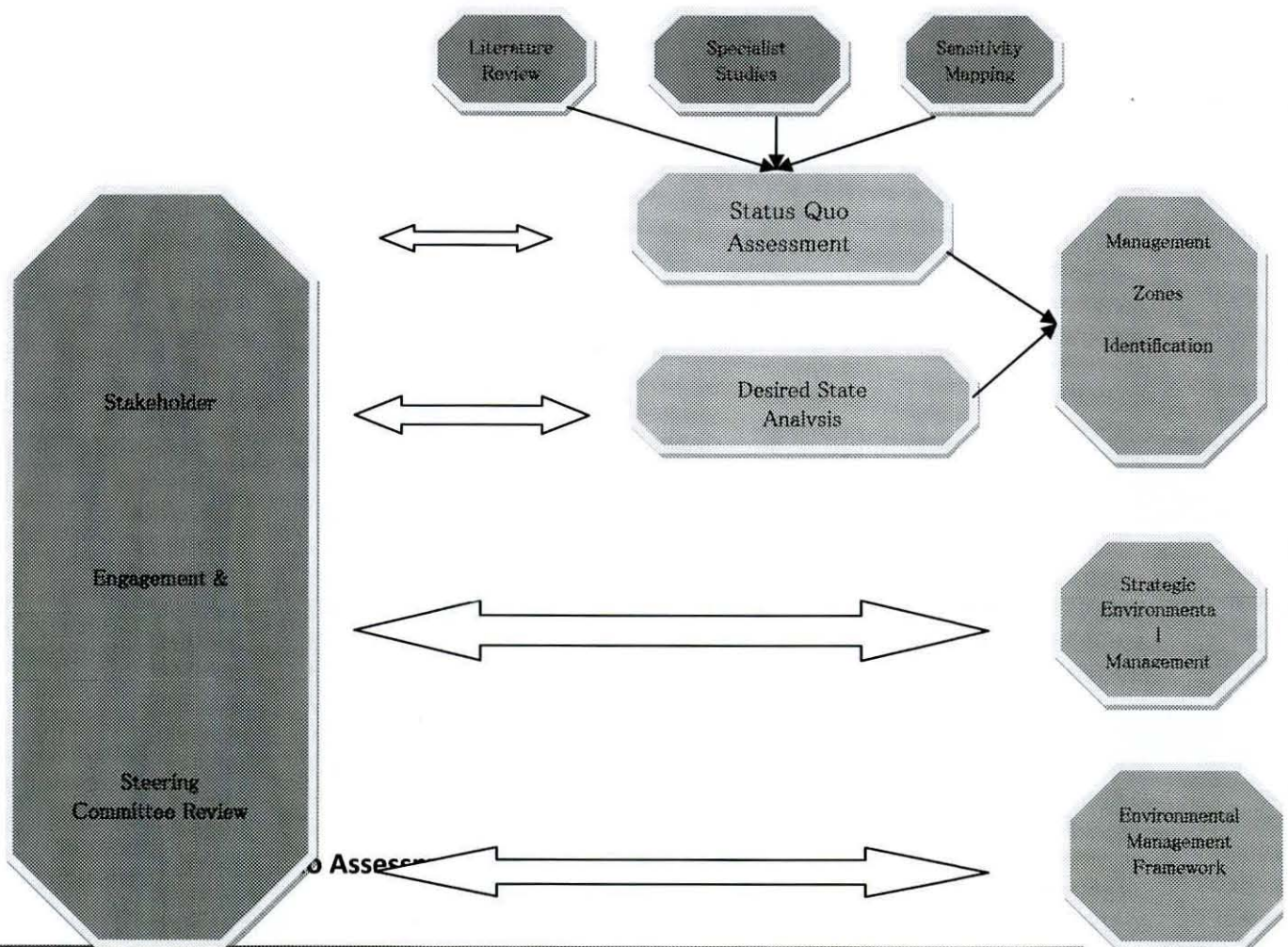
3.4.4 Concomitant list of appropriate technical or management options



The approach to this project is the use of multi-disciplinary expertise to perform the various specialised analyses of the work scope, with a core group of strategic environmental specialists responsible for integration. As indicated in Figure 2, the process of compiling an EMF follows a clear set of phases, namely:

1. Status Quo Assessment;
2. Desired State Analysis
3. Management Zones Identification & accompanying Strategic Environmental Management Plan
4. Final EMF Compilation

Each phase builds on the findings of its predecessor, as well as the inputs from stakeholders and a central project steering committee. The final Environmental Management Framework consists of the most critical findings of the Status Quo Assessment along with a full set of environmental management guidelines for each identified Management Zone, as well as specific guidance on relevant strategic interventions such as the proclamation of protected areas and the interface with other environmental regulatory processes





Various subject-specific specialists are responsible for the gathering and assessment of information pertaining to the current status of the environment, infrastructure and development activities, as well as legal, policy and economic aspects of the study area. The primary reporting output is the Status Quo Report, accompanied by a series of more detailed specialist reports. At the same time, a Geographic Information Systems (GIS) team is responsible for a GIS interface that holds all the relevant information in a repository that can be constantly updated throughout the project, the collation and manipulation of which provides the required data for the intermediate and final project outputs.

3.4.4.2 Desired State Analysis

The Desired State phase is preceded by Public Participation, where comments on the Status Quo report are collected and form an important input into the Desired State. Public participation takes the form of specific sessions with different role-players and focus groups (such as landowners; eco-tourism operators; conservancies Environmental management specialists are responsible for the assessment and integration of information into intermediate elements (feature descriptions, feature status, feature objectives, etc.) that feed into the GIS system and ultimately a Desired State analysis. The desired state phase provides a description of the desired state of the area given all the available information and inputs.

3.4.4.3 Management Zones and Strategic Environmental Management Plan

The Desired State information feeds into the final Environmental Management Framework via the designation of environmental management zones and the compilation of a Strategic Environmental Management Plan. Based on the Status Quo Report and the Desired State information, it is possible to gain a clear understanding of the development trends and environmental requirements in Management Ore processes in Beeshoek, Plaas 475 & 465. These are depicted as discrete management zones that form the basis for pro-active environmental management in the study area. The various management zones are used as to determine where and how certain development activities should take place, and the environmental framework and strategic environmental management plan (SEMP). The SEMP provides the guidance necessary for land use planning and environmental decision-making, but stops short of prescribing detailed design measures.

3.4.4.4 Final Environmental Management Framework

A second and final round of Public Participation ensures that the public and all stakeholders are provided with the opportunity to comment on



the Draft Environmental Management Plan and EMF report. This takes the form of a Public Open Day.

The results of the second round of public participation are used to verify and update the EMF report which can then be submitted to the National Minister of Water & Environmental Affairs for concurrence prior to official adoption by the Member of the Executive Council (MEC) for Environment in Northern Cape.

3.4.5 Review the significance of the identified impacts

(After bringing the proposed mitigation measures into consideration).

A similar review approach will be implemented as stated in 3.4.4 above.

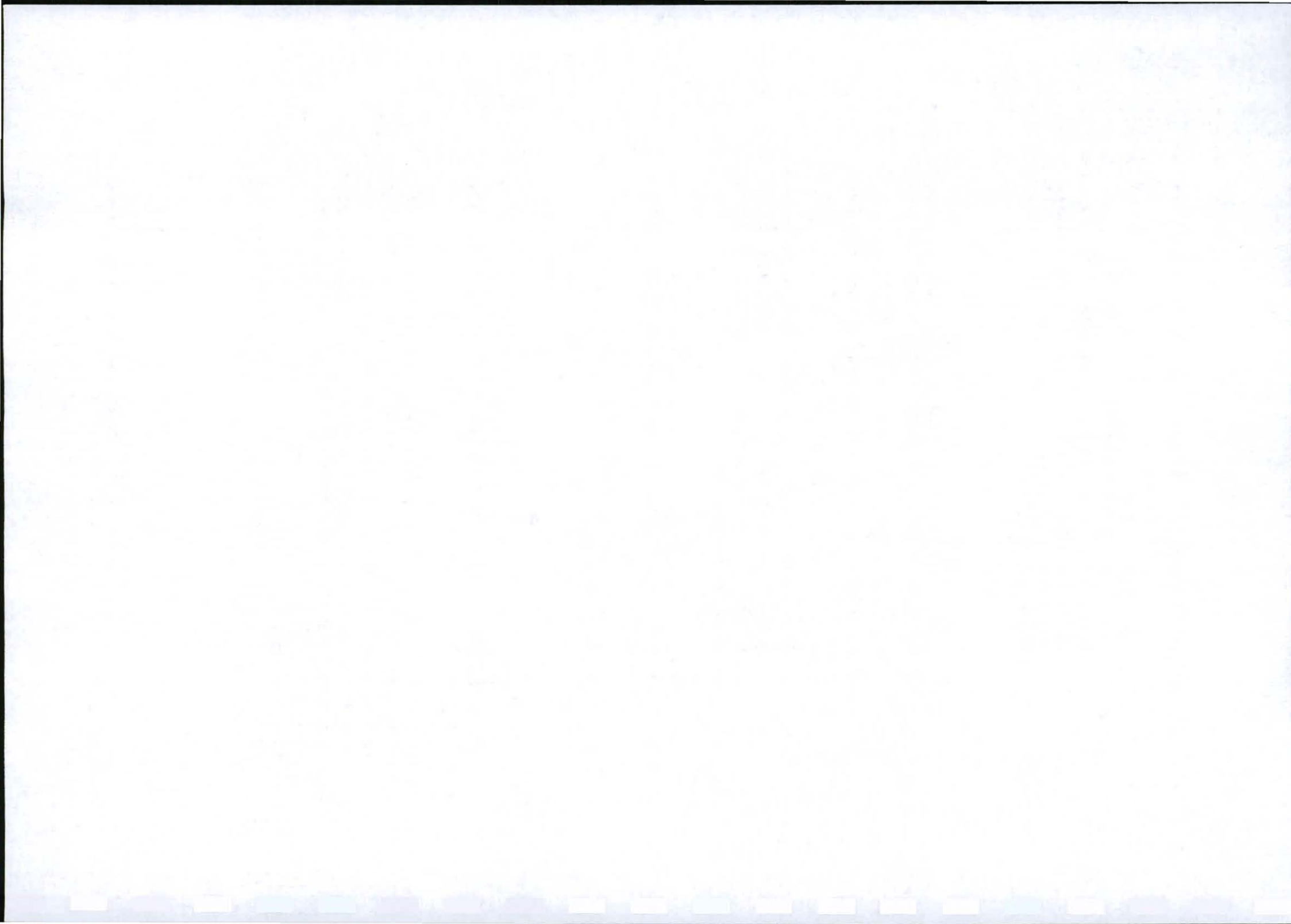
A second and final round of Public Participation ensures that the public and all stakeholders are provided with the opportunity to comment on the Draft Environmental Management Plan and EMF report. This takes the form of a Public Open Day.

The results of the second round of public participation are used to verify and update the EMF report which can then be submitted to the National Minister of Water & Environmental Affairs for concurrence prior to official adoption by the Member of the Executive Council (MEC) for Environment in Northern Cape.

4 REGULATION 52 (2) (d): Financial provision. The applicant is required to-

The amount that is necessary for the rehabilitation of damage caused by the operation, both sudden closure during the normal operation of the project and at final, planned closure will be estimated by the regional office of the DME, based on the information supplied in this document. This amount will reflect how much will it cost the Department to rehabilitate the area disturbed in case of liquidation or abscondence.

Financial provision required here: R 10 621.00



4.3 Plans for quantum calculation purposes.

(Show the location and aerial extent of the aforesaid main mining actions, activities, or processes, for each of the construction operational and closure phases of the operation).

The plans & aerial extent cannot be quantified and/or presented at this stage of the Prospecting Right phase, once the Prospecting Right has been confirmed proper aerial maps will be submitted in order to quantify. The other maps are hereto attached.

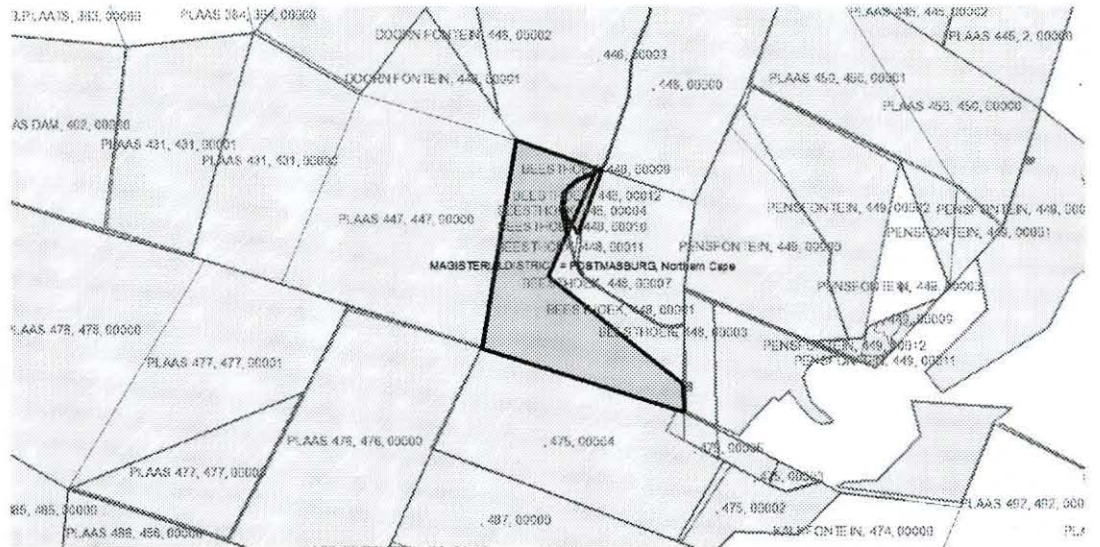
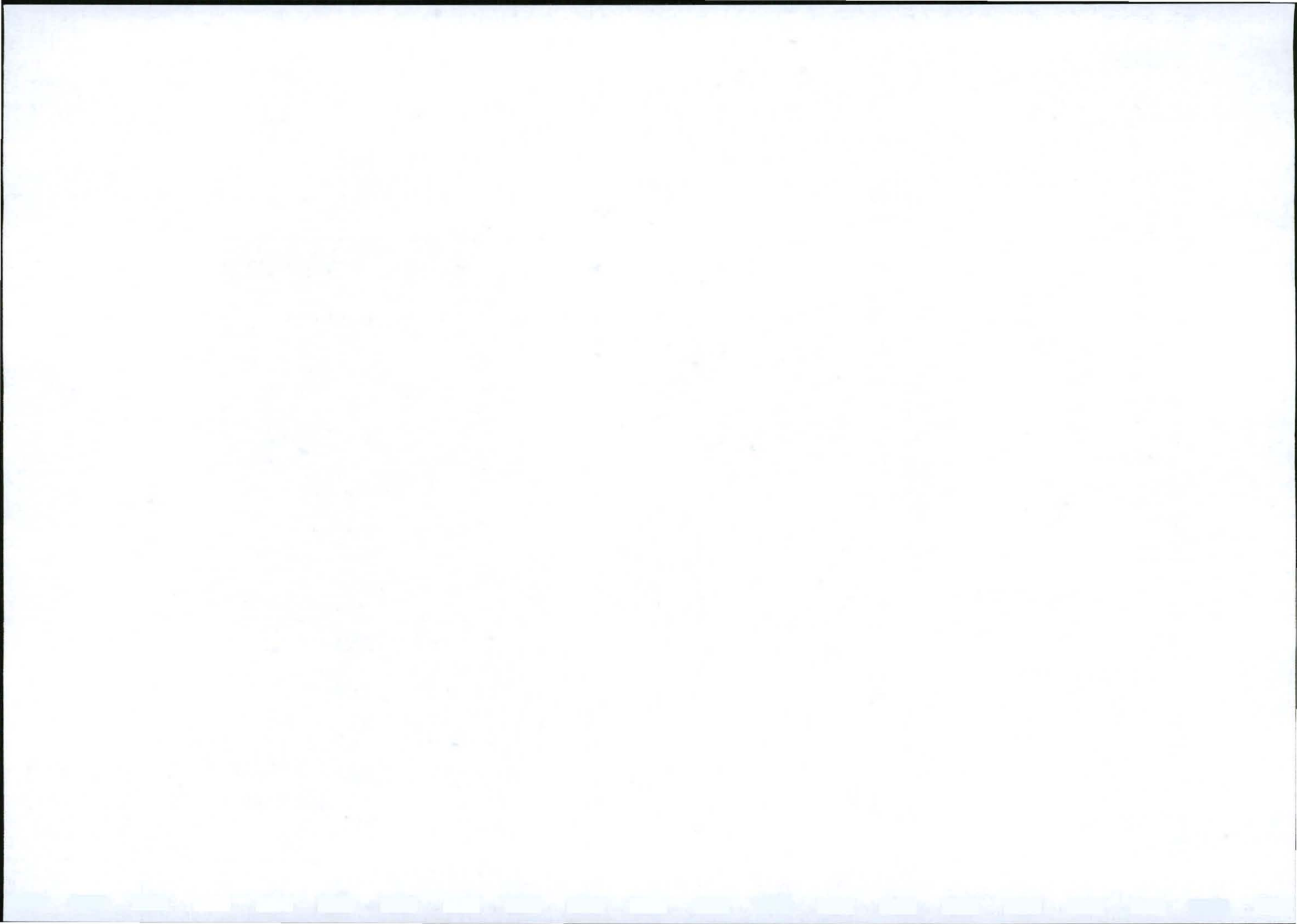


Figure 1 Beeshoek, Plaas 475 and Plaas 447 Locality Map



Figure 4: Aerial View of the Mining Activity at Beeshoek



4.4 Alignment of rehabilitation with the closure objectives

(Describe and ensure that the rehabilitation plan is compatible with the closure objectives determined in accordance with the baseline study as prescribed).

The rehabilitation plan on Beeshoek, Plaas 447 and 475 will follow the below mentioned plan:

Environment, health & safety services for current open-pit mines

<u>Disciplines</u>	<u>Description</u>
<u>OBJECTIVES:</u>	
Rehabilitation	The ideal situation is to be able to return waste material to previously excavated areas, but this is often impossible and the waste must then be placed in a dump.
Health & safety	The long-term rehabilitation objectives may vary considerably at different sites, but in all cases the first objective will be to protect the safety and health of people working on the mine and communities living in areas surrounding the site.
<u>BENEFITS OFFERED:</u>	
Rehabilitation	Where possible, Razita Mining Resources's rehabilitation programmes are planned to take place concurrent with mining and are incorporated into the mine plan. Rehabilitation equipment requirements are aligned with that of mining and cost engineering applied in all its facets.
Health & safety	Safety and health are an integral part of our company policy and will never be compromised. All our deliverables, irrespective of the discipline, contain industry-related safety margins and stringent health conformance practices.
<u>DELIVERABLES:</u>	
<u>REHABILITATION</u>	
Rehabilitation plans	Designs, plans: LOM, 5 year, annual plans.
Rehabilitation cost valuations	Resource selection, optimisations, cost engineering and independent engineer evaluations.
Integration of rehabilitation with mine plan	Progressive rehabilitation plans and designs, which incorporate ongoing mining and which optimise mining and rehabilitation to the extent where the rehabilitation costs become insignificant.



EIA and EMP assistance	Assistance with compilation of certain aspects of EIAs and EMPs in accordance with the customers' requirements.
<u>HEALTH & SAFETY</u>	
Safe operating procedures	Compilation of Standard Operating Procedures (SOPs) and Code of Practice (COPs), with specific emphasis on the design and safe making of openpit mines, assistance with the management and implementation of SOPs and COPs.

4.5 Quantum calculations.

(Provide a calculation of the quantum of the financial provision required to manage and rehabilitate the environment, in accordance with the guideline prescribed in terms of regulation 54 (1) in respect of each of the phases referred to).

We cannot at this stage quantify the rehabilitation costs and management of the Beeshoek Mining site due to objections to our Prospecting Right. We will be in a position to quantify the Management and Rehabilitation of environment, according to Regulation 54 (1), upon being granted the Prospecting Right. However, the following guidelines will be followed:

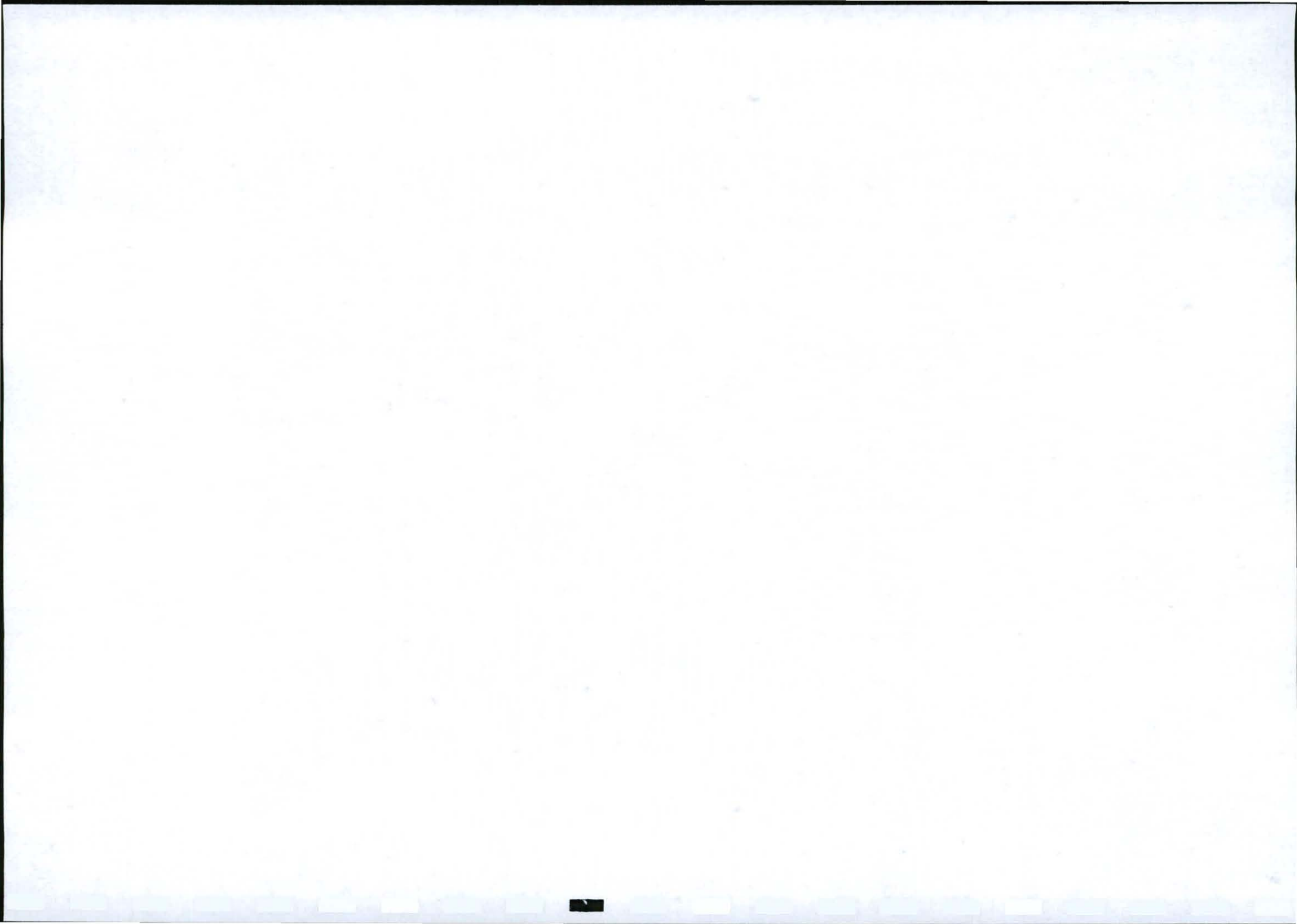
This guideline is to assist Razita Mining Resources Pty Ltd (RMS) to propose acceptable rehabilitation outcomes and strategies during the planning stages of a mine or when changes to the proposed rehabilitation outcomes and strategies become necessary during the operational stages of a mine.

The guideline also explains how RMS will assess whether progressive or final rehabilitation for either new or Beeshoek Mine projects is satisfactory. Assessment will be based on the accepted rehabilitation objectives for each domain within the mine site and monitoring of indicators to demonstrate that the completion criteria have been met and are likely to be sustained for an acceptable period. Establishment of early contact with the administering authority through pre-design conferencing is recommended to ensure there are "no surprises" in the later stages of the assessment process. Similar contact during any proposal to change rehabilitation outcomes or to obtain progressive certification or final sign-off is also recommended.

4.5.1 Scope

The guideline applies to both progressive and final rehabilitation. This guideline is not to be used to interpret the standard environmental conditions in those codes.

4.5.2 Structure of the guideline



Section 1 provides an introduction to the guideline. Section 2 describes the policy and legislative frameworks that provide direction for mine rehabilitation outcomes. Section 3 lists the goals that the Government expects rehabilitation to achieve. Sections 4, 5 and 6 describe how a mining company should develop site-specific rehabilitation strategies comprising:

- rehabilitation objectives for each domain in a mining project;
- indicators that can measure progress towards the objectives; and
- completion criteria that are consistent with the rehabilitation goals set by Government and with the rehabilitation objectives established in the environmental authority for each domain in a mining project.

Section 7 describes the assessment process that will provide transparent and consistent decisions for progressive and final rehabilitation based on the rehabilitation goals, objectives, indicators and completion criteria for the mining project. Section 8 describes how existing mining projects with inadequate rehabilitation objectives, indicators or completion criteria will be assessed.

4.5.3 Other relevant guidelines

The four general rehabilitation goals require rehabilitation of areas disturbed by mining to result in sites that are:

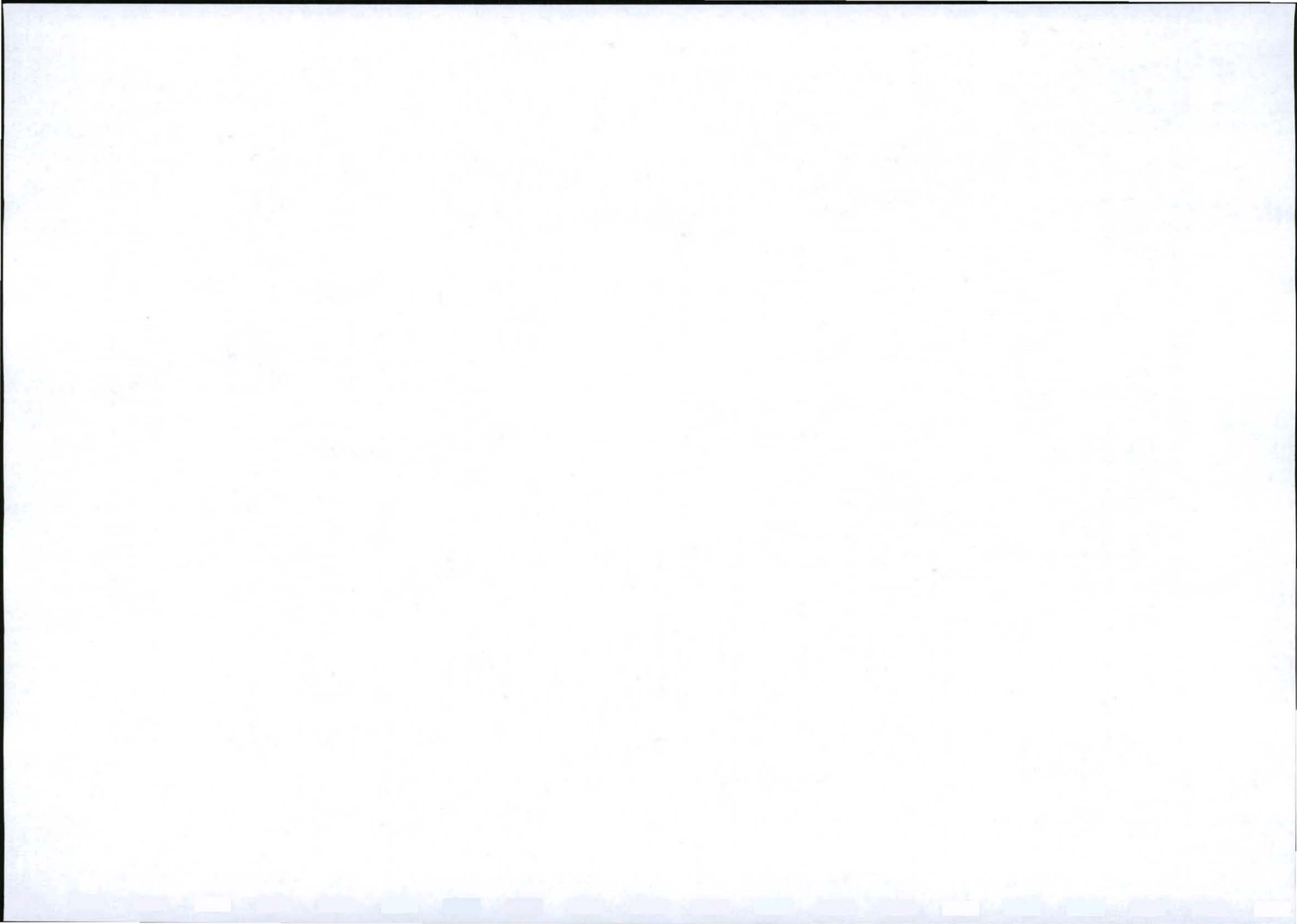
- safe to humans and wildlife;
- non-polluting;
- stable ; and
- able to sustain an agreed post-mining land use

To ensure that the mine fulfils its environmental, economic and social responsibilities within the Reg 54 (1) principles, the rehabilitation objectives must:

- address potential environmental impacts;
- achieve the highest practicable level in the rehabilitation hierarchy; and
- identify post-mining land uses that are acceptable to the community, local government and any other relevant stakeholders.

The first steps in identifying the potential environmental impacts for a level 1 mining project will generally be baseline environmental investigations and consultation with local residents and other interested parties to identify the environmental values in the proposed mining lease and adjoining areas

The EM plan describes the proposed rehabilitation of the mining disturbance and how it will control future environmental harms to an acceptable level. As



part of the progressive rehabilitation certification process and final surrender application, The Current Mining Operation (Beeshoek Mine, Assmang Ltd) will be required to submit a risk assessment that documents the probability and consequence of future environmental harms across each of the rehabilitated domains. Where there is potential for future environmental harms, the cost to remediate this harms must be calculated in order to decide whether a residual risk payment is required (See the guideline 'Calculating financial assurance for mining projects').

During mine planning, the post-mining land use must be identified, as this is a controlling factor in setting rehabilitation objectives that are consistent with the goals described above and in defining how rehabilitation success will be measured.

The variable inputs in calculating the quantum:

Input:

- Unit cost to rehabilitate (ZAR/unit);
- Length of Rehabilitated mine/site;
- Total Capital Cost for Rehabilitation;
- Annual Interest rate (%/yr); and
- Benefits payback period (yrs).

Calculated:

- Annual Capital Cost based on 30yr payback periods (ZAR/yr);
- Payback periods for savings to equal cost (yrs).

4.6 Undertaking to provide financial provision

(Indicate that the required amount will be provided should the right be granted).

Razita Mining Resources undertakes to provide the financial provision for rehabilitation as computed and quantified in the EIA report, upon being granted the Prospecting Right and the quantum that will be finalised in the Mining Right phase.



5 REGULATION 52 (2) (e): Planned monitoring and performance assessment of the environmental management plan.

Project planning services for future open pit mine and the Beeshoek, Plaas 447 and 475 fRMSs

<u>Disciplines</u>	<u>Description</u>
<u>OBJECTIVES:</u>	
Conceptual study	To provide an initial indication of project worth and justify additional exploration and investigation by defining at least one feasible concept.
Pre-feasibility studies	To determine if further expenditure on a project would be justified. The pre-feasibility study would provide management with the first indication of the potential viability, or lack thereof.
Feasibility studies	The feasibility is a vigorous evaluation process, achieved through the commitment of a multi-disciplinary team consisting of technical, economic, financial and legal disciplines. It represents the final economic assessment of the project and must withstand detailed scrutiny.
<u>BENEFITS OFFERED:</u>	<p><u>Razita Mining Resources</u> expertise has a demonstrated track record in undertaking independent project evaluations, technical due diligence audits, competent persons reports, assessments and feasibility studies to companies on projects.</p> <p>Our experts comply with the competencies described by organisations such as JORC, SAMREC, etc. and are registered with various <i>professional organisations</i>.</p>
<u>DELIVERABLES:</u>	
Conceptual studies	Inferred mineral resource, conceptual mining design, environmental impact study, conceptual capital estimate, operating cost estimate, conceptual study report.
Pre-feasibility studies	Mineral resource estimate, mining process selection, engineering design, capital cost estimate, operation cost estimate, project programme, environmental study, risk assessment, pre-feasibility study report.
Feasibility studies	Comprehensive exploration and ore body evaluation, detail mining method, engineering design, human resources, project



implementation, planning and scheduling, operating cost estimate, capital cost estimate, environmental study and permitting, feasibility study report.

5.3 List of identified impacts requiring monitoring programmes.

In order to assess the impacts and issues identified in detail, a number of specialist studies are proposed to assess specific impacts. The specialist investigations will include studies addressing the potential issues and impacts of the following aspects:

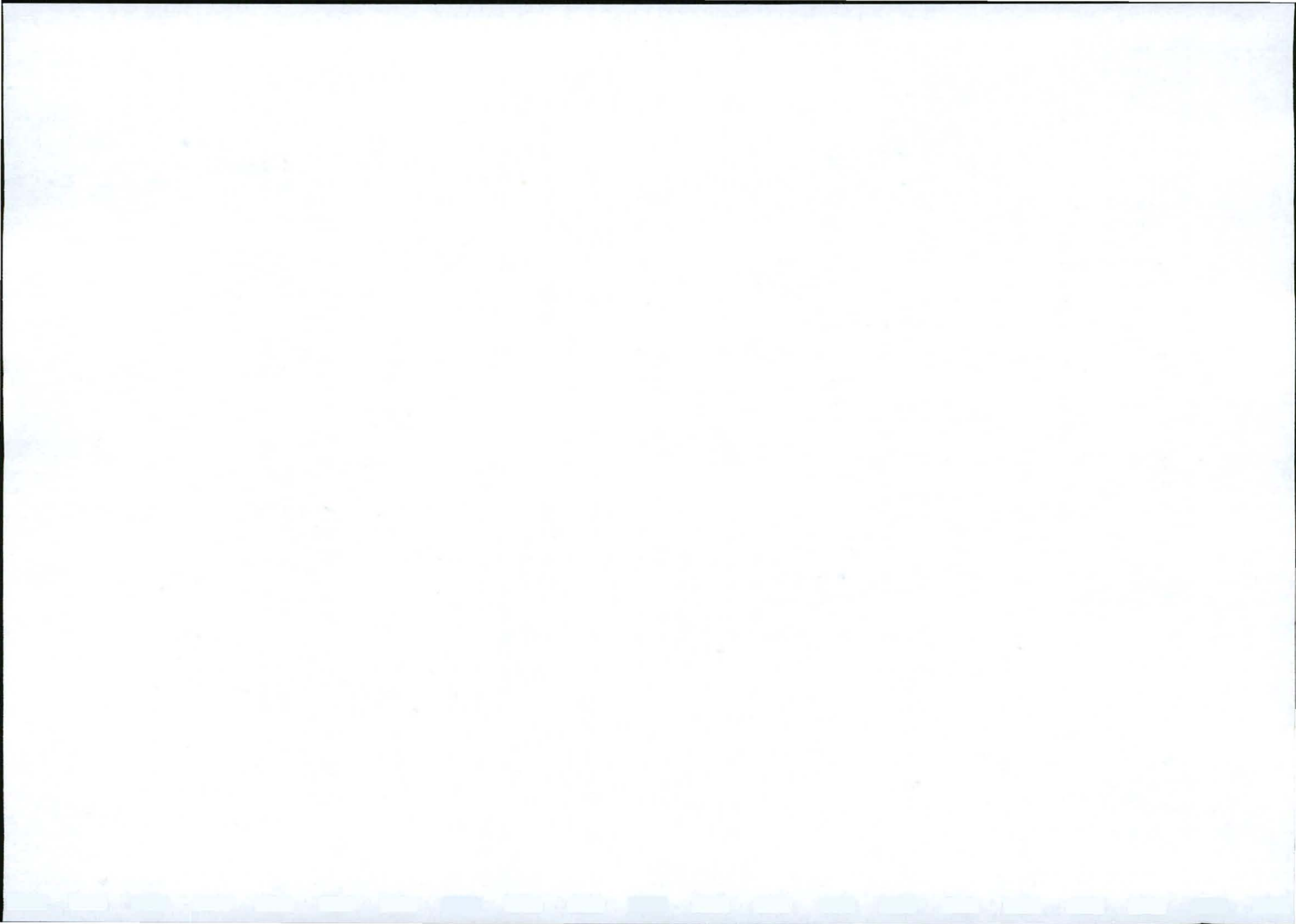
- Avi-fauna and non-avian fauna;
- Cultural heritage,
- Groundwater;
- Social Impact;
- Economic impact;
- Vegetation;
- Noise;
- Traffic and Transportation;
- Electrical Power;
- Visual Impact Assessment;
- Health Impact Assessment (Dust); and
- Integrated Water and Waste Management, Potable Water, Storm water,
- Sanitation, Domestic Waste, Hazardous Waste, Construction Waste, Industrial Effluent/Wastewater. These will all be incorporated into an Integrated Waste and Water Management Plan (IWWMP).

The above mentioned impacts will require monitoring and monitoring programmes will be implemented post the Prospecting Right Phase

5.4 Functional requirements for monitoring programmes.

Monitoring is a cornerstone of EIA implementation and follow up. Other components are dependent on the scope and type of monitoring information that is provided. The primary aim of monitoring is to provide information that will aid impact management, and, secondarily, to achieve a better understanding of cause-effect relationships and to improve EIA prediction and mitigation methods. Both the immediate and long-term benefits from undertaking monitoring as part of EIA are widely recognised, although not always realised.

Monitoring is used to:



- establish baseline trends and conditions;
- measure the impacts that occur during project construction and operation;
- check their compliance with agreed conditions and standards;
- facilitate impact management, e.g. by warning of unanticipated impacts; and
- determine the accuracy of impact predictions and the effectiveness of mitigation measures.

A sound baseline is a critical reference point for the conduct of effects monitoring. In turn, effects monitoring establishes the basis for corrective action when actual impacts are unanticipated or worse than predicted. Compliance monitoring, carried out through repetitive or periodic measurement, also can be used for this purpose. This may suffice as a safety net for certain projects, for example, where the mitigation measures are well tried and known to be effective. However, compliance monitoring will trigger impact management only if regulatory standards or specified conditions are exceeded and, on its own, may be insufficient for large-scale, complex projects.

Monitoring involves designing the programme, collecting and analysing the data, establishing their linkage to impact management, auditing and other components, and interpretation and reporting of data.

The following points need to be agreed as part of the EMP and conditions of project approval:

- major impacts to be monitored;
- objectives of monitoring and data requirements;
- arrangements for the conduct of monitoring;
- use of the information to be collected;
- response to unanticipated or greater than predicted impacts; and
- measures for public reporting and involvement.

Monitoring requirements should focus on the significant impacts predicted in the EIA report, taking account of:

- the environmental values to be safeguarded;
- the magnitude of each potential impact;
- the risk or probability of each impact occurring;
- the pathways and boundaries of each impact; and
- the confidence in the prediction of each impact.

Monitoring programmes need to be constantly reviewed to make sure that relevant information is being supplied, and to identify the time at which they can be stopped.

Some elements of an effective environmental monitoring programme are listed in the table below. The following steps can help to implement these elements:

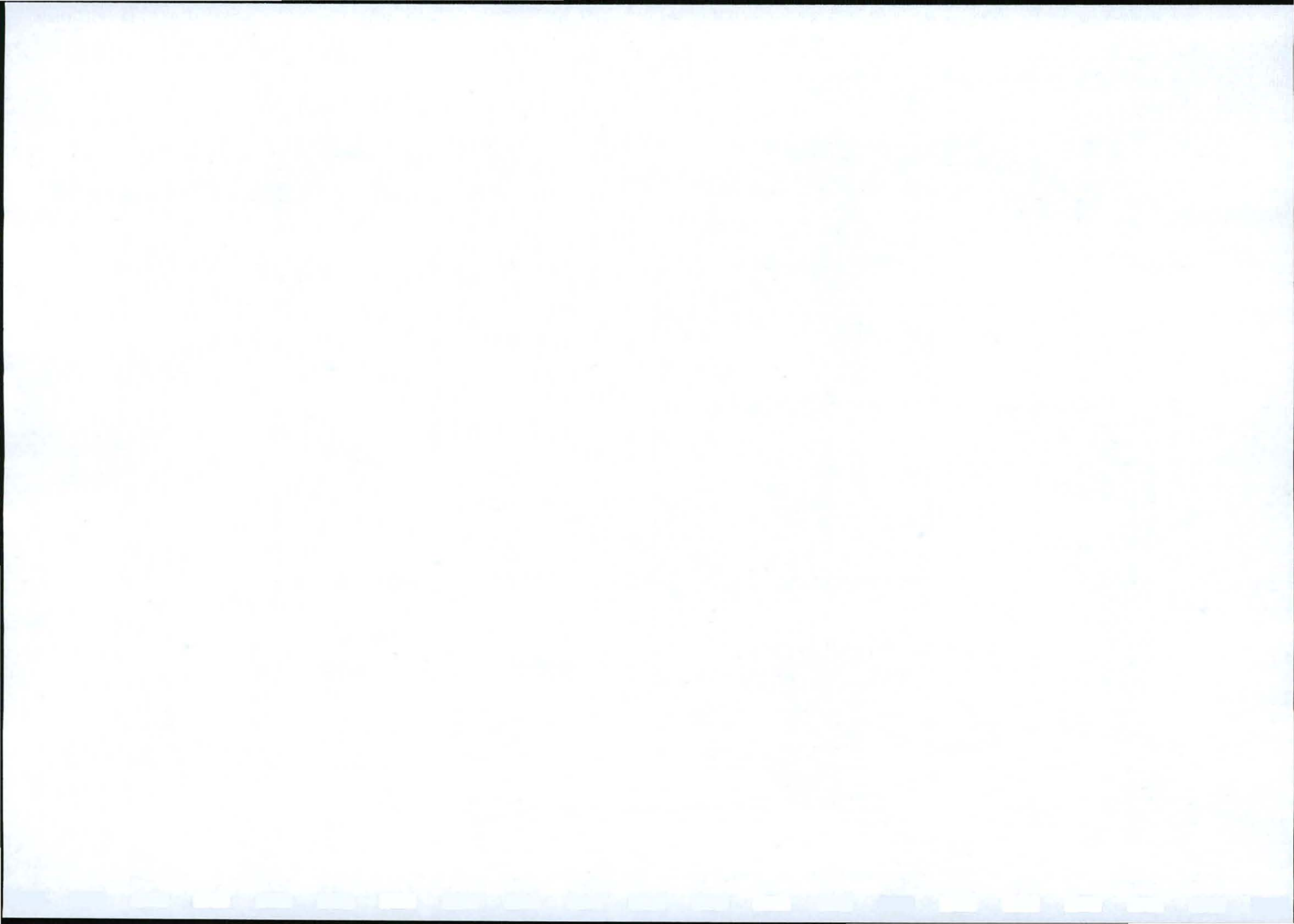


- define the scope and objectives of monitoring for each impact;
- identify the sites for observation, measurement and sampling;
- select the key indicators for direct measurement or observation;
- determine the level of accuracy required in the data;
- consider how the data will be analysed in relation to baseline and other data;
- establish a system for recording, organising and reporting the data;
- specify thresholds of impact acceptability; and
- set requirements for management action if monitoring indicates these are exceeded.

Effective environmental monitoring programmes	
Monitoring Aspect	Approaches
<i>Adapted from OECD/DAC (1994)</i>	
Sampling	A realistic sampling programme (temporal and spatial)
	Sampling methods relevant to source and/or type of impact
Data Collection and Analysis	A targeted approach to data collection
	Comparability of data with baseline and other relevant data
	Quality control in measurement and analysis
	Systematic record keeping and database organisation
Review	Reporting requirements for internal and external checks
Public Consultation	Provision for input from and response to third parties
	Presentation of results to the public

5.5 Roles and responsibilities for the execution of monitoring programmes.

External audits of the safety, health and environmental (SHE) performance of Razita Mining Resources Pty Ltd operations will be undertaken by a team comprising health and safety legal specialists, environmental legal and management specialists, an occupational medical specialist and an occupational nurse. The purpose of the audits is to determine the current

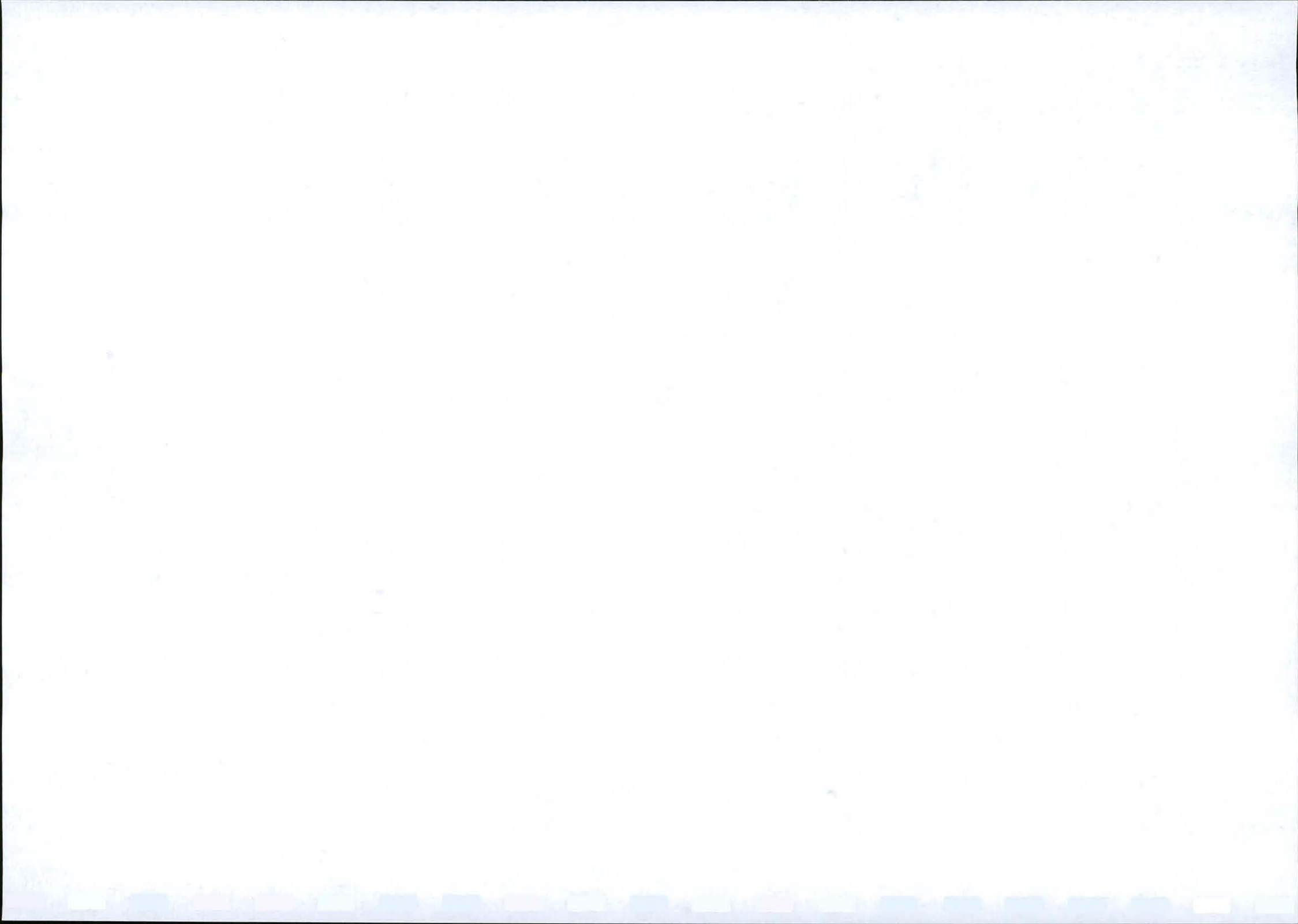


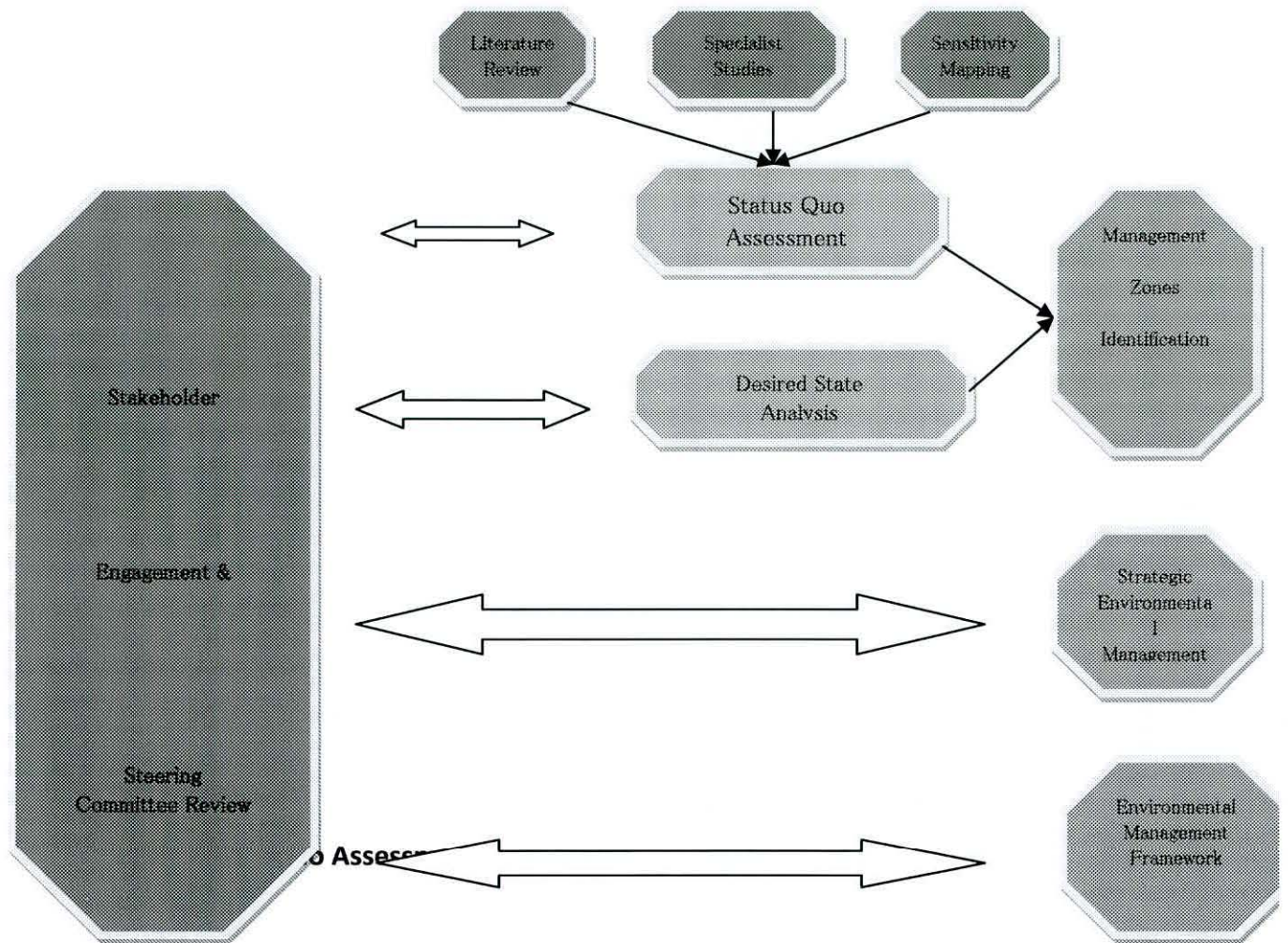
status of legal compliance and our submission on the EIA and EMP, to compile SHE risk profiles of each operation and to identify opportunities for improvement. Action plans to address the findings and gaps identified during the audits will be compiled and presented to the Executive Management Team of Razita Mining Resources Pty Ltd. A corporate action plan will be developed in response and execution of the monitoring programmes.

5.6 Committed time frames for monitoring and reporting.

Data gathering and reporting systems have continued to evolve to provide management with timely information to inform their decisions and actions. Report formats have expanded to report on a wider range of sustainability indicators that allows health, safety and sustainability considerations to be incorporated into decision making on a systemic and ongoing basis. Environment, health and safety staff on the sites report directly to mine management and are also supported by corporate staff who are responsible for establishing group-wide policy and performance standards, facilitating internal and external reporting [8 and auditing operational performance. Material issues such as fatalities, lost time injuries (LTIs), major environmental incidents and issues of legal non-compliance are reported to Razita Mining Resources Pty Ltd (RMS) Technical Director as soon as they occur. Quarterly reports on compliance with safety, health and environmental legislation for all group operations are submitted to the RMS Audit and Risk committee for review. Similarly, a review of safety, health and environmental performance takes place quarterly within RMS and is attended by divisional executives and corporate personnel as well as senior operational staff. The group reports on sustainability performance in accordance with Global Reporting Initiative (GRI) G3 indicators.

Each phase builds on the findings of its predecessor, as well as the inputs from stakeholders and a central project steering committee. The final Environmental Management Framework consists of the most critical findings of the Status Quo Assessment along with a full set of environmental management guidelines for each identified Management Zone, as well as specific guidance on relevant strategic interventions such as the proclamation of protected areas and the interface with other environmental regulatory processes





The Manager: Sustainable Development, who reports to the Chief Executive Officer of Razita Mining Resources Pty Ltd (RMS) with oversight from the Social and Development called the Sustainable Development Committee), is responsible for reviewing sustainable development policies, strategies and targets and ensuring that they are aligned with the Board's commitment to zero tolerance of RMS throughout our business. The purpose of the Social and Ethics Committee is to monitor and report on the manner and extent to which RMS protects, enhances and invests in the wellbeing of the economy, society and the natural environment in which RMS operates in order to ensure that its business practices are sustainable. The Committee also reviews and considers the efficacy of RMS's systems to promote local economic development opportunities to enable historically disadvantaged South Africans (HDSAs) to develop economically whilst meeting the requirements of mining rights conversions, the Mining Charter and other requirements detailed in the Minerals and Petroleum Resources Development Act, 2002 and other legislation. The Social and Ethics Committee has three members, of which two are Independent Non-executive Directors as described in the Corporate Governance section of the Integrated Annual Report.



Regular Meetings, at least quarterly will be convened with RMS Team and stakeholders in order assess the impact of the environment.

6 REGULATION 52 (2) (f): Closure and environmental objectives.

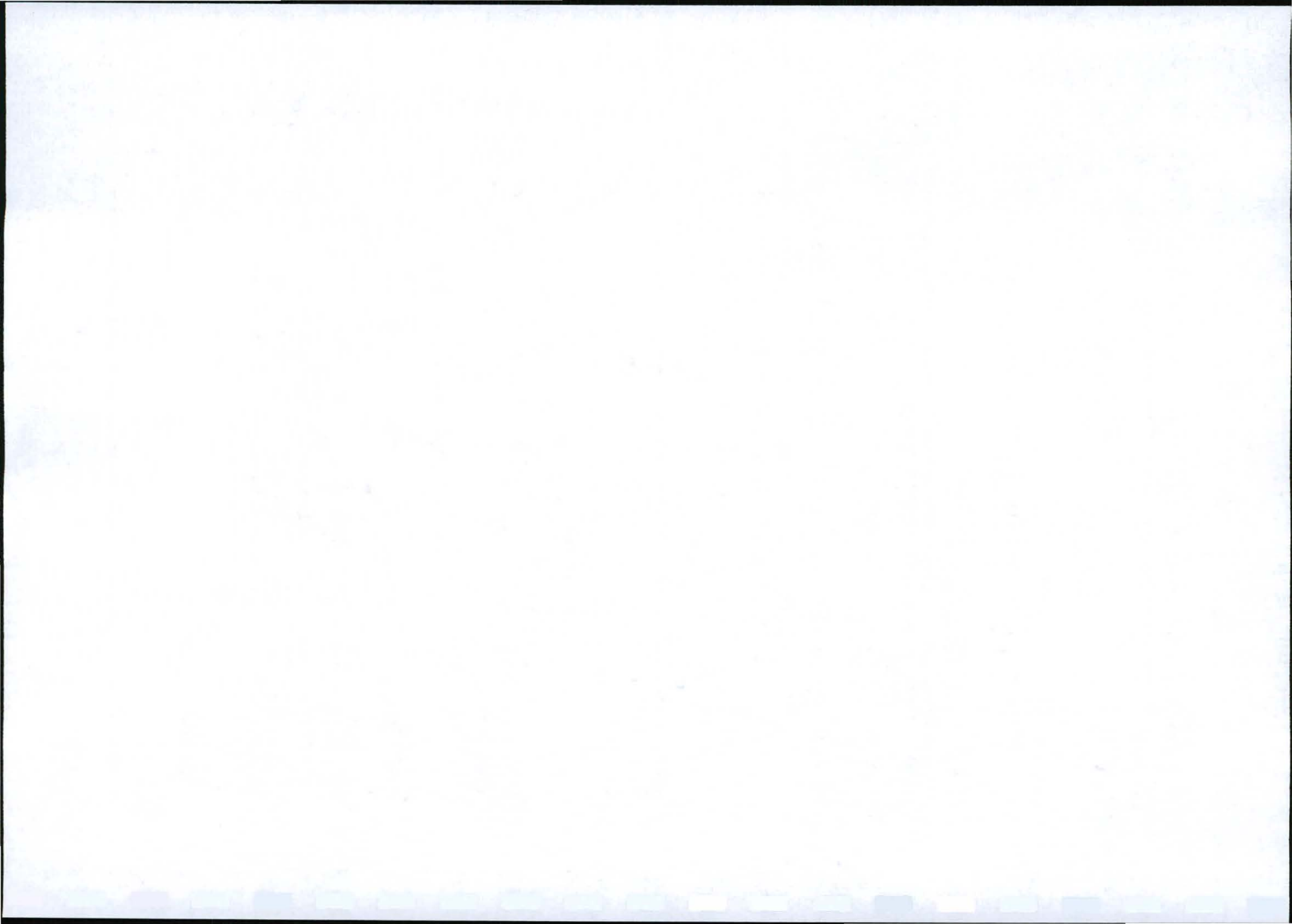
6.3 Rehabilitation plan

(Show the areas and aerial extent of the main prospecting activities, including the anticipated prospected area at the time of closure).

The rehabilitation plan on Beeshoek, Plaas 447 and 475 will follow the below mentioned plan:

Environment, health & safety services for current open-pit mines

<u>Disciplines</u>	<u>Description</u>
<u>OBJECTIVES:</u>	
Rehabilitation	The ideal situation is to be able to return waste material to previously excavated areas, but this is often impossible and the waste must then be placed in a dump.
Health & safety	The long-term rehabilitation objectives may vary considerably at different sites, but in all cases the first objective will be to protect the safety and health of people working on the mine and communities living in areas surrounding the site.
<u>BENEFITS OFFERED:</u>	
Rehabilitation	Where possible, Razita Mining Resources's rehabilitation programmes are planned to take place concurrent with mining and are incorporated into the mine plan. Rehabilitation equipment requirements are aligned with that of mining and cost engineering applied in all its facets.
Health & safety	Safety and health are an integral part of our company policy and will never be compromised. All our deliverables, irrespective of the discipline, contain industry-related safety margins and stringent health conformance practices.
<u>DELIVERABLES:</u>	
<u>REHABILITATION</u>	



Rehabilitation plans	Designs, plans: LOM, 5 year, annual plans.
Rehabilitation cost valuations	Resource selection, optimisations, cost engineering and independent engineer evaluations.
Integration of rehabilitation with mine plan	Progressive rehabilitation plans and designs, which incorporate ongoing mining and which optimise mining and rehabilitation to the extent where the rehabilitation costs become insignificant.
EIA and EMP assistance	Assistance with compilation of certain aspects of EIAs and EMPs in accordance with the customers' requirements.
<u>HEALTH & SAFETY</u>	
Safe operating procedures	Compilation of Standard Operating Procedures (SOPs) and Code of Practice (COPs), with specific emphasis on the design and safe making of openpit mines, assistance with the management and implementation of SOPs and COPs.

6.4 Closure objectives and their extent of alignment to the pre-mining environment.

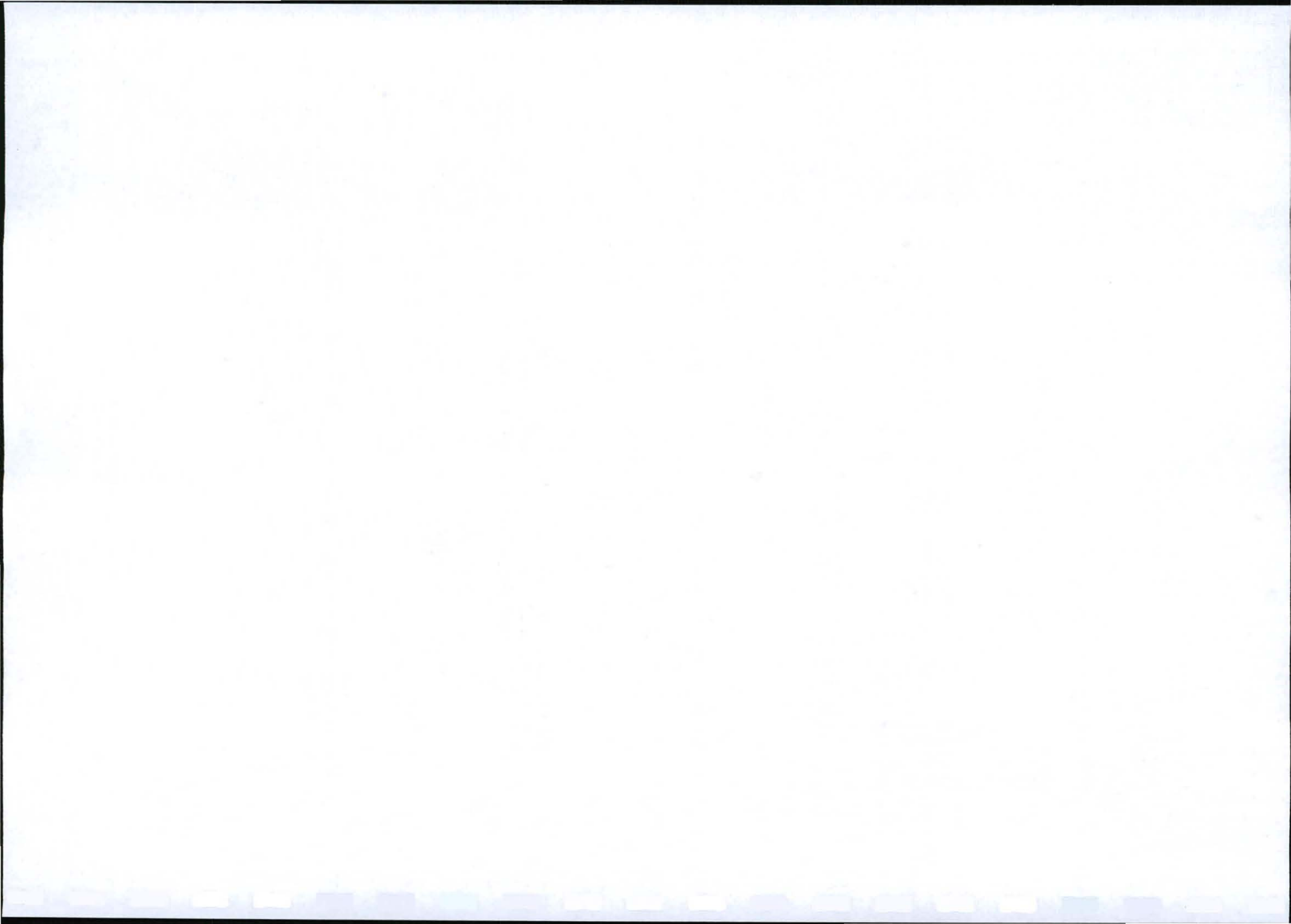
All closures & alignment in terms of pre-mining will be assessed based on the input from the EIA, the Rehabilitation Objectives and Environment and consultation with the current mining company.

6.5 Confirmation of consultation

(Confirm specifically that the environmental objectives in relation to closure have been consulted with landowner and interested and affected parties).

Consultation has been ongoing with affected Parties, including Assmang Ltd. A letter is attached hereto for your consideration and further consultation are being planned in the coming months. Notices, as per attached hereto below has been sent to affected parties.

The below mentioned letter was the content of discussion held with the prospective farm owners:



NOTICE

30 Nov 2011

Mr. William Grobler
ASSMANG LTD
Northern Cape

Dear Sir,

PROSPECTING REQUIREMENTS—Beesthoek No. 448

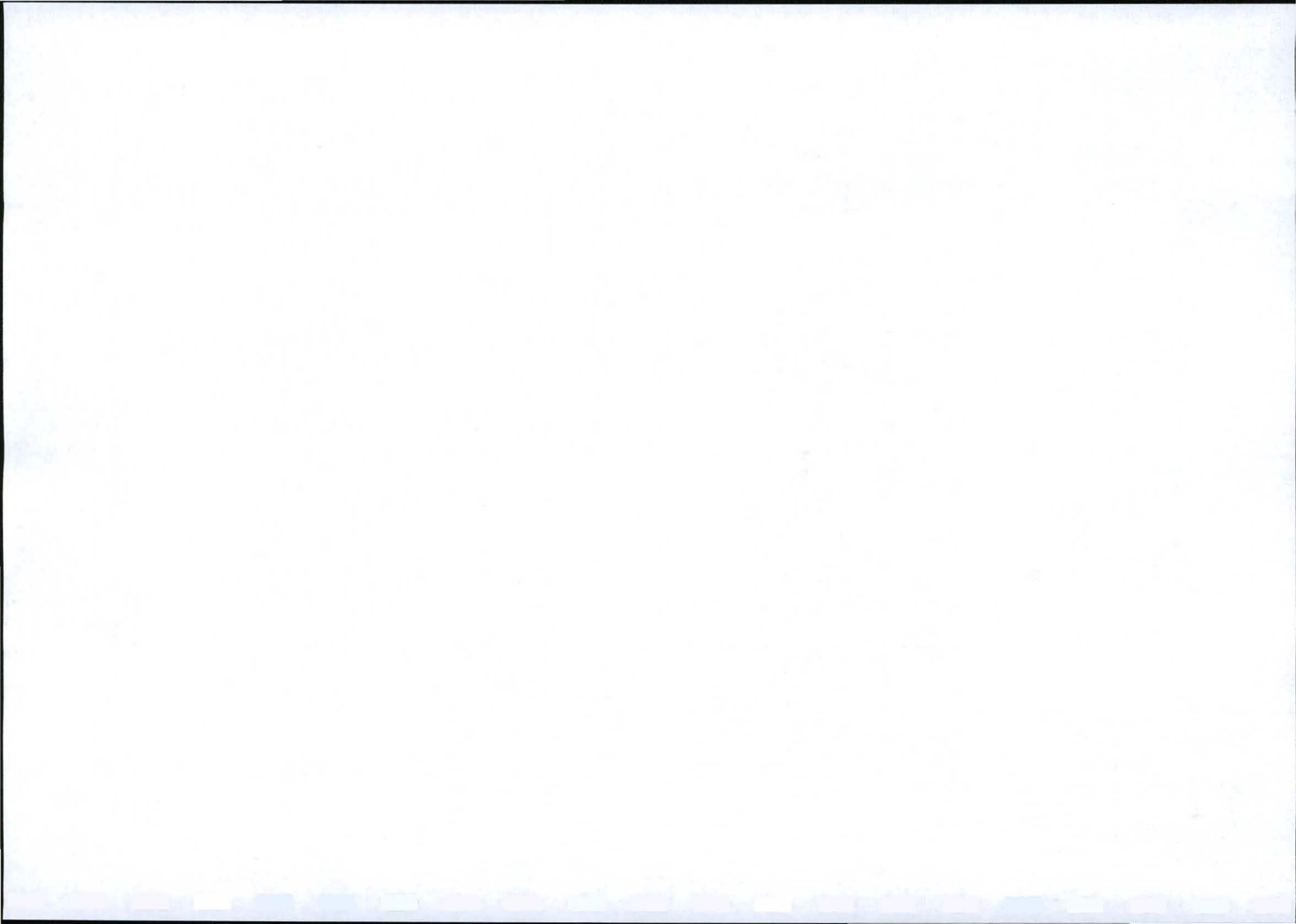
Notice is hereby given that Razita Mining Resources (Pty) Ltd application for Prospecting Rights has been accepted on 27TH of October 2011 by the Department of Minerals Resources (Northern Cape Province). In terms of regulation 7(1) of the Regulations under the Mineral and Petroleum Resources Development Act 2002 (Act No. 28 of 2002), we hereby seek permission to prospect for **Manganese (Mn)** on the above mentioned farm.

Yours Sincerely,

Brian Nyezi

I..... do object / do not object to the prospecting of the above minerals on my farm.

Date Signature



7 REGULATION 52 (2) (g): Record of the public participation and the results thereof.

In terms of the time line given after submission through the SAMRAD Online system for the Prospecting Right Application, we could not conduct a public participation and we commit to conduct a public participation after the Prospecting Right has been granted.

7.3 Identification of interested and affected parties.

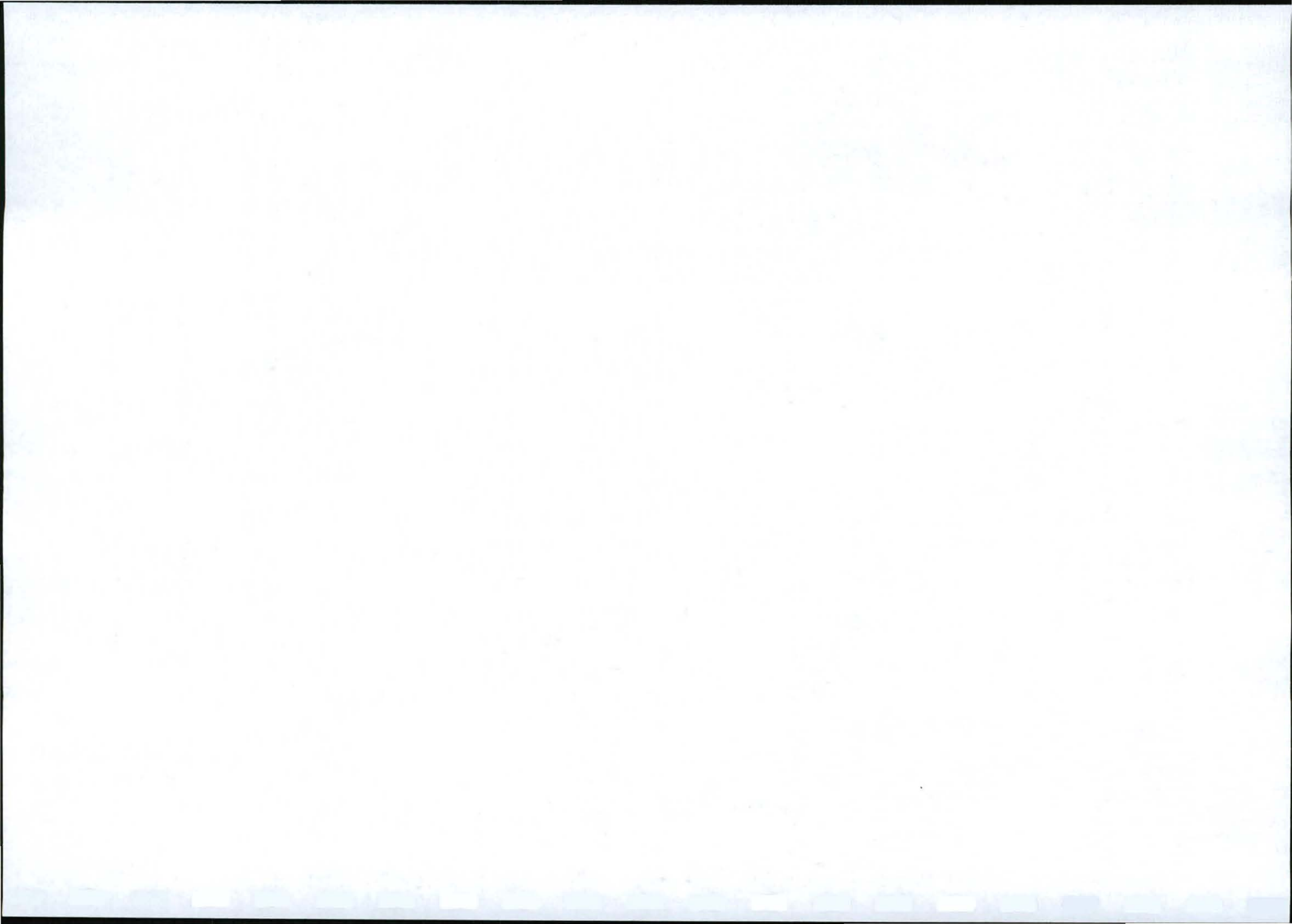
(Provide the information referred to in the guideline)

Name of Interested/ affected party	Contact details: Address & telephone number	How did consultation take place?	What were his/her main concern about the operation?
Beesthoek Farm No. 448 Mr. Grobler GM: Assmang Ltd , Kuruman Operation	Mr. Willem Grobler GM: Assmang Ltd , Kuruman Operation Tel:(053) 311 6547 Fax: 053 Mail:	Telephonic Consultation and email a letter	Mr. W. Grobler indicated to me that he will pass my request to the relevant people within the Assmang Ltd Exco, A letter is hereto attached
Assmang Ltd	Mr. Jan Steenkamp Director: Assmang Ltd P O Box 782058 Sandton 2146	Letter of Objection to Razita Mining Resources Prospecting right	Objecting that Razita cannot operate a mining operation on their property.

7.4 The details of the engagement process.

7.4.3 Description of the information provided to the community, landowners, and interested and affected parties.

Please see below letter sent to affected Parties



NOTICE

30 Nov 2011

Mr. Grobler
ASSMANG LTD
Northern Cape

Dear Sir,

PROSPECTING REQUIREMENTS—Beesthoek No. 448

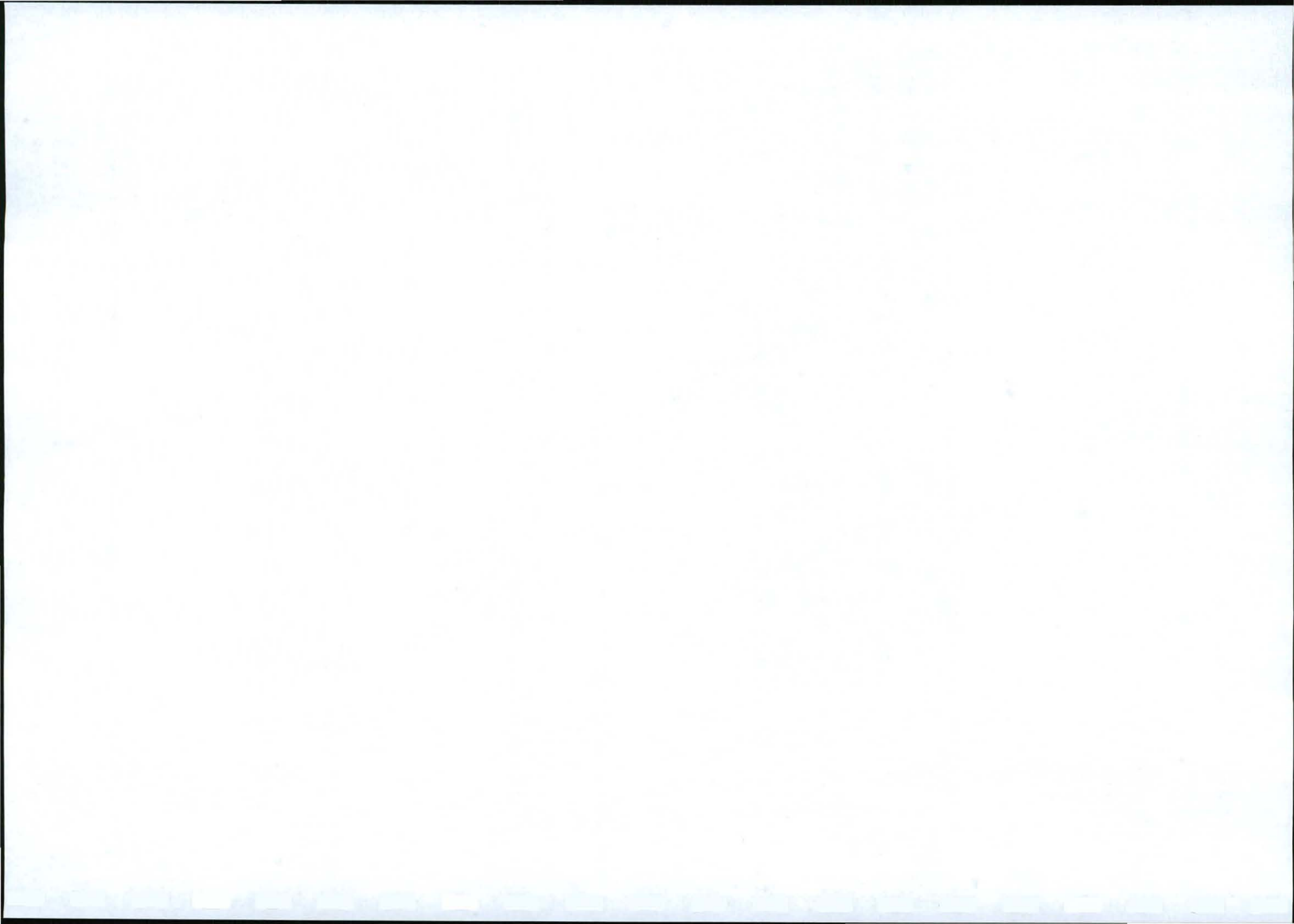
Notice is hereby given that Razita Mining Resources (Pty) Ltd application for Prospecting Rights has been accepted on 27TH of October 2011 by the Department of Minerals Resources (Northern Cape Province). In terms of regulation 7(1) of the Regulations under the Mineral and Petroleum Resources Development Act 2002 (Act No. 28 of 2002), we hereby seek permission to prospect for **Manganese (Mn)** on the above mentioned farm.

Yours Sincerely,

Brian Nyezi

I..... do object / do not object to the prospecting of the above minerals on my farm.

Date Signature



7.4.4 List of which parties identified in 7.1 above that were in fact consulted, and which were not consulted.

Affected Parties of farms Plaas 447 and Plaas 479 could not be identified, however, letter has been sent to the Affected Parties

7.4.5 List of views raised by consulted parties regarding the existing cultural, socio-economic or biophysical environment.

Letter of objection from Assmang Ltd is attached hereto for your attention, as Annexure "C".

7.4.6 List of views raised by consulted parties on how their existing cultural, socio-economic or biophysical environment potentially will be impacted on by the proposed prospecting or mining operation.

Letter of objection from Assmang Ltd is attached hereto for your attention, as Annexure "C".

7.4.7 Other concerns raised by the aforesaid parties.

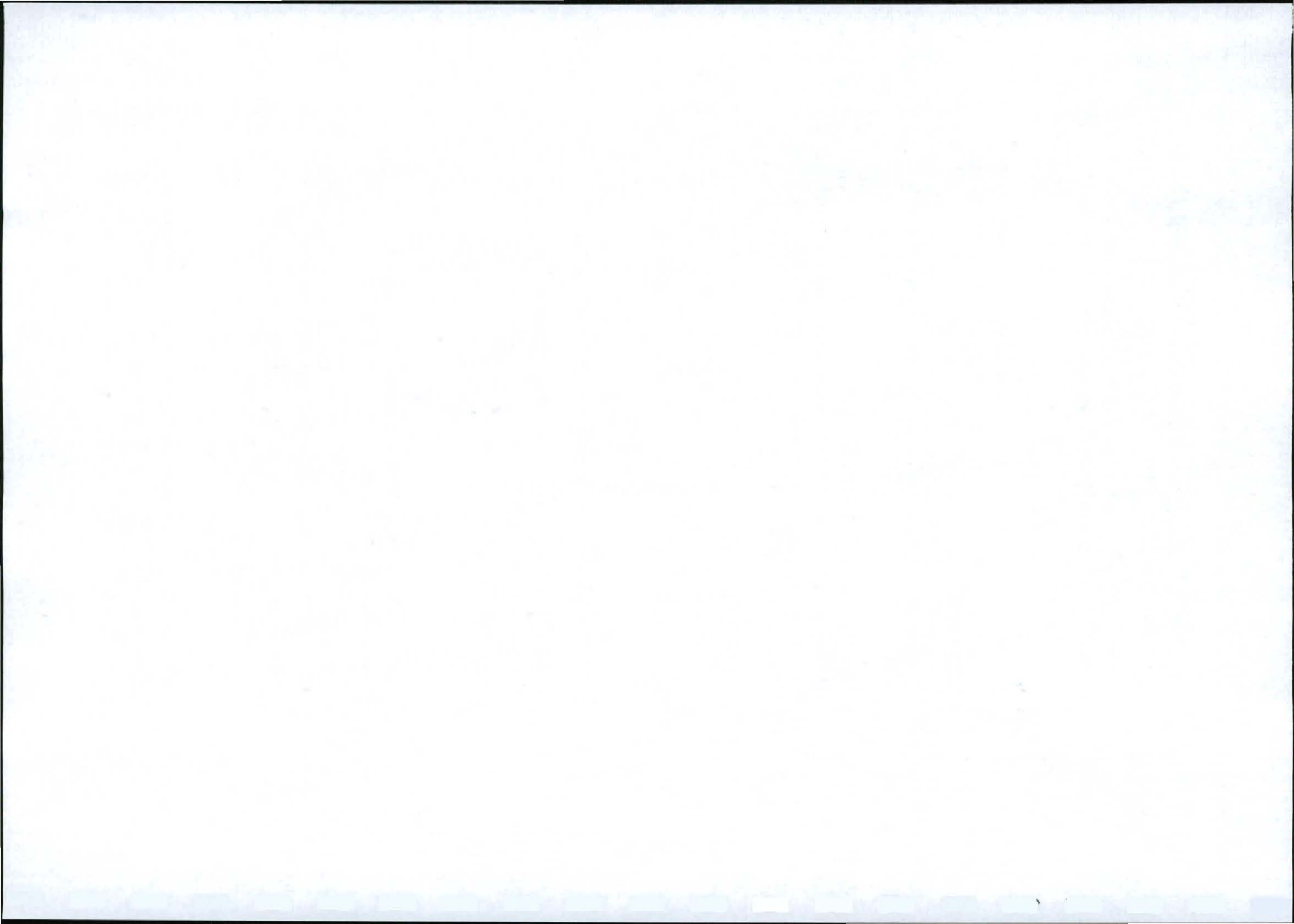
Letter of objection from Assmang Ltd is attached hereto for your attention, as Annexure "C".

7.4.8 Confirmation that minutes and records of the consultations are appended.

At this stage there has not been any meeting, due to short time lines prior to submission of the Prospecting Right, however, letters has been sent and future meetings are planned.

7.4.9 Information regarding objections received.

Letter of objection from Assmang Ltd, the holders or affected Party from Beeshoek No. 448 is attached hereto as Annexure "C".



7.5 The manner in which the issues raised were addressed.

Not all matters were addressed and future consultation is planned.

8 SECTION 39 (3) (c) of the Act: Environmental awareness plan.

8.3 Employee communication process

(Describe how the applicant intends to inform his or her employees of any environmental risk which may result from their work).

The use of symmetrical communication strategies such as openness, access, and listening in risk communication programs contributed to external publics' development of positive perceptions regarding the organization.

The strategies to manage risk typically include avoiding the risk, reducing the negative effect or probability of the risk, or even accepting some or all of the potential or actual consequences of a particular risk.

ideal risk management minimizes spending (or manpower or other resources) and also minimizes the negative effects of risks.

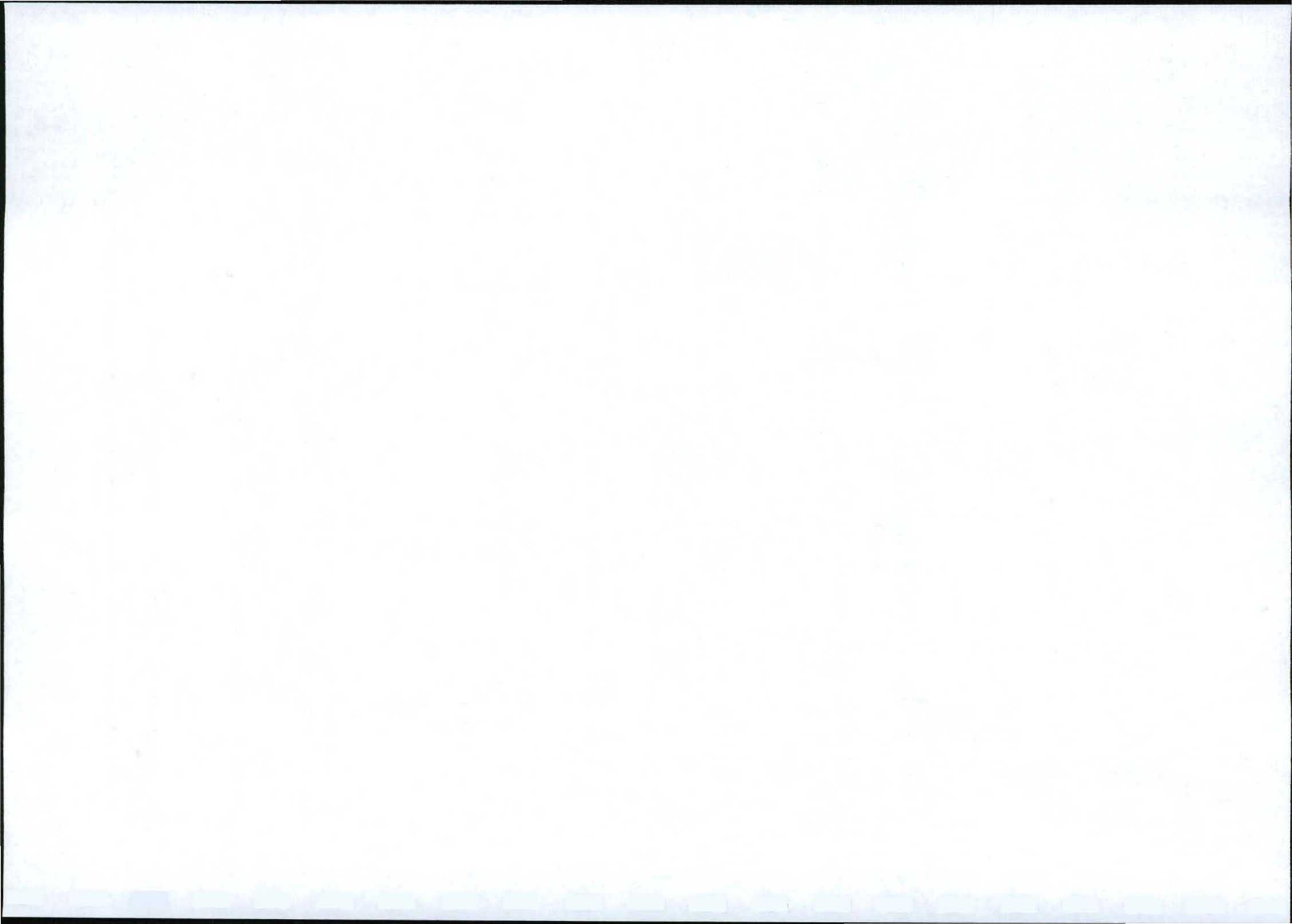
Method

For the most part, these methods consist of the following elements, performed, more or less, in the following order.

1. identify, characterize, and assess threats
2. assess the vulnerability of critical assets to specific threats
3. determine the risk (i.e. the expected consequences of specific types of attacks on specific assets)
4. identify ways to reduce those risks
5. prioritize risk reduction measures based on a strategy

Principles of risk management

RMS identifies the following principles of risk management



Risk management should:

- create value - resources expended to mitigate risk should generally exceed the consequence of inaction, or (as in value engineering), the gain should exceed the pain
- be an integral part of organizational processes
- be part of decision making
- explicitly address uncertainty and assumptions
- be systematic and structured
- be based on the best available information
- be tailorable
- take into account human factors
- be transparent and inclusive
- be dynamic, iterative and responsive to change
- be capable of continual improvement and enhancement
- be continually or periodically re-assessed

RMS risk mitigation measures are usually formulated according to one or more of the following major risk options, which are:

1. Design a new business process with adequate built-in risk control and containment measures from the start.
2. Periodically re-assess risks that are accepted in ongoing processes as a normal feature of business operations and modify mitigation measures.
3. Transfer risks to an external agency (e.g. an insurance company)
4. Avoid risks altogether (e.g. by closing down a particular high-risk business area)

8.4 Description of solutions to risks

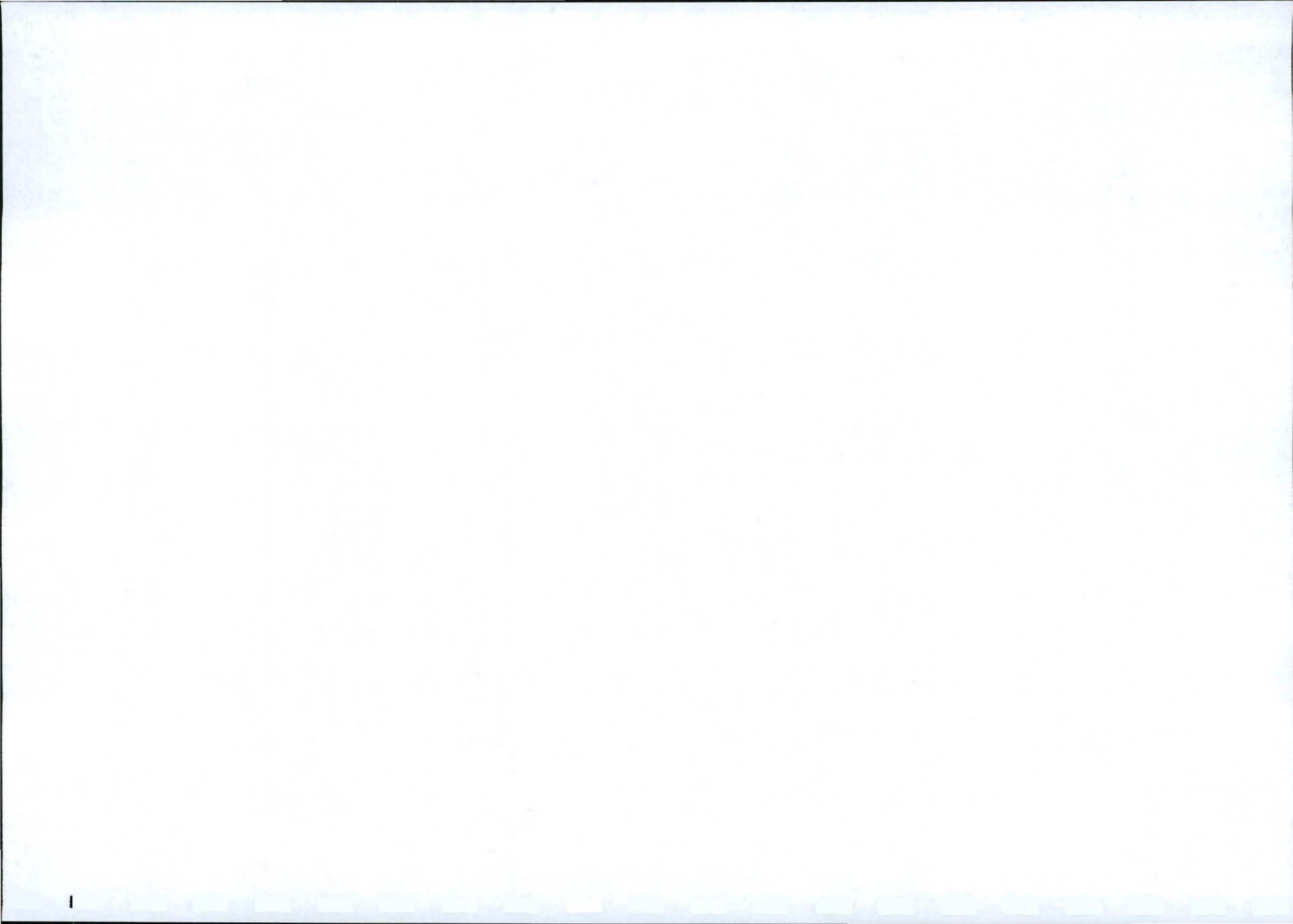
(Describe the manner in which the risk must be dealt with in order to avoid pollution or degradation of the environment).

Review and evaluation of the plan

RMS has through experience learnt that initial risk management plans will never be perfect. Practice, experience, and actual loss results will necessitate changes in the plan and contribute information to allow possible different decisions to be made in dealing with the risks being faced.

Risk analysis results and management plans should be updated periodically. There are two primary reasons for this:

1. to evaluate whether the previously selected security controls are still applicable and effective, and
2. to evaluate the possible risk level changes in the business environment. For example, information risks are a good example of rapidly changing business environment.



8.5 Environmental awareness training.

(Describe the general environmental awareness training and training on dealing with emergency situations and remediation measures for such emergencies).

Training, Awareness, and Competence Background and Exhibits

There are two excellent reasons to train employees on environmental management and your EMS:

- Every employee can have potential impacts on the environment; and
- Any employee can have good ideas about how to improve environmental management efforts.

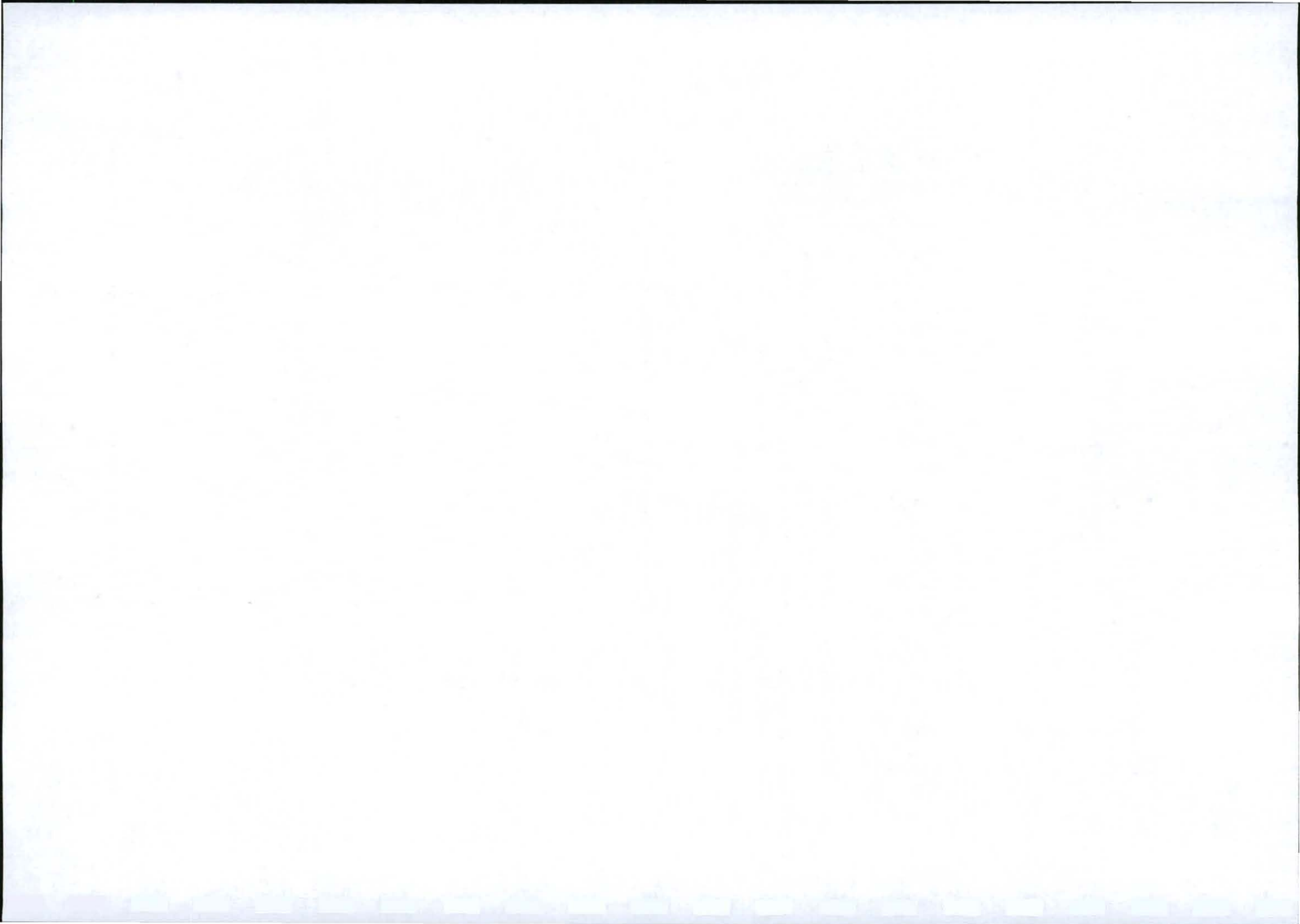
Each person and function within your facility can play a role in environmental management. For this reason, your training program should cast a wide net. Every employee and manager should be aware of the environmental policy, the significant environmental aspects (SEAs) of their work activities, key EMS roles and responsibilities, procedures that apply to their work, and the importance of Conformance with EMS requirements.

All RMS personnel will receive appropriate training and support to be competent at their work, at regular intervals, yearly and all times. Training is needed both in technical work and for general awareness on the part of all employees. As

EMS Training, task-specific training should be offered as a subset of general awareness training.

Action Steps:

1. Identify all job functions that affect the environment. Small facilities may wish to identify individuals. Identify who is responsible for employee health and safety.
2. Identify the training and type of training these people currently receive that relates to environmental and health and safety concerns.
3. Determine if EMS education could be integrated with existing training or whether there should be special EMS training, at least in the beginning.
4. Identify training materials or programs available outside your facility. Some places to check include:
 - Trade associations;
 - Small Business Administration;



- EPA;
- State departments of environmental protection;
- Suppliers;
- Certified contractors; and
- Navy (Note: Materials from the Navy's Occupational Safety, Health, and Environmental Training Program.

The need for ongoing training when experiencing employee turnover.

Procedure for Environmental Training and Awareness (EP-008)

1.0 Purpose

This procedure defines the process for identifying and planning environmental training and Awareness.

2.0 Activities Affected

All areas and departments

3.0 Forms Used

- 3.1 Training Needs Analysis—Environmental Courses (EF-008.01)
- 3.2 Training Needs Analysis—Procedures and Work Instructions by Area/Department (EF-008.02)

4.0 References

- 4.1 Procedure for Identification of Legal and Other Requirements (EP-001)
- 4.2 Procedure for Environmental Aspects, Objectives and Targets, and Programs (EP-003)
- 4.3 Procedure for Communication with Stakeholders (EP-004)
- 4.4 ISO 14001:1996, Element 4.4.2

5.0 Definitions

None

6.0 Exclusions

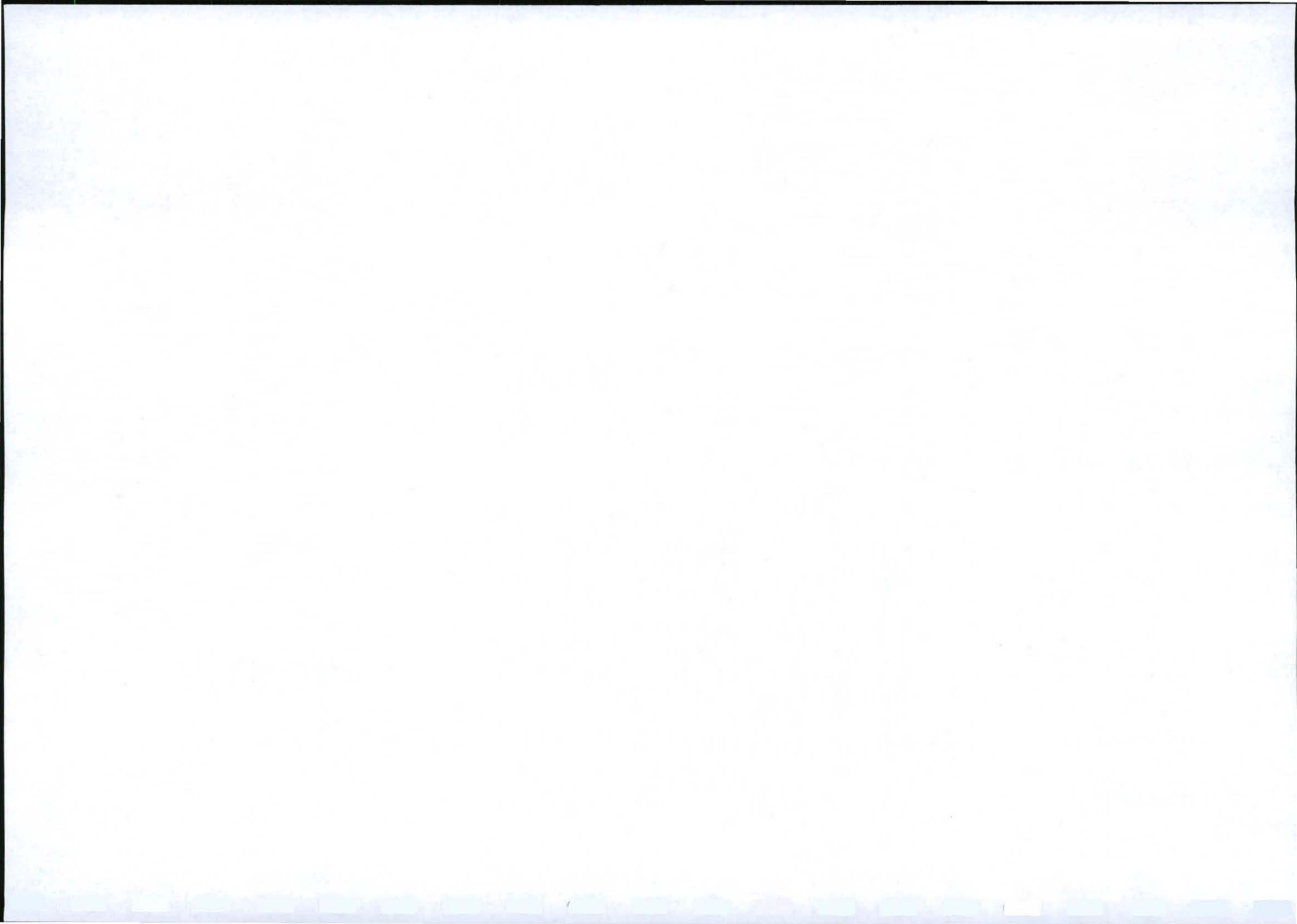
None

7.0 Procedure

7.1 Training

7.1.1 A training needs analysis (TNA) and training schedule shall be completed and maintained by the Training Department to identify the level of instruction needed by personnel whose jobs may create a significant impact on the environment.

7.1.2 The needs analysis and training schedule shall be reviewed and updated where necessary, at least annually, and when requested by the Environmental Management Representative or designee in consultation with the Training Department to ensure its continuing adequacy.



7.1.3 Knowledgeable individuals with appropriate expertise and experience in shall develop the TNA: operational environmental management; relevant environmental legal requirements for environmental training;

7.1.4 New, part-time, and transferred employees, as well as permanent on-site contractors, shall be included in the environmental training program.

7.1.5 The Training Department shall maintain records of each individual's environmental training

9 SECTION 39 (4) (a) (iii) of the Act: Capacity to rehabilitate and manage negative impacts on the environment.

RMS has the capacity internally to manage the rehabilitation and the management of negative impacts, if and when necessary outside expertise will be incorporated into the system and EIA, EMP programmes.

9.3 The annual amount required to manage and rehabilitate the environment.

(Provide a detailed explanation as to how the amount was derived)

The below mentioned amount is the provision for the rehabilitation of the drilling holes and not for the entire environment and this will be looked at in detail in the Mining Right phase.

Costs pertaining to the rehabilitation and management of environmental impacts

Phases	Rate	Cost
Phase 1		
Phase 2 and 2		
Rehabilitation of camp site		R 6 750-00
Rehabilitation of boreholes	R 106-00 per plug	R 55 000-00
Rehabilitation of sumps	R 75-00 per borehole	R 10 500-00
Environmental management		R 25 000-00
Phase 4		
Closure report		R 20 000-00
Total		R 117 250-00



9.4 Confirmation that the stated amount correctly reflected in the Prospecting Work Programme as required.

The above amount mentioned is reflected in the Revises Prospecting Work Programme

10 REGULATION 52 (2) (h): Undertaking to execute the environmental management plan.

Herewith I, the person whose name and identity number is stated below, confirm that I am the person authorised to act as representative of the applicant in terms of the resolution submitted with the application, and confirm that the above report comprises EIA and EMP compiled in accordance with the guideline on the Departments official website and the directive in terms of sections 29 and 39 (5) in that regard, and the applicant undertakes to execute the Environmental management plan as proposed.

Full Names and Surname	Brian Thabo Nyezi
Identity Number	671210 5266 088

-END-





ASSMANG

ASSMANG LIMITED H:\PAULHEVAMM Iron Ore Beeshoek\corres\Razita-let01.doc
REG. NO. 1935/007343/06

REGISTERED OFFICE: 15 December 2011
24 IMPALA ROAD

CHISLEHURSTON, 2196 Mr Brian Nyezi
Executive Chairman
Razita Mining Resources (Pty) Limited
POSTAL ADDRESS: Razita Mining Resources (Pty) Limited
P.O. BOX 782058
SANDTON, 2146 Email address: brian@nubj.co.za
SOUTH AFRICA

TEL:
(27 11) 779 1000

FAX:
(27 11) 779 1031

DIRECTORS:

D G SACCO (Chairman)

A J WILKENS (Deputy Chairman)

M ARNOLD

G C BUTLER

C J CORY

P C GROUS

A JOUBERT

S M LANGA

LS MATSIMELA

P E SACCO

A D STALKER

J C STEENKAMP

ALTERNATE DIRECTORS:

R AVENANT-BUYS

M W GULE

P G W HENDERSON

F H KALP

G C T KARSTEN

B MASHIANE

A McADAM

F T OLIVIER

G R PIETERSE

B H VAN ASWEGEN

J C VENTER

Dear Mr Nyezi


OBJECTION BY ASSMANG LIMITED ("ASSMANG") TO APPLICATION FOR A PROSPECTING RIGHT BY RAZITA RESOURCES (PROPRIETARY) LIMITED OVER THE REMAINING EXTENT AND PORTION 1 OF THE FARM BEESHOEK 448, AND IF APPLICABLE, THE REMAINING EXTENT OF THE FARM OLYNFFONTEIN 475, FOR MANGANESE ORE

I refer to your email dated 29 November 2011, and to the documents attached thereto.

Assmang objects to your application for a prospecting right referred to above, and there is attached a copy of our objection which has been submitted to the Regional Manager of the Department of Mineral Resources.

To enable us further to consider your application, I would be grateful if you would provide us with a copy of your application for a prospecting right and proposed environmental management plan, and all other relevant documentation in your possession relating to your application for the prospecting right.

Yours faithfully


Willem Grobbelaar
EXECUTIVE: MINES

COMPANY SECRETARY:
AFRICAN RAINBOW MINERALS
LIMITED





Razita Mineral Resources Pty Ltd Reg No. 2003/009808/07

Tel: +27 11 656 5441, Fax: +27 11 656 5456

P. O Box 786573, Sandton 2146

54 Oldens Way, Kelvin, Sandton, or 11 Alice Lane, STD Bank Building, West Wing, 1st
Floor, Sandton 2146

19 Dec 2011

Mr. Willem Grobbelaar

EXECUTIVES: MINES

ASSMANG LTD

P O Box 782058

Sandton

Dear Mr. Grobbelaar,

Re: PROSPECTING RIGHT (NC) 30/5/1/1/2/10242, BEESTHOEK NO.448

We refer to the above matter and wish to state the following:

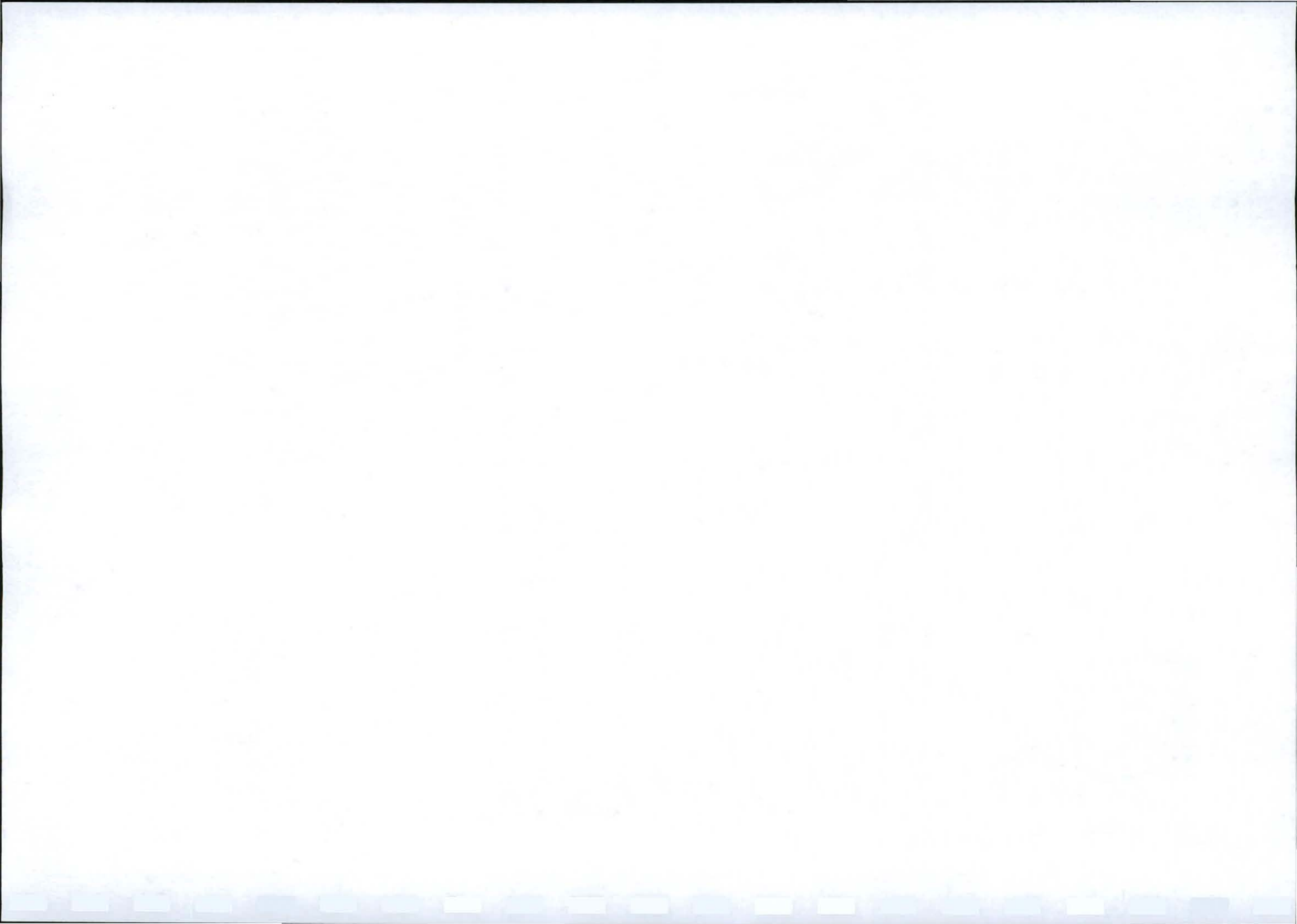
1. We acknowledge receipt of your objection letter dated 15th of Dec 2011 in connection with the above application;
2. We also acknowledge receipt of your objection letter sent by Mr. Jan Steenkamp to the Department of Mineral Resources (DMR), dated 15th of Dec 2011;
3. The letter from DMR confirms that Assmang has Iron Ore mining licence, NC 5/3/2/150;
4. We wish to state that we noted the grounds of your objections and we will respond in due course or to DMR on your objections, after seeking advice; and
5. We further wish to state that we are willing to resolve this matter amicably.

Yours Sincerely,

Brian Nyezi

Executive Chairman

Confidential



The below mentioned letter was the content of discussion held with the prospective farm owners:

NOTICE

30 Nov 2011

Mr. Grobler
ASSMANG LTD
Northern Cape

Dear Sir,

PROSPECTING REQUIREMENTS-Beesthoek No. 448

Notice is hereby given that Razita Mining Resources (Pty) Ltd application for Prospecting Rights has been accepted on 27TH of October 2011 by the Department of Minerals Resources (Limpopo Province). In terms of regulation 7(1) of the Regulations under the Mineral and Petroleum Resources Development Act 2002 (Act No. 28 of 2002), we hereby seek permission to prospect for **Manganese (Mn)** on the above mentioned farm.

Yours Sincerely,



Brian Nyezi

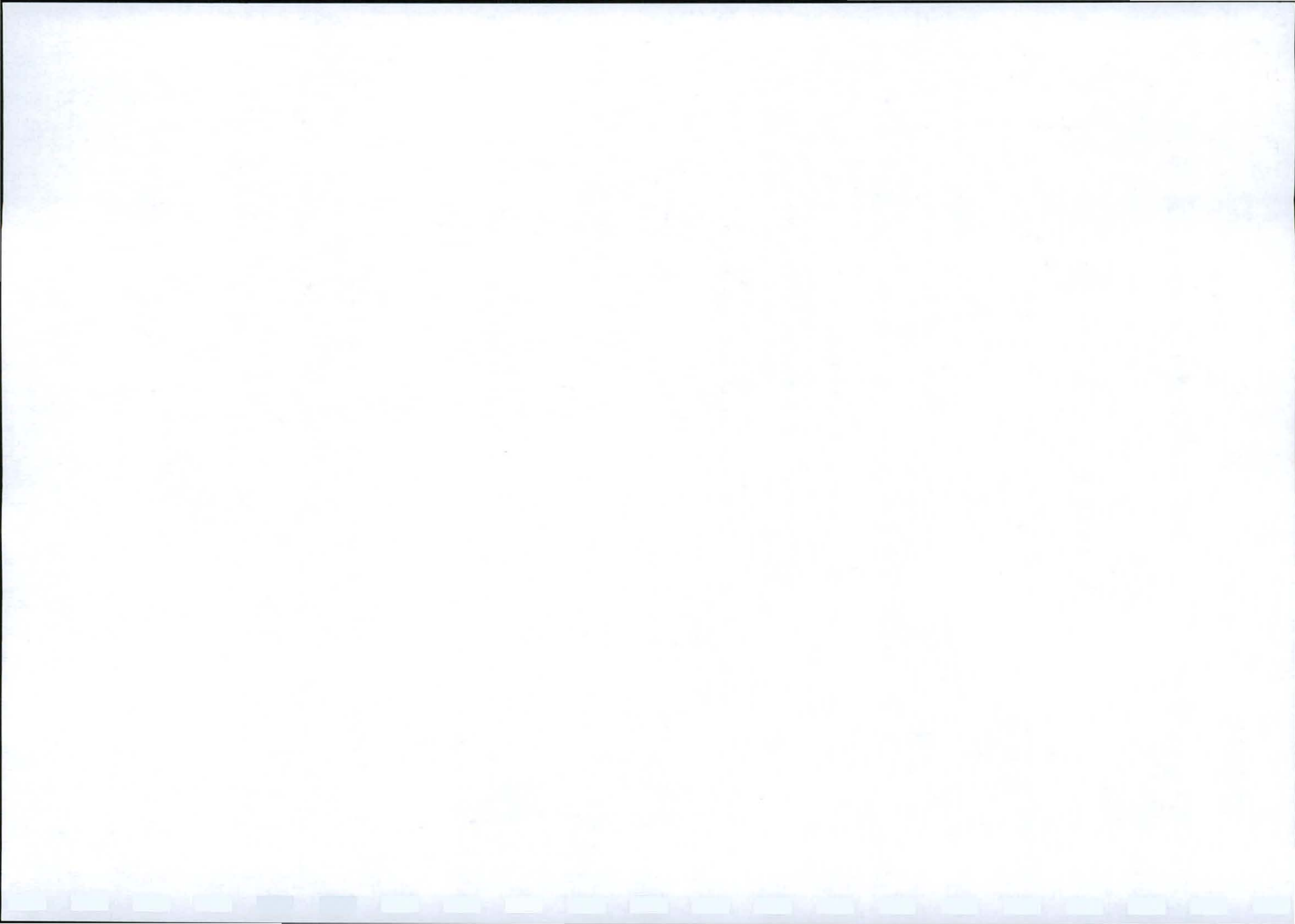
I..... do object / do not object to the prospecting of the above minerals on my farm.

Date Signature

Razita Mining Resources Pty Ltd



Northern Cape Province- Hay District Municipality
Release Version (1.3.1) 30 Nov 2011



Brian Nyezi

From: "Paul Henderson" <Paul.Henderson@arm.co.za>
To: <brian@nubj.co.za>
Cc: "Willem Grobelaar" <willemg@assmang.co.za>; "Mark Oosthuizen" <marko@assmang.co.za>;
 "Andre Joubert (ARM)" <andre.joubert@arm.co.za>
Sent: 19 December 2011 11:20 AM
Attach: Regional Manager-let12.annexes.docx.pdf; Regional Manager-let12.docx.pdf; razita-let01.pdf
Subject: FW: MANGANESE PROSPECTING REQUEST

Dear Mr Nyezi

Further to your email addressed to Willem Grobbelaar, copied below, there is attached our formal response thereto, being our letter to you, and a copy of our objection submitted to the Regional Manager, attached thereto.

Regards

Paul

Date: 2011.12.19

Executive: Legal, Armferrous, African Rainbow Minerals Limited, 24 Impala Road, Chislehurst, Sandton

Tel: +27 11 779 1103, Fax: +27 11 779 1019, E-mail: Paul.Henderson@arm.co.za



Please consider the environment before printing this email.

From: Brian Nyezi [<mailto:brian@nubj.co.za>]
Sent: 29 November 2011 05:21 PM
To: Willem Grobbelaar
Subject: MANGANESE PROSPECTING REQUEST

Dear Mr. Grobler,

Please find hereto attached Razita Mining Resources Pty Ltd Prospecting Right (PR) as discussed.

Razita Mining Resources' PR was accepted by DMR on the 27th of October 2011 for Beesthoek and other farms as depicted in the attached acceptance letter. We did not receive any objection in writing from affected Parties by the said date stated in the acceptance letter and hence our request to prospect on Beesthoek farm for Manganese, since Assmang is mining Iron Ore on the said farm.

We anticipate a favourable response.

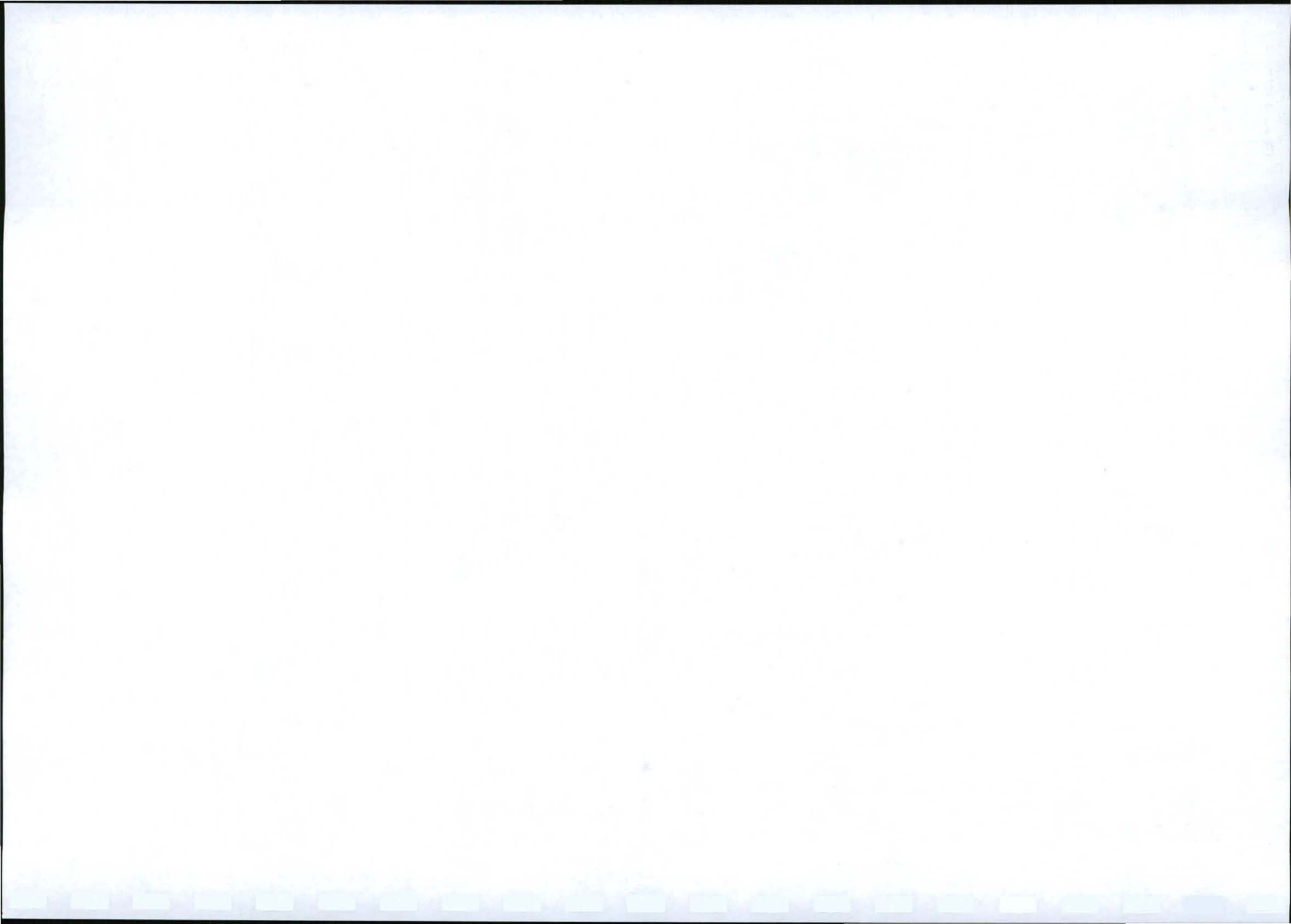
Yours Sincerely,

Brian Nyezi

Executive Chairman

Razita Mining Resources (Pty) Ltd

Tel: +27 11 656 5447



Mobile: +27 82 357 5455

Assmang Iron Ore - Disclaimer:

This e-mail message and all attachments contain information intended solely for the addressee, which is confidential or private in nature. If you have received this in error, please contact the sender immediately and delete this e-mail and any attachments. Any views or opinions presented are solely those of the author and do not necessarily represent those of Assmang Iron Ore Operations. Neither Assmang Iron Ore Operations nor the sender accepts liability for any interception, errors, virus or other interference

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