the denc

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

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BASIC ASSESMENT REPORT

(For official use only)

File Reference Number:	
Application Number:	
Date Received:	

Project applicant:	**Khai Garib Local Municipality**		
Business reg. no./ID. no.:	**N/A**		
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Prepared by:

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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. 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.

3. Where applicable **tick** the boxes that are applicable or **black out** the boxes that are not applicable in the report.

4. An incomplete report may be returned to the applicant for revision.

5. 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.

6. This report must be handed in at offices of the relevant competent authority as determined by each authority.

7. No faxed or e-mailed reports will be accepted.

8. The report must be compiled by an independent environmental assessment practitioner.

9. 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.

10. A competent authority may require that for specified types of activities in defined situations only parts of this report need to be completed.

SECTION A: ACTIVITY INFORMATION

Has a specialist been consulted to assist with the completion of this section?	YES	NO

If YES, please complete form XX for each specialist thus appointed:
Any specialist reports must be contained in Appendix D.

The ecological specialist report is attached in Appendix D.

1. ACTIVITY DESCRIPTION

Describe the activity, which is being applied for, in detail:

The Khai Garib Local Municipality is applying for a waste management license for the closure of the existing Riemvasmaak Landfill. The landfill is located about 2.1 km south east of Riemvasmaak settlement, Northern Cape.

Waste generated in the settlement of Riemvasmaak is currently collected on a weekly basis for disposal at the existing Kakamas Landfill. However, some domestic waste is currently dumped illegally, after which it is burnt at the existing Riemvasmaak landfill site.

The site is not licensed but is classified as a G:C:B-, due to the waste types and volume received and the climatic conditions of the area. A general description of the landfill (following a site visit conducted on the 31/08/2015) includes the following:

- **The landfill site is enclosed by perimeter fencing and a gate. However, no access control is conducted;**
- **This facility is not lined with any impervious surfacing;**
- **Type of waste present includes domestic (glass, paper and plastic) waste. No hazardous waste was reported to be received on site;**
- **Burning of waste occurred on site;**
- **No record keeping of the influx (amount) of waste received was kept; and**
- **Illegal dumping was found to occur inside and outside the landfill facility.**

The closure and rehabilitation activities will comply with the Minimum Requirements for Waste Disposal by Landfill (Second Edition, 1998). Closure activities will commence within 12 months from the date of issue on the waste management license. In compliance with the requirements for a communal landfill, during closure of the existing landfill the following activities will be conducted:

- **Closure:**
  - **Consolidation of waste on site in skips for disposal at the Kakamas landfill.**
  - **Placement of a "no dumping" notice at the site.**
  - **Closing and locking the gate to the site so that no illegal dumping can take place.**
  - **Providing a skip for the community to dump their waste in. The skip will be taken to a legal landfill site at least once a week.**
- **Stormwater:**
  - **Design of stormwater management infrastructure to comply with Government Notice 704 of the National Water Act of 1998.**
- **Final Cover:**
  - **After the waste has been removed from site, the site will be capped with a**

150mm topsoil layer.
- The site will then, immediately following capping with topsoil, be seeded with a mixture of indigenous grasses.
- Vegetation establishment must be monitored post decommissioning to ensure successful rehabilitation.

Closure activities should be completed within 6 months from commencement. Upon closure, the Khai Garib Local Municipality intends to establish a waste transfer station (WTS) for the temporary storage of waste, prior to disposal at the licensed Kakamas Landfill. In terms of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) GN 921 of 2013, amended 2014, the construction of the proposed WTS does not require environmental authorisation, however, the WTS must comply with GNR 37088: Norms and Standards for Storage of Waste (2013). The construction of the WTS however, falls outside the scope of this assessment.

2. FEASIBLE AND REASONABLE ALTERNATIVES

As the application entails the closure of an existing landfill site, only the option of not implementing closure is considered

"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. Alternatives should include a consideration of all possible means by which the purpose and need of the proposed activity 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.

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

3. ACTIVITY POSITION

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.
List alternative sites, if applicable.

As the Project entails the closure of an existing landfill site, no alternative sites are considered.

Alternative:	**Latitude (S):**		**Longitude (E):**	
Alternative S1[1] (preferred or only site alternative)	**28°**	**27'.56.22**	**20°**	**19'54.77**
Alternative S2 (if any)	**N/A**			
Alternative S3 (if any)	**N/A**			

4. PHYSICAL SIZE OF THE ACTIVITY

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

Alternative:	**Size of the activity:**
Alternative A1[2] (preferred activity alternative)	**648** m^2
Alternative A2 (if any)	**N/A** m^2
Alternative A3 (if any)	**N/A** m^2

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

Alternative:	**Size of the site/servitude:**
Alternative A1 (preferred activity alternative)	**648** m^2
Alternative A2 (if any)	**N/A** m^2
Alternative A3 (if any)	**N/A** m^2

5. SITE ACCESS

Does ready access to the site exist?	**YES** ☒
If NO, what is the distance over which a new access road will be built	**N/A** m

Describe the type of access road planned:

N/A

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.

6. SITE OR ROUTE PLAN

Please refer to Appendix A for the locality map. No alternative sites are being considered as this is a closure application for an existing facility.

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:

6.1 the scale of the plan which must be at least a scale of 1:500;
6.2 the property boundaries and numbers of all the properties within 50 metres of the site;
6.3 the current land use as well as the land use zoning of each of the properties adjoining the site or sites;

[1] "Alternative S.." refer to site alternatives.
[2] "Alternative A.." refer to activity, process, technology or other alternatives.

6.4 the exact position of each element of the application as well as any other structures on the site;
6.5 the position of services, including electricity supply cables (indicate above or underground), water supply pipelines, boreholes, street lights, sewage pipelines, storm water infrastructure and telecommunication infrastructure;
6.6 all trees and shrubs taller than 1.8 metres;
6.7 walls and fencing including details of the height and construction material;
6.8 servitudes indicating the purpose of the servitude;
6.9 sensitive environmental elements within 100 metres of the site or sites including (but not limited thereto):

- rivers;
- the 1:100 year flood line (where available or where it is required by DWA);
- ridges;
- cultural and historical features;
- areas with indigenous vegetation (even if it is degraded or invested with alien species);

6.9 for gentle slopes the 1 metre contour intervals must be indicated on the plan and whenever the slope of the site exceeds 1:10, the 500mm contours must be indicated on the plan; and
6.10 the positions from where photographs of the site were taken.

7. 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 form**.** It must be supplemented with additional photographs of relevant features on the site, if applicable.

8. FACILITY ILLUSTRATION

A detailed illustration of the activity must be provided at a scale of 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.

N/A. The closure of the existing Riemvasmaak landfill does not involve any activities that include structures, hence no facility illustrations are required. Note that detailed engineering designs for closure of the landfill site are not included within the scope of this assessment. The Applicant will have to appoint a professional engineer to draw up detailed closure plans based on the WML issued and requirements of the relevant authorities prior to commencing with decommissioning activities on site.

9. ACTIVITY MOTIVATION

9(a) Socio-economic value of the activity

What is the expected capital value of the activity on completion?	R **500,000.00**
What is the expected yearly income that will be generated by or as a result of the activity?	R **0**
Will the activity contribute to service infrastructure?	**YES** [redacted]
Is the activity a public amenity?	**YES** [redacted]
How many new employment opportunities will be created **during the closure and rehabilitation of the landfill?**	**10**
What is the expected value of the employment opportunities **during the decommissioning phase?**	**R 150,000.00**
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?	**0**
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(b) Need and desirability of the activity

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

Service Delivery is an issue of national concern / importance. Thus, the closure of an illegal community landfill or the provision of a more sustainable and efficient waste management service is considered part of this programme. This licensing process undertaken in terms of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) (NEMWA) for the unlicensed dumping facilities within the Khai Garib LM is in accordance with an initiative driven by the National Department of Environmental Affairs (DEA) to ensure the legal compliance of all municipal landfills, which in turn ensures appropriate and effective environmental management of these sites.

Indicate any benefits that the activity will have for society in general:

The site is an illegal community waste facility. The closure of the community landfill will not compromise the ability of the municipality to perform service delivery, as waste is already transported to the Kakamas landfill site. Rehabilitation of the site will ensure that the environment (a national asset) is no longer polluted.

Indicate any benefits that the activity will have for the local communities where the activity will be located:

Closure and the rehabilitation of the site will have a positive impact on surrounding areas (in terms of the natural environment) in that pollution will be removed and prevented in future. The visual impact of the existing dumping facility will be minimized as the site will be rehabilitated to the same state as the surrounding land use and topography of the area. The potential for groundwater and surface water pollution will be minimized.

DESIRABILITY:			
1.	Does the proposed land use / development fit the surrounding area?	**YES**	[redacted]
2.	Does the proposed land use / development conform to the relevant structure plans, SDF and planning visions for the area?	**YES**	[redacted]
3.	Will the benefits of the proposed land use / development outweigh the negative impacts of it?	**YES**	[redacted]
4.	If the answer to any of the questions 1-3 was NO, please provide further motivation / explanation:		
	N/A		
5.	Will the proposed land use / development impact on the sense of place?	[redacted]	**NO**
6.	Will the proposed land use / development set a precedent?	[redacted]	**NO**
7.	Will any person's rights be affected by the proposed land use / development?	[redacted]	**NO**
8.	Will the proposed land use / development compromise the "urban edge"?	[redacted]	**NO**
9.	If the answer to any of the question 5-8 was YES, please provide further motivation / explanation.		
	N/A		

BENEFITS:			
1.	Will the land use / development have any benefits for society in general?	YES	■
2.	Explain:		
	Service Delivery is an issue of national concern / importance. Thus, the closure of an illegal community landfill or the provision of a more sustainable and efficient waste management service is considered part of this programme. This licensing process undertaken in terms of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) (NEMWA) for the unlicensed dumping facilities within the Khai Garib LM is in accordance with an initiative driven by the National Department of Environmental Affairs (DEA) to ensure the legal compliance of all municipal landfills, which in turn ensure appropriate and effective environmental management of these sites. **The site is an illegal community waste facility. The closure of the community landfill will not compromise the ability of the municipality to perform service delivery, as waste is already transported to the Kakamas landfill site. Rehabilitation of the site will ensure that the environment (a national asset) is no longer polluted.**		
3.	Will the land use / development have any benefits for the local communities where it will be located?	YES	■
4.	Explain:		
	The closure of the community landfill will not compromise the ability of the municipality to perform service delivery, as waste is already transported to the Kakamas landfill site. Rehabilitation of the site will ensure that environment (a national asset) is no longer polluted. The visual impact of the existing dumping facility will be minimized as the site will be rehabilitated in accordance to the surrounding land use and topography of the area. The potential for groundwater and surface water pollution will be minimized. Fires and pollution will be reduced.		

10. 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:	Administering authority:	Date:
National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) GN 921 of 2013, amended 2014.	**Department of Environment and Nature Conservation (DENC)**	**2008**
National Environmental Management Act, 1998 (Act No. 107 of 1998)	**DENC**	**1998**
Suite of various NEMA EIA Guideline Documents	**DENC**	**Various**
National Water Act, 1998 (Act No. 36 of 1998)	**DWS**	**1998**
National Environment Management: Air Quality Act, 2004 (Act No. 39 of 2004)	**DENC**	**2004**
Minimum Requirements Document (2nd edition) for the Handling, Classification and Disposal of Waste	**DWS**	**1998**
National Environmental Management: Waste	**DENC**	**2008**

Act (2008) - National Norms and Standards for the Storage of Waste No 926		
National Environmental Management: Waste Act (2008) - Waste Classification and Management Regulations No. 634	**DENC**	**2008**

11. WASTE, EFFLUENT, EMISSION AND NOISE MANAGEMENT

11(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?	**Building rubble – quantity unknown**

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

N/A – the activity is for the closure of the landfill site, no construction required. The site contains very little waste, which can be collected and transported to the Kakamas Landfill.

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

Solid waste will be transported to the Kakamas Landfill using trucks.

Will the activity produce solid waste during its operational phase?	■ **NO**
If yes, what estimated quantity will be produced per month?	**N/A** m^3

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

N/A

Where will the solid waste be disposed 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.

Can any part of the solid waste be classified as hazardous in terms of the relevant legislation?	■ **NO**

If yes, inform the competent authority and request a change to an application for scoping and EIA.

Is the activity that is being applied for a solid waste handling or treatment facility?	■ ~~NO~~

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.

11(b) Liquid effluent

Will the activity produce effluent, other than normal sewage, that will be disposed of in a municipal sewage system?	■ **NO**
If yes, what estimated quantity will be produced per month?	**N/A** m^3
Will the activity produce any effluent that will be treated and/or disposed of on site?	■ **NO**

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**

~~If yes, provide the particulars of the facility:~~

~~Facility name:~~			
~~Contact person:~~			
~~Postal address:~~			
~~Postal code:~~			
~~Telephone:~~		~~Cell:~~	
~~E-mail:~~		~~Fax:~~	

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

N/A – No waste water will be generated

11(c) Emissions into the atmosphere

Will the activity release emissions into the atmosphere?	**YES** [redacted]
If yes, is it controlled by any legislation of any sphere of government?	[redacted] **NO**

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.

If no, describe the emissions in terms of type and concentration:

Closure activities are anticipated to result in minimal air emissions, in the form of dust, and would therefore not require a permit or legal process.

11(d) Generation of noise

Will the activity generate noise?	[redacted] **NO**
If yes, is it controlled by any legislation of any sphere of government?	[redacted] **NO**

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.

If no, describe the noise in terms of type and level:

Considering the nature of the activity and the distance from the nearest residential area, it is unlikely that the project will result in significant noise impacts.

12. WATER USE

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

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	**the activity will not use water**

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:	**N/A** litres
Does the activity require a water use permit from the Department of Water Affairs?	[redacted] **NO**

If yes, please submit the necessary application to the Department of Water Affairs and attach proof thereof to this application if it has been submitted.

13. ENERGY EFFICIENCY

Describe the design measures, if any, that 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 C and indicate the area, which is covered by each copy No. on the Site Plan.

Section C Copy No. (e.g. 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	**NO**

If YES, please complete form XX for each specialist thus appointed:
All specialist reports must be contained in Appendix D.

The ecological specialist report is attached in Appendix D.

1. GRADIENT OF THE SITE

Indicate the general gradient of the site.

Alternative S1:

~~Flat~~	**1:50 – 1:20**	[redacted]				

No alternative sites are being considered as this is a closure application for an existing facility.

~~Alternative S2 (if any):~~

~~Flat~~	~~1:50 – 1:20~~	~~1:20 – 1:15~~	~~1:15 – 1:10~~	~~1:10 – 1:7,5~~	~~1:7,5 – 1:5~~	~~Steeper than 1:5~~

~~Alternative S3 (if any):~~

~~Flat~~	~~1:50 – 1:20~~	~~1:20 – 1:15~~	~~1:15 – 1:10~~	~~1:10 – 1:7,5~~	~~1:7,5 – 1:5~~	~~Steeper than 1:5~~

2. LOCATION IN LANDSCAPE

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

~~2.1 Ridgeline~~
~~2.2 Plateau~~
~~2.3 Side slope of hill/mountain~~
~~2.4 Closed valley~~
~~2.5 Open valley~~
2.6 Plain
~~2.7 Undulating plain / low hills~~
~~2.8 Dune~~
~~2.9 Seafront~~

3. GROUNDWATER, SOIL AND GEOLOGICAL STABILITY OF THE SITE

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

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

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).

There is a good aerial spread of boreholes around the Riemvasmaak landfill site with long records of water levels. Using three boreholes (D4N1593, D4N1596 and D4N1595) in close proximity around the site the groundwater flow can be deduced to be in a southerly direction.

4. GROUNDCOVER

Indicate the types of groundcover present on the site:

~~4.1 Natural veld – good condition~~ [E]
4.2 Natural veld – scattered aliens [E]
~~4.3 Natural veld with heavy alien infestation~~ [E]
~~4.4 Veld dominated by alien species~~ [E]
~~4.5 Gardens~~
~~4.6 Sport field~~
~~4.7 Cultivated land~~
~~4.8 Paved surface~~
~~4.9 Building or other structure~~
4.10 Bare soil

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

[redacted]	**Natural veld with scattered aliens**[E]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	**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. LAND USE CHARACTER OF SURROUNDING AREA

Indicate land uses and/or prominent features that does 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:

5.1 Natural area
5.2 Low density residential
~~5.3 Medium density residential~~
~~5.4 High density residential~~
~~5.5 Informal residential[A]~~
~~5.6 Retail commercial & warehousing~~
~~5.7 Light industrial~~
~~5.8 Medium industrial [AN]~~
~~5.9 Heavy industrial [AN]~~
~~5.10 Power station~~
~~5.11 Office/consulting room~~
~~5.12 Military or police base/station/compound~~
~~5.13 Spoil heap or slimes dam[A]~~
~~5.14 Quarry, sand or borrow pit~~
~~5.15 Dam or reservoir~~
~~5.16 Hospital/medical centre~~
~~5.17 School~~
~~5.18 Tertiary education facility~~
~~5.19 Church~~
~~5.20 Old age home~~
~~5.21 Sewage treatment plant[A]~~
~~5.22 Train station or shunting yard [N]~~
~~5.23 Railway line [N]~~
~~5.24 Major road (4 lanes or more) [N]~~
~~5.25 Airport [N]~~
~~5.26 Harbour~~
~~5.27 Sport facilities~~
~~5.28 Golf course~~
~~5.29 Polo fields~~
~~5.30 Filling station [H]~~
~~5.31 Landfill or waste treatment site~~
~~5.32 Plantation~~
~~5.33 Agriculture~~
5.34 River, stream or wetland
~~5.35 Nature conservation area~~
~~5.36 Mountain, koppie or ridge~~
~~5.37 Museum~~
~~5.38 Historical building~~
~~5.39 Protected Area~~
~~5.40 Graveyard~~
~~5.41 Archaeological site~~
~~5.42 Other land uses (describe)~~

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

If YES, 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.

If YES, 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.

If YES, specify and explain:	**N/A**

6. 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?	[redacted]	**NO**
	[redacted]	

If YES, explain: **N/A**

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

Briefly explain the findings of the specialist:	**N/A**	
Will any building or structure older than 60 years be affected in any way?	[redacted]	**NO**
Is it necessary to apply for a permit in terms of the National Heritage Resources Act, 1999 (Act 25 of 1999)?	[redacted]	**NO**

If yes, please submit or, make sure that the applicant or a specialist submits the necessary application to SAHRA or the relevant provincial heritage agency and attach proof thereof to this application if such application has been made.

SECTION C: PUBLIC PARTICIPATION

REFER TO APPENDIX E FOR PUBLIC PARTICIPATION DOCUMENTATION

1. ADVERTISEMENT

The person conducting a public participation process must take into account any guidelines applicable to public participation as contemplated in section 24J of the Act and must give notice to all potential interested and affected parties of the application which is subjected to public participation by—

(a) fixing a notice board (of a size at least 60cm by 42cm; and must display the required information in lettering and in a format as may be determined by the competent authority) at a place conspicuous to the public at the boundary or on the fence of—
  (i) the site where the activity to which the application relates is or is to be undertaken; and
  (ii) any alternative site mentioned in the application;

(b) giving written notice to—
  (i) the owner or person in control of that land if the applicant is not the owner or person in control of the land;
  (ii) the occupiers of the site where the activity is or is to be undertaken or to any alternative site where the activity is to be undertaken;
  (iii) owners and occupiers of land adjacent to the site where the activity is or is to be undertaken or to any alternative site where the activity is to be undertaken;
  (iv) the municipal councillor of the ward in which the site or alternative site is situated and any organisation of ratepayers that represent the community in the area;
  (v) the municipality which has jurisdiction in the area;
  (vi) any organ of state having jurisdiction in respect of any aspect of the activity; and
  (vii) any other party as required by the competent authority;

(c) placing an advertisement in—
  (i) one local newspaper; or
  (ii) any official *Gazette* that is published specifically for the purpose of providing public notice of applications or other submissions made in terms of these Regulations;

(d) placing an advertisement in at least one provincial newspaper or national newspaper, if the activity has or may have an impact that extends beyond the boundaries of the metropolitan or local municipality in which it is or will be undertaken: Provided that this paragraph need not be complied with if an advertisement has been placed in an official *Gazette* referred to in subregulation 54(c)(ii); and

(e) using reasonable alternative methods, as agreed to by the competent authority, in those instances where a person is desiring of but unable to participate in the process due to—
  (i) illiteracy;
  (ii) disability; or
  (iii) any other disadvantage.

2. CONTENT OF ADVERTISEMENTS AND NOTICES

A notice board, advertisement or notices must:

(a) indicate the details of the application which is subjected to public participation; and

(b) state—
  (i) that the application has been submitted to the competent authority in terms of these Regulations, as the case may be;

(ii) whether basic assessment or scoping procedures are being applied to the application, in the case of an application for environmental authorisation;

(iii) the nature and location of the activity to which the application relates;

(iv) where further information on the application or activity can be obtained; and

(iv) the manner in which and the person to whom representations in respect of the application may be made.

3. PLACEMENT OF ADVERTISEMENTS AND NOTICES

Where the proposed activity may have impacts that extend beyond the municipal area where it is located, a notice must be placed in at least one provincial newspaper or national newspaper, indicating that an application will be submitted to the competent authority in terms of these regulations, the nature and location of the activity, where further information on the proposed activity can be obtained and the manner in which representations in respect of the application can be made, unless a notice has been placed in any *Gazette* that is published specifically for the purpose of providing notice to the public of applications made in terms of the EIA regulations.

Advertisements and notices must make provision for all alternatives.

4. DETERMINATION OF APPROPRIATE MEASURES

The practitioner must ensure that the public participation is adequate and must determine whether a public meeting or any other additional measure is appropriate or not based on the particular nature of each case. Special attention should be given to the involvement of local community structures such as Ward Committees, ratepayers associations and traditional authorities where appropriate. Please note that public concerns that emerge at a later stage that should have been addressed may cause the competent authority to withdraw any authorisation it may have issued if it becomes apparent that the public participation process was inadequate.

5. COMMENTS AND RESPONSE REPORT

The practitioner must record all comments and respond to each comment of the public before the application 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 this application. The comments and response report must be attached under Appendix E.

6. AUTHORITY PARTICIPATION

Authorities are key interested and affected parties in each application and no decision on any application will be made before the relevant local authority is provided with the opportunity to give input. The planning and the environmental sections of the local authority must be informed of the application at least 30 (thirty) calendar days before the submission of the application

List of authorities informed:

- **Department of Environment and Nature Conservation (DENC)**
- **Department of Water & Sanitation (DWS)**
- **Northern Cape Provincial Heritage Authority**
- **Department of Health**
- **ZF Mgcawu District Municipality**
- **Kai! Garib Local Municipality Ward Councillor (Ward 1)**

List of authorities from whom comments have been received:

All comments received during the review and comment period of the Draft BAR will be summarized here within the Final BAR as well as in the Comment and Response Report in Appendix E.

7. CONSULTATION WITH OTHER STAKEHOLDERS

Note that, for linear activities, or 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.

Any stakeholder that has a direct interest in the site or property, such as servitude holders and service providers, should be informed of the application at least 30 (thirty) calendar days before the submission of the application and be provided with the opportunity to comment.

Has any comment been received from stakeholders?	[redacted]	NO

If "YES", briefly describe the feedback below (also attach copies of any correspondence to and from the stakeholders to this application):

N/A

All comments received during the review and comment period of the Draft BAR will be summarized here within the Final BAR as well as in the Comment and Response Report in Appendix E.

SECTION D: IMPACT ASSESSMENT

The assessment of impacts must adhere to the minimum requirements in the EIA Regulations, 2010, 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. ISSUES RAISED BY INTERESTED AND AFFECTED PARTIES

List the main issues raised by interested and affected parties.

All comments received during the review and comment period of the Draft BAR will be summarized here within the Final BAR as well as in the Comment and Response Report in Appendix E.

Response from the practitioner to the issues raised by the interested and affected parties (A full response must be given in the Comments and Response Report that must be attached to this report):

All comments received during the review and comment period of the Draft BAR will be summarized here within the Final BAR as well as in the Comment and Response Report in Appendix E.

2. 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

The assessment methods used are in accordance with the requirements of the 2014 EIA Regulations published in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA).

The methodology for assessing impacts was practised by using techniques for Risk Assessment as found in the South African National Standard (SANS) 31010 of 2010. The National standards are the identical implementation of IEC/ISO 31010:2009 and are adopted with the permission of the International Electrotechnical Commission and the International Organisation for Standardization.

Risk assessment does not make use of one method alone; there are various tools available for assessing impacts. The Leopold Matrix is utilised, whereby criteria are mainly used to determine factors such as – probability, duration, extent etc. This method was practised by making use of P.J. Aucamp (2009) (A practical guide for the discerning practitioner, page 74, based on the previous EIA regulations for risk assessment).

The Leopold Matrix is a qualitative Environmental Impact Assessment (EIA) method developed in 1971. The system consists of a matrix with columns representing the various activities of the project, and rows representing the various environmental factors to be considered. The intersections are filled in to indicate the magnitude (from -10 to +10) and the importance (from 1 to 10) of the impact of each activity on each environmental factor.

“Measurements of magnitude and importance tend to be related, but do not necessarily directly correlate. Magnitude can be measured, in terms of how much area is affected by the development and how badly, but importance is a more subjective measurement. While a proposed development may have a large impact in terms of magnitude, the effects it causes may not actually significantly affect the environment as a whole. The example given by Leopold is of a stream that significantly alters the erosion patterns in a specific area, which will have a significant magnitude, but may not be important, provided the stream in question is swift moving and transports large amounts of soil anyway. In this case, an impact of significant magnitude may not actually be important to the environment in question” (Leopold *et al*, 1971).

It should be noted that there is currently in South Africa no mention of a right or wrong way of assessing impacts. The method used is decided upon by the Environmental Assessment Practitioner (EAP). Hence the following definitions are applied to the assessment criteria used to assess the significance of potential impacts pre- and post- mitigation.

ASSESSMENT CRITERIA	CHARACTERISTICS
Extent	**The physical and spatial scale of the impact.** • **Site:** the impacted area is only at the site – the actual extent of the activity; • **Local:** the impacted area extends to the surrounding, the immediate and the neighbouring properties; • **Regional**: the impacted area could be as wide as the municipal area or at a provincial level; and • **National:** the impact can be considered to be of national importance.
Duration	**The lifetime of the impact is measured in relation to the lifetime of the proposed development.** • **Short term:** the impact will be for 0 – 3 years, or only last for the period of construction; • **Medium term:** three to ten years; • **Long term:** longer than 10 years or the impact will continue for the entire operational lifetime of the project; and • **Permanent:** this applies to the impact that will remain after the operational lifetime of the project.
Intensity	**This is the degree to which the project affects or changes the environment.** • **Low:** the change is slight and often not noticeable, and the natural, cultural or social functions and processes are minimally affected; • **Medium:** the environment is remarkably altered, but still functions in a modified way; and • **High:** functioning of the affected environment is disturbed and can cease.
Probability	**This is the likelihood or the chances that the impact will occur.** • **Low:** during the normal operation of the project, no impacts are expected; • **Medium:** the impact is likely to occur if extra care is not taken to mitigate them; and • **High:** the environment will be affected irrespectively; in some cases such impact can be reduced.
Nature	**Description of the impact as positive, negative or neutral.**
Confidence	**The level of information/knowledge available to the EAP for impact assessment purposes.** • **Low:** the judgement is based on intuition and not on knowledge or information; • **Medium:** common sense and general knowledge informs the decision; and • **High:** scientific and or proven information has been used to give such a judgement.
Consequence	**A combination of extent, duration and intensity.** • **Low:** low and medium intensity, short and medium term duration and site or local level extent; • **Medium:** low and medium intensity, long term or permanent duration at a region or national level extent; OR low and medium intensity, long term or permanent duration and site or local level extent; OR high intensity, short to medium term duration at site or local level; OR high intensity, long term or permanent duration at site or local level; and • **High:** high intensity, long term or permanent at a regional or national level.
Significance (before and after mitigation)	**A synthesis of the characteristics described above and assessed as low, medium or high. A distinction will be made for the significance rating without the implementation of mitigation measures and with the implementation of mitigation measures.** • **Low:** low consequence and unlikely, probable or definite probability; medium consequence and unlikely probability; • **Medium:** medium consequence and probable or definite probability or high consequence and unlikely probability. The impacts require attention and mitigation is required to reduce the negative impacts; and • **High:** high consequence and probable or definite probability. Mitigation is crucial.

ASSESSMENT CRITERIA	CHARACTERISTICS
Cumulative Impacts	**The possible cumulative impacts will also be considered. Cumulative impacts have incremental impacts of the activity and other that past, present and future activities will have on a common resource.** • **Low:** there is sufficient capacity of the environmental resources within the geographic area to respond to change and withstand further stress; • **Medium:** the capacity of the environmental resources within the geographic area to respond to change and withstand further stress is reduced; and • **High:** the capacity of the environmental resources within the geographic area to respond to change and withstand further stress has been or is close to being exceeded.

List the potential direct, indirect and cumulative property/activity/design/technology/operational alternative related impacts (as appropriate) 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.

Alternative (preferred alternative)

Impacts that may result from the planning, design and construction phase

As this application is for the closure/ decommissioning of the existing illegal Riemvasmaak landfill site no impacts are associated with the planning, design and construction phase.

Impacts that may result from the operational phase

The landfill site is to be closed, thus no "operational phase" exists.

Impacts that may result from the decommissioning and closure phase

Potential impacts on geographical and physical aspects:	**It is not foreseen that the closure of the landfill will have any negative impacts on geographical or physical aspects as the project area has already been altered / disturbed.** **However, it is foreseen that the closure of the landfill will have positive impacts on the physical environment, as the landfill area will be levelled and re-vegetated.**

Potential impacts on socio-economic aspects:	**Closure and rehabilitation activities will lead to employment opportunities within the Khai Garib LM.**

Potential impacts on cultural-historical aspects:	**It is not foreseen that the closure of the landfill will have any impact on cultural-historical aspects as the project area has already been altered / disturbed.**

Potential visual impacts:	**It is anticipated that the closure of the landfill will have a positive impact on the visual environment, as the site will be rehabilitated to pre-landfilling conditions.**

Potential noise impacts:	
Nature of impact:	**Noise generated during the proposed activities for closure.**
Extent and duration of impact:	**Site**
Probability of occurrence:	**Definite**

Degree to which the impact can be reversed:	**Low**
Degree to which the impact may cause irreplaceable loss of resources:	**N/A**
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	**Low**
Degree to which the impact can be mitigated:	**Medium**
Proposed mitigation:	• **Servicing of all vehicles and machinery to ensure good working order; and,** • **Use of silencers and mufflers on potentially noisy equipment.**
Cumulative impact post mitigation:	**N/A**
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	**Low**

Potential impacts due to air and dust emissions:	
Nature of impact:	**Emissions from vehicles transporting the remaining waste from the site to the Kakamas Landfill, as well as other vehicles and equipment on site fitted with exhausts may cause a temporary decrease in air quality within the immediate surroundings.** **Similarly, dust generated during closure and rehabilitation activities may negatively impact on the surrounding areas ambient air quality.**
Extent and duration of impact:	**Local and Short-Term**
Probability of occurrence:	**Low**
Degree to which the impact can be reversed:	**Low**
Degree to which the impact may cause irreplaceable loss of resources:	**Low**
Cumulative impact prior to mitigation:	**N/A**
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	**Low**
Degree to which the impact can be mitigated:	**Medium**
Proposed mitigation:	• **All reasonable measures should be taken to minimise air emissions in the form of smoke, dust and gases from vehicles/ equipment used on site.** • **No fires are allowed.** • **The Landfill Supervisor shall implement measures to restrict the generation of dust during rehabilitation activities.** • **The Landfill Supervisor shall control dust from spoil dumps or stockpiles by ensuring that they are kept covered or must have a suitable dust palliative applied (such as water or commercial dust suppressants) to prevent windborne dust pollution.**
Cumulative impact post mitigation:	**N/A**
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	**Low**

Potential impact on health and safety:	
Nature of impact:	**Health and safety incidents to workers during closure and rehabilitation activities**
Extent and duration of impact:	**Local**
Probability of occurrence:	**Medium**
Degree to which the impact can be reversed:	**High**
Degree to which the impact may cause irreplaceable loss of resources:	**High**
Cumulative impact prior to mitigation:	**N/A**
Significance rating of impact prior to mitigation	**High**

(Low, Medium, Medium-High, High, or Very-High)	
Degree to which the impact can be mitigated:	**High**
Proposed mitigation:	• **Safety training of staff is required to minimize accidents.** • **All staff are required to wear the required Personal Protective Equipment (PPE) at all times.**
Cumulative impact post mitigation:	**N/A**
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	**Low**

Potential impact on health and safety:	
Nature of impact:	**Movement of operational vehicles and equipment or danger associated with open areas (trenches, unstable ground etc.) may lead to potential safety impacts to the public if not demarcated as no go zones.**
Extent and duration of impact:	**Site**
Probability of occurrence:	**Medium**
Degree to which the impact can be reversed:	**High**
Degree to which the impact may cause irreplaceable loss of resources:	**N/A**
Cumulative impact prior to mitigation:	**N/A**
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	**Medium**
Degree to which the impact can be mitigated:	**High**
Proposed mitigation:	• **The site must have access control. The public will not be allowed near the working areas.** • **On site vehicles will be fitted with reversing horn.** • **Staff on site will wear PPE and reflective clothing.** • **Open excavations will be marked with danger tape.**
Cumulative impact post mitigation:	**N/A**
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	**Low**

Potential impact on surface water and soils:	
Nature of impact:	**Contamination of soils and surface water due to hydrocarbon spills from vehicles/ equipment used during rehabilitation.**
Extent and duration of impact:	**Local**
Probability of occurrence:	**Medium**
Degree to which the impact can be reversed:	**Medium**
Degree to which the impact may cause irreplaceable loss of resources:	**Medium**
Cumulative impact prior to mitigation:	**N/A**
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	**Medium**
Degree to which the impact can be mitigated:	**Medium**
Proposed mitigation:	• **Precautionary measures must be taken to prevent any form of pollution.** • **Accidental pollution incidents shall be reported to the Municipal Manager immediately after they occur and shall be cleaned up (to the satisfaction of the ECO) by the Landfill Supervisor or a nominated clean-up organisation.** • **Vehicle and plant maintenance shall be confined to the areas demarcated for this purpose. Should any amount of fuel, oil, transmission or hydraulic fluids be spilled onto the soils, the Municipal Manager or ECO shall be informed immediately. Tests must be conducted to determine the extent of soil contamination as soon as a spillage occurs. The polluted soil shall be rehabilitated or**

	remediated to the satisfaction of the ECO. • On-site stormwater management shall be to the satisfaction of the ECO. • Any spillage of waste, caused by any party during the closure activities, shall be cleaned up immediately and appropriately disposed of.
Cumulative impact post mitigation:	**N/A**
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	**Low**

Potential illegal dumping impacts:	
Nature of impact:	**Night-time and / or weekend fly tipping (illegal dumping) may result in dumping of unacceptable waste steams increasing environmental, health and safety impacts and risks including:** • **Changes in the expected composition of leachate from the waste disposal facility resulting in the pollution of soil and water resources.** • **Changes in expected landfill gas emissions resulting in flammability, toxicity, asphyxiation and other hazards as well as objectionable odour negatively impacting on on-site personnel (and other on-site persons) health and safety.** • **The increase for the landfill footprint in instances of uncontrolled dumping of wastes.**
Extent and duration of impact:	**Local**
Probability of occurrence:	**High**
Degree to which the impact can be reversed:	**High**
Degree to which the impact may cause irreplaceable loss of resources:	**N/A**
Cumulative impact prior to mitigation:	**N/A**
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	**Medium**
Degree to which the impact can be mitigated:	**High**
Proposed mitigation:	• **All existing fencing shall be maintained to prevent access for illegal dumping.** • **The local community shall be informed of the site closure and made aware of alternatives through public meetings, the placement of notices in local newspapers, etc.** • **The Municipal Manager shall ensure placement of signage close to the road informing the public of site closure and providing details on alternative disposal sites or facilities.** • **Maintain security at the site for a short period after closure to prevent potential illegal dumping and / or vandalism.** • **Placement of skips near the community residential areas / notices informing community members of the waste transfer station for use to safety dispose of their waste.**
Cumulative impact post mitigation:	**N/A**
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	**Low**

Potential impact on water pollution and environmental degradation:	
Nature of impact:	**Surface and groundwater water pollution may occur after closure if the engineering design/ instructions are not correctly implemented on site.**
Extent and duration of impact:	**Local**
Probability of occurrence:	**Medium**
Degree to which the impact can be reversed:	**Medium**

Degree to which the impact may cause irreplaceable loss of resources:	**Medium**
Cumulative impact prior to mitigation:	**Low**
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	**Medium**
Degree to which the impact can be mitigated:	**Medium**
Proposed mitigation:	• **A professional engineer must provide detailed closure drawings and oversee and sign off on the closure of the landfill.** • **Maintenance of the site is ongoing until vegetation establishment has been completed.** • **The installation of stormwater management measures, such as intercept drains and conservancy tanks, must be regular checked for damage and proper functioning.** • **Water collected in the conservancy tank (if applicable) must be analyzed for potential contamination.**
Cumulative impact post mitigation:	**Unknown**
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	**Low**

Loss of habitat and indigenous species	
Nature of impact:	**Activities conducted for the closure of the landfill may lead to the loss of natural habitats and indigenous species.**
Extent and duration of impact:	**Local**
Probability of occurrence:	**Medium**
Degree to which the impact can be reversed:	**High**
Degree to which the impact may cause irreplaceable loss of resources:	**Low**
Cumulative impact prior to mitigation:	**Low (loss of indigenous vegetation)**
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	**Low**
Degree to which the impact can be mitigated:	**High**
Proposed mitigation:	• **Clean up the surrounding areas and move the litter into an approved landfill area.** • **Vehicle movement must be restricted to the fenced area and the road to the landfill and should not disturb additional vegetation and habitat.** • **Rehabilitation activities should focus on clearing the litter from the area outside the landfill and establishing a soil cover over the litter on site.**
Cumulative impact post mitigation:	**N/A**
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	**No impact**

Potential impact of alien invasive plants	
Nature of impact:	**Alien plant species may establish on site post closure/ decommissioning of the landfill site. This may interfere with the capping layer making it less able to control the ingress of water, resulting in leachate.**
Extent and duration of impact:	**Local**
Probability of occurrence:	**Medium**
Degree to which the impact can be reversed:	**High**
Degree to which the impact may cause irreplaceable loss of resources:	**Low**
Cumulative impact prior to mitigation:	**Medium (increased potential in spreading of alien invasive plants in the area)**
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	**Low**
Degree to which the impact can be mitigated:	**High**
Proposed mitigation:	• **Maintenance of the site is ongoing until indigenous vegetation has successful established on site.** • **Any alien plants identified must be removed from site and destroyed.**

	• **Care must be taken not to control indigenous species.**
Cumulative impact post mitigation:	**N/A**
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	**No impact**

Any other impacts:

N/A

3. 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.

Alternative A (preferred alternative)

Based on the findings of the Basic Assessment process, no impacts of high significance or environmental fatal flaws will result from the granting of a NEMWA WML (i.e. Closure License) for the existing landfill facility at Riemvasmaak. Minimal socio-economic impacts are expected with the closure of the landfill as potential job losses will be compensated by employment opportunities created by the proposed waste transfer station to be established. Noise and dust pollution during closure and rehabilitation will be insignificant due to the extent of the illegal landfill and no sensitive receptors are located within the immediate surrounding environment. Potential impacts on surface and groundwater and the introduction of alien plant species can easily be managed by adhering to the recommended management measures in the Environmental Management Programme (EMPr). The closure and rehabilitation of the illegal landfill will have positive impacts in that the existing pollution source will be removed, the site will be levelled, revegetated and managed in accordance with environmental legislation (i.e. NEMA and NEMWA) into the future by way of the comprehensive EMPr which has been prepared. All potential impacts during the closure phase of the Riemvasmaak landfill facility can be minimised through the implementation of the practical and appropriate mitigation measures contained in the EMPr (Appendix F).

No-go alternative (compulsory)

The no-go alternative would imply that the current state of the landfill site would remain as it is not currently being utilised. In order words the waste still on site would remain and the site would not be rehabilitated to blend into the surrounding natural environment. The negative health and visual impacts associated with existing waste on site would remain into the future.

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** ■
Is an EMPr attached?	**YES** ■

The EMPr must be attached as Appendix F.

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):

N/A

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:

- **Compliance to the mitigation measures and recommendations as indicated in the EMPr (Appendix F).**

- **An Environmental Control Officer (ECO) is to be appointed to audit compliance with the EMPr and WML. Once the closure of the site has been signed off by the Professional Engineer, the ECO is to submit a final audit report with findings and recommendations to the DENC. The DENC may decide to amend the frequency of future monitoring based on the results of the audit.**
- **All conditions contained within the DWS Record of Recommendation (RoR) should be captured as conditions of the WML issued.**

SECTION F: APPENDIXES

The following appendixes must be attached as appropriate:

Appendix A: Site plan(s)

Appendix B: Photographs

Appendix C: Facility illustration(s)

Appendix D: Specialist reports

Appendix E: Comments and responses report

Appendix F: Environmental Management Programme (EMPr)

Appendix G: Other information