

BASIC ASSESSMENT REPORT



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Department:
Environment & Nature Conservation
NORTHERN CAPE PROVINCE
REPUBLIC OF SOUTH AFRICA

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(For official use only)

File Reference Number:

Application Number:

Date Received:

Basic Assessment Report in terms of the Environmental Impact Assessment Regulations, 2014, promulgated in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended.

Kindly note that:

1. This **basic assessment report** is a standard report that may be required by a competent authority in terms of the EIA Regulations, 2014 and is meant to streamline applications. Please make sure that it is the report used by the particular competent authority for the activity that is being applied for.
2. This report format is current as of 07 April 2017. It is the responsibility of the applicant to ascertain whether subsequent versions of the form have been published or produced by the competent authority.
3. The report must be typed within the spaces provided in the form. The size of the spaces provided is not necessarily indicative of the amount of information to be provided. The report is in the form of a table that can extend itself as each space is filled with typing.
4. Where applicable **tick** the boxes that are applicable in the report.
5. An incomplete report may be returned to the applicant for revision.
6. The use of "not applicable" in the report must be done with circumspection because if it is used in respect of material information that is required by the competent authority for assessing the application, it may result in the rejection of the application as provided for in the regulations.
7. This report must be handed in at offices of the relevant competent authority as determined by each authority.
8. No faxed or e-mailed reports will be accepted.
9. The signature of the EAP on the report must be an original signature.
10. The report must be compiled by an independent environmental assessment practitioner.
11. Unless protected by law, all information in the report will become public information on receipt by the competent authority. Any interested and affected party should be provided with the information contained in this report on request, during any stage of the application process.
12. A competent authority may require that for specified types of activities in defined situations only parts of this report need to be completed.
13. Should a specialist report or report on a specialised process be submitted at any stage for any part of this application, the terms of reference for such report must also be submitted.

SECTION A: ACTIVITY INFORMATION

Has a specialist been consulted to assist with the completion of this section?

NO

If YES, please complete the form entitled "Details of specialist and declaration of interest" for the specialist appointed and attach in Appendix I.

1. ACTIVITY DESCRIPTION

a) Describe the project associated with the listed activities applied for

Black Mountain Mining (Pty) Ltd is currently planning to upgrade the Kokerboom Reservoir and Pipeline, on Portion 01 and Remaining Extent of the Farm Aggeneys 56, approximately 4km North-East of Aggeneys. The project is located within the Bushmanland, Khâi-Ma Local Municipality, Northern Cape Province.

The proposed project will upgrade the current Kokerboom portable reservoir which have a 4-hour storage capacity to a facility with a 48-hour capacity to provide water for the Aggeneys town. The upgrade consists of the construction of two 5200 m³ prefabricated reservoir tanks consisting of AZ150 Aluminium Zinc coated steel sheets and lined with PVC. Excavation will ensure that the new reservoirs are placed at a similar height as the existing Kokerboom reservoir.

The current pipeline with a 250mm internal diameter needs to be replaced for 7.8 kilometres, of which 7.1 km will be replaced with a 400mm diameter UPVc pipeline and 0.7km will be replaced with a 315mm UPVc diameter pipeline. The replacement of the pipeline necessitates the construction of the new pipes next to the current pipeline from the reservoir towards the Aggeneys urban edge and around the south-western part of the Aggeneys town. The current pipeline will only be removed at mine closure.

b) Provide a detailed description of the listed activities associated with the project as applied for

Listed activity as described in GN 327, 325 and 324	Description of project activity
Activity 9 of NEMA GN 327 The development of infrastructure exceeding 1000 meters in length for the bulk transportation of water or storm water- (i) with an internal diameter of 0,36 meters or more;	The current bulk water supply needs to be replaced for 7.8 kilometres of which 7.1 km is a 0,40 meters diameter pipeline and 0.7km is a 0,32 meters diameter pipeline.
Activity 2 of NEMA GN 324 The development of reservoirs, excluding dams, with a capacity of more than 250 cubic meters. (ii) Outside urban areas: (dd) Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans	Two reservoirs will be constructed. The capacity of each reservoir will be 5 200 cubic meters. The combined capacity will thus be 10 400 cubic meters and exceeds 250 cubic meters within a critical biodiversity area (CBA1).

<p>Activity 12 of NEMA GN 324 The clearance of an area of 300 square meters or more of indigenous vegetation except where such clearance of indigenous vegetation is required for maintenance purposes undertaken in accordance with a maintenance management plan. (ii) Within critical biodiversity areas identified in bioregional plans</p>	<p>The clearance of vegetation for the upgrade of the reservoirs and pipeline will exceed 300 square meters within critical biodiversity areas (CBA1 and CBA2).</p>
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2. FEASIBLE AND REASONABLE ALTERNATIVES

“alternatives”, in relation to a proposed activity, means different means of meeting the general purpose and requirements of the activity, which may include alternatives 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.

Describe alternatives that are considered in this application as required by Appendix 1 (3)(h), Regulation 2014. Alternatives should include a consideration of all possible means by which the purpose and need of the proposed activity (NOT PROJECT) could be accomplished in the specific instance taking account of the interest of the applicant in the activity. The no-go alternative must in all cases be included in the assessment phase as the baseline against which the impacts of the other alternatives are assessed.

The determination of whether site or activity (including different processes, etc.) or both is appropriate needs to be informed by the specific circumstances of the activity and its environment. After receipt of this report the, competent authority may also request the applicant to assess additional alternatives that could possibly accomplish the purpose and need of the proposed activity if it is clear that realistic alternatives have not been considered to a reasonable extent.

Indicate the position of the activity using the latitude and longitude of the centre point of the site for each alternative site. The co-ordinates should be in degrees, minutes and seconds. The projection that must be used in all cases is the WGS84 spheroid in a national or local projection.

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a) Site alternatives

Evaluation Criteria		Reservoir	Pipeline	Access Road
Description of infrastructure		Two (2) 5200 cubic meters prefabricated reservoir tanks consisting of AZ150 Aluminum Zinc coated steel sheets and lined with PVC.	a 7.1 km uPVC pipeline of 0,400 meters in diameter and a 0.7 km uPVC pipeline of 0,315 meters in diameter.	Access to reservoirs.
(a) the property on which, or location where, it is proposed to undertake the activity;	Alternatives considered (Alternative 2)	Further into natural veld in the center of a wash.	New pipeline servitude. (Not an option)	New access road
	Preferred alternative (Alternative 1)	Close to the existing road and minimal impact on the wash.	Use of the existing gravel road and road reserve.	Use of existing gravel road with no access road.

Alternative 1 (preferred alternative)		
Description	Lat (DDMMSS)	Long (DDMMSS)
Reservoirs closer to the existing road and further from the wash	-29°12'20,9838"	18°52'13,5015"
Alternative 2		
Description	Lat (DDMMSS)	Long (DDMMSS)
Reservoirs original location	-29°12'22,0717"	18°52'13,4965"

In the case of linear activities:

Alternative:

Alternative S1 (preferred)

- Starting point of the activity
- Middle/Additional point of the activity
- End point of the activity
- Starting point of the activity
- Middle/Additional point of the activity
- End point of the activity
- Starting point of the activity
- Middle/Additional point of the activity
- Middle/Additional point of the activity
- Middle/Additional point of the activity

Latitude (S):

Longitude (E):

-29°12'17,9949"	18°52'12,9449"
-29°12'18,1393"	18°52'13,2900"
-29°12'28,3209"	18°52'6,9260"
-29°12'18,6618"	18°52'12,7175"
-29°12'26,9494"	18°52'7,4633"
-29°13'56,9854"	18°50'36,8560"
-29°13'47,1716"	18°50'46,6336"
-29°13'44,1192"	18°50'41,0095"
-29°14'3,0524"	18°50'15,1868"
-29°14'16,2692"	18°50'8,3622"

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• Middle/Additional point of the activity	-29°14'30,5722"	18°50'14,1002"
• End point of the activity	-29°14'37,0242"	18°50'26,0244"
• Starting point of the activity	-29°14'35,9964"	18°50'26,7972"
• Middle/Additional point of the activity	-29°14'40,1969"	18°50'23,8435"
• Middle/Additional point of the activity	-29°14'49,3060"	18°50'31,0609"
• End point of the activity	-29°14'54,5432"	18°50'31,8572"
Alternative S2 (if any)		
• Starting point of the activity	N/A	
• Middle/Additional point of the activity		
• End point of the activity		

For route alternatives that are longer than 500m, please provide an addendum with co-ordinates taken every 250 meters along the route for each alternative alignment.

In the case of an area being under application, please provide the co-ordinates of the corners of the site as indicated on the lay-out map provided in Appendix A of this form.

b) Lay-out alternatives

Evaluation Criteria		Reservoir	Pipeline	Access Road
Description of infrastructure		Two (2) 5200 cubic meters prefabricated reservoir tanks consisting of AZ150 Aluminum Zinc coated steel sheets and lined with PVC.	a 7.1 km uPVC pipeline of 0,400 meters in diameter and a 0.7 km uPVC pipeline of 0,315 meters in diameter.	Access to reservoirs.
(c) the design or layout of the activity;	Alternatives considered (Alternative 2)	N/A	Pipeline above ground	N/A
	Preferred alternative (Alternative 1)	N/A	Pipeline underground where minimal damage to the pipe is possible, thus preventing unnecessary leakages.	N/A

Alternative 1 (preferred alternative)		
Description	Lat (DDMMSS)	Long (DDMMSS)
Pipeline underground	N/A	N/A
Alternative 2		
Description	Lat (DDMMSS)	Long (DDMMSS)
Pipeline above ground	N/A	N/A

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c) Technology alternatives

No alternatives considered

c) Other alternatives (e.g. scheduling, demand, input, scale and design alternatives)

Evaluation Criteria		Reservoir	Pipeline	Access Road
Description of infrastructure		Two (2) 5200 cubic meters prefabricated reservoir tanks consisting of AZ150 Aluminum Zinc coated steel sheets and lined with PVC.	a 7.1 km uPVC pipeline of 0,400 meters in diameter and a 0.7 km uPVC pipeline of 0,315 meters in diameter.	Access to reservoirs.
(e) the operational aspects of the activity; and	Preferred alternative	Standard acceptable engineering technology processes will be applied.	Standard acceptable engineering technology processes will be applied.	n/a

e) No-go alternative

The No-Go Option is not applicable

The assessment of alternatives must at all times include the “no-go” option as a baseline against which all other alternatives must be measured. The option of not implementing the activity must always be assessed and to the same level of detail as the other feasible and reasonable alternatives. The “no-go” option is taken to be the existing rights on the property and this includes all the duty of care and other legal responsibilities that apply to the owner of the property. For example, one cannot state that the “no-go” option for a vacant piece of land will result in further degradation or alien plant invasion, as the Conservation of Agricultural Resources Act, 1983 (Act No. 43 of 1983) requires that the landowner keeps their land clear of alien invasive plants, and Section 28 of the NEMA, “Duty of Care”, states that reasonable measures must be taken to prevent pollution or degradation from occurring, continuing or reoccurring. All the applicable permits must be in place for a land use to be an existing right (the no-go/default) e.g. the zoning of Agriculture does not mean land can be cultivated as the no-go option, as other approvals must first be obtained.

Paragraphs 3 – 13 below should be completed for each alternative.

3. PHYSICAL SIZE OF THE ACTIVITY

APPLICABLE FOR ALL ALTERNATIVES

- a) Indicate the physical size of the preferred activity/technology as well as alternative activities/technologies (footprints):

Alternative:

Alternative A1¹ (preferred activity alternative)

Alternative A2 (if any)

Alternative A3 (if any)

Size of the activity:

130 000m ²
130 000m ²
m ²

or, for linear activities:

Alternative:

Alternative A1 (preferred activity alternative)

Alternative A2 (if any)

Alternative A3 (if any)

Length of the activity:

7 800 m
7 800 m
m

- b) Indicate the size of the alternative sites or servitudes (within which the above footprints will occur):

Alternative:

Alternative A1 (preferred activity alternative)

Alternative A2 (if any)

Alternative A3 (if any)

Size of the site/servitude:

130 000m ²
130 000m ²
m ²

4. SITE ACCESS

ALTERNATIVE 1

Does ready access to the site exist?

If NO, what is the distance over which a new access road will be built

YES	
	m

ALTERNATIVE 2

Does ready access to the site exist?

If NO, what is the distance over which a new access road will be built

	NO
	25 m

Describe the type of access road planned:

4 m Gravel Road

Include the position of the access road on the site plan and required map, as well as an indication of the road in relation to the site.

¹ "Alternative A.." refer to activity, process, technology or other alternatives.

5. LOCALITY MAP

An A3 locality map must be attached to the back of this document, as Appendix A. The scale of the locality map must be relevant to the size of the development (at least 1:50 000. For linear activities of more than 25 kilometres, a smaller scale e.g. 1:250 000 can be used. The scale must be indicated on the map.). The map must indicate the following:

- an accurate indication of the project site position as well as the positions of the alternative sites, if any;
- indication of all the alternatives identified;
- closest town(s);
- road access from all major roads in the area;
- road names or numbers of all major roads as well as the roads that provide access to the site(s);
- all roads within a 1km radius of the site or alternative sites; and
- a north arrow;
- a legend; and
- locality GPS co-ordinates (Indicate the position of the activity using the latitude and longitude of the centre point of the site for each alternative site. The co-ordinates should be in degrees and decimal minutes. The minutes should have at least three decimals to ensure adequate accuracy. The projection that must be used in all cases is the WGS84 spheroid in a national or local projection).

6. LAYOUT/ROUTE PLAN

A detailed site or route plan(s) must be prepared for each alternative site or alternative activity. It must be attached as Appendix A to this document.

The site or route plans must indicate the following:

- the property boundaries and numbers of all the properties within 50 metres of the site;
- the current land use as well as the land use zoning of the site;
- the current land use as well as the land use zoning each of the properties adjoining the site or sites;
- the exact position of each listed activity applied for (including alternatives);
- servitude(s) indicating the purpose of the servitude;
- a legend; and
- a north arrow.

7. SENSITIVITY MAP

The layout/route plan as indicated above must be overlain with a sensitivity map that indicates all the sensitive areas associated with the site, including, but not limited to:

- watercourses;
- the 1:100 year flood line (where available or where it is required by DWS);
- ridges;
- cultural and historical features;
- areas with indigenous vegetation (even if it is degraded or infested with alien species); and
- critical biodiversity areas.

The sensitivity map must also cover areas within 100m of the site and must be attached in Appendix A.

8. SITE PHOTOGRAPHS

Colour photographs from the centre of the site must be taken in at least the eight major compass directions with a description of each photograph. Photographs must be attached under Appendix B to this report. It must be supplemented with additional photographs of relevant features on the site, if applicable.

9. FACILITY ILLUSTRATION

A detailed illustration of the activity must be provided at a scale of at least 1:200 as Appendix C for activities that include structures. The illustrations must be to scale and must represent a realistic image of the planned activity. The illustration must give a representative view of the activity.

10. ACTIVITY MOTIVATION

APPLICABLE FOR ALL ALTERNATIVES

Motivate and explain the need and desirability of the activity (including demand for the activity):

1. Is the activity permitted in terms of the property's existing land use rights?	YES		Please explain
This is an upgrade of an existing pipeline and existing reservoir on the property.			
2. Will the activity be in line with the following?			
(a) Provincial Spatial Development Framework (PSDF)	YES		Please explain
One of the key interventions proposed by the PSDF is: Reducing the backlog of basic needs such as water, sanitation and housing.			
(b) Urban edge / Edge of Built environment for the area	YES		Please explain
The last section of the pipeline will be located within the urban edge of the town Aggeneys.			

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(c) Integrated Development Plan (IDP) and Spatial Development Framework (SDF) of the Local Municipality (e.g. would the approval of this application compromise the integrity of the existing approved and credible municipal IDP and SDF?).	YES		Please explain
<p>This project aligns with the outcomes of the Khâi-Ma IDP and Vedanta Zinc International (VZI) (owner of Black Mountain Mining) takes the responsibility of rendering this basic service to Aggeneys:</p> <p>The Municipality have set out to create conditions for decent living through the following programs and many others:</p> <ul style="list-style-type: none"> - Ensuring access to municipal services such as electricity, water and sanitation <p>1. Service delivery and infrastructure development</p> <p>(1) Strategic Objectives</p> <p>Eradicate backlogs in order to improve access to services and assure proper operations and maintenance.</p> <p>(2) Intended Outcome</p> <p>Sustainable delivery of improved services to all households</p> <p>NB: VZI takes current responsibility in rendering basic services to households and other consumers in Aggeneys.</p>			
(d) Approved Structure Plan of the Municipality	YES	NO	Please explain
<p>No Structure Plan could be sourced for the Khâi-Ma municipality</p>			
(e) An Environmental Management Framework (EMF) adopted by the Department (e.g. Would the approval of this application compromise the integrity of the existing environmental management priorities for the area and if so, can it be justified in terms of sustainability considerations?)	YES		Please explain
<p>The vision of the Namakwa District Municipality Environmental Management Framework is “To ensure that economic and social development in the NDM advances to meet inhabitants’ needs whilst ensuring that environmental goods and services are protected where stressed and used where sustainable”.</p> <p>The project aligns to the following fundamental principles of the EMF:</p> <ul style="list-style-type: none"> - Present and future generations must be assured of a healthy and productive life; - The impacts of development must be minimized and managed; - Adequate infrastructure provision should be made available to all inhabitants, with due regard to environmental sustainability; and - A high degree of environmental awareness should be encouraged amongst all development planning and implementation entities, be they public or private. <p>Further the vision of the EMF is to protect and promote:</p> <ul style="list-style-type: none"> - Development of appropriate infrastructure. 			
(f) Any other Plans (e.g. Guide Plan)	YES	NO	Please explain
<p>No other plans</p>			

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3. Is the land use (associated with the activity being applied for) considered within the timeframe intended by the existing approved SDF agreed to by the relevant environmental authority (i.e. is the proposed development in line with the projects and programmes identified as priorities within the credible IDP)?	YES		Please explain
Basic services infrastructure development is planned.			
4. Does the community/area need the activity and the associated land use concerned (is it a societal priority)? (This refers to the strategic as well as local level (e.g. development is a national priority, but within a specific local context it could be inappropriate.)	YES		Please explain
The project consists of upgrading of basic services infrastructure.			
5. Are the necessary services with adequate capacity currently available (at the time of application), or must additional capacity be created to cater for the development? (Confirmation by the relevant Municipality in this regard must be attached to the final Basic Assessment Report as Appendix I.)	YES		Please explain
The necessary capacity is available for this project.			
6. Is this development provided for in the infrastructure planning of the municipality, and if not what will the implication be on the infrastructure planning of the municipality (priority and placement of services and opportunity costs)? (Comment by the relevant Municipality in this regard must be attached to the final Basic Assessment Report as Appendix I.)	YES		Please explain
According to the Khâi-Ma Municipality IDP the intended outcome of the service delivery and infrastructure development is the sustainable delivery of improved services to all households. The IDP further states that the basic services rendered to Aggeneys is the responsibility of VZI (Owner of Black Mountain Mine and the client of this project).			
7. Is this project part of a national programme to address an issue of national concern or importance?	YES		Please explain
Drinking water supply is a constitutional priority.			
8. Do location factors favour this land use (associated with the activity applied for) at this place? (This relates to the contextualisation of the proposed land use on this site within its broader context.)	YES		Please explain
This is an upgrade of an existing pipeline in the same location and an existing reservoir opposite the current proposed location.			

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9. Is the development the best practicable environmental option for this land/site?	YES		Please explain
Please refer to alternatives considered. The pipeline will be located on as much previously disturbed areas as possible (Road and road reserve) and the reservoirs will be place close to an existing access road.			
10. Will the benefits of the proposed land use/development outweigh the negative impacts of it?	YES		Please explain
Please refer to the risk assessment. Drinking water as a basic service will be secured. Minimal new impact is planned.			
11. Will the proposed land use/development set a precedent for similar activities in the area (local municipality)?		NO	Please explain
The town of Aggeneys has existing water supply infrastructure.			
12. Will any person's rights be negatively affected by the proposed activity/ies?		NO	Please explain
The applicant of the proposed project is also the landowner. Everyone has the right to have access to sufficient food and water.			
13. Will the proposed activity/ies compromise the "urban edge" as defined by the local municipality?	YES		Please explain
The pipeline will be situated around the edge of Aggeneys and will end within the town.			
14. Will the proposed activity/ies contribute to any of the 17 Strategic Integrated Projects (SIPS)?		NO	Please explain
15. What will the benefits be to society in general and to the local communities?	Please explain		
The project consists of the upgrading of the water supply and will thus benefit the community.			
16. Any other need and desirability considerations related to the proposed activity?	Please explain		
Currently there are no more than 6 hours of water supply to the Aggeneys town, thus not complying to the 48-hour rule. Thus, the need for this upgrade.			
17. How does the project fit into the National Development Plan for 2030?	Please explain		
<p>This project aligns with Economic Infrastructure development as a key point to the NDP:</p> <p>"South Africa needs to maintain and expand its electricity, water, transport and telecommunications infrastructure in order to support economic growth and social development goals."</p> <p>"Water supply and sanitation services, which depend on adequate management, are a priority for most South African communities. Their effective and sustainable management is essential for community health, development and cohesion, and continued economic activity."</p>			

18. Please describe how the general objectives of Integrated Environmental Management as set out in section 23 of NEMA have been taken into account.

To give effect to the objectives as set out in section 23 of NEMA actual and potential impacts on the environment, socio-economic conditions and cultural heritage, the risks and consequences and alternatives and options for mitigation of activities have been considered in detail.

The integration of these different disciplines is considered from the baseline context, setting up the integrated scope of the project within which the project takes place as well as the impact assessment and environmental management plan. The process followed with this EIA recognises that all elements of the environment are linked and interrelated.

It considers identified resultant social, economic, biophysical impacts of the project in an integrated manner. The significance of these potential impacts is summarized in the impact statement.

19. Please describe how the principles of environmental management as set out in section 2 of NEMA have been taken into account.

Section 2 of the NEMA as amended, lists environmental principles to be applied by all organs of state regarding proposals that may significantly affect the environment. All development must be socially, economically and environmentally sustainable, environmental management must place people and their needs at the forefront of its concern, to serve their physical, psychological, developmental, cultural and social interests equitably.

This development underpins Section 2 of NEMA as it will supply basic services on the most sustainable manner to the community. The community needs are considered through the stakeholder engagement process followed.

When considering how this development may affect justifiable and social development, it is assessed in context of the relevant spatial plans, including Municipal Integrated Development Plans (IDP), Spatial Development Frameworks (SDF) and Environmental Management Frameworks (EMF) as far as these documents are available.

The assessment includes whether there are significant socio-economic impacts resulting from the activities of the project. Where such impacts occur, conflicting interests with the environment is considered and alternative mitigation measures proposed to ensure sustainable integration takes place.

The results of the above considerations and assessments provide justification for the need and desirability of the project and in what manner this can be executed in the most sustainable manner.

11. APPLICABLE LEGISLATION, POLICIES AND/OR GUIDELINES

List all legislation, policies and/or guidelines of any sphere of government that are applicable to the application as contemplated in the EIA regulations, if applicable:

Title of legislation, policy or guideline	Applicability to the project	Administering authority	Date
National Environmental Management Act, 1998 (Act No. 107 of 1998)	Listing notice is triggered and basic environmental assessment and EMP is	Department of Forestry, Fisheries and Environment (DFFE)	22 November 1998

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	required (this document and appendices).		
National Water Act, 1998 (Act No. 36 of 1998)	Section 21c & i is triggered and a General Authorisation applied for.	Department of Water and Sanitation (DWS)	01 October 1998
National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004)	The project is located within Critical Biodiversity Areas. If there is any protected species found within the project area a permit will be required.	Department Forestry Fisheries and Environment (DFFE)	14 December 2007
National Heritage Resources Act (Act No. 25 of 1999)	If there is any heritage and palaeontological resources found within the project area.	South African Heritage Resources Agency (SAHRA)	01 April 2002

12. WASTE, EFFLUENT, EMISSION AND NOISE MANAGEMENT

APPLICABLE FOR ALL ALTERNATIVES

a) Solid waste management

Will the activity produce solid construction waste during the construction/initiation phase?

YES

If YES, what estimated quantity will be produced per month?

negligible

How will the construction solid waste be disposed of (describe)?

Solid waste will be removed by construction vehicles and disposed of in a proper manner. BMM's waste management procedure will be adhered to during all activities of this project.

Where will the construction solid waste be disposed of (describe)?

All waste will be disposed of at BMM's approved salvage yards.

Will the activity produce solid waste during its operational phase?

NO

If YES, what estimated quantity will be produced per month?

m³

How will the solid waste be disposed of (describe)?

No solid waste will be generated during the operational phase.

If the solid waste will be disposed of into a municipal waste stream, indicate which registered landfill site will be used.

N/A

Where will the solid waste be disposed of if it does not feed into a municipal waste stream (describe)?

N/A

If the solid waste (construction or operational phases) will not be disposed of in a registered landfill site or be taken up in a municipal waste stream, then the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.

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Can any part of the solid waste be classified as hazardous in terms of the NEM:WA?

	NO
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If YES, inform the competent authority and request a change to an application for scoping and EIA. An application for a waste permit in terms of the NEM:WA must also be submitted with this application.

Is the activity that is being applied for a solid waste handling or treatment facility?

	NO
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If YES, then the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA. An application for a waste permit in terms of the NEM:WA must also be submitted with this application.

b) Liquid effluent

Will the activity produce effluent, other than normal sewage, that will be disposed of in a municipal sewage system?

	NO
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If YES, what estimated quantity will be produced per month?

	m ³
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Will the activity produce any effluent that will be treated and/or disposed of on site?

	NO
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If YES, the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.

Will the activity produce effluent that will be treated and/or disposed of at another facility?

	NO
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If YES, provide the particulars of the facility:

Facility name:	N/A		
Contact person:	N/A		
Postal address:	N/A		
Postal code:	N/A		
Telephone:	N/A	Cell:	N/A
E-mail:	N/A	Fax:	N/A

Describe the measures that will be taken to ensure the optimal reuse or recycling of waste water, if any:

N/A

c) Emissions into the atmosphere

Will the activity release emissions into the atmosphere other than exhaust emissions and dust associated with construction phase activities?

	NO
--	----

If YES, is it controlled by any legislation of any sphere of government?

YES	NO
-----	----

If YES, the applicant must consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.
If NO, describe the emissions in terms of type and concentration:

N/A

d) Waste permit

Will any aspect of the activity produce waste that will require a waste permit in terms of the NEM:WA?

	NO
--	----

BASIC ASSESSMENT REPORT

If YES, please submit evidence that an application for a waste permit has been submitted to the competent authority

e) Generation of noise

Will the activity generate noise?

YES	
-----	--

If YES, is it controlled by any legislation of any sphere of government?

	NO
--	----

Describe the noise in terms of type and level:

Negligible construction related noise will be produced in the form of increased traffic and excavating. This will be insignificant compared to the baseline noise in the area.
--

13. WATER USE

APPLICABLE FOR ALL ALTERNATIVES

Please indicate the source(s) of water that will be used for the activity by ticking the appropriate box(es):

	Water board				
--	-------------	--	--	--	--

If water is to be extracted from groundwater, river, stream, dam, lake or any other natural feature, please indicate the volume that will be extracted per month:

litres

Does the activity require a water use authorisation (general authorisation or water use license) from the Department of Water Affairs?

YES	
-----	--

If YES, please provide proof that the application has been submitted to the Department of Water Affairs.

14. ENERGY EFFICIENCY

APPLICABLE FOR ALL ALTERNATIVES

Describe the design measures, if any, which have been taken to ensure that the activity is energy efficient:

N/A

Describe how alternative energy sources have been taken into account or been built into the design of the activity, if any:

N/A

SECTION B: SITE/AREA/PROPERTY DESCRIPTION**Important notes:**

1. For linear activities (pipelines, etc) as well as activities that cover very large sites, it may be necessary to complete this section for each part of the site that has a significantly different environment. In such cases please complete copies of Section B and indicate the area, which is covered by each copy No. on the Site Plan.

Section B Copy No. (e.g. A):

A

2. Paragraphs 1 - 6 below must be completed for each alternative.

3. Has a specialist been consulted to assist with the completion of this section?

YES

If YES, please complete the form entitled "Details of specialist and declaration of interest" for each specialist thus appointed and attach it in Appendix I. All specialist reports must be contained in Appendix D.

Property description/physical address:

Province	Northern Cape
District Municipality	Namakwa District Municipality
Local Municipality	Khâi-Ma Local Municipality
Ward Number(s)	4
Farm name and number	Aggeneys 56
Portion number	Portion 1 and Remaining Extent
SG Code	C05300000000005600000 C05300000000005600001

Where a large number of properties are involved (e.g. linear activities), please attach a full list to this application including the same information as indicated above.

Current land-use zoning as per local municipality IDP/records:

Agricultural

In instances where there is more than one current land-use zoning, please attach a list of current land use zonings that also indicate which portions each use pertains to, to this application.

Is a change of land-use or a consent use application required?

NO

BASIC ASSESSMENT REPORT

1. GRADIENT OF THE SITE

Indicate the general gradient of the site.

Alternative S1:

Flat						
------	--	--	--	--	--	--

Alternative S2 (if any):

Flat						
------	--	--	--	--	--	--

2. LOCATION IN LANDSCAPE

Indicate the landform(s) that best describes the site:

2.1 Ridgeline	<input type="checkbox"/>	2.4 Closed valley	<input type="checkbox"/>	2.7 Undulating plain / low hills	<input type="checkbox"/>
2.2 Plateau	<input type="checkbox"/>	2.5 Open valley	<input type="checkbox"/>	2.8 Dune	<input type="checkbox"/>
2.3 Side slope of hill/mountain	<input type="checkbox"/>	2.6 Plain	<input checked="" type="checkbox"/>	2.9 Seafront	<input type="checkbox"/>
2.10 At sea	<input type="checkbox"/>				

3. GROUNDWATER, SOIL AND GEOLOGICAL STABILITY OF THE SITE

Is the site(s) located on any of the following?

	Alternative S1:	Alternative S2 (if any):	Alternative S3 (if any):
Shallow water table (less than 1.5m deep)	<input type="checkbox"/> NO	<input type="checkbox"/> NO	N/A N/A
Dolomite, sinkhole or doline areas	<input type="checkbox"/> NO	<input type="checkbox"/> NO	N/A N/A
Seasonally wet soils (often close to water bodies)	<input type="checkbox"/> NO	<input type="checkbox"/> NO	N/A N/A
Unstable rocky slopes or steep slopes with loose soil	<input type="checkbox"/> NO	<input type="checkbox"/> NO	N/A N/A
Dispersive soils (soils that dissolve in water)	<input type="checkbox"/> NO	<input type="checkbox"/> NO	N/A N/A
Soils with high clay content (clay fraction more than 40%)	<input type="checkbox"/> NO	<input type="checkbox"/> NO	N/A N/A
Any other unstable soil or geological feature	<input type="checkbox"/> NO	<input type="checkbox"/> NO	N/A N/A
An area sensitive to erosion	YES <input type="checkbox"/>	YES <input type="checkbox"/>	N/A N/A

If you are unsure about any of the above or if you are concerned that any of the above aspects may be an issue of concern in the application, an appropriate specialist should be appointed to assist in the completion of this section. Information in respect of the above will often be available as part of the project information or at the planning sections of local authorities. Where it exists, the 1:50 000 scale Regional Geotechnical Maps prepared by the Council for Geo Science may also be consulted.

4. GROUNDCOVER

Indicate the types of groundcover present on the site. The location of all identified rare or endangered species or other elements should be accurately indicated on the site plan(s).

BASIC ASSESSMENT REPORT

Natural veld - good condition ^E
Bare soil

If any of the boxes marked with an "E" is ticked, please consult an appropriate specialist to assist in the completion of this section if the environmental assessment practitioner doesn't have the necessary expertise.

5. SURFACE WATER

Indicate the surface water present on and or adjacent to the site and alternative sites?

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

If any of the boxes marked YES or UNSURE is ticked, please provide a description of the relevant watercourse.

The Bushmanland region is frequented by washes that are overland ephemeral sheet or erosion areas created from significant rainfall events. These washes are not seen as rivers, but isolated features between inselbergs. The initial screening of this project indicates that no NFEPA listed rivers or wetlands are present near the proposed project. Various washes are however present in the buffer zone (100 meters) and or crossing the current pipeline that must be replaced.

Four (4) isolated washes that are directly intersected are relatively short erosion / sheet features (580m; 890m; 1200m and 6500m long). These washes are not headwaters, are not linked to other rivers and do not flow into any NFEPA rivers or any other main streams.

6. LAND USE CHARACTER OF SURROUNDING AREA

Indicate land uses and/or prominent features that currently occur within a 500m radius of the site and give description of how this influences the application or may be impacted upon by the application:

Natural area	Hospital/medical centre	Filling station ^H
Low density residential	School	Plantation
Power station	Church	Agriculture
Office/consulting room	Sport facilities	River, stream or wetland
	Golf course	Mountain, Koppie or ridge

BASIC ASSESSMENT REPORT

If any of the boxes marked with an "N" are ticked, how this impact will / be impacted upon by the proposed activity? Specify and explain:

N/A

If any of the boxes marked with an "An" are ticked, how will this impact / be impacted upon by the proposed activity? Specify and explain:

N/A

If any of the boxes marked with an "H" are ticked, how will this impact / be impacted upon by the proposed activity? Specify and explain:

A filling station is located 430m from the proposed project, with housing in between. There will thus be no impact on the filling station from the proposed project.

Does the proposed site (including any alternative sites) fall within any of the following:

Critical Biodiversity Area (as per provincial conservation plan)	YES	
Core area of a protected area?		NO
Buffer area of a protected area?		NO
Planned expansion area of an existing protected area?		NO
Existing offset area associated with a previous Environmental Authorisation?		NO
Buffer area of the SKA?		NO

If the answer to any of these questions was YES, a map indicating the affected area must be included in Appendix A.

7. CULTURAL/HISTORICAL FEATURES

Are there any signs of culturally or historically significant elements, as defined in section 2 of the National Heritage Resources Act, 1999, (Act No. 25 of 1999), including Archaeological or paleontological sites, on or close (within 20m) to the site? If YES, explain:

NO

The proposed pipeline will be located on the existing footprint created by the existing pipeline, on the existing roads and road reserves and will thus have minimal new impact. The area where the reservoirs will be located were identified as a low impact area during the screening process for this project.

If uncertain, conduct a specialist investigation by a recognised specialist in the field (archaeology or palaeontology) to establish whether there is such a feature(s) present on or close to the site. Briefly explain the findings of the specialist:

--

Will any building or structure older than 60 years be affected in any way?

NO

Is it necessary to apply for a permit in terms of the National Heritage Resources Act, 1999 (Act 25 of 1999)?

NO

If YES, please provide proof that this permit application has been submitted to SAHRA or the relevant provincial authority.

8. SOCIO-ECONOMIC CHARACTER

a) Local Municipality

Please provide details on the socio-economic character of the local municipality in which the proposed site(s) are situated.

Level of unemployment:

22% (General rate – 22.1%) (Youth – 23.6%)

Economic profile of local municipality:

Table 1: Summary of income in the Khâi-Ma Municipality

Income	Percentage
None income	8,4%
R1 - R4,800	2,6%
R4,801 - R9,600	5%
R9,601 - R19,600	17,7%
R19,601 - R38,200	22,3%
R38,201 - R76,4000	18,7%
R76,401 - R153,800	13,4%
R153,801 - R307,600	7%
R307,601 - R614,400	4%
R614,001 - R1,228,800	0,6%
R1,228,801 - R2,457,600	0,2%
R2,457,601+	0,1%

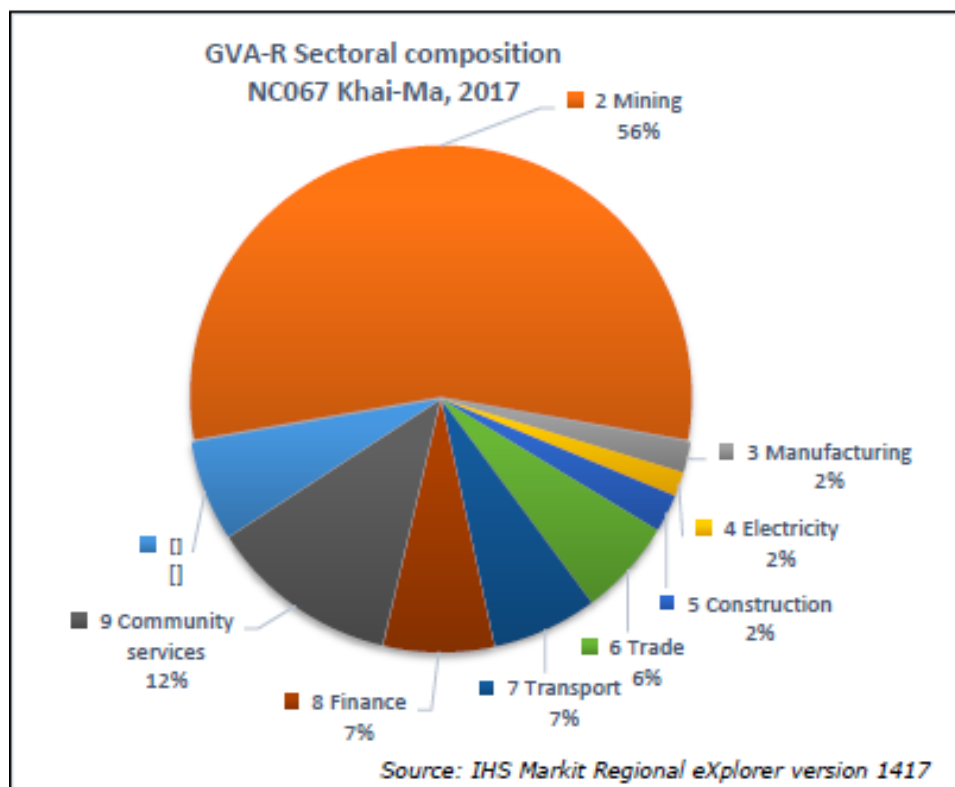


Figure 1: Sector contribution to the economic state of Khâi-Ma Municipality

The graph indicates that the highest contributing sector is mining (56%), followed by community services (21%).

Khâi-Ma's mining and quarrying sector averaged a positive annual growth rate of 3.8% which is more significant than the Provincial and District average (-1.2% and -4.3% respectively).

Khâi-Ma LM is rich in minerals deposits. South Africa's main source of lead production is from Aggeneys. The main zinc deposits in the Northern Cape Province can be found at Gamsberg near Aggeneys.

Level of education:

Table 2: Highest level of education for persons aged 20 years and above, 1996-2016

Year	No schooling	Some primary	Complete primary	Some secondary	Grade 12/Std 10	Higher	Total
Number							
1996	446	1 112	615	2 187	673	324	5 359
2001	482	1 755	855	2 810	1 062	282	7 247
2011	314	1 404	672	3 712	1 449	462	8 013
2016	238	983	571	4 316	1 922	438	8 468
Percent (%)							
1996	8.3	20.8	11.5	40.8	12.6	6.1	100.0
2001	6.6	24.2	11.8	38.8	14.7	3.9	100.0
2011	3.9	17.5	8.4	46.3	18.1	5.8	100.0
2016	2.8	11.6	6.7	51.0	22.7	5.2	100.0

*Excludes "do not know" and "unspecified"

Table 3: Highest level of education by population group type for persons aged 20 years and above, 2016

BASIC ASSESSMENT REPORT

	No schooling	Some Primary	Complete Primary	Some Secondary	Grade 12/Std 10	Higher	Total
Number							
Black African	19	18	-	120	91	30	278
Coloured	219	938	552	4 033	1 350	148	7 241
Indian/Asian	-	27	18	-	56	-	101
White	-	-	-	164	426	259	848
Percent (%)							
Black African	6.9	6.3	-	43.3	32.7	10.8	100.0
Coloured	3.0	13.0	7.6	55.7	18.6	2.1	100.0
Indian/Asian	-	26.6	18.0	-	55.3	-	100.0
White	-	-	-	19.3	50.2	30.5	100.0

*Excludes "do not know" and "unspecified"

b) Socio-economic value of the activity

What is the expected capital value of the activity on completion?	R 38 000 000
What is the expected yearly income that will be generated by or as a result of the activity?	N/A
Will the activity contribute to service infrastructure?	YES
Is the activity a public amenity?	NO
How many new employment opportunities will be created in the development and construction phase of the activity/ies?	38
What is the expected value of the employment opportunities during the development and construction phase?	R1 100 000
What percentage of this will accrue to previously disadvantaged individuals?	100%
How many permanent new employment opportunities will be created during the operational phase of the activity?	None. Current employees to do maintenance
What is the expected current value of the employment opportunities during the first 10 years?	N/A
What percentage of this will accrue to previously disadvantaged individuals?	N/A

9. BIODIVERSITY

Please note: The Department may request specialist input/studies depending on the nature of the biodiversity occurring on the site and potential impact(s) of the proposed activity/ies. To assist with the identification of the biodiversity occurring on site and the ecosystem status consult <http://bgis.sanbi.org> or BGIShelp@sanbi.org. Information is also available on compact disc (cd) from the Biodiversity-GIS Unit, Ph (021) 799 8698. This information may be updated from time to time and it is the applicant/EAP's responsibility to ensure that the latest version is used. A map of the relevant biodiversity information (including an indication of the habitat conditions as per (b) below) and must be provided as an overlay map to the property/site plan as Appendix D to this report.

- a) **Indicate 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
---	--

BASIC ASSESSMENT REPORT

Critical Biodiversity Area (CBA)	CBA1 – Areas that are irreplaceable for meeting biodiversity targets. There are no other options for conserving the ecosystems, species, or ecological processes in these areas.
	CBA2 – Areas that are the best option for meeting biodiversity targets, in the smallest area, while avoiding conflict with other land uses.

b) Indicate 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	10%	The new reservoirs will be constructed on natural veld. This is Aggeneys Gravel Vygiveld vegetation. No quartz patches were present in this area.
Near Natural (includes areas with low to moderate level of alien invasive plants)	30%	The road reserve which will be utilised for the construction of the pipeline can be described as near natural veld. This area falls within the Bushmanland Arid Grassland vegetation type. The area had some past disturbances due to the construction of the road and the continues impact from utilisation of the road.
Degraded (includes areas heavily invaded by alien plants)	30%	The existing pipeline footprint and the footprint of a telecommunication line that runs parallel with the existing pipeline can be described as degraded. Evidence of disturbance are still visible on these areas.
Transformed (includes cultivation, dams, urban, plantation, roads, etc)	30%	The gravel road which will be utilised for the construction of the pipeline can be described as transformed area.

c) 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 unchanneled wetlands, flats, seeps pans, and artificial wetlands)		Estuary		Coastline	
		YES			NO		NO

- d) **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)**

Please refer to Appendix D for a comprehensive Ecological Study.

Three vegetation types are present within the proposed project footprint: Bushmanland Inselberg Shrubland; Aggeneys Gravel Vygiveld and Bushmanland Arid Grassland.

Approximately 270 meters of the proposed pipeline are situated within the Bushmanland Inselberg Shrubland and approximately 540 meters of the proposed pipeline area situated within the Aggeneys Gravel Vygiveld. The remaining extend of the pipeline is situated within Bushmanland Arid Grassland. The new reservoirs will be constructed within natural veld within the Aggeneys Gravel Vygiveld at the foot of an inselberg.

The only protected species found on site were *Aloidendron dichotomum* (Quiver tree), *Anacampseros* sp. (*Avonia* sp.) and *Lessertia frutescens* (Cancer bush).

The Bushmanland region is frequented by washes that are overland ephemeral sheet or erosion areas created from significant rainfall events. These washes are not seen as rivers, but isolated features between inselbergs. Four (4) isolated washes that are directly intersected are relatively short erosion / sheet features (580m; 890m; 1200m and 6500m long). These washes are not headwaters, are not linked to other rivers and do not flow into any NFEPA rivers or any other main streams.

SECTION C: PUBLIC PARTICIPATION

1. ADVERTISEMENT AND NOTICE

Publication name	Gemsbok	
Date published	18/08/2021	
Site notice position	Latitude	Longitude
	-29°13'9,10"	18°51'24,59"
	-29°13'56,51 "	18°50'36,70"
	-29°14'32,34 "	18°50'38,70"
Date placed	20/08/2021	

Include proof of the placement of the relevant advertisements and notices in Appendix E1.

2. DETERMINATION OF APPROPRIATE MEASURES

Provide details of the measures taken to include all potential I&APs as required by Regulation 41(2)(e) and 41(6) of GN 733.

Key stakeholders (other than organs of state) identified in terms of Regulation 41(2)(b) of GN 733

Please refer to Appendix E2

Include proof that the key stakeholder received written notification of the proposed activities as Appendix E2. This proof may include any of the following:

- e-mail delivery reports;
- registered mail receipts;
- courier waybills;
- signed acknowledgements of receipt; and/or
- or any other proof as agreed upon by the competent authority.

3. ISSUES RAISED BY INTERESTED AND AFFECTED PARTIES

Summary of main issues raised by I&APs	Summary of response from EAP
No issues raised to date	

4. COMMENTS AND RESPONSE REPORT

The practitioner must record all comments received from I&APs and respond to each comment before the Draft BAR is submitted. The comments and responses must be captured in a comments and response report as prescribed in the EIA regulations and be attached to the Final BAR as Appendix E3.

5. AUTHORITY PARTICIPATION

Authorities and organs of state identified as key stakeholders:

Please refer to Appendix E4

Include proof that the Authorities and Organs of State received written notification of the proposed activities as appendix E4.

In the case of renewable energy projects, Eskom and the SKA Project Office must be included in the list of Organs of State.

6. CONSULTATION WITH OTHER STAKEHOLDERS

Note that, for any activities (linear or other) where deviation from the public participation requirements may be appropriate, the person conducting the public participation process may deviate from the requirements of that sub-regulation to the extent and in the manner as may be agreed to by the competent authority.

Proof of any such agreement must be provided, where applicable. Application for any deviation from the regulations relating to the public participation process must be submitted prior to the commencement of the public participation process.

A list of registered I&APs must be included as appendix E5.

Copies of any correspondence and minutes of any meetings held must be included in Appendix E6.

SECTION D: IMPACT ASSESSMENT

The assessment of impacts must adhere to the minimum requirements in the EIA Regulations, 2014 and should take applicable official guidelines into account. The issues raised by interested and affected parties should also be addressed in the assessment of impacts.

1. IMPACTS THAT MAY RESULT FROM THE PLANNING AND DESIGN, CONSTRUCTION, OPERATIONAL, DECOMMISSIONING AND CLOSURE PHASES AS WELL AS PROPOSED MANAGEMENT OF IDENTIFIED IMPACTS AND PROPOSED MITIGATION MEASURES

Provide a summary and anticipated significance of the potential direct, indirect and cumulative impacts that are likely to occur as a result of the planning and design phase, construction phase, operational phase, decommissioning and closure phase, including impacts relating to the choice of site/activity/technology alternatives as well as the mitigation measures that may eliminate or reduce the potential impacts listed. This impact assessment must be applied to all the identified alternatives to the activities identified in Section A(2) of this report.

Please refer to Appendix F

A complete impact assessment in terms of Regulation 19(3) of GN 733 must be included as Appendix F.

2. ENVIRONMENTAL IMPACT STATEMENT

Taking the assessment of potential impacts into account, please provide an environmental impact statement that summarises the impact that the proposed activity and its alternatives may have on the environment after the management and mitigation of impacts have been taken into account, with specific reference to types of impact, duration of impacts, likelihood of potential impacts actually occurring and the significance of impacts.

Please refer to Appendix F for full impact statement

Alternative A (preferred alternative)

The main impacts during the site clearance and construction phase will be the loss of vegetation; loss of topsoil; accumulation of waste and changes in the surface hydrological patterns. These will all have a low impact on site after mitigation.

Rehabilitation will have a direct positive impact on site.

The main impacts during the operational phase of the proposed project will be the loss of vegetation during maintenance of the pipeline. This will have a low impact on the site after mitigation.

Alternative B

Impacts for this alternative will be the same as for alternative A

Alternative C

N/A

No-go alternative (compulsory)

Not an option for the proposed project

SECTION E. RECOMMENDATION OF PRACTITIONER

Is the information contained in this report and the documentation attached hereto sufficient to make a decision in respect of the activity applied for (in the view of the environmental assessment practitioner)?

YES	
-----	--

If "NO", indicate the aspects that should be assessed further as part of a Scoping and EIA process before a decision can be made (list the aspects that require further assessment).

If "YES", please list any recommended conditions, including mitigation measures that should be considered for inclusion in any authorisation that may be granted by the competent authority in respect of the application.

Application of the necessary permits to search and rescue protected flora should be obtained and implemented.

Where water resources are affected, the general authorisation conditions of the Section 21 (c&i) in terms of the National Water Act should be part of the condition of this authorisation.

A maintenance and monitoring plan for the underground pipeline should be submitted after construction to ensure the least amount of environmental impacts re-occur during the operational phase.

The pending final comment by the South African Heritage Resources Agency (SAHRA) should be taken into consideration prior to the issuance of the final decision for the granting of this Environmental Authorisation.

Is an EMP attached?

YES	
-----	--

The EMP must be attached as Appendix G.

The details of the EAP who compiled the BAR and the expertise of the EAP to perform the Basic Assessment process must be included as Appendix H.

If any specialist reports were used during the compilation of this BAR, please attach the declaration of interest for each specialist in Appendix I.

Any other information relevant to this application and not previously included must be attached in Appendix J.

Chrizette Deona Neethling

NAME OF EAP



SIGNATURE OF EAP

13 October 2021
DATE

SECTION F: APPENDIXES

The following appendixes must be attached:

Appendix A: Maps

Appendix B: Photographs

Appendix C: Facility illustration(s)

Appendix D: Specialist reports (including terms of reference)

Appendix E: Public Participation

Appendix F: Impact Assessment

Appendix G: Environmental Management Programme (EMPr)

Appendix H: Details of EAP and expertise

Appendix I: Specialist's declaration of interest

Appendix J: Additional Information