mineral resources

Department:
Mineral Resources
REPUBLIC OF SOUTH AFRICA

DRAFT BASIC ASSESSMENT REPORT

for

MIDDEN MINING - BENTONITE AND ZEOLITE PROSPECTING RIGHT CLOSURE

on

RE AND PORTION 2 OF MELKBOOM 209, PORTION 1 AND 4 OF MATJIESFONTEIN 210, PORTION OF MATJIESDRIFT 329, PORTION OF FARM 323, PORTION OF FARM 372

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

NAME OF APPLICANT: Midden Mining (Pty) Ltd\]
REGISTRATION NR: 200902371307
CONTACT PERSON: Mr Robert Nicholas Barnett
TEL NO: 011 864 4546
CELL: 08/2 820 2574
EMAIL: rbarnett@telkomsa.net
POSTAL ADDRESS: P.O.Box 6208, Weltevreden Park, 1715
PHYSICAL ADDRESS: 29 Pauline Street, Constantia Kloof, 1725

PROSPECTING REF: WC30/5/1/1/2/10032PR

NOVEMBER 2018

1. IMPORTANT NOTICE

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

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

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

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

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

2. Objective of the basic assessment process

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

(a) determine the policy and legislative context within which the proposed activity is located and how the activity complies with and responds to the policy and legislative context;

(b) identify the alternatives considered, including the activity, location, and technology alternatives;

(c) describe the need and desirability of the proposed alternatives,

(d) through the undertaking of an impact and risk assessment process inclusive of cumulative impacts which focused on determining the geographical, physical, biological, social, economic, heritage , and cultural sensitivity of the sites and locations within sites and the risk of impact of the proposed activity and technology alternatives on the these aspects to determine:

  (i) the nature, significance, consequence, extent, duration, and probability of the impacts occurring to; and
  (ii) the degree to which these impacts—
    (aa) can be reversed;
    (bb) may cause irreplaceable loss of resources; and
    (cc) can be managed, avoided or mitigated;

(e) through a ranking of the site sensitivities and possible impacts the activity and technology alternatives will impose on the sites and location identified through the life of the activity to—
  (i) identify and motivate a preferred site, activity and technology alternative;
  (ii) identify suitable measures to manage, avoid or mitigate identified impacts; and
  (iii) identify residual risks that need to be managed and monitored.

APPENDICES		Tick the box if Appendix is attached
Appendix A:	**EAP CV and Qualifications**	X
Appendix B:	**Site plan(s) and photographs**	X
Appendix C:	**Proof of Public Participation Process**	X
Appendix D:	**Approved Prospecting Right and Work Programme**	X
Appendix E:	**Approved Environmental Management Plan**	X
Appendix F:	**Prospecting Results Report/s**	X
Appendix G:	**Final Closure Audit, Environmental Risk Report and Closure/Rehabilitation Plan**	X
Appendix H:	**Heritage Western Cape: Notice of Intent**	X

PART A

SCOPE OF ASSSSMENT AND BASIC ASSESSMENT REPORT

3. Contact Person and correspondence address

a) Details of

i) Details of the EAP

Name of The Practitioner: Johmandie Pienaar (Giliomee)
Tel No.: 021 671 1660
Cell No.: 072 240 3092
Fax No. : 021 671 9976
e-mail address: johmandie@ecoimpact.co.za

ii) Expertise of the EAP.

The qualifications of the EAP
(with evidence).

Johmandie Pienaar (Giliomee) holds a Baccalaureus Technologiae Degree (Cum Laude) in Nature Conservation from the Cape Peninsula University of Technology and has also completed the following short courses at the Centre for Environmental Management:

- Implementing Environmental Management Systems (ISO 14001)(2009);
- Occupational Health and Safety Law for Managers (2010);
- Implementing an OHS Management System based on OHSAS 18001 (2010) and;
- Occupational Health and Safety Management System OHSAS 18001 Audit: A Lead Auditor Course Based on ISO 19011 and ISO 17021 (2011).
- Conduct Outcome Based Assessment (May 2015).

Summary of the EAP's past experience.
(In carrying out the Environmental Impact Assessment Procedure)

Johmandie has been involved in environmental management and assessment aspects since 2005 having worked for South African National Parks and then as an private Environmental Manager for an estate in the Swartland.

Since March 2009 Johmandie has been practicing as an Environmental Assessment Practitioner, as part of an environmental consultancy company, on several projects throughout South-Africa and mainly within the Western Cape.

Johmandie has also been involved in successfully compiling, coordinating and managing Basic Assessment Reports, Environmental Impact Assessments, Section 24G Applications, NEMA EIA Checklists, Environmental Management Programmes, Waste License Applications, Water Use License Applications, Mining Right and Prospecting Right Applications; Environmental Rehabilitation Plans and Baseline Biodiversity Surveys for numerous clients.

Johmandie has also conducted and completed numerous Environmental Control Officer jobs, and since 2011 been involved in Occupational Health and Safety Auditing, Managing and Training specializing in the auditing of construction sites and implementing and auditing Occupational Health and Safety Management Systems, and providing training on the implementation of Occupational Health and Safety Management System OHSAS 18001.
(Refer to **Appendix A** for EAP CV)

b) Location of the overall Activity.

Farm Name:	RE and Portion 2 of Melkboom 209, Portion 1 and 4 of Matjiesfontein 210, Portion of Matjiesdrift 329, Portion of Farm 323, Portion of Farm 372, Western Cape, Mossel Bay
Application area (Ha)	3098.185ha
Magisterial district:	Mossel bay
Middle Point (GPS Co-ordinates) of Property	34° 06' 12.43''S 21° 57' 18.27''E
Distance and direction from nearest town	14 km W.N.W (direct distance) of Mossel Bay
21 digit Surveyor General Code for each farm portion	C05100000000032900000; C05100000000021000001; C05100000000020900002; C05100000000021000004; C05100000000032300000; C05100000000037200000

c) Locality map
(show nearest town, scale not smaller than 1:250000)

See locality maps as attached under **Appendix B**

d) Description of the scope of the proposed overall activity.

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

See locality maps as attached under **Appendix B**

(i) Listed and specified activities

NAME OF ACTIVITY **(E.g. For prospecting -** drill site, site camp, ablution facility, accommodation, equipment storage, sample storage, site office, access route **etc…etc…etc.** **E.g. for mining**,- excavations, blasting, stockpiles, discard dumps or dams, Loading, hauling and transport, Water supply dams and boreholes, accommodation, offices, ablution, stores, workshops, processing plant, storm water control, berms, roads, pipelines, power lines, conveyors, etc…etc…etc.)	**Aerial extent of the Activity Ha or m²**	**LISTED ACTIVITY Mark with an X where applicable or affected.**	**APPLICABLE LISTING NOTICE (*GNR 983, GNR 984 or GNR 985)***
Closure and rehabilitation of bentonite and zeolite prospecting right activities that was conducted on cultivated agricultural land.	3098.185ha	X	GNR 983, Activity no. 22

(ii) Description of the activities to be undertaken

(Describe Methodology or technology to be employed, including the type of commodity to be prospected/mined and for a linear activity, a description of the route of the activity)

DMR issued a Prospecting Right (PR) in respect of bentonite and zeolite prospecting activities on a total of 3098.185ha on RE and Portion 2 of Melkboom 209, Portion 1 and 4 of Martjiesfontein 210, Portion of Matjiesdrift 329, Portion of Farm 323 and Portion of Farm 372, within the Magisterial District of Mossel Bay, in the Western Cape Province.

Prospecting activities commenced during February 2014 and finished during September 2018 when the last and most recent rehabilitation work was done on site. Prospecting methods consisted of:

- Non-invasive desktop studies and foot surveys to create geological maps to determine where trenching and sampling will be necessary.
- Invasive trenching with a back-actor under constant geological specialist supervision so as to minimise unnecessary trenching and expenditure.
- During trenching the topsoil is separated and piled first on one side of the trench and the subsoil is piled separately. This is to conserve the topsoil and subsoil for

rehabilitation purposes after sampling. Each trench is a maximum length of 30m, 1.2m wide and 2m deep. In total there were approximately 60 trenches and 268 boreholes sites created within the prospecting right area which disturbed less than 10ha of previously cultivated agricultural lands where samples were taken for analyses.

- A soil sample is then taken for testing and geological mapping and then the trench is firstly backfilled with the stored subsoil followed by the topsoil and then shaped according to surrounding topography to prevent any depressions from forming at the trenching site. Note all of the trenching, sampling and backfilling takes place on the same day.
- The trenching operations and sampling are followed-up by further desktop studies and if feasible drilling thereafter.

Following the results of the prospecting conducted the mining company do not intend to pursue a bentonite and zeolite mining right for the applicable properties at this stage.

Additional long-term management, monitoring and maintenance recommended/expected for the rehabilitated sites

Ideally, a properly designed and executed rehabilitation plan will leave the prospecting area in a condition requiring no continuing, long-term maintenance to achieve an enduring, high quality environment. The prospecting right holder commits to post-closure maintenance during rehabilitation of the site and until the time of receipt of a closure certificate for all or parts of the prospecting area. Long-term care will include maintenance of all storm water contour infrastructures, erosion rehabilitation and clearing of weed and alien vegetation species until the next ploughing/cultivation season. Thereafter, the responsibility for the ongoing maintenance and monitoring of the site will rest with the landowner.

Management and maintenance is expected to continue until the landowner cultivates the areas impacted by prospecting or after the closure certificate is issued (whichever comes first). Maintenance will be focused on erosion prevention and removal of weed and alien vegetation species on the prospecting area.

In terms of monitoring the EMP requirements states that six monthly photographic records of all rehabilitated sites must be kept by the Prospect Manager (“PM”) until the Closure Certificate have been obtained.

Currently all sites have been rehabilitated by means of infilling excavated materials, replacing excavated topsoil and shaping the impacted area according to surrounding contours. No signs of erosion or depressions are currently visible at the rehabilitated sites, but not all sites have been replanted/ revegetated with pastures as yet and therefore erosion might still occur after heavy rains. It is therefore recommended that the rehabilitated sites be revisited for a follow-up inspection at the end of July 2019 by an external environmental consultant or specialist and if signs of erosion or alien/weed encroachment are visible at the sites suitable recommendations for alien/weed eradication, soil stabilising and preventative measures must be provided and implemented. Additional follow-up inspections may also be required/ recommended.

Due to the disturbed sites having different types of pastures and vegetation growing on and adjacent to the sites and the landowner himself planting different crops on the various sites it was agreed with the landowner that no replanting will be done by the prospecting company, but that the sites will be left to naturally revegetate and that the landowner will replant the relevant sites during the next cultivation cycle. However, if evidence of erosion is noted at any of the rehabilitated sites during the follow-up inspection, as recommended for July 2019, the consultant/specialist may recommend the immediate replanting of the eroded sites to

promote stabilisation and prevent reoccurring erosion.

Also refer to Appendix G: Final Closure Audit, Environmental Risk Report and Closure/Rehabilitation Plan for more details of recommended additional closure/rehabilitation measures to be implemented.

e) Policy and Legislative Context

APPLICABLE LEGISLATION AND GUIDELINES USED TO COMPILE THE REPORT (a description of the policy and legislative context within which the development is proposed including an identification of all legislation, policies, plans, guidelines, spatial tools, municipal development planning frameworks and instruments that are applicable to this activity and are to be considered in the assessment process	**REFERENCE WHERE APPLIED**	**HOW DOES THIS DEVELOPMENT COMPLY WITH AND RESPOND TO THE LEGISLATION AND POLICY CONTEXT.** (E.g. In terms of the National Water Act a Water Use License has/ has not been applied for)
Minerals and Petroleum Resources Development Act (No 28 of 2002) and National Environmental Management Act, 1998 (Act No. 107 of 1998) [NEMA] and relevant regulations	Sections 38 to 47 of MPRDA S24(1) of NEMA S28(1) of NEMA	An application for a Prospecting Right Closure and associated Environmental Authorisation have been submitted to the DMR. Draft BAR will be submitted to registered interested and affected parties and all key departments for comments before final submission to DMR
Land Use Planning Ordinance (15 of 1985)		NA
National Heritage Resources Act 25 of 1999 [NHRA]		Notice of Intent to Develop will be submitted to Heritage Western Cape
National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) [NEMWA] and relevant regulations		Draft BAR will be submitted to the DEA&DP: Waste Management and DEA&DP: Pollution and Chemical Management for comments.
National Environmental Management: Biodiversity Act 10 of 2004 [NEMBA] and relevant regulations		NA
National Environmental Management: Air Quality Act, 39 of 2004 [NEMAQA] and Relevant Regulations		NA
National Water Act, 1998 (Act No. 36 of 1998) [NWA] and relevant regulations	Section 21 – Water Use Activities	Draft BAR will be submitted to the BGCMA for comments
Conservation of Agricultural Resources Act, 43 of 1983 [CARA]		Draft BAR will be submitted to the Western Cape Department of Agriculture for comments
National Health Act, 61 of 2003; Constitution of the Republic of South Africa, 1996		NA

Fencing Act, 31 of 1963		NA
National Veld and Forest Fire Act 101 of 1998 [NVFFA]		NA
Environment Conservation Act, 73 of 1989, Western Cape Noise Control Regulations		NA
National Forests Act, 84 of 1998		NA
Hazardous Substances Act, 15 of 1973		NA
National Environmental Management: Protected Areas Act 57 of 2003		NA
Mine Health and Safety Act, 1996 (Act No. 29 of 1996)		NA
Compensation for Occupational Injuries and Diseases Act 130 of 1993		NA
Basic Conditions of Employment Act 75 of 1997		NA
Labour Relations Act 66 of 1995		NA

POLICY/ GUIDELINES	**ADMINISTERING AUTHORITY**
Mossel Bay Municipality SDF	Mossel Bay Municipality
Mossel Bay Municipality Town planning regulations	Mossel Bay Municipality
Guideline on Public Participation	Department of Mineral Resources and Environmental Affairs
Guidelines on Alternatives	Department of Mineral Resources and Environmental Affairs
Guideline on Need and desirability	Department of Mineral Resources and Environmental Affairs
Guideline for Environmental Management Plans (EMP's)	Department of Mineral Resources and Environmental Affairs
PGWC Urban Edge Guidelines	Western Cape Department of Environmental Affairs and Development Planning
PGWC SDF	Western Cape Department of Environmental Affairs and Development Planning

f) Need and desirability of the proposed activities.

(Motivate the need and desirability of the proposed development including the need and desirability of the activity in the context of the preferred location).

It is the applicant's responsibility to implement closure and rehabilitation measures as according to the requirements of the approved prospecting right, prospecting work programme and environmental management plan; and accordingly apply for a prospecting right closure certificate.

Areas impacted during completed prospecting activities was inspected by an independent environmental consultant to determine level of compliance according to closure/rehabilitation objectives and where required additional rehabilitation long term monitoring, maintenance and management measures were recommended.

g) Motivation for the overall preferred site, activities and technology alternative.

- **Preferred site alternative**

Sites rehabilitated are restricted to the areas that were impacted upon by the completed prospecting activities on RE and Portion 2 of Melkboom 209, Portion 1 and 4 of Martjiesfontein 210, Portion of Matjiesdrift 329, Portion of Farm 323 and Portion of Farm 372. Therefore there are no other feasible or reasonable site alternatives to assess.

- **Preferred activity alternative**

Due to the prospecting activities already completed the only reasonable and feasible activity alternative that exists is to ensure successful rehabilitation of the impacted sites. Following the prospecting right closure site inspection conducted by the independent environmental consultant the following rehabilitation/closure monitoring, maintenance and management measures are recommended to achieve and maintain the closure objective of restoring the impacted areas to its previous agricultural pasture state:

  - All rehabilitated sites must be revisited for a follow-up inspection at the end of July 2019 by an external environmental consultant or specialist and if signs of erosion are visible at the sites suitable recommendations for stabilising and preventative measures must be provided and implemented. If during the follow-up inspection as recommended to July 2019 it is found that detrimental impacts has occurred within sensitive landscape features surrounding the previously cultivated agricultural lands due to rehabilitated prospecting activities areas the consultant or specialist must provide additional rehabilitation mitigation measures to be implemented to restore these areas and prevent any further detrimental impacts.
  - Additional follow-up inspections may also be required/ recommended.
  - If natural revegetation of the sites is not taking place fast enough and signs of erosion are detected replanting of the affected sites must be done to stabilise the soils. The crop to be used to replant the rehabilitated sites to prevent further erosion must be discussed and agreed with the landowner and must be similar to previous agricultural crops planted on site. The sites must be inspected by a qualified independent environmental consultant or specialist 6 months after replanting to establish whether it was successful in stabilising the soils and preventing further erosion. If erosion is still detected further mitigation and monitoring measures may be recommended by the consultant/specialist.
  - Existing agricultural land contour structures must be reinstated during rehabilitation
  - Implement erosion and storm water runoff management measures as according to EMP requirements to prevent (or if prevention is not possible limit) any erosion from occurring on the prospecting activity areas and surrounds.
  - Only use topsoil and excavated material as derived and conserved from the proposed prospecting site to backfill and rehabilitate impacted areas.
  - Alien invasive and weed vegetation monitoring and removal must be undertaken for at least a year after sampling on disturbed prospecting areas or until the landowner starts with the annual cultivation activities on the affected land. This must be done by the applicant, landowner or their appointed contractor, using CapeNature approved methodology depending on the contract agreement that the applicant has with the landowner and the end use objective of the site.

- **Preferred technology alternative**

No technology alternatives were assessed other than the activities as proposed as the method of bentonite and zeolite prospecting rehabilitation is singular and the activities as proposed are the most “environmentally-friendly” methods available which will have the least possible detrimental environmental impacts.

- **No-go/No-prospecting rehabilitation alternative**

The No-Go option will result in the site remaining as it is presently, disturbed cultivated agricultural land rehabilitated to the extent that the excavated material has been backfilled and the areas shaped according to surrounding contours, but no follow-up monitoring will be done to determine whether or not rehabilitated sites have stabilised.

h) Full description of the process followed to reach the proposed preferred alternatives within the site.

NB!! – This section is about the determination of the specific site layout and the location of infrastructure and activities on site, having taken into consideration the issues raised by interested and affected parties, and the consideration of alternatives to the initially proposed site layout.

i) Details of the development footprint alternatives considered.

With reference to the site plan provided as Appendix 4 and the location of the individual activities on site, provide details of the alternatives considered with respect to:

(a) the property on which or location where it is proposed to undertake the activity;
(b) the type of activity to be undertaken;
(c) the design or layout of the activity;
(d) the technology to be used in the activity;
(e) the operational aspects of the activity; and
(f) the option of not implementing the activity.

Location alternatives – Not applicable. Rehabilitation sites are limited to the areas impacted during prospecting activities.

Activity alternatives- Due to the prospecting activities already completed the only reasonable and feasible activity alternative that exists is to ensure successful rehabilitation of the impacted sites. Following the prospecting right closure site inspection conducted by the independent environmental consultant the following rehabilitation/closure monitoring, maintenance and management measures are recommended to achieve and maintain the closure objective of restoring the impacted areas to its previous agricultural pasture state:

- All rehabilitated sites must be revisited for a follow-up inspection at the end of July 2019 by an external environmental consultant or specialist and if signs of erosion are visible at the sites suitable recommendations for stabilising and preventative measures must be provided and implemented. If during the follow-up inspection as recommended to July 2019 it is found that detrimental impacts has occurred within sensitive landscape features surrounding the previously cultivated agricultural lands due to rehabilitated prospecting activities areas the consultant or specialist must provide additional rehabilitation mitigation measures to be implemented to restore these areas and prevent any further detrimental impacts.
- Additional follow-up inspections may also be required/ recommended.
- If natural revegetation of the sites is not taking place fast enough and signs of erosion are detected replanting of the affected sites must be done to stabilise the soils. The crop to be used to replant the rehabilitated sites to prevent further erosion must be discussed and agreed with the landowner and must be similar to previous agricultural crops planted on site. The sites must be inspected by a qualified independent environmental consultant or specialist 6 months after replanting to establish whether it was successful in stabilising the soils and preventing further erosion. If erosion is still detected further mitigation and monitoring measures may be recommended by the consultant/specialist.
- Existing agricultural land contour structures must be reinstated during rehabilitation

- Implement erosion and storm water runoff management measures as according to EMP requirements to prevent (or if prevention is not possible limit) any erosion from occurring on the prospecting activity areas and surrounds.
- Only use topsoil and excavated material as derived and conserved from the proposed prospecting site to backfill and rehabilitate impacted areas.
- Alien invasive and weed vegetation monitoring and removal must be undertaken for at least a year after sampling on disturbed prospecting areas or until the landowner starts with the annual cultivation activities on the affected land. This must be done by the applicant, landowner or their appointed contractor, using CapeNature approved methodology depending on the contract agreement that the applicant has with the landowner and the end use objective of the site.

Layout alternatives – Not applicable. Rehabilitation sites are limited to the areas impacted during prospecting activities.

Technology alternatives – No technology alternatives were assessed other than the activities as proposed as the method of bentonite and zeolite prospecting rehabilitation is singular and the activities as proposed are the most "environmentally-friendly" methods available which will have the least possible detrimental environmental impacts.

Operational alternatives – Refer to Activity alternatives as listed above for proposed rehabilitation measures to be implemented.

The No-Go/No-Prospecting Option- The No-Go option will result in the site remaining as it is presently, disturbed cultivated agricultural land rehabilitated to the extent that the excavated material has been backfilled and the areas shaped according to surrounding contours, but no follow-up monitoring will be done to determine whether or not rehabilitated sites have stabilised.

ii) Details of the Public Participation Process Followed

Describe the process undertaken to consult interested and affected parties including public meetings and one on one consultation. NB the affected parties must be specifically consulted regardless of whether or not they attended public meetings. (Information to be provided to affected parties must include sufficient detail of the intended operation to enable them to assess what impact the activities will have on them or on the use of their land.

Also Refer to **Appendix C.**

This section of the report is included in compliance with the Regulations. Public participation is an integral part of the EIA process and affords potentially interested and potentially affected parties (I&APs) an opportunity to participate in the EIA process, or to comment on any aspect of the development proposals.

Other relevant considerations regarding the public participation process being undertaken for this project are that:

- The public participation process being undertaken for this project complies with the requirements of the Regulations.
- The description of the public participation process included in sections below itemises the steps and actions undertaken.

THE FOLLOWING PUBLIC PARTICIPATION PROCESS WILL BE CONDUCTED:

Notification to I&APs

Potential I&AP's are notified about the project in the following manner (this is in compliance with Regulation 41 of GN R982):

- Fixing notice boards at the boundary of the property in compliance with Regulation 41 of GN R982.
- Written notifications are sent via registered post to potential I&APs (i.e. landowner, direct neighbours etc.) inviting them to register and give comments on the proposed development within 30 days from the date which appears on the notice. These notifications are in line with the requirements of the Regulations.
- Placing an advertisement in a local newspaper and the notice in compliance with the Regulations.

All potential I&APs are afforded the opportunity (within a 30 day period) to register for the project. All registered I&APs will be informed of further activities regarding the project.

Public Meetings, Workshops and Pre-application Meetings

No public meetings, workshops and pre-application meetings have been held thus far. The need for public meetings will be determined during the course of the public participation process as and if requested by I&APs and key departments.

Availability of the Draft Basic Assessment Report

As per the requirements of Regulation 43 of GN R982, the Draft Basic Assessment Report (BAR) will be made available to all relevant state departments and all registered I&APs for a 30 day commenting period.

The Draft BAR will be included for statutory comment with the written notice as sent to the commenting organs of state for a 30 day commenting period. Electronic copies (CDs) will be made available to any department or I&AP on request.

The Draft Basic Assessment Report will be sent to the following Key Departments for consideration/comments:

- Department:Mineral Resources
- Breede-Gouritz Catchment Management Agency (also commenting on behalf of Department of Water and Sanitation)
- CapeNature Scientific Services
- DEA&DP: Development Management
- DEA&DP: Planning
- DEA&DP: Pollution & Chemical Management
- DEA&DP: Waste Management
- Department of Agriculture
- Eden District Municipality
- Heritage Western Cape: A Notice of Intent to Develop was submitted to HWC
- Mossel Bay Municipality
- Department: Rural Development & Land Reform

Proof of delivery and document placement is attached to the final BAR.

Comments received are responded to as per the requirements of regulations. The comments and response report as well as all comments received is attached to the final BAR.

Public Participation during the Final BAR Phase

Once all comments have been received, the BAR will be finalised taking into account the comments and submitted to the competent authority for a decision.

Decision and Appeal Period

Once the DMR have reviewed the Final BAR and are satisfied that it contains sufficient information to make an informed decision, the DMR will use the information contained within the BAR to determine the environmental acceptability of the proponent's preferred options. A decision on the applications and associated reports will be made by the DMR based on the findings of the BAR.

Following the issuing of the decision, all key department and registered I&APS will be notified and afforded the opportunity to appeal the decision to the MEC of the DMR in terms of the NEMA.

Proof of the Public Participation Process conducted/to be conducted will be attached to the Final BAR under Appendix C.

iii) Summary of issues raised by I&APs
(Complete the table summarising comments and issues raised, and reaction to those responses)

Interested and Affected Parties List the names of persons consulted in this column, and Mark with an X where those who must be consulted were in fact consulted.		Date Comments Received	Issues raised	EAPs response to issues as mandated by the applicant	Section and paragraph reference in this report where the issues and or response were incorporated
AFFECTED PARTIES					
Landowner	**X**				
J Marx Farm Koppies P.O. Box 126 Mossel Bay 6506	-	No comments received to date			
G van Rensburg Farm Geluk P.O. Box 2229 Mossel Bay 6506	-	No comments received to date			
Mark Rutherford Farm Gondwana P.O. Box 1572 Mossel Bay 6506	-	No comments received to date			
Hanre Marx Farm Matjiesdrift	-	No comments			

P.O. Box 126 Mossel Bay 6506		received to date			
G.A Marx Farm Dorie P.O. Box 126 Mossel Bay 6505	-	No comments received to date			
Department: Rural Development & Land Reform	-	No comments received to date			
Lawful occupier/s of the land	**NA**				
	-				
Landowners or lawful occupiers on adjacent properties	**X**				
Hartenbos Private Game Lodge PO Box 85 Hartenbos 6520	-	No comments received to date			
CJ Muller PO Box 749 Hartenbos 6520	-	No comments received to date			
National Government of SA Republic Private Bag X9027 Cape Town 8000	-	No comments received to date			
JI Crous PO Box 335 Mosselbaai 6500	-	No comments received to date			
Nare Breeding Projects Pty Ltd	-	No comments			

PO Box 10293 Danabaai 6510		received to date			
HF Muller PO Box 179 Mosselbaai 6500	-	No comments received to date			
Van Rensburg Broers Boerdery PO Box 109 Mosselbaai 6500	-	No comments received to date			
Stars Away INV 87 (Pty) Ltd PO Box 11271 Heiderand 6511	-	No comments received to date			
Patysfontein Familietrust PO Box 271 Mosselbaai 6500	-	No comments received to date			
Transand (Pty) Ltd PO Box 396 Mosselbaai 6500	-	No comments received to date			
Dappie Pienaar Familie Trust PO Box 110 Mosselbaai 6500	-	No comments received to date			
Torres Beef CC PO Box 11083 Dana Bay 6510	-	No comments received to date			
Gondwana Game Reserve PO Box 1572 Mossel Bay	-	No comments received to date			

6500					
Leon en Nadine BK PO Box 321 Hartenbos 6520	-	No comments received to date			
Local and District Municipalities	**X**				
Mossel Bay Municipality municipal manager on behalf of municipal council	-	Await comments on Draft BAR			
Eden District Municipality	-	Await comments on Draft BAR			
Organs of state (Responsible for infrastructure that may be affected Roads Department, Eskom, Telkom, DWA etc.)	**X**				
Breede Gouritz Management Agency (also commenting on behalf of Department of Water and Sanitation	-	Await comments on Draft BAR			
CapeNature	-	Await comments on Draft BAR			
Heritage Western Cape	-	Await comments on HWC NID and Draft BAR			

Department of Agriculture	-	Await comments on Draft BAR			
Communities	**X**				
Municipal manager to be consulted on behalf of local communities	-	Await comments on Draft BAR			
Dept. Land Affairs	**X**				
Department: Rural Development and Land Reform	-	Await comments on Draft BAR			
Traditional Leaders	**NA**				
Western Cape Dept. Environmental Affairs and Development Planning	**X**				
Directorate: Waste Management	-	Await comments on Draft BAR			
Directorate: Development Management	-	Await comments on Draft BAR			
Directorate: Planning					
Pollution and Chemical Management	-	Await comments on Draft BAR			
Other Competent Authorities affected	**X**				
<u>OTHER AFFECTED PARTIES</u>					
NA					
<u>INTERESTED PARTIES</u>					
NA					

iv) The Environmental attributes associated with the alternatives.
(The environmental attributed described must include socio-economic, social, heritage, cultural, geographical, physical and biological aspects)

(1) Baseline Environment

(a) Type of environment affected by the proposed activity.
(its current geographical, physical, biological, socio- economic, and cultural character).

Geographical, Physical and Biological Characteristics
The farm is characterised by its undulating landscape with associated steep slopes, drainage lines and gorges which limits the extent of cultivation mainly to moderate slopes and flat lying areas.

Farming activities is mainly related to crop cultivation, cattle, sheep and ostrich farming. The undulating low hills are dissected by a number or mainly non-perennial watercourse which are tributaries of the Melkboom river and eventually drain into the Hartebeeskuil Dam to the east of the Prospecting Right area.

The surrounding properties are similar farmland with a number of brickworks and related clay and borrow pits as well as stone quarries. The areas on which prospecting activities took place were all previously cultivated (ploughed and planted with agricultural crops) and are continually used for livestock grazing especially cattle, sheep and ostriches.

To the north of the prospecting area lies the Gondwana Game Reserve which is situated on formerly farmed land consisting of contoured hilltops with scattered wattle groves and indigenous vegetation in the steeper valleys.

The indigenous vegetation remnants remaining on the prospecting right properties are mainly restricted to the steep slopes and deep valleys which could not be ploughed for cultivation. The type of indigenous vegetation remnants adjacent to the prospected cultivated areas are mainly Mossel Bay Shale Renosterveld and along the higher lying western parts Swellendam Silcrete Fynbos and lower lying northeastern parts Groot Brak Dune Strandveld.

Socio-Economic Characteristics
The rural areas within which the completed prospecting areas took place have a high agricultural economic value mainly as cultivation and livestock grazing lands.

The Gondwana Game Reserve to the North of the prospecting right areas also attracts tourism to the area and plays an important part in protecting local endangered indigenous vegetation areas.

Cultural Characteristics
See Notice of Intent to Develop as submitted to Heritage Western Cape under Appendix H. No evidence could be found that any significant heritage resources were detrimentally impacted upon during the completed prospecting activities and this is mainly due to all of the impacts taking place on previously cultivated agricultural land and because the trenching is done relatively shallow. The prospecting operations did not impact on any national estate referred to in section 3(2) of the National Heritage Resources Act, 1999 nor on any building or structure older than 60 years in any way.

(b) Description of the current land uses.

LAND USE OF THE SITE

~~Untransformed area~~	~~Low density residential~~	~~Medium density residential~~	~~High density residential~~
~~Informal residential~~	~~Heavy industrial~~	~~Tourism & Hospitality facility~~	~~Dam or reservoir~~
~~Old age home~~	~~Airport~~	~~Filling station~~	~~Nature conservation area~~
~~Retail~~	~~Commercial & warehousing~~	~~Light industrial~~	~~Medium industrial~~
~~Power station~~	~~Office/consulting room~~	~~Military or police base/station/compound~~	~~Casino/entertainment complex~~
~~Open cast mine~~	~~Underground mine~~	~~Spoil heap or slimes dam~~	~~Quarry, sand or borrow pit~~
~~Hospital/medical center~~	~~School~~	~~Tertiary education facility~~	~~Church~~
~~Sewage treatment plant~~	~~Train station or shunting yard~~	~~Railway line~~	~~Major road (4 lanes or more)~~
~~Harbour~~	~~Sport facilities~~	~~Golf course~~	~~Polo fields~~
~~Landfill or waste treatment site~~	~~Plantation~~	**Agriculture X**	~~River, stream or wetland~~
~~Mountain, koppie or ridge~~	~~Museum~~	~~Historical building~~	~~Graveyard~~
~~Archaeological site~~			
~~Other land uses (describe~~):			

Provide a description:

The areas on which prospecting activities took place were and are being used for agricultural activities such as livestock grazing and crop planting.

LAND USE CHARACTER OF SURROUNDING AREA

Highlight the current land uses and/or prominent features that occur within +/- 500m radius of the site and neighbouring properties if these are located beyond 500m of the site.

Untransformed area X	**Low density residential X (Farm Houses)**	~~Medium density residential~~	~~High density residential~~
~~Informal residential~~	~~Heavy industrial~~	~~Tourism & Hospitality facility~~	**Man-made Farm Dam X** ~~or reservoir~~
~~Old age home~~	~~Airport~~	~~Filling station~~	**Nature conservation area**
~~Retail~~	~~Commercial & warehousing~~	~~Light industrial~~	~~Medium industrial~~
~~Power station~~	~~Office/consulting room~~	~~Military or police base/station/compound~~	~~Casino/entertainment complex~~

~~Open cast mine~~	~~Underground mine~~	~~Spoil heap or slimes dam~~	**Quarry X, sand or borrow pit**
~~Hospital/medical center~~	~~School~~	~~Tertiary education facility~~	~~Church~~
~~Sewage treatment plant~~	~~Train station or shunting yard~~	~~Railway line~~	~~Major road (4 lanes or more)~~
~~Harbour~~	~~Sport facilities~~	~~Golf course~~	~~Polo fields~~
~~Landfill or waste treatment site~~	~~Plantation~~	**Agriculture X**	**River, stream, wetland or drainage line X**
Mountain, koppie or ridge X	~~Museum~~	~~Historical building~~	~~Graveyard~~
~~Archaeological site~~			
~~Other land uses (describe~~):			

Provide a description:

Within a 500m radius of the prospecting areas lies farm houeses, cultivated agricultural land, indigenous vegetation areas, existing sand quarry areas, mountainous areas and “koppies” and drainage lines due to the undulating nature of the property, man-made farm dams and the Gondwana Game Reserve

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

The only “infrastructure” on site is informal gravel roads and farm fencing of agricultural lands.

GRADIENT OF THE SITE

Indicate the general gradient of the sites (highlight the appropriate box).

Flat	**Flatter than 1:10**	~~1:10 – 1:4~~	~~Steeper than 1:4~~

LOCATION IN LANDSCAPE

Indicate the landform(s) that best describes the site (highlight the appropriate box(es).

~~Ridgeline~~	~~Plateau~~	**Side slope of hill/ mountain**	~~Closed valley~~	~~Open valley~~	~~Plain~~	**Undulating plain/low hills**	~~Dune~~	~~Sea-front~~

GROUNDWATER, SOIL AND GEOLOGICAL STABILITY OF THE SITE

Is the site(s) located on or near any of the following (highlight the appropriate boxes)?

Shallow water table (less than 1.5m deep)	~~YES~~	**NO**	~~UNSURE~~
Seasonally wet soils (often close to water bodies)	~~YES~~	**NO**	~~UNSURE~~
Unstable rocky slopes or steep slopes with loose soil	~~YES~~	**NO**	~~UNSURE~~
Dispersive soils (soils that dissolve in water)	~~YES~~	**NO**	~~UNSURE~~
Soils with high clay content	~~YES~~	**NO**	~~UNSURE~~
Any other unstable soil or geological feature	~~YES~~	**NO**	~~UNSURE~~
An area sensitive to erosion	**YES**	~~NO~~	~~UNSURE~~
An area adjacent to or above an aquifer.	~~YES~~	**NO**	~~UNSURE~~
An area within 100m of the source of surface water	**YES**	~~NO~~	~~UNSURE~~

Please indicate the type of geological formation underlying the site.

~~Granite~~	~~Shale~~	~~Sandstone~~	~~Quartzite~~	~~Dolomite~~	~~Dolorite~~	**Other (describe)**

Please provide a description.

This prospecting right is situated in the Kirkwood formation which is known for its viable Bentonite deposits in the Western Cape Province (Heidelberg/Plettenberg Bay).

During the Kirkwood period, bentonite ashes from subductive volcanic eruptions were deposited in a salty lacustrine environment. This depositional environment was very low in energy which allowed the bentonite ashes to settle into the lake, through gravity. This was followed by fine sediments that settled on top of the bentonite layer, leading to the geological sequence that is visible today. This low energy environment enabled the bentonite layers to be conserved.

SURFACE WATER

Indicate the surface water present on and or adjacent to the site and alternative sites (highlight the appropriate boxes)?

Perennial River	~~YES~~	**NO**	~~UNSURE~~
Non-Perennial River	**YES**	~~NO~~	~~UNSURE~~
Permanent Wetland	~~YES~~	**NO**	~~UNSURE~~
Seasonal Wetland	**YES**	~~NO~~	~~UNSURE~~
Artificial Wetland	**YES**	~~NO~~	~~UNSURE~~
Estuarine / Lagoonal wetland	~~YES~~	**NO**	~~UNSURE~~

Please provide a description.

The non-perennial drainage lines with seasonal wetland characteristics adjacent to the proposed prospecting areas are storm water run-off drainage lines as formed within undulating topography i.e. “klowe” and mainly flows only during heavy rains.

Artificial wetlands also exist throughout the property due to man-made farm dams.

These features are however restricted to areas outside of the prospected areas, not located on previously cultivated agricultural lands.

BIODIVERSITY

Highlight the applicable biodiversity planning categories of all areas on site and indicate the reason(s) provided in the biodiversity plan for the selection of the specific area as part of the specific category).

Systematic Biodiversity Planning Category				**If CBA or ESA, indicate the reason(s) for its selection in biodiversity plan**
~~Critical Biodiversity Area (CBA)~~	~~Ecological Support Area (ESA)~~	~~Other Natural Area (ONA)~~	No Natural Area Remaining (NNR)	Sensitive environmental features that were identified on the property but outside of the prospecting areas include natural and near natural indigenous vegetation remnants which exists throughout the property and

				consists mainly of Mosselbay Bay Shale Renosterveld and to a lesser extent of Groot Brak Dune Strandveld and Swellendam Silcrete Fynbos also identified as Terrestrial Critical Biodiversity Areas ("CBA") as according to the Fine Scale Planning ("FSP") for Hessequa. Other sensitive environmental and landscape features also identified on the property but outside of the prospecting areas include secondary and primary non-perennial drainage lines, man-made dams with associated wetland characteristics mostly connected to remaining indigenous remnants, also classified as Aquatic Critical Biodiversity and Ecological Support Areas ("ESA"), associated buffer areas and National Freshwater Ecosystems Priority Areas ("NFEPA"). The primary reason for selection of these areas as terrestrial and/or aquatic CBAs and/or ESAs is that it helps meet the national conservation target for threatened vegetation types, and ancillary reasons are that it offers opportunities for continuation of ecological connectivity especially related to the hydrological connectivity of the drainage lines. Although CBA's, ESA's and NFEPA's have been identified throughout the property the prospecting activities only took place on previously cultivated agricultural lands on which no natural indigenous vegetation areas and watercourses or

				wetland features remain.

Highlight and describe the habitat condition on site.

Habitat Condition	Percentage of habitat condition class (adding up to 100%)	Description and additional Comments and Observations (including additional insight into condition, e.g. poor land management practises, presence of quarries, grazing/harvesting regimes etc.)
Natural	0%	Prospecting activities took place only on previously transformed cultivated and grazed agricultural lands.
Near Natural (includes areas with low to moderate level of alien invasive plants)	0%	
Degraded (includes areas heavily invaded by alien plants)	0%	
Transformed (includes cultivation, dams, urban, plantation, roads, etc.)	100%	

Complete the table to indicate:
(i) the type of vegetation, including its ecosystem status, present on the site; and
(ii) whether an aquatic ecosystem is present on site.

Terrestrial Ecosystems		Aquatic Ecosystems						
Ecosystem threat status as per the National Environmental Management: Biodiversity Act (Act No. 10 of 2004)	~~Critical~~	Wetland (including rivers, depressions, channelled and unchannelled wetlands, flats, seeps pans, and artificial wetlands)			Estuary		Coastline	
	~~Endangered~~							
	~~Vulnerable~~							
	~~Least/Not Threatened~~	~~YES~~	**NO**	~~UNSURE~~	~~YES~~	**NO**	~~YES~~	**NO**

Please provide a description of the vegetation type and/or aquatic ecosystem present on site, including any important biodiversity features/information identified on site (e.g. threatened species and special habitats)

Sensitive environmental features identified on site as described above are all located outside of the areas impacted during the completed prospecting activities. Prospecting activities was done on previously ploughed and cultivated lands which are also continuously grazed by cattle, sheep and ostriches.

(d) Environmental and current land use map.

(Show all environmental, and current land use features

Refer to Appendix B.

v) Impacts and risks identified including the nature, significance, consequence, extent, duration and probability of the impacts, including the degree to which these impacts

(Provide a list of the potential impacts identified of the activities described in the initial site layout that will be undertaken, as informed by both the typical known impacts of such activities, and as informed by the consultations with affected parties together with the significance, probability, and duration of the impacts. Please indicate the extent to which they can be reversed, the extent to which they may cause irreplaceable loss of resources, and can be avoided, managed or mitigated).

Risk Assessment

Risk no.	Category	Risk Name	Probability	Consequence	Risk Value (AXB)																				
					Low Risk						Medium Risk						High Risk								
					0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	Health and Safety																								
		Risk of injury/ death to workers due to unsafe working conditions during rehabilitation activities	1	4																					
2	Natural Environment	Risk of instability, slippage and failure of re-vegetation due to steep slopes and/ or erosion	2	3																					
3		Risk of sedimentation to watercourse or water bodies due to steep slope and/ or erosion	1	3																					
4		Risk of spread of alien/ invasive vegetation due to disturbance caused by prospecting	2	3																					
	Economic Legal and Authorisation																								
5		Risk of legal action due to the failure to comply with the requirements of the PR	1	3																					

6		Risk of not rehabilitating impacted agricultural land to its previous state to allow agricultural activities to continue																							
7	Economic	Risk of not obtaining closure certification from DMR due to absence of extent authorization for prospecting area, failure to satisfy the conditions attached to any authorisation and/ or failure to achieve satisfactory rehabilitated state for prospecting area	1	2																					

Impacts that may result from the closure/rehabilitation phase (briefly describe and compare the potential impacts (as appropriate), significance rating of impacts, proposed mitigation and significance rating of impacts after mitigation that are likely to occur as a result of the decommissioning/closure/rehabilitation phase.

Nature of impact:
Temporary loss of agricultural land during rehabilitation

Discussion:
During rehabilitation of the sites impacted during prospecting cumulative impacts such as erosion of the disturbed sites may lead to temporary loss of agricultural land

Cumulative impacts:
Temporary loss of agricultural land for agricultural use.

Mitigation:

- If natural revegetation of the sites is not taking place fast enough and signs of erosion are detected replanting of the affected sites must be done to stabilise the soils. The crop to be used to replant the rehabilitated sites to prevent further erosion must be discussed and agreed with the landowner and must be similar to previous agricultural crops planted on site. The sites must be inspected by a qualified independent environmental consultant or specialist 6 months after replanting to establish whether it was successful in stabilising the soils and preventing further erosion. If erosion is still detected further mitigation and monitoring measures may be recommended by the consultant/specialist.
- All rehabilitated sites must be revisited for a follow-up inspection at the end of July 2019 by an external environmental consultant or specialist and if signs of erosion are visible at the sites suitable recommendations for stabilising and preventative measures must be provided and implemented. Additional follow-up inspections may also be required/ recommended.

	Preferred Prospecting Area		No Go option
	Without Mitigation	With Mitigation	
Extent	3	1	Not Applicable (No prospecting activities to take place during the No-Go Alternative)
Duration	5	1	
Magnitude	6	2	
Probability	4	2	
Significance	56 - Medium	8 - Low	
Status	Medium significance if not mitigated	Low significance if mitigated	
Reversibility	100%		
Irreplaceable loss of resources	1-Will not be lost		
Can impacts be mitigated?	2- Can be partly mitigated.		

Nature of potential impact:
Potential erosion of the site and surrounds during rehabilitation phase

Discussion:
Overland storm water flow during heavy rains could lead to erosion of the rehabilitated sites due to the soil not yet being stabilised.

Cumulative impacts:
Exposing and disturbing soil may lead to erosion of site and surrounds if not mitigated.

Mitigation:

- Existing agricultural land contour structures must be reinstated during rehabilitation
- Implement erosion and storm water runoff management measures as according to EMP requirements to prevent (or if prevention is not possible limit) any erosion from occurring on the prospecting activity areas and surrounds.
- If natural revegetation of the sites is not taking place fast enough and signs of erosion are detected replanting of the affected sites must be done to stabilise the soils. The crop to be used to replant the rehabilitated sites to prevent further erosion must be discussed and agreed with the landowner and must be similar to previous agricultural crops planted on site. The sites must be inspected by a

qualified independent environmental consultant or specialist 6 months after replanting to establish whether it was successful in stabilising the soils and preventing further erosion. If erosion is still detected further mitigation and monitoring measures may be recommended by the consultant/specialist.

- All rehabilitated sites must be revisited for a follow-up inspection at the end of July 2019 by an external environmental consultant or specialist and if signs of erosion are visible at the sites suitable recommendations for stabilising and preventative measures must be provided and implemented. Additional follow-up inspections may also be required/ recommended.

	Preferred Prospecting Area		No Go option
	Without Mitigation	With Mitigation	
Extent	2	1	Not Applicable (No prospecting activities to take place during the No-Go Alternative)
Duration	3	1	
Magnitude	6	2	
Probability	4	2	
Significance	44 – Medium	8 - Low	
Status	Medium Significance without Mitigation	Low Significance with Mitigation	
Reversibility	100% Reversible		
Irreplaceable loss of resources	1-Resource will not be lost if mitigated		
Can impacts be mitigated?	1 – Can be completely mitigated		

Nature of potential impact:
Introduction of alien and weed plant species during rehabilitation

Discussion:
Indirect impacts occur mostly during the rehabilitation phase and in this case the nature would vary from the introduction of alien and weed vegetation, to partial disruption of ecological processes due to the effects of the alien and weed species. The extent of the indirect impact in this case will be local.

Cumulative impacts:
Disturbance of the site due to proposed prospecting activities may lead to introduction of alien and weed vegetation encroachment during rehabilitation, which may in turn lead to infestation of surrounding remaining natural areas and drainage lines resulting in disruption and destruction of ecological processes.

Mitigation:

- Only use topsoil and excavated material as derived and conserved from the proposed prospecting site to backfill and rehabilitate impacted areas.
- Alien invasive and weed vegetation monitoring and removal must be undertaken for at least a year after sampling on disturbed prospecting areas or until the landowner starts with the annual cultivation activities on the affected land. This must be done by the applicant, landowner or their appointed contractor, using CapeNature approved methodology depending on the contract agreement that the applicant has with the landowner and the end use objective of the site.

	Preferred Prospecting Area		No Go option
	Without Mitigation	With Mitigation	
Extent	3	1	Not Applicable (No prospecting activities to take place during the No-Go Alternative)
Duration	5	1	
Magnitude	6	2	
Probability	4	2	
Significance	56 - Medium	8 - Low	
Status	Medium significance if not mitigated	Low significance if mitigated	
Reversibility	100%		
Irreplaceable loss of resources	1-Will not be lost if mitigated		
Can impacts be mitigated?	1 – Can be completely mitigated		

Nature of potential impact:
Impact of rehabilitation activities on adjacent terrestrial ESAs and CBAs and secondary-, primary drainage lines and man-made dams with associated wetland characteristics and aquatic vegetation as associated with mapped NFEPAs and aquatic CBAs and ESAs

Discussion:
Sensitive environmental and landscape features identified on the property include indigenous vegetation remnants, secondary and primary non-perennial drainage lines, man-made dams with associated wetland characteristics mostly connected to remaining indigenous remnants. Most of these areas have also been mapped classified Terrestrial and Aquatic Critical Biodiversity and Ecological Support Areas ("ESA"), associated buffer areas and National Freshwater Ecosystems Priority Areas ("NFEPA").

The prospecting activities did however not have any significant detrimental impacts on these sensitive environmental and landscape features.

Cumulative impacts:
If erosion or alien/weed plant species encroachment takes place at the rehabilitated sites this may spread to surrounding sensitive environmental landscape features as mentioned above and have a detrimental impact on the ecological functioning of these areas.

Mitigation:

- Existing agricultural land contour structures must be reinstated during rehabilitation
- Implement erosion and storm water runoff management measures as according to EMP requirements to prevent (or if prevention is not possible limit) any erosion from occurring on the prospecting activity areas and surrounds.
- If natural revegetation of the sites is not taking place fast enough and signs of erosion are detected replanting of the affected sites must be done to stabilise the soils. The crop to be used to replant the rehabilitated sites to prevent further erosion must be discussed and agreed with the landowner and must be similar to previous agricultural crops planted on site. The sites must be inspected by a qualified independent environmental consultant or specialist 6 months after replanting to establish whether it was successful in stabilising the soils and preventing further erosion. If erosion is still detected further mitigation and monitoring measures may be recommended by the consultant/specialist.
- All rehabilitated sites must be revisited for a follow-up inspection at the end of July 2019 by an external environmental consultant or specialist and if signs of erosion are visible at the sites suitable recommendations for stabilising and preventative measures must be provided and implemented. Additional follow-up inspections may also be required/ recommended.
- If during the follow-up inspection as recommended to July 2019 it is found that detrimental impacts has occurred within sensitive landscape features surrounding the previously cultivated agricultural lands due to rehabilitated prospecting activities areas the consultant or specialist must provide additional rehabilitation mitigation measures to be implemented to restore these areas and prevent any further detrimental impacts.

	Preferred Prospecting Area		**No Go option**
	Without Mitigation	**With Mitigation**	
Extent	2	1	Not Applicable (No prospecting activities to take place during the No-Go Alternative)
Duration	3	1	
Magnitude	6	2	
Probability	4	2	
Significance	44 – Medium	8 - Low	
Status	Medium significance if not mitigated	Low significance if mitigated	
Reversibility	100% Reversible		
Irreplaceable loss of resources	1-Will not be lost if mitigation measures are implemented		
Can impacts be mitigated?	1 – Can be completely mitigated		

vi) Methodology used in determining and ranking the nature, significance, consequences, extent, duration and probability of potential environmental impacts and risks;

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

RISK REGISTER

The risk assessment tool is founded upon a risk register, comprised of 26 potential risks, covering the full range of activities associated with the identification, planning, operation and closure of the proposed bentonite quarry. These risks are divided into the following logical structure of risk categories:

- Health and safety risks (5);
- Technical risks (1);
- Natural environment risks (7);
- Built environment risks (5);
- Economic risks (1); and
- Legal and authorisation risks (7).

Category	Number	Issue / Risk Event
Health & Safety	1	Risk of public injury/death due prospecting operations
	2	Risk of injury/ death to livestock and natural fauna due to prospecting operations
	3	Risk of public injury/ death due to drowning in poorly drained prospecting area
	4	Risk of injury/ death to workers due to unsafe working conditions
	5	Risk to passing traffic due poor visibility, operation of large plant, unsafe prospecting development adjacent to road and/ or lack of adequate traffic safety measures
Technical	6	Risk of substandard material quality and non-optimal exploitation of resource due to poor planning and/ or implementation of prospecting plan
Natural Environment	7	Risk of negative visual aesthetics experienced by public due to scarring, scale, location in sensitive environment, dumping and/ or abandonment of plant
	8	Risk of instability, slippage and failure of re-vegetation due to steep slopes and/ or erosion
	9	Risk of sedimentation to watercourse or water bodies due to steep slope and/ or erosion
	10	Risk of environmental degradation due to illegal dumping, unplanned or uncontrolled spoiling and/ or *ad hoc* prospecting
	11	Risk of spread of alien/ invasive vegetation due to disturbance caused by prospecting
	12	Risk of spreading fire due to inadequate fire planning and implementation
	13	Risk of nuisance to flora and fauna due to noise and dust generation
Built Environment	14	Risk of nuisance to neighbours and lands due to dust and noise generation
	15	Risk of direct and indirect damage to heritage resources/ significance due to poor planning and implementation of

		prospecting plan
	16	Risk of loss of access to property due to operation of heavy plant
	17	Risk of permanent loss of land use potential due to poor operation and abandonment of prospecting area
	18	Risk of damage to service infrastructure due to proximity of services
Economic	19	Risk of increased operation/ rehabilitation costs and lost opportunity due to poor operation
Legal and Authorisation	20	Risk of legal action due to the failure to comply with the requirements of the Mine Health
	21	Risk of prosecution or stop works order from authority due to lack of authorisation
	22	Risk of legal action, prohibition of access or compensation claim by landowner due to failure to formally secure property and agree on conditions of use, and/ or due to irresponsible operation/ abandonment of the prospecting area
	23	Risk of legal action or compensation claim by third party due to irresponsible operation/abandonment of the prospecting area
	24	Risk of not obtaining closure certification from DMR due to absence of extent authorization for prospecting area, failure to satisfy the conditions attached to any authorisation and/ or failure to achieve satisfactory rehabilitated state for mining area
	25	Risk of unregulated removal of materials by unauthorised third party due to uncontrolled access
	26	Risk of uncontrolled development of mining area, with attendant risks, due to formally shared liability Act

Risk Management

The utilisation of materials sources is in essence about the management of assets and risk, and hence, the approach adopted for the compilation of the EMP is founded on a risk management philosophy. Risk management is best described as the process of measuring/ assessing risk and then developing strategies to address the identified risks. As such, it represents a logical and systematic approach to the identification, analysis, assessment, treatment, monitoring, and communication of the risks inherent to the use of material sources.

The risk assessment tool presented here is based upon the International Organisation for Standardisation (ISO), ISO 31000:2009 Risk Management – Principles and Guidelines, and represents a systematic and proven process consisting of the following key steps (refer to Figure 1.1)

- Establish the context to clarify the scope of the risk assessment process;
- Identify the potential risks;
- Evaluate the identified risks to determine the probability of a risk occurring and its consequence;
- Map the identified risks to compared them against criteria for treatment; and
- Develop appropriate risk treatments or mitigation measures.

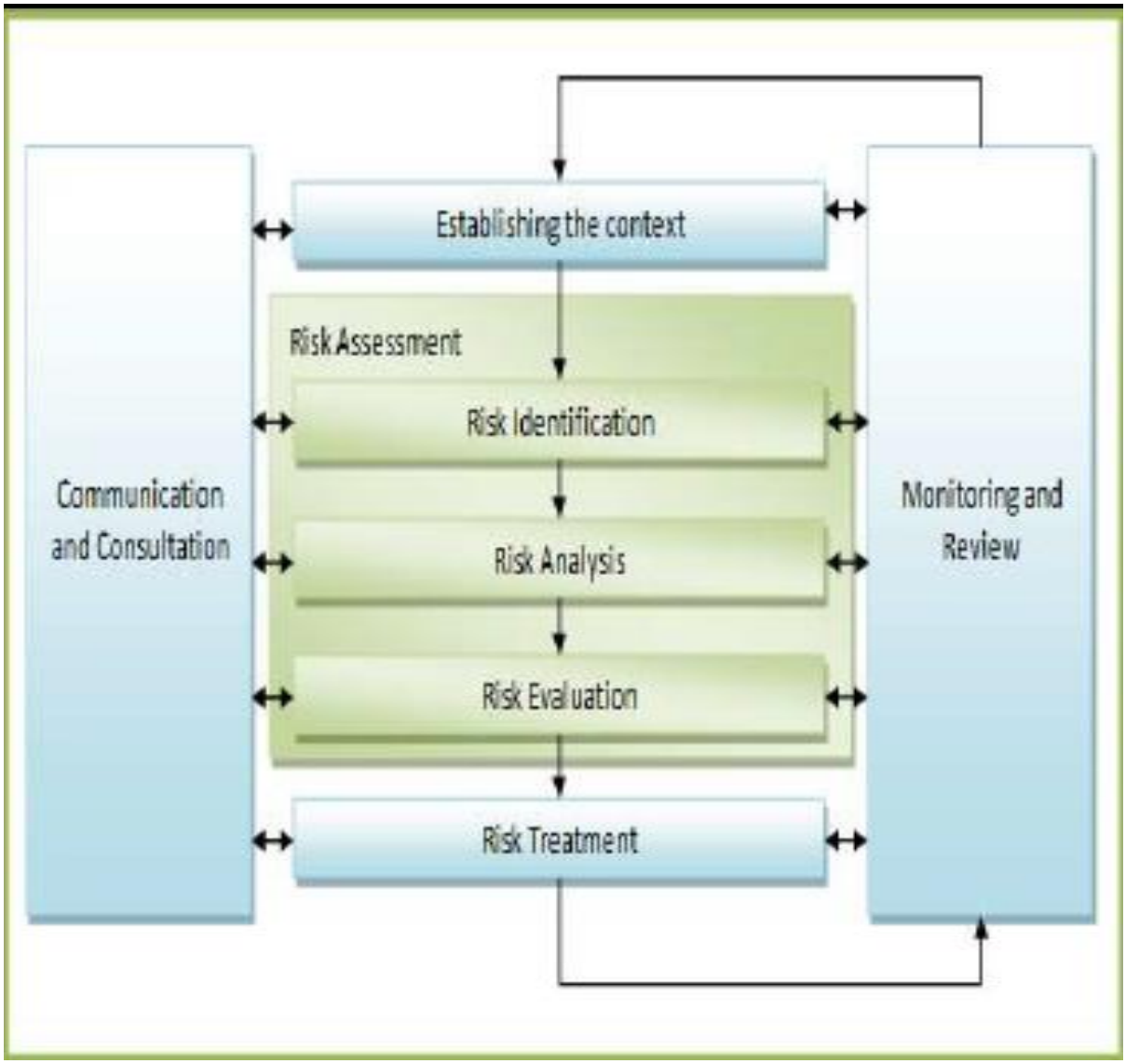

Figure 1.1.

In terms of the M&PRDA, the prospecting right holder liability for a particular material source persists until such time as a Closure Certificate has been issued by DMR. An advantage of the risk assessment approach detailed here is that it links in well with the legal requirements related to closure, specifically the requirements for the completion of an Environmental Risk Report as part of closure applications.

- **Risk probability**

Risk probability refers to the likelihood of an event occurring. It is important to evaluate this likelihood in the context of the anticipated use of the bentonite mine and with the anticipated controls in place. In other words, this is the likelihood that, under the anticipated mining conditions, the event described in the risk register will occur at some time in the future. It is evaluated on a semi-quantitative scale of 0 to 5, modified from the AS/ NZ 4360: 1995 Standard:

Rating Description
0-Impossible
1-Unlikely
2-Possible

3-Probable
4-Highly Probable
5-Almost Certain

The risk assessment tool includes a guideline for the determination of risk probability. The risk assessor is required to be familiar with, and refer to this guideline to inform the selection of the risk probability.

- **Risk consequence**

Risk consequence refers to the magnitude of the consequences, should the risk event occur. It is evaluated on a scale of 0 to 4, modified from the AS/ NZ 4360: 1995 Standard:

Rating Description
0-Insignificant
1-Minor
2-Moderate
3-Major
4-Catastrophic

The risk assessment tool includes a guideline for the determination of risk consequences. The risk assessor is required to be familiar with, and refer to this guideline to inform the selection of the risk consequence. The consequences of certain of the risks in the risk register can be predetermined to an extent. For example, the consequence of an injury or death of a person falling down a steep slope will never be “insignificant”. Rather, it will always have a “major” or “catastrophic” consequence. In such cases, the risk evaluation sheet is blanked out for inapplicable selections. This reduces the degree of subjectivity of the evaluation and streamlines the process.

Mapping of risk
The total elimination of all risks is typically not financially or technically feasible. A degree of risk will always exist and the intention of risk management is to reduce that risk in a systematic and cost effective manner. It is therefore important that the treatment of risks is undertaken by prioritising and addressing risk in a systematic manner. This is the role of risk mapping. The mapping of risks enables not only the comparative assessment of different material sources in terms of risk, but also facilitates the visualisation of the relative levels of different risks within a specific mine area. As such, it is an invaluable tool in the identification and prioritisation of risk treatments.

For the risk mapping tool, a simplistic approach is adopted to the mapping of risk. For each identified risk, a risk score is determined based on the product of risk probability and risk consequence. So for example where a risk is probable (probability rating of 3) and has a moderate consequence (consequence rating of 2), its risk score would be 6 (3 x 2). The resultant risk scores can be utilised in one of two ways:

- All risk scores for a particular site (i.e. the individual risk scores for each of the 26 identified risks) can be summed to give a total risk score for that mine area. This value can then be used to identify and prioritise high risk material sources for treatment; and
- For a specific mine the risk score for each risk can be used to identify the most significant risks within that site and prioritise their treatments.

The risk assessment tool utilised for the current investigation includes a graphic risk-mapping instrument to guide the identification and prioritisation of risk treatments within specific material sources. This instrument distinguishes between high, medium and low risk, defined as follows:

- **High risk**: Risk events falling into this class, are high probability of occurring with major to catastrophic consequences under the current status quo. These risks require urgent and immediate attention to either reduce the probability of occurrence, consequences of occurrence or both to acceptable levels.

- **Medium risk**: Risk events falling into this class require active management and mitigation to reduce their probability of occurrence, consequences of occurrence or both to acceptable levels.

- **Low risk**: Risk events falling into this class do not necessarily require mitigation, however on-going monitoring is required to ensure that they do not later move into the medium or high risk class as a result of changing circumstances.

It is important to emphasise that the risk assessment tool represents a semi-quantitative approach. The numerical values simply aid in the integration of the various variables comprising risk (viz. risk probability and consequence) and facilitate the interpretation and prioritisation of this risk. The risk values are not absolute and are thus not meaningful beyond the comparative assessment reflected in the EMP. The objective is simply to produce a more detailed prioritisation than is usually achieved in pure qualitative analysis, not to suggest any realistic values for risk such as presented in a truly quantitative analysis.

Treatment of risk

As outlined previously, the total elimination of all risk is typically not economically feasible and it is thus important that the treatment of risk be undertaken by prioritising and addressing high and medium risk issues in their order of significance. The intention of the risk management effort is to focus attention on what matters most. In many instances, the treatment of one particular risk will have a positive effect (reduction of risk) on a number of other risk events. A range of mechanisms exist for the treatment of risk, viz. transferring the risk, avoiding the risk, mitigating the risk or accepting the consequences of a particular risk. The approach to risk treatment will vary depending on the stage at which the risk assessment process is being undertaken, viz. feasibility versus planning versus operation versus closure.

Feasibility stage

(Proposed prospecting activities falls within the feasibility stage as described below.)

The focus of the feasibility stage is to identify suitable material sources, viz. bentonite or zeolite mine that contain adequate reserves of appropriate material, which can be mined in a sustainable manner. Accordingly, the key question during the feasibility stage is “Should a particular area be utilised or not?” In informing this decision, the risk assessment process should be utilised to identify sites where:

- Specific high risks render the use of the site unacceptable; or
- The combined effects of a number of medium and low risks render the use of the site unacceptable.

In exceptional circumstance, particularly where material sources in a particular area are in short supply, it may be decided to utilise a site despite of the findings of the risk assessment. In this situation, the risk assessment would guide the planning for this site.

Below is the assessment methodology utilized in determining the significance of the potential prospecting activities impacts as identified, and where applicable the possible alternatives, on the biophysical and socio-economic environment. The methodology is broadly consistent to that described in DEA’s Guideline Document on the EIA Regulations

(1998).

ASSESSMENT METHODOLOGY

This section outlines the methodology used to assess the significance of the potential environmental impacts. For each impact, the EXTENT (spatial scale), MAGNITUDE (size or degree scale) and DURATION (time scale) are used to ascertain the SIGNIFICANCE of the impact, firstly in the case of no mitigation and then with the most effective mitigation measure(s) in place. The mitigation described in the EMP represents the full range of plausible and pragmatic measures *but does not necessarily imply that they should or will all be implemented*.

Assessment criteria for the evaluation of impacts

CRITERIA	CATEGORY	DESCRIPTION
Extent or spatial influence of impact	**Regional**	Beyond a 20 km radius of the site
	Local	Within a 20 km radius of the centre of the site
	Site specific	On site or within 100 m of the site
Magnitude of impact (at the indicated spatial scale)	**High**	Natural and/ or social functions and/ or processes are *severely* altered
	Medium	Natural and/ or social functions and/ or processes are *notably* altered
	Low	Natural and/ or social functions and/ or processes are *slightly* altered
	Very Low	Natural and/ or social functions and/ or processes are *negligibly* altered
	Zero	Natural and/ or social functions and/ or processes remain *unaltered*
Duration of impact	**Prospecting period Medium Term**	Up to 60 months Up to 10 years after prospecting
	Long Term	More than 10 years after prospecting

The SIGNIFICANCE of an impact is derived by taking into account the temporal and spatial scales and magnitude. The means of arriving at the different significance ratings is explained in the following table.

Definition of significance ratings

SIGNIFICANCE RATINGS	LEVEL OF CRITERIA REQUIRED
High	• High magnitude with a regional extent and long term duration • High magnitude with either a regional extent and medium term duration or a local extent and long term duration • Medium magnitude with a regional extent and long term duration
Medium	• High magnitude with a local extent and medium term duration • High magnitude with a regional extent and mining period or a site specific extent and long term duration • High magnitude with either a local extent and mining period duration or a site specific extent and medium term duration • Medium magnitude with any combination of extent and duration except site specific and mining period or regional and long term • Low magnitude with a regional extent and long term duration

Low	• High magnitude with a site specific extent and mining period duration • Medium magnitude with a site specific extent and mining period duration • Low magnitude with any combination of extent and duration except site specific and mining period or regional and long term • Very low magnitude with a regional extent and long term duration
Very low	• Low magnitude with a site specific extent and mining period duration • Very low magnitude with any combination of extent and duration except regional and long term
Neutral	• Zero magnitude with any combination of extent and duration

Once the significance of an impact has been determined, the PROBABILITY of this impact occurring as well as the CONFIDENCE in the assessment of the impact would be determined using the rating systems outlined in below respectively. It is important to note that the significance of an impact should always be considered in concert with the probability of that impact occurring.

Probability ratings	**Criteria**
Definite	>95% chance of impact occurring.
Probable	5 – 95% chance of impact occurring.
Unlikely	<5% chance of impact occurring.

Confidence ratings	**Criteria**
Certain	Wealth of information on and sound understanding of the environmental factors potentially influencing the impact.
Sure	Reasonable amount of useful information on and relatively sound understanding of the environmental factors potentially influencing the impact.
Unsure	Limited useful information on and understanding of the environmental factors potentially influencing this impact.

Criteria	**Description**		
Nature	a description of what causes the effect, what will be affected, and how it will be affected.		
	Type	**Score**	**Description**
Extent (E)	None (No)	1	Footprint
	Site (S)	2	On site or within 100 m of the site
	Local (L)	3	Within a 20 km radius of the centre of the site
	Regional (R)	4	Beyond a 20 km radius of the site
	National (Na)	5	Crossing provincial boundaries or on a national / land wide scale
Duration (D)	Short term (S)	1	0 – 1 years
	Short to medium (S-M)	2	2 – 5 years
	Medium term (M)	3	5 – 15 years
	Long term (L)	4	> 15 years
	Permanent(P)	5	Will not cease
Magnitude (M)	Small (S)	0	will have no effect on the environment
	Minor (Mi)	2	will not result in an impact on processes
	Low (L)	4	will cause a slight impact on processes
	Moderate (Mo)	6	processes continuing but in a modified way

	High (H)	8	processes are altered to the extent that they temporarily cease
	Very high (VH)	10	results in complete destruction of patterns and permanent cessation of processes.
Probability (P) the likelihood of the impact actually occurring. Probability is estimated on a scale, and a score assigned	Very improbable (VP)	1	probably will not happen
	Improbable (I)	2	some possibility, but low likelihood
	Probable (P)	3	distinct possibility
	Highly probable (HP)	4	most likely
	Definite (D)	5	impact will occur regardless of any prevention measures
Significance (S)	Determined through a synthesis of the characteristics described above: **S = (E+D+M) x P** Significance can be assessed as low, medium or high		
Low: < 30 points:	The impact would not have a direct influence on the decision to develop in the area		
Medium: 30 – 60 points:	The impact could influence the decision to develop in the area unless it is effectively mitigated		
High: < 60 points:	The impact must have an influence on the decision process to develop in the area		
No significance	When no impact will occur or the impact will not affect the environment		
Status	Positive (+)		Negative (-)
The degree to which the impact can be reversed	Completely reversible (R)	90-100%	The impact can be mostly to completely reversed with the implementation of the correct mitigation and rehabilitation measures.
	Partly reversible (PR)	6-89%	The impact can be partly reversed providing that mitigation measures as stipulated in the EMP are implemented and rehabilitation measures are undertaken
	Irreversible (IR)	0-5%	The impact cannot be reversed, regardless of the mitigation or rehabilitation measures taking place
The degree to which the impact may cause irreplaceable loss of resources	Resource will not be lost (R)	1	The resource will not be lost or destroyed provided that mitigation and rehabilitation measures as stipulated in the EMP are implemented
	Resource may be partly destroyed (PR)	2	Partial loss or destruction of the resources will occur even though all management and mitigation measures as stipulated in the EMP are implemented
	Resource cannot be replaced (IR)	3	The resource cannot be replaced no matter which management or mitigation measures are implemented.
The degree to which the impact can be mitigated	Completely mitigatable (CM)	1	The impact can be completely mitigated providing that all management and mitigation measures as stipulated in the EMP are implemented
	Partly mitigatable (PM)	2	The impact cannot be completely mitigated even though all management and mitigation measures as stipulated in the EMP are implemented. Implementation of these measures will provide a measure of mitigatibility

	Un-mitigatable (UM)	3	The impact cannot be mitigated no matter which management or mitigation measures are implemented.

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

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

Prospecting activities took place on previously ploughed and cultivated agricultural land which are currently still in the process of rehabilitating i.e. all disturbed prospected areas have been backfilled and shaped according to surrounding contours but not all of the rehabilitated sites have revegetated as yet.

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

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

Refer to Part A h) v) above for risk and impact assessments and associated mitigation measures proposed.

ix) Motivation where no alternative sites were considered.

Not applicable – prospecting closure application restricted to the areas already impacted upon.

x) Statement motivating the alternative development location within the overall site.

Not applicable – prospecting closure application restricted to the areas already impacted upon.

i) Full description of the process undertaken to identify, assess and rank the impacts and risks the activity will impose on the preferred site (In respect of the final site layout plan) through the life of the activity. (Including (i) a description of all environmental issues and risks that were identified during the environmental impact assessment process and (ii) an assessment of the significance of each issue and risk and an indication of the extent to which the issue and risk could be avoided or addressed by the adoption of mitigation measures.)

Refer to Part A h) v) and vi) above for risk and impact assessments and associated mitigation measures proposed and risk/impact assessment methodology used.

j) Assessment of each identified potentially significant impact and risk

(This section of the report must consider all the known typical impacts of each of the activities (including those that could or should have been identified by knowledgeable persons) and not only those that were raised by registered interested and affected parties).

NAME OF ACTIVITY **E.g. For mining**,- excavations, blasting, stockpiles, discard dumps or dams, Loading, hauling and transport, Water supply dams and boreholes, accommodation, offices, ablution, stores, workshops, processing plant, storm water control, berms, roads, pipelines, power lines, conveyors, etc…etc…etc.)	**POTENTIAL IMPACT** (Including the potential impacts for cumulative impacts) (e.g. dust, noise, drainage surface disturbance, fly rock, surface water contamination, groundwater contamination, air pollution etc….etc.…)	**ASPECTS AFFECTED**	**PHASE** In which impact is anticipated (e.g. Mining, commissioning, operational Decommissioning, closure, post-closure)	**SIGNIFICANCE** if not mitigated	**MITIGATION TYPE** (modify, remedy, control, or stop) through (e.g. noise control measures, storm-water control, dust control, rehabilitation, design measures, blasting controls, avoidance, relocation, alternative activity etc. etc.) E.g. Modify through alternative method. Control through noise control Control through management and monitoring through rehabilitation..	**SIGNIFICANCE** if mitigated
Prospecting Closure/Rehabilitation	**Potential erosion of the site and surrounds during rehabilitation phase**	Natural and Agricultural Resources	Closure/Rehabilitation Phase	44-Medium	• Existing agricultural land contour structures must be reinstated during rehabilitation • Implement erosion and storm water runoff management measures as according to EMP requirements to prevent (or if prevention is not possible limit) any erosion from occurring on the prospecting activity areas and surrounds. • If natural revegetation of the sites is not taking place fast enough and signs of erosion are detected	8-Low

					replanting of the affected sites must be done to stabilise the soils. The crop to be used to replant the rehabilitated sites to prevent further erosion must be discussed and agreed with the landowner and must be similar to previous agricultural crops planted on site. The sites must be inspected by a qualified independent environmental consultant or specialist 6 months after replanting to establish whether it was successful in stabilising the soils and preventing further erosion. If erosion is still detected further mitigation and monitoring measures may be recommended by the consultant/specialist. • All rehabilitated sites must be revisited for a follow-up inspection at the end of July 2019 by an external environmental consultant or specialist and if signs of erosion are visible at the sites	

					suitable recommendations for stabilising and preventative measures must be provided and implemented. Additional follow-up inspections may also be required/ recommended.	
Prospecting Closure/Rehabilitation	**Introduction of alien and weed plant species during rehabilitation**	Natural and Agricultural Resources	Closure/Rehabilitation Phase	56-Medium	• Only use topsoil and excavated material as derived and conserved from the proposed prospecting site to backfill and rehabilitate impacted areas. • Alien invasive and weed vegetation monitoring and removal must be undertaken for at least a year after sampling on disturbed prospecting areas or until the landowner starts with the annual cultivation activities on the affected land. This must be done by the applicant, landowner or their appointed contractor, using CapeNature approved methodology depending on the contract agreement that the applicant has with the landowner and the end use objective of the site.	8-Low

Prospecting Closure/Rehabilitation	**Temporary loss of agricultural land during rehabilitation**	Natural and Agricultural Resources	Closure/Rehabilitation Phase	56-Medium	• If natural revegetation of the sites is not taking place fast enough and signs of erosion are detected replanting of the affected sites must be done to stabilise the soils. The crop to be used to replant the rehabilitated sites to prevent further erosion must be discussed and agreed with the landowner and must be similar to previous agricultural crops planted on site. The sites must be inspected by a qualified independent environmental consultant or specialist 6 months after replanting to establish whether it was successful in stabilising the soils and preventing further erosion. If erosion is still detected further mitigation and monitoring measures may be recommended by the consultant/specialist. • All rehabilitated sites must be revisited for a follow-up inspection at the end of	8-Low

					July 2019 by an external environmental consultant or specialist and if signs of erosion are visible at the sites suitable recommendations for stabilising and preventative measures must be provided and implemented. Additional follow-up inspections may also be required/ recommended.	
Prospecting Closure/Rehabilitation	**Impact of rehabilitation activities on adjacent terrestrial ESAs and CBAs and secondary-, primary drainage lines and man-made dams with associated wetland characteristics and aquatic vegetation as associated with mapped NFEPAs and aquatic CBAs and ESAs**	Natural and Agricultural Resources	Closure/Rehabilitation Phase	44-Medium	• Existing agricultural land contour structures must be reinstated during rehabilitation • Implement erosion and storm water runoff management measures as according to EMP requirements to prevent (or if prevention is not possible limit) any erosion from occurring on the prospecting activity areas and surrounds. • If natural revegetation of the sites is not taking place fast enough and signs of erosion are detected replanting of the affected sites must be done to stabilise the soils. The crop to be used to replant the	8-Low

					rehabilitated sites to prevent further erosion must be discussed and agreed with the landowner and must be similar to previous agricultural crops planted on site. The sites must be inspected by a qualified independent environmental consultant or specialist 6 months after replanting to establish whether it was successful in stabilising the soils and preventing further erosion. If erosion is still detected further mitigation and monitoring measures may be recommended by the consultant/specialist. • All rehabilitated sites must be revisited for a follow-up inspection at the end of July 2019 by an external environmental consultant or specialist and if signs of erosion are visible at the sites suitable recommendations for stabilising and preventative measures must be provided and	

					implemented. Additional follow-up inspections may also be required/ recommended. • If during the follow-up inspection as recommended to July 2019 it is found that detrimental impacts has occurred within sensitive landscape features surrounding the previously cultivated agricultural lands due to rehabilitated prospecting activities areas the consultant or specialist must provide additional rehabilitation mitigation measures to be implemented to restore these areas and prevent any further detrimental impacts.	

Refer to section v) above for the supporting impact assessment conducted by the EAP

k) Summary of specialist reports.

(This summary must be completed if any specialist reports informed the impact assessment and final site layout process and must be in the following tabular form):-

LIST OF STUDIES UNDERTAKEN	RECOMMENDATIONS OF SPECIALIST REPORTS	SPECIALIST RECOMMENDATIONS THAT HAVE BEEN INCLUDED IN THE EIA REPORT (Mark with an X where applicable)	REFERENCE TO APPLICABLE SECTION OF REPORT WHERE SPECIALIST RECOMMENDATIONS HAVE BEEN INCLUDED.

PROSPECTING RIGHT ON RE AND PORTION 2 OF MELKBOOM 209, PORTION 1 AND 4 OF MATJIESFONTEIN 210, PORTION OF MATJIESDRIFT 329, PORTION OF FARM 323 AND PORTION OF FARM 372 FINAL CLOSURE COMPLIANCE AUDIT REPORT, ENVIRONMENTAL RISK REPORT AND CLOSURE/REHABILITATION PLAN Eco Impact Legal Consulting November 2018	**6. FINAL CLOSURE/REHABILITATION PLAN** **6.1 CLOSURE/REHABILITATION OBJECTIVE** According to the EMP requirements the final closure/rehabilitation objective is to return prospected areas to pasture matching the surrounding environment. **6.2 DETAILS OF ANY LONG-TERM MANAGEMENT, MONITORING AND MAINTENANCE EXPECTED FOR THE REHABILITATED SITES** Ideally, a properly designed and executed rehabilitation plan will leave the prospecting area in a condition requiring no continuing, long-term maintenance to achieve an enduring, high quality environment. The prospecting right holder commits to post-closure maintenance during rehabilitation of the site and until the time of receipt of a closure certificate for all or parts of the prospecting area. Long-term care will include maintenance of all storm water contour infrastructures, erosion rehabilitation and clearing of weed and alien vegetation species until the next ploughing/cultivation season. Thereafter, the responsibility for the ongoing maintenance and monitoring of the site will rest with the landowner. Management and maintenance is expected to continue until the landowner cultivates the areas impacted by prospecting or after the closure certificate is issued (whichever comes first). Maintenance will be focused on erosion prevention and removal of weed and alien vegetation species on the prospecting area. In terms of monitoring the EMP requirements states that six monthly photographic records of all rehabilitated sites must be kept by the Prospect Manager (“PM”) until the Closure Certificate have been obtained. Currently all sites have been rehabilitated by means of infilling excavated materials, replacing excavated topsoil and shaping the impacted area according to surrounding contours. No signs of erosion or depressions are currently visible at the rehabilitated sites, but not all sites have been replanted/ revegetated with pastures as yet and therefore erosion might still occur after heavy rains. It is therefore recommended that the rehabilitated	All recommendations as within the report have been included in the EIA report	Refer below to section **m) Proposed impact management objectives and the impact management outcomes for inclusion in the EMPr**

	sites be revisited for a follow-up inspection at the end of July 2019 by an external environmental consultant or specialist and if signs of erosion or alien/weed encroachment are visible at the sites suitable recommendations for alien/weed eradication, soil stabilising and preventative measures must be provided and implemented. Additional follow-up inspections may also be required/ recommended. Due to the disturbed sites having different types of pastures and vegetation growing on and adjacent to the sites and the landowner himself planting different crops on the various sites it was agreed with the landowner that no replanting will be done by the prospecting company, but that the sites will be left to naturally revegetate and that the landowner will replant the relevant sites during the next cultivation cycle. However, if evidence of erosion is noted at any of the rehabilitated sites during the follow-up inspection, as recommended for July 2019, the consultant/specialist may recommend the immediate replanting of the eroded sites to promote stabilisation and prevent reoccurring erosion.		

See report attached as **Appendix G**.

l) Environmental impact statement

i. Summary of the key findings of the environmental impact assessment;

The objective of an EIA, in this case a basic assessment, is to assess the impacts of the prospecting activities that was completed and provide where necessary additional recommendations for rehabilitation measures to be implemented to ensure that the rehabilitation objective is successfully obtained. The assessment and evaluation of potential impacts associated with the prospecting activities closure was undertaken in an iterative manner, to inform proactively the additional recommended rehabilitation measures. Specialist's environmental consultants and key stakeholders were involved in the EIA process to identify and assess these potential impacts.

From assessing the information as provided by the client and conducting the closure site visits it was concluded that there is currently no signs of any significant detrimental impacts on the agricultural lands within which the prospecting activities occurred and that no indigenous vegetation areas, water courses or their ecological functioning were significantly impacted upon.

The assessment revealed that the prospecting areas have been backfilled (with the material as excavated from site during prospecting activities) and shaped according to surrounding topography with no evidence of erosion or depressions at the sites. Due to natural revegetation not yet occurring at most of the recently rehabilitated sites additional follow-up inspection is recommended for July 2019 to determine the success of the rehabilitation measures as implemented thus far and whether or not additional measures will have to be implemented to stabilise the sites so as to return it to its previous agricultural pasture state. Refer to the compliance audit, environmental risk report and final rehabilitation/closure plan report under Appendix G for more details on long-term management, monitoring and maintenance recommended for the sites.

(ii) Final Site Map

Provide a map at an appropriate scale which superimposes the proposed overall activity and its associated structures and infrastructure on the environmental sensitivities of the preferred site indicating any areas that should be avoided, including buffers Attach as **Appendix B**

Refer to maps attached under **Appendix B**

(iii) Summary of the positive and negative impacts and risks of the proposed activity and identified alternatives;

Prospecting activities took place on previously ploughed and cultivated agricultural land which are currently still in the process of rehabilitating i.e. all disturbed prospected areas have been backfilled and shaped according to surrounding contours but not all of the rehabilitated sites have revegetated as yet.

The following potential impacts were identified, assessed and mitigation measures provided:

- **Potential erosion of the site and surrounds during rehabilitation phase**
  - Existing agricultural land contour structures must be reinstated during rehabilitation
  - Implement erosion and storm water runoff management measures as according to EMP requirements to prevent (or if prevention is not possible limit) any erosion from occurring on the prospecting activity areas and surrounds.
  - If natural revegetation of the sites is not taking place fast enough and signs of erosion are detected replanting of the affected sites must be done to stabilise

the soils. The crop to be used to replant the rehabilitated sites to prevent further erosion must be discussed and agreed with the landowner and must be similar to previous agricultural crops planted on site. The sites must be inspected by a qualified independent environmental consultant or specialist 6 months after replanting to establish whether it was successful in stabilising the soils and preventing further erosion. If erosion is still detected further mitigation and monitoring measures may be recommended by the consultant/specialist.

- All rehabilitated sites must be revisited for a follow-up inspection at the end of July 2019 by an external environmental consultant or specialist and if signs of erosion are visible at the sites suitable recommendations for stabilising and preventative measures must be provided and implemented. Additional follow-up inspections may also be required/ recommended.

- **Introduction of alien and weed plant species during rehabilitation**
  - Only use topsoil and excavated material as derived and conserved from the proposed prospecting site to backfill and rehabilitate impacted areas.
  - Alien invasive and weed vegetation monitoring and removal must be undertaken for at least a year after sampling on disturbed prospecting areas or until the landowner starts with the annual cultivation activities on the affected land. This must be done by the applicant, landowner or their appointed contractor, using CapeNature approved methodology depending on the contract agreement that the applicant has with the landowner and the end use objective of the site.

- **Temporary loss of agricultural land during rehabilitation**
  - If natural revegetation of the sites is not taking place fast enough and signs of erosion are detected replanting of the affected sites must be done to stabilise the soils. The crop to be used to replant the rehabilitated sites to prevent further erosion must be discussed and agreed with the landowner and must be similar to previous agricultural crops planted on site. The sites must be inspected by a qualified independent environmental consultant or specialist 6 months after replanting to establish whether it was successful in stabilising the soils and preventing further erosion. If erosion is still detected further mitigation and monitoring measures may be recommended by the consultant/specialist.
  - All rehabilitated sites must be revisited for a follow-up inspection at the end of July 2019 by an external environmental consultant or specialist and if signs of erosion are visible at the sites suitable recommendations for stabilising and preventative measures must be provided and implemented. Additional follow-up inspections may also be required/ recommended.

- **Impact of rehabilitation activities on adjacent terrestrial ESAs and CBAs and secondary-, primary drainage lines and man-made dams with associated wetland characteristics and aquatic vegetation as associated with mapped NFEPAs and aquatic CBAs and ESAs**
  - Existing agricultural land contour structures must be reinstated during rehabilitation
  - Implement erosion and storm water runoff management measures as according to EMP requirements to prevent (or if prevention is not possible limit) any erosion from occurring on the prospecting activity areas and surrounds.
  - If natural revegetation of the sites is not taking place fast enough and signs of erosion are detected replanting of the affected sites must be done to stabilise the soils. The crop to be used to replant the rehabilitated sites to prevent further erosion must be discussed and agreed with the landowner and must

be similar to previous agricultural crops planted on site. The sites must be inspected by a qualified independent environmental consultant or specialist 6 months after replanting to establish whether it was successful in stabilising the soils and preventing further erosion. If erosion is still detected further mitigation and monitoring measures may be recommended by the consultant/specialist.

- All rehabilitated sites must be revisited for a follow-up inspection at the end of July 2019 by an external environmental consultant or specialist and if signs of erosion are visible at the sites suitable recommendations for stabilising and preventative measures must be provided and implemented. Additional follow-up inspections may also be required/ recommended.
- If during the follow-up inspection as recommended to July 2019 it is found that detrimental impacts has occurred within sensitive landscape features surrounding the previously cultivated agricultural lands due to rehabilitated prospecting activities areas the consultant or specialist must provide additional rehabilitation mitigation measures to be implemented to restore these areas and prevent any further detrimental impacts.

m) Proposed impact management objectives and the impact management outcomes for inclusion in the EMPr;

Based on the assessment and where applicable the recommendations from specialist reports, the recording of proposed impact management objectives, and the impact management outcomes for the development for inclusion in the EMPr as well as for inclusion as conditions of authorisation.

As according to the approved prospecting right environmental management plan the final closure/rehabilitation objective is to return prospected areas to pasture matching the surrounding environment.

Prospecting activities took place on previously ploughed and cultivated agricultural land which are currently still in the process of rehabilitating i.e. all disturbed prospected areas have been backfilled and shaped according to surrounding contours but not all of the rehabilitated sites have revegetated as yet.

The following potential impacts were identified, assessed and mitigation measures provided:

- **Potential erosion of the site and surrounds during rehabilitation phase**
  - Existing agricultural land contour structures must be reinstated during rehabilitation
  - Implement erosion and storm water runoff management measures as according to EMP requirements to prevent (or if prevention is not possible limit) any erosion from occurring on the prospecting activity areas and surrounds.
  - If natural revegetation of the sites is not taking place fast enough and signs of erosion are detected replanting of the affected sites must be done to stabilise the soils. The crop to be used to replant the rehabilitated sites to prevent further erosion must be discussed and agreed with the landowner and must be similar to previous agricultural crops planted on site. The sites must be inspected by a qualified independent environmental consultant or specialist 6 months after replanting to establish whether it was successful in stabilising the soils and preventing further erosion. If erosion is still detected further mitigation and monitoring measures may be recommended by the consultant/specialist.
  - All rehabilitated sites must be revisited for a follow-up inspection at the end of July 2019 by an external environmental consultant or specialist and if signs of erosion are visible at the sites suitable recommendations for stabilising and

preventative measures must be provided and implemented. Additional follow-up inspections may also be required/ recommended.

- **Introduction of alien and weed plant species during rehabilitation**
  - Only use topsoil and excavated material as derived and conserved from the proposed prospecting site to backfill and rehabilitate impacted areas.
  - Alien invasive and weed vegetation monitoring and removal must be undertaken for at least a year after sampling on disturbed prospecting areas or until the landowner starts with the annual cultivation activities on the affected land. This must be done by the applicant, landowner or their appointed contractor, using CapeNature approved methodology depending on the contract agreement that the applicant has with the landowner and the end use objective of the site.

- **Temporary loss of agricultural land during rehabilitation**
  - If natural revegetation of the sites is not taking place fast enough and signs of erosion are detected replanting of the affected sites must be done to stabilise the soils. The crop to be used to replant the rehabilitated sites to prevent further erosion must be discussed and agreed with the landowner and must be similar to previous agricultural crops planted on site. The sites must be inspected by a qualified independent environmental consultant or specialist 6 months after replanting to establish whether it was successful in stabilising the soils and preventing further erosion. If erosion is still detected further mitigation and monitoring measures may be recommended by the consultant/specialist.
  - All rehabilitated sites must be revisited for a follow-up inspection at the end of July 2019 by an external environmental consultant or specialist and if signs of erosion are visible at the sites suitable recommendations for stabilising and preventative measures must be provided and implemented. Additional follow-up inspections may also be required/ recommended.

- **Impact of rehabilitation activities on adjacent terrestrial ESAs and CBAs and secondary-, primary drainage lines and man-made dams with associated wetland characteristics and aquatic vegetation as associated with mapped NFEPAs and aquatic CBAs and ESAs**
  - Existing agricultural land contour structures must be reinstated during rehabilitation
  - Implement erosion and storm water runoff management measures as according to EMP requirements to prevent (or if prevention is not possible limit) any erosion from occurring on the prospecting activity areas and surrounds.
  - If natural revegetation of the sites is not taking place fast enough and signs of erosion are detected replanting of the affected sites must be done to stabilise the soils. The crop to be used to replant the rehabilitated sites to prevent further erosion must be discussed and agreed with the landowner and must be similar to previous agricultural crops planted on site. The sites must be inspected by a qualified independent environmental consultant or specialist 6 months after replanting to establish whether it was successful in stabilising the soils and preventing further erosion. If erosion is still detected further mitigation and monitoring measures may be recommended by the consultant/specialist.
  - All rehabilitated sites must be revisited for a follow-up inspection at the end of July 2019 by an external environmental consultant or specialist and if signs of erosion are visible at the sites suitable recommendations for stabilising and

preventative measures must be provided and implemented. Additional follow-up inspections may also be required/ recommended.

- If during the follow-up inspection as recommended to July 2019 it is found that detrimental impacts has occurred within sensitive landscape features surrounding the previously cultivated agricultural lands due to rehabilitated prospecting activities areas the consultant or specialist must provide additional rehabilitation mitigation measures to be implemented to restore these areas and prevent any further detrimental impacts.

n) Aspects for inclusion as conditions of Authorisation.
Any aspects which must be made conditions of the Environmental Authorisation

All recommendations as provided in the final closure compliance audit report, environmental risk report and closure/rehabilitation plan attached as Appendix G to the Draft BAR must be implemented.

o) Description of any assumptions, uncertainties and gaps in knowledge.
(Which relate to the assessment and mitigation measures proposed)

EAP has no detailed knowledge of bentonite and zeolite deposits and distributions and areas where prospecting activities took place other than information as provided by Midden Mining and observations made during the rehabilitation site inspections. Only knowledgeable on potential impacts of prospecting rehabilitation activities on the environment and the associated ecological and biodiversity aspects. In undertaking the investigation and compiling this report, the following has been assumed:

- The information provided by the client is accurate and unbiased;
- The scope of this investigation is to assess the direct and cumulative environmental impacts associated with the proposed prospecting rehabilitation activities.

p) Reasoned opinion as to whether the proposed activity should or should not be authorised

i. Reasons why the activity should be authorized or not.
The EAP is of the opinion that the environmental authorisation should be issued.

From assessing the information as provided by the client and conducting the closure site visits it was concluded that there is currently no signs of any significant detrimental impacts on the agricultural lands within which the prospecting activities occurred and that no indigenous vegetation areas, water courses or their ecological functioning were significantly impacted upon.

The assessment revealed that the prospecting areas have been backfilled (with the material as excavated from site during prospecting activities) and shaped according to surrounding topography with no evidence of erosion or depressions at the sites. Due to natural revegetation not yet occurring at most of the recently rehabilitated sites additional follow-up inspection is recommended for July 2019 to determine the success of the rehabilitation measures as implemented thus far and whether or not additional measures will have to be implemented to stabilise the sites so as to return it to its previous agricultural pasture state. Refer to the compliance audit, environmental risk report and final rehabilitation/closure plan report under Appendix G for more details on long-term management, monitoring and maintenance recommended for the sites.

ii. Conditions that must be included in the authorisation
Refer to point **n)** above.

q) Period for which the Environmental Authorisation is required.
NA

r) Undertaking
Confirm that the undertaking required to meet the requirements of this section is provided at the end of the EMPr and is applicable to both the Basic assessment report and the Environmental Management Programme report.

Yes, it is confirmed that the undertaking is provided and included at the end of the EMPr.

s) Financial Provision
State the amount that is required to both manage and rehabilitate the environment in respect of rehabilitation.

i. Explain how the aforesaid amount was derived.

It remains the responsibility of the prospecting right holder to financially provide for the rehabilitation of the sites impacted during prospecting activities until successful rehabilitation status have been obtained.

The current expected rehabilitation costs associated with the post prospecting closure management requirements as recommended within this report is R 18 000 for 2019 (estimated cost for appointment of external suitably qualified environmental consultant or specialist to conduct follow-up inspection of rehabilitated sites). However should the consultant/specialist find that additional rehabilitation measures must be implemented if the sites are not successfully rehabilitated the prospecting right holder will be responsible to provide adequate funds to implement these recommendations.

ii. Confirm that this amount can be provided for from operating expenditure. (Confirm that the amount, is anticipated to be an operating cost and is provided for as such in the Mining work programme, Financial and Technical Competence Report or Prospecting Work Programme as the case may be).
The client has confirmed that this amount can be provided for.

t) Specific Information required by the competent Authority

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

1. Impact on the socio-economic conditions of any directly affected person. (Provide the results of Investigation, assessment, and evaluation of the impact of the mining, bulk sampling or alluvial diamond prospecting on any directly affected person including the landowner, lawful occupier, or, where applicable, potential beneficiaries of any land restitution claim, attach the investigation report as an **Appendix**).
Please refer to the impact tables above for more detail. The zeolite and bentonite prospecting activities did not and will not have any significant detrimental impacts on the socio-economic conditions of the local landowners, residence or communities as assessed.

2. Impact on any national estate referred to in section 3(2) of the National Heritage Resources Act. **(**Provide the results of Investigation, assessment, and evaluation of the impact of the mining, bulk sampling or alluvial diamond prospecting on any national estate referred to in section 3(2) of the National Heritage Resources Act, 1999 (Act No. 25 of 1999) with the exception of the national estate contemplated in section 3(2)(*i*)(vi) and (vii) of

that Act, attach the investigation report as **Appendix** and confirm that the applicable mitigation is reflected in 2.5.3; 2.11.6.and 2.12.herein).

A Notice of Intent to Develop has been submitted to Heritage Western Cape for comments on the closure application. However during the original prospecting right application HWC was notified of the proposed prospecting activities and HWC replied that no HIA studies were required.. See Notice of Intent to Develop as submitted to Heritage Western Cape attached as Appendix H. HWC will also be provided with the opportunity to comment on the Draft BAR. No evidence that any detrimental impacts occurred during the prospecting activities on any heritage resources were found during the site closure inspection. The prospecting activities did not impact on any national estate referred to in section 3(2) of the National Heritage Resources Act, 1999 or impact on any building or structure older than 60 years in any way.

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

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

The EIA Regulations, 2014 require that all EIA processes must identify and describe "alternatives to the proposed activity that are feasible and reasonable". Different types or categories of alternatives can be identified, e.g. location alternatives, type of activity, design or layout alternatives, technology alternatives and operational alternatives. The "No-Go" or "No Project" alternative must also be considered. Please refer to the sections above for detailed assessment of the preferred site alternative and no go option assessments.

In the case of the proposed closure of the bentonite and zeolite prospecting right activities on the relevant properties, the identification of feasible alternatives is severely constrained due to the fact that this is a closure application and therefore locality and activity alternatives are limited to the areas already impacted upon by the prospecting activities

PART B

ENVIRONMENTAL MANAGEMENT PROGRAMME REPORT

1) DRAFT ENVIRONMENTAL MANAGEMENT PROGRAMME (November 2018).

a) Details of the EAP,

(Confirm that the requirement for the provision of the details and expertise of the EAP are already included in PART A, section 3 a) herein as required).

It is confirmed that the details and expertise of the EAP are already provided under Part A, Section 3 a).

b) Description of the Aspects of the Activity

(Confirm that the requirement to describe the aspects of the activity that are covered by the draft environmental management programme is already included in PART A, section 3 h) herein as required).

It is confirmed that the requirements to describe the aspects of the activity that are covered by the EMP are already provided under Part A, section 3 h).

c) Composite Map

(Provide a map **(Attached as an Appendix**) at an appropriate scale which superimposes the proposed activity, its associated structures, and infrastructure on the environmental

sensitivities of the preferred site, indicating any areas that any areas that should be avoided, including buffers)
Please refer to **Appendix B** and **F** of the BAR**.**

d) Description of Impact management objectives including management statements

i) Determination of closure objectives.
(ensure that the closure objectives are informed by the type of environment described)
According to current prospecting right and EMP conditions the main closure/rehabilitation objective is to rehabilitate the prospected areas as according to previous agricultural potential.

Details of any long-term management, monitoring and maintenance expected for the rehabilitated sites:
Ideally, a properly designed and executed rehabilitation plan will leave the prospecting area in a condition requiring no continuing, long-term maintenance to achieve an enduring, high quality environment. The prospecting right holder commits to post-closure maintenance during rehabilitation of the site and until the time of receipt of a closure certificate for all or parts of the prospecting area. Long-term care will include maintenance of all storm water contour infrastructures, erosion rehabilitation and clearing of weed and alien vegetation species until the next ploughing/cultivation season. Thereafter, the responsibility for the ongoing maintenance and monitoring of the site will rest with the landowner.

Management and maintenance is expected to continue until the landowner cultivates the areas impacted by prospecting or after the closure certificate is issued (whichever comes first). Maintenance will be focused on erosion prevention and removal of weed and alien vegetation species on the prospecting area.

In terms of monitoring the EMP requirements states that six monthly photographic records of all rehabilitated sites must be kept by the Prospect Manager ("PM") until the Closure Certificate have been obtained.

Currently all sites have been rehabilitated by means of infilling excavated materials, replacing excavated topsoil and shaping the impacted area according to surrounding contours. No signs of erosion or depressions are currently visible at the rehabilitated sites, but not all sites have been replanted/ revegetated with pastures as yet and therefore erosion might still occur after heavy rains. It is therefore recommended that the rehabilitated sites be revisited for a follow-up inspection at the end of July 2019 by an external environmental consultant or specialist and if signs of erosion or alien/weed encroachment are visible at the sites suitable recommendations for alien/weed eradication, soil stabilising and preventative measures must be provided and implemented. Additional follow-up inspections may also be required/ recommended.

Due to the disturbed sites having different types of pastures and vegetation growing on and adjacent to the sites and the landowner himself planting different crops on the various sites it was agreed with the landowner that no replanting will be done by the prospecting company, but that the sites will be left to naturally revegetate and that the landowner will replant the relevant sites during the next cultivation cycle. However, if evidence of erosion is noted at any of the rehabilitated sites during the follow-up inspection, as recommended for July 2019, the consultant/specialist may recommend the immediate replanting of the eroded sites to promote stabilisation and prevent reoccurring erosion.

ii) Volumes and rate of water use required for the operation.

NA. The activity will not require any water.

iii) Has a water use licence been applied for?

Neither applicable nor required.

iv) Impacts to be mitigated in their respective phases

Measures to rehabilitate the environment affected by the undertaking of any listed activity

ACTIVITIES **(E.g. For prospecting -** drill site, site camp, ablution facility, accommodation, equipment storage, sample storage, site office, access route **etc…etc…etc.** **E.g. For mining**,- excavations, blasting, stockpiles, discard dumps or dams, Loading, hauling and transport, Water supply dams and boreholes, accommodation, offices, ablution, stores, workshops, processing plant, storm water control, berms, roads, pipelines, power lines, conveyors, etc…etc…etc.)	**PHASE** (of operation in which activity will take place. State; Planning and design, Pre-Mining' Mining, Operational, Rehabilitation, Closure, Post closure).	**SIZE AND SCALE of disturbance** (volumes, tonnages and hectares or m^2)	**MITIGATION MEASURES** (describe how each of the recommendations in herein will remedy the cause of pollution or degradation and migration of pollutants)	**COMPLIANCE WITH STANDARDS** (A description of how each of the recommendations herein will comply with any prescribed environmental management standards or practices that have been identified by Competent Authorities)	**TIME PERIOD FOR IMPLEMENTATION** Describe the time period when the measures in the environmental management programme must be implemented Measures must be implemented when required. With regard to Rehabilitation specifically this must take place at the earliest opportunity. .With regard to Rehabilitation, therefore state either:-.. Upon cessation of the individual activity or. Upon the cessation of mining, bulk sampling or alluvial diamond prospecting as the case may be.
Prospecting Closure/Rehabilitation	Closure/ Rehabilitation	<10ha	**Conserving and Rehabilitating Agricultural Land** • If natural revegetation of the sites is not taking place fast enough and signs of erosion are detected replanting of the affected sites must be done to stabilise the soils. The crop to be used to replant the rehabilitated sites to prevent further erosion must be discussed and agreed with the landowner and must be similar to previous	Conservation of Agricultural Resources Act, 43 of 1983	Closure/ Rehabilitation phases

			agricultural crops planted on site. The sites must be inspected by a qualified independent environmental consultant or specialist 6 months after replanting to establish whether it was successful in stabilising the soils and preventing further erosion. If erosion is still detected further mitigation and monitoring measures may be recommended by the consultant/specialist. • All rehabilitated sites must be revisited for a follow-up inspection at the end of July 2019 by an external environmental consultant or specialist and if signs of erosion are visible at the sites suitable recommendations for stabilising and preventative measures must be provided and implemented. Additional follow-up inspections may also be required/ recommended.		
Prospecting Closure/Rehabilitation	Closure/ Rehabilitation	<10ha	**Potential Erosion** • Existing agricultural land contour structures must be reinstated during rehabilitation • Implement erosion and storm water runoff management measures as according to EMP requirements to prevent (or	Conservation of Agricultural Resources Act, 43 of 1983 and regulations	Closure/ Rehabilitation phases

			if prevention is not possible limit) any erosion from occurring on the prospecting activity areas and surrounds. • If natural revegetation of the sites is not taking place fast enough and signs of erosion are detected replanting of the affected sites must be done to stabilise the soils. The crop to be used to replant the rehabilitated sites to prevent further erosion must be discussed and agreed with the landowner and must be similar to previous agricultural crops planted on site. The sites must be inspected by a qualified independent environmental consultant or specialist 6 months after replanting to establish whether it was successful in stabilising the soils and preventing further erosion. If erosion is still detected further mitigation and monitoring measures may be recommended by the consultant/specialist. • All rehabilitated sites must be revisited for a follow-up inspection at the end of July 2019 by an external environmental consultant or specialist and if signs of erosion are visible		

			at the sites suitable recommendations for stabilising and preventative measures must be provided and implemented. Additional follow-up inspections may also be required/ recommended.		
Prospecting Closure/Rehabilitation	Closure/Rehabilitation Phase	<10ha	**Alien and Weed Vegetation Management** • Only use topsoil and excavated material as derived and conserved from the proposed prospecting site to backfill and rehabilitate impacted areas. • Alien invasive and weed vegetation monitoring and removal must be undertaken for at least a year after sampling on disturbed prospecting areas or until the landowner starts with the annual cultivation activities on the affected land. This must be done by the applicant, landowner or their appointed contractor, using CapeNature approved methodology depending on the contract agreement that the applicant has with the landowner and the end use objective of the site.	National Environmental Management: Biodiversity Act 10 of 2004 [NEMBA] and relevant regulations Conservation of Agricultural Resources Act, 43 of 1983	Closure/Rehabilitation Phase
Prospecting Closure/Rehabilitation	Closure/Rehabilitation Phase	<10ha	**Conserving indigenous vegetation areas and watercourses associated with terrestrial and aquatic CBAs, ESAs and**	National Environmental Management: Biodiversity Act 10 of 2004 [NEMBA]	Closure/Rehabilitation Phase

			NFEPAs • Existing agricultural land contour structures must be reinstated during rehabilitation • Implement erosion and storm water runoff management measures as according to EMP requirements to prevent (or if prevention is not possible limit) any erosion from occurring on the prospecting activity areas and surrounds. • If natural revegetation of the sites is not taking place fast enough and signs of erosion are detected replanting of the affected sites must be done to stabilise the soils. The crop to be used to replant the rehabilitated sites to prevent further erosion must be discussed and agreed with the landowner and must be similar to previous agricultural crops planted on site. The sites must be inspected by a qualified independent environmental consultant or specialist 6 months after replanting to establish whether it was successful in stabilising the soils and preventing further erosion. If erosion is still detected further mitigation		

			and monitoring measures may be recommended by the consultant/specialist. • All rehabilitated sites must be revisited for a follow-up inspection at the end of July 2019 by an external environmental consultant or specialist and if signs of erosion are visible at the sites suitable recommendations for stabilising and preventative measures must be provided and implemented. Additional follow-up inspections may also be required/ recommended. • If during the follow-up inspection as recommended to July 2019 it is found that detrimental impacts has occurred within sensitive landscape features surrounding the previously cultivated agricultural lands due to rehabilitated prospecting activities areas the consultant or specialist must provide additional rehabilitation mitigation measures to be implemented to restore these areas and prevent any further detrimental impacts.		

e) Impact Management Outcomes

(A description of impact management outcomes, identifying the standard of impact management required for the aspects contemplated);

ACTIVITY (whether listed or not listed). **(E.g. Excavations, blasting, stockpiles, discard dumps or dams, Loading, hauling and transport, Water supply dams and boreholes, accommodation, offices, ablution, stores, workshops, processing plant, storm water control, berms, roads, pipelines, power lines, conveyors, etc…etc…etc.)**.	**POTENTIAL IMPACT** **(e.g. dust, noise, drainage surface disturbance, fly rock, surface water contamination, groundwater contamination, air pollution etc….etc.…)**	**ASPECTS AFFECTED**	**PHASE** In which impact is anticipated **(e.g. Mining, commissioning, operational Decommissioning, closure, post-closure)**	**MITIGATION TYPE** **(modify, remedy, control, or stop) through (e.g. noise control measures, storm-water control, dust control, rehabilitation, design measures, blasting controls, avoidance, relocation, alternative activity etc. etc.)** **E.g.** • **Modify through alternative method.** • **Control through noise control** • **Control through management and monitoring** • **Remedy through rehabilitation..**	**STANDARD TO BE ACHIEVED** **(Impact avoided, noise levels, dust levels, rehabilitation standards, end use objectives) etc.**
Prospecting Closure/Rehabilitation	**Temporary loss of agricultural land used for crop cultivation and livestock grazing**	Socio Economic and Agricultural Resources Impacts	Closure/ Rehabilitation	• If natural revegetation of the sites is not taking place fast enough and signs of erosion are detected replanting of the affected sites must be done to stabilise the soils. The crop to be used to replant the rehabilitated sites to prevent further erosion must be discussed and agreed with the landowner and must be similar to previous agricultural crops planted on site. The sites must be inspected by a qualified independent environmental consultant or specialist 6 months after replanting to establish whether it was successful in stabilising the	Prospected areas to be rehabilitated to previous agricultural state according to surroudings.

				soils and preventing further erosion. If erosion is still detected further mitigation and monitoring measures may be recommended by the consultant/specialist. • All rehabilitated sites must be revisited for a follow-up inspection at the end of July 2019 by an external environmental consultant or specialist and if signs of erosion are visible at the sites suitable recommendations for stabilising and preventative measures must be provided and implemented. Additional follow-up inspections may also be required/ recommended.	
Prospecting Closure/Rehabilitation	**Potential erosion of the site and surrounds during rehabilitation phase**	Natural and Agricultural Resources	Closure/Rehabilitation Phase	• Existing agricultural land contour structures must be reinstated during rehabilitation • Implement erosion and storm water runoff management measures as according to EMP requirements to prevent (or if prevention is not possible limit) any erosion from occurring on the prospecting activity areas and surrounds. • If natural revegetation of the sites is not taking place fast enough and signs of erosion are detected replanting of the affected sites must be done to stabilise the soils. The crop to be used to replant the rehabilitated sites to prevent	Impact avoidance, if detected rectification and prevention.

				further erosion must be discussed and agreed with the landowner and must be similar to previous agricultural crops planted on site. The sites must be inspected by a qualified independent environmental consultant or specialist 6 months after replanting to establish whether it was successful in stabilising the soils and preventing further erosion. If erosion is still detected further mitigation and monitoring measures may be recommended by the consultant/specialist. • All rehabilitated sites must be revisited for a follow-up inspection at the end of July 2019 by an external environmental consultant or specialist and if signs of erosion are visible at the sites suitable recommendations for stabilising and preventative measures must be provided and implemented. Additional follow-up inspections may also be required/ recommended.	
Prospecting Closure/Rehabilitation	**Introduction of alien and weed plant species during rehabilitation**	Natural and Agricultural Resources	Closure/Rehabilitation Phase	• Only use topsoil and excavated material as derived and conserved from the proposed prospecting site to backfill and rehabilitate impacted areas. • Alien invasive and weed vegetation monitoring and removal must be undertaken	Impact avoidance, if detected rectification and prevention.

				for at least a year after sampling on disturbed prospecting areas or until the landowner starts with the annual cultivation activities on the affected land. This must be done by the applicant, landowner or their appointed contractor, using CapeNature approved methodology depending on the contract agreement that the applicant has with the landowner and the end use objective of the site.	
Prospecting Closure/Rehabilitation	**Conserving indigenous vegetation areas and watercourses associated with terrestrial and aquatic CBAs, ESAs and NFEPAs**	Natural Resources	Closure/Rehabilitation Phase	• Existing agricultural land contour structures must be reinstated during rehabilitation • Implement erosion and storm water runoff management measures as according to EMP requirements to prevent (or if prevention is not possible limit) any erosion from occurring on the prospecting activity areas and surrounds. • If natural revegetation of the sites is not taking place fast enough and signs of erosion are detected replanting of the affected sites must be done to stabilise the soils. The crop to be used to replant the rehabilitated sites to prevent further erosion must be discussed and agreed with the landowner and must be similar to previous agricultural crops planted on site. The sites must	Impact avoidance, if detected rectification and prevention

				be inspected by a qualified independent environmental consultant or specialist 6 months after replanting to establish whether it was successful in stabilising the soils and preventing further erosion. If erosion is still detected further mitigation and monitoring measures may be recommended by the consultant/specialist. • All rehabilitated sites must be revisited for a follow-up inspection at the end of July 2019 by an external environmental consultant or specialist and if signs of erosion are visible at the sites suitable recommendations for stabilising and preventative measures must be provided and implemented. Additional follow-up inspections may also be required/ recommended. • If during the follow-up inspection as recommended to July 2019 it is found that detrimental impacts has occurred within sensitive landscape features surrounding the previously cultivated agricultural lands due to rehabilitated prospecting activities areas the consultant or specialist must provide additional rehabilitation mitigation measures to be implemented to restore these	

				areas and prevent any further detrimental impacts.	

f) Impact Management Actions

(A description of impact management actions, identifying the manner in which the impact management objectives and outcomes contemplated in paragraphs (d) and (e) will be achieved).

ACTIVITY whether listed or not listed. **(E.g. Excavations, blasting, stockpiles, discard dumps or dams, Loading, hauling and transport, Water supply dams and boreholes, accommodation, offices, ablution, stores, workshops, processing plant, storm water control, berms, roads, pipelines, power lines, conveyors, etc…etc…etc.)**.	**POTENTIAL IMPACT** **(e.g. dust, noise, drainage surface disturbance, fly rock, surface water contamination, groundwater contamination, air pollution etc.…etc.…)**	**MITIGATION TYPE** **(modify, remedy, control, or stop) through (e.g. noise control measures, storm-water control, dust control, rehabilitation, design measures, blasting controls, avoidance, relocation, alternative activity etc. etc.)** **E.g.** • **Modify through alternative method.** • **Control through noise control** • **Control through management and monitoring** **Remedy through rehabilitation..**	**TIME PERIOD FOR IMPLEMENTATION** Describe the time period when the measures in the environmental management programme must be implemented Measures must be implemented when required. With regard to Rehabilitation specifically this must take place at the earliest opportunity. .With regard to Rehabilitation, therefore state either:-.. Upon cessation of the individual activity or. Upon the cessation of mining, bulk sampling or alluvial diamond prospecting as the case may be.	**COMPLIANCE WITH STANDARDS** (A description of how each of the recommendations in 2.11.6 read with 2.12 and 2.15.2 herein will comply with any prescribed environmental management standards or practices that have been identified by Competent Authorities)
Prospecting Closure/Rehabilitation	**Potential erosion of the site and surrounds during rehabilitation phase**	• Existing agricultural land contour structures must be reinstated immediately (same day) after prospecting activities completion. • Undertake prospecting activities only in identified and specifically demarcated areas as proposed on completely transformed and cultivated areas. • Implement erosion and storm water runoff management measures as	Closure/Rehabilitation Phase	Impact avoidance, if detected rectification and prevention.

		according to EMP requirements to prevent (or if prevention is not possible limit) any erosion from occurring on the prospecting activity areas and surrounds. • Backfill proposed prospecting trenches and boreholes immediately (same day) with onsite excavated material after samples have been collected. • Monitor excavated prospecting areas for signs of erosion for at least six months after sampling and implement erosion rectification and prevention measures as and if required.		
Prospecting Closure/Rehabilitation	**Introduction of alien and weed plant species during rehabilitation**	• Only use topsoil and excavated material as derived and conserved from the proposed prospecting site to backfill and rehabilitate impacted areas. • Alien invasive and weed vegetation monitoring and removal must be undertaken for at least a year after sampling on disturbed prospecting areas or until the landowner starts with the annual cultivation activities on the affected land. This must be done by the applicant, landowner or their appointed contractor, using CapeNature approved methodology depending on the contract	Closure/Rehabilitation Phase	Impact avoidance, if detected rectification and prevention.

		agreement that the applicant has with the landowner.		
Prospecting Closure/Rehabilitation	**Conserving indigenous vegetation areas and watercourses associated with terrestrial and aquatic CBAs, ESAs and NFEPAs**	• Existing agricultural land contour structures must be reinstated during rehabilitation • Implement erosion and storm water runoff management measures as according to EMP requirements to prevent (or if prevention is not possible limit) any erosion from occurring on the prospecting activity areas and surrounds. • If natural revegetation of the sites is not taking place fast enough and signs of erosion are detected replanting of the affected sites must be done to stabilise the soils. The crop to be used to replant the rehabilitated sites to prevent further erosion must be discussed and agreed with the landowner and must be similar to previous agricultural crops planted on site. The sites must be inspected by a qualified independent environmental consultant or specialist 6 months after replanting to establish whether it was successful in stabilising the soils and preventing further erosion. If erosion is still detected further mitigation and monitoring measures may be recommended by the consultant/specialist.	Closure/Rehabilitation Phase	Impact avoidance, if detected rectification and prevention.

		• All rehabilitated sites must be revisited for a follow-up inspection at the end of July 2019 by an external environmental consultant or specialist and if signs of erosion are visible at the sites suitable recommendations for stabilising and preventative measures must be provided and implemented. Additional follow-up inspections may also be required/ recommended. • If during the follow-up inspection as recommended to July 2019 it is found that detrimental impacts has occurred within sensitive landscape features surrounding the previously cultivated agricultural lands due to rehabilitated prospecting activities areas the consultant or specialist must provide additional rehabilitation mitigation measures to be implemented to restore these areas and prevent any further detrimental impacts.		
Prospecting Closure/Rehabilitation	**Temporary loss of agricultural land used for crop cultivation and livestock grazing**	• If natural revegetation of the sites is not taking place fast enough and signs of erosion are detected replanting of the affected sites must be done to stabilise the soils. The crop to be used to replant the rehabilitated sites to prevent further erosion must	Closure/Rehabilitation Phase	Impact avoidance, if detected rectification and prevention.

		be discussed and agreed with the landowner and must be similar to previous agricultural crops planted on site. The sites must be inspected by a qualified independent environmental consultant or specialist 6 months after replanting to establish whether it was successful in stabilising the soils and preventing further erosion. If erosion is still detected further mitigation and monitoring measures may be recommended by the consultant/specialist. • All rehabilitated sites must be revisited for a follow-up inspection at the end of July 2019 by an external environmental consultant or specialist and if signs of erosion are visible at the sites suitable recommendations for stabilising and preventative measures must be provided and implemented. Additional follow-up inspections may also be required/ recommended.		

i) Financial Provision

(1) Determination of the amount of Financial Provision.

(a) Describe the closure objectives and the extent to which they have been aligned to the baseline environment described under the Regulation.
According to current prospecting right and EMP conditions the main closure/rehabilitation objective is to rehabilitate the prospected areas as according to previous agricultural potential.

(b) Confirm specifically that the environmental objectives in relation to closure have been consulted with landowner and interested and affected parties.
The environmental objectives in relation to the closure of the prospecting activities are included in the documents that have been made available to the registered interested and affective parties and landowners for comment.

(c) Provide a rehabilitation plan that describes and shows the scale and aerial extent of the main prospecting activities, including the anticipated prospecting area at the time of closure.
Refer to Appendix B and Appendix F for maps of rehabilitated prospecting areas at the time of closure.

(d) Explain why it can be confirmed that the rehabilitation plan is compatible with the closure objectives.
The proposed rehabilitation measures/plan has been informed by the environmental impact assessment conducted; Potential impacts with associated mitigation measures were identified and included to achieve successful closure/ rehabilitation of prospected sites.

(e) Calculate and state the quantum of the financial provision required to manage and rehabilitate the environment in accordance with the applicable guideline.
It remains the responsibility of the prospecting right holder to financially provide for the rehabilitation of the sites impacted during prospecting activities until successful rehabilitation status have been obtained.

The current expected rehabilitation costs associated with the post prospecting closure management requirements as recommended within this report is R 18 000 for 2019 (estimated cost for appointment of external suitably qualified environmental consultant or specialist to conduct follow-up inspection of rehabilitated sites). However should the consultant/specialist find that additional rehabilitation measures must be implemented if the sites are not successfully rehabilitated the prospecting right holder will be responsible to provide adequate funds to implement these recommendations.

(f) Confirm that the financial provision will be provided as determined.
By signing this document the EAP hereby confirms that the applicant stated that the financial provision will be provided as determined.

Mechanisms for monitoring compliance with and performance assessment against the environmental management programme and reporting thereon, including

g) Monitoring of Impact Management Actions
h) Monitoring and reporting frequency
i) Responsible persons
j) Time period for implementing impact management actions
k) Mechanism for monitoring compliance

SOURCE ACTIVITY	IMPACTS REQUIRING MONITORING PROGRAMMES	FUNCTIONAL REQUIREMENTS FOR MONITORING	ROLES AND RESPONSIBILITIES (FOR THE EXECUTION OF THE MONITORING PROGRAMMES)	MONITORING AND REPORTING FREQUENCY and TIME PERIODS FOR IMPLEMENTING IMPACT MANAGEMENT ACTIONS
Prospecting: Closure and Rehabilitation Phase	Successful rehabilitation of impacted area	Follow-up site inspection of rehabilitated prospecting areas to be conducted until the applicable areas have been successfully revegetated or cultivated by the landowner (whichever comes first)	Prospect manager to keep 6 monthly photographic record of rehabilitated sites until closure certificate have been obtained. Independent environmental consultant or specialist to conduct follow-up site inspection during July 2019 and provide additional rehabilitation recommendations if required.	Management and maintenance is expected to continue until the landowner cultivates the areas impacted by prospecting or after the closure certificate is issued (whichever comes first). Maintenance will be focused on erosion prevention and removal of weed and alien vegetation species on the prospecting area. In terms of monitoring the EMP requirements states that six monthly photographic records of all rehabilitated sites must be kept by the Prospect Manager (“PM”) until the Closure Certificate have been obtained. Currently all sites have been rehabilitated by means of infilling excavated materials,

				replacing excavated topsoil and shaping the impacted area according to surrounding contours. No signs of erosion or depressions are currently visible at the rehabilitated sites, but not all sites have been replanted/ revegetated with pastures as yet and therefore erosion might still occur after heavy rains. It is therefore recommended that the rehabilitated sites be revisited for a follow-up inspection at the end of July 2019 by an external environmental consultant or specialist and if signs of erosion or alien/weed encroachment are visible at the sites suitable recommendations for alien/weed eradication, soil stabilising and preventative measures must be provided and implemented. Additional follow-up inspections may also be required/ recommended. Reports should be made available to the Competent Authority if required in the form of an follow-up rehabilitation performance report.

l) Indicate the frequency of the submission of the performance assessment/ environmental audit report.

Management and maintenance is expected to continue until the landowner cultivates the areas impacted by prospecting or after the closure certificate is issued (whichever comes first). Maintenance will be focused on erosion prevention and removal of weed and alien vegetation species on the prospecting area.

In terms of monitoring the EMP requirements states that six monthly photographic records of all rehabilitated sites must be kept by the Prospect Manager ("PM") until the Closure Certificate have been obtained.

Currently all sites have been rehabilitated by means of infilling excavated materials, replacing excavated topsoil and shaping the impacted area according to surrounding contours. No signs of erosion or depressions are currently visible at the rehabilitated sites, but not all sites have been replanted/ revegetated with pastures as yet and therefore erosion might still occur after heavy rains. It is therefore recommended that the rehabilitated sites be revisited for a follow-up inspection at the end of July 2019 by an external environmental consultant or specialist and if signs of erosion or alien/weed encroachment are visible at the sites suitable recommendations for alien/weed eradication, soil stabilising and preventative measures must be provided and implemented. Additional follow-up inspections may also be required/ recommended.

Reports should be made available to the Competent Authority if required in the form of a follow-up rehabilitation performance report.

m) Environmental Awareness Plan

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

If additional rehabilitation measures are needed the relevant employees conducting the work will be informed once before work commences on site of the environmental risks and what not to do etc. as according to EMP requirements.

Environmental Training from the Environmental Control Officer

Not applicable

(2) Manner in which risks will be dealt with in order to avoid pollution or the degradation of the environment.

If additional rehabilitation measures are needed the requirements of the EMP will be followed in order to avoid pollution or degradation of the environment.

n) Specific information required by the Competent Authority
(Among others, confirm that the financial provision will be reviewed annually).

No specific information requirements have been detailed by the Competent Authority to date. It is confirmed that the financial provisions will be reviewed annually, if required.

UNDERTAKING

The EAP herewith confirms

- the correctness of the information provided in the reports √
-
- the inclusion of comments and inputs from stakeholders and I&APs ; √
- the inclusion of inputs and recommendations from the specialist reports where relevant; √ and
- that the information provided by the EAP to interested and affected parties and any responses by the EAP to comments or inputs made by interested and affected. parties are correctly reflected herein. √

Signature of the environmental assessment practitioner:

Eco Impact Legal Consulting

Name of company:

20 November

Date:

-END-