

# DRAFT BASIC ASSESSMENT REPORT

## PROPOSED UPGRADING OF SOLID WASTE SITE: FRANKFORT, MAFUBE LOCAL MUNICIPALITY

<p><b>PREPARED BY:</b></p> <p>NSVT Consultants 1 Fourth Street, Office 1A, Arboretum Bloemfontein 9301</p> <p>Telephone: 051 430 1042</p> <p>Fax: 086 239 9133</p> <p>Cell: 071 5454 241</p> <p>Email: <a href="mailto:kea@nsvt.co.za">kea@nsvt.co.za</a></p> <p>Contact person: Keagalaletsa G. Gobolawamang</p>	<p><b>PREPARED FOR:</b></p> <p>Mafube Local Municipality 64 Hadebe Street, Frankfort 9830</p> <p>Telephone: 058 813 1051</p> <p>Fax: 058 813 3072</p> <p>Email: <a href="mailto:mojalefa.motlale@gmail.com">mojalefa.motlale@gmail.com</a></p> <p>Contact person: Mojalefa Motlale</p>
	

**PROJECT INFORMATION**

**1.1.1 DETAILS OF APPLICANT**

<b>PROJECT APPLICANT</b>	Mafube Local Municipality		
<b>CONTACT PERSON</b>	Mr Mojalefa Matlole		
<b>POSTAL ADDRESS</b>	P.O. Box 2 Frankfort 9830		
<b>TELEPHONE</b>	058 813 9701	<b>Fax</b>	058 813 3072
<b>EMAIL</b>	<a href="mailto:mojalefa.matlole@gmail.com">mojalefa.matlole@gmail.com</a>		

**1.1.2. DETAILS OF THE CONSULTING ENGINEERS**

<b>PROJECT ENGINEER</b>	Dipabala Consulting Engineers		
<b>CONTACT PERSON</b>	Mr. T. Motheane		
<b>POSTAL ADDRESS</b>	P.O. 42452, Heuwelsig, 9332		
<b>TELEPHONE</b>	051 430 1042	<b>Fax</b>	086 239 9133
<b>E-MAIL</b>	<a href="mailto:tmotheane@gmail.com">tmotheane@gmail.com</a>	<b>Cell</b>	071 163 2116

**1.1.3. DETAILS OF ENVIRONMENTAL ASSESSMENT PRACTITIONER**

The details of the EAP are shown below and the CV is attached hereto as **Appendix 1**.

<b>EAP</b>	NSVT Consultants		
<b>CONTACT PERSON</b>	Keagalaletsa Gobolawamang		
<b>POSTAL ADDRESS</b>	P. O. Box 42452, Heuwelsig, 9332		
<b>TELEPHONE</b>	(051) 430 1042	<b>Fax</b>	086 239 9133
<b>E-MAIL</b>	<a href="mailto:kea@nsvt.co.za">kea@nsvt.co.za</a>	<b>Cell</b>	071 545 4241
<b>QUALIFICATIONS</b>	BA Environmental Management	<b>Expertise/ Experience</b>	1 and half year working in the environmental management field as an EAP. She has experience compiling in EIA, basic assessment, drafting of EMPs and Data analysis and Data Visualization.
<b>TRAINING/ CONTINUED PROFESSIONAL DEVELOPMENT</b>	<b>Y2NEXT Training:</b> Introduction to GIS (ArcGis)		
		<b>Professional Affiliation</b>	Member of the International Association for Impact Assessment. IAIA number- 6090

Basic assessment report in terms of the Environmental Impact Assessment Regulations, 2010, promulgated in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended.

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**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, 2010 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 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.

## BASIC ASSESSMENT REPORT

### SECTION A: ACTIVITY INFORMATION

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 appointment of a specialist for each specialist thus appointed:

Any specialist reports must be contained in Appendix D.

#### 1. ACTIVITY DESCRIPTION

Describe the activity, which is being applied for, in detail<sup>1</sup>:

The activity that is being applied for upgrading of a licensed general waste disposal facility at Frankfort, which is going to be operated as a regional waste site to accommodate general waste from the small towns at the Mafube Local Municipality in the Free State.

**Project Overview and Classification of the Facility:** The existing landfill site is 6.34 hectares in size and the total upgrading will be 14 hectares in size and is classified as G: S: B+ waste disposal as it is used for the disposal of mixed waste that is more than 25 tonnes of general and non-hazardous waste.

The general waste which is disposed on site includes domestic waste, garden refuse and builders' rubble, etc. excluding hazardous and medical waste. The waste is collected by the municipality daily during weekdays from the residential areas and business centres, and surrounding communities and contractors drop off garden refuse and builders' rubble in the site. The ideal activities during operation of the site are expected to include but are not limited to excavation of trenches, disposing waste in the trenches and covering waste/backfilling with topsoil, then compacting before using a new trench.

**Description of the Receiving Environment:**

Frankfort is a town with a population that largely depends on agriculture hence the degradation due to overgrazing and frequent burning. Numerous footpaths also traverse the entire area. The area is therefore not reminiscent of the natural climatic state of the relevant Frankfort Highveld Grassland vegetation type (Gm 6). Grazing livestock was observed during site inspection. The study area is degraded due to anthropogenic activities, but two provincially protected plants are found in the area.

**Geophysical:**

A geohydrological investigation of the existing waste disposal site has been undertaken and the site was found to be suitable for waste disposal in terms of the geohydrology beneath the site and in the surrounding. Ongoing monitoring of water quality is vital, as to know when remedial measures should be implemented and to protect water resources such as Wilge River which is in proximity of the existing landfill site.

**Groundwater, Boreholes and Hydro census:** According to the Aquifer Classification Map of South Africa, the study area is situated on a minor to poor aquifer system where the expected yields of boreholes are <0.4 l/s. Due to the fact that the project area is situated on a poor aquifer and the aquifer vulnerability is least, it can therefore be assumed that the aquifer has a low susceptibility for contamination. There is one borehole in the surrounding area and two more were drilled in respect to the recommendations of the specialist for water quality monitoring purposes and a monitoring plan must be compiled for DWS approval.

<sup>1</sup> Please note that this description should not be a verbatim repetition of the listed activity as contained in the relevant Government Notice but should be a brief description of activities to be undertaken as per the project description.

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**Geology and Soil Characteristics:** From the geological map the following was observed about the regional geology:

Mudstone or shale with sandstone of the Adelaide subgroup with Jurassic Karoo dolerite intrusions. Soils are Glenrosa, Bonheim and Avalon, with Mayo forms dominating the outcrops and slightly elevated areas. Sepane, Arcadia and Rensburg forms dominate the moist bottomlands. Most of the area is classified as Ea landtype while the rest is Ca land type. (Mucina & Rutherford, 2006)

**Current Infrastructure and Security Access:** There is currently no infrastructure on site and the main entrance to the site has no security control measures or visible signage. Incoming waste tonnages are not recorded; therefore, the lifespan of this site cannot be calculated.

**Operational Hours:** Current operations times are tabled below:

Period	From	Until
Weekdays	08h00	17h00
Saturday	08h00	12h00
Sunday	08h00	12h00
Public Holidays	08h00	12h00

The site is currently owned by the Mafube Local Municipality and is zoned as agricultural land.

## 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. 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.**

## BASIC ASSESSMENT REPORT

### Alternatives:

#### **Alternative 2**

Alternative 2- is about 10.5 ha, North- West of the existing landfill site. Alternative 2 constitutes a slightly less degraded grassland landscape relative to the assessment area but is still in a moderately disturbed and degraded state also mainly caused by anthropogenic activities associated with the existing landfill site as well as overgrazing by livestock from the local community and frequent burning. Numerous footpaths also traverse the entire area. The area is therefore also not reminiscent of the natural climactic state of the relevant Frankfort Highveld Grassland vegetation type (Gm 6).

Alternative 2 however houses in excess of fifty (50) individuals of the provincially protected species *Boophone disticha* which is significantly more compared to the assessment area. Alternative 2 also forms part of the upper commencement of the same small localised surface water catchment and drainage area as the assessment area. Due to the slightly less degraded state of Alternative 2 relative to the assessment area as well as the significant presence of provincially protected species individuals, it is not recommended that Alternative 2 be considered for development instead of the assessment area

#### **Alternative 3**

Alternative 3 is approximately 14.5 ha in size and is located approximately 1.5 km north-east of the town of Frankfort. Alternative 3 constitutes a relatively natural landscape associated with an Ecological Support Area one (ESA 1) and the vulnerable Frankfort Highveld Grassland vegetation type (Gm 6).

Several ephemeral watercourses also traverse Alternative 3 which subsequently feed into the Wilge River located approximately 370 m south-east of Alternative 3. Alternative 3 also forms part of the upper commencement of a quaternary surface water catchment and drainage area.

Due to the relatively natural landscape of Alternative 3 and the surrounding areas as well as the presence of a few ephemeral watercourses, it is not recommended that Alternative 3 be considered for development instead of the assessment area.

### 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.

**Latitude (S):**

**Longitude (E):**

#### **Alternative:**

Alternative S<sup>12</sup> (preferred or only site alternative)

30°	1.849062'	25°	46.08176'
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<sup>2</sup> "Alternative S.." refer to site alternatives.

## BASIC ASSESSMENT REPORT

Alternative S2 (if any)				
Alternative S3 (if any)				

**In the case of linear activities:**

**Alternative:**

**Latitude (S):**

**Longitude (E):**

Alternative S1 (preferred or only route alternative)

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

o	°	o	°
o	°	o	°
o	°	o	°

Alternative S2 (if any)

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


Alternative S3 (if any)

- Starting point of the activity
- 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.

### 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<sup>3</sup> (preferred activity alternative)

144 000 m <sup>2</sup>
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Alternative A2 (if any)

105 000 m <sup>2</sup>
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Alternative A3 (if any)

145 000 m <sup>2</sup>
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or, for linear activities:

**Length of the activity:**

N/A

**Alternative:**

Alternative A1 (preferred activity alternative)

No-Go Option
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Alternative A2 (if any)

Alternative A3 (if any)

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**There are no alternatives sites which were considered because the facility is already existing**

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)

144 000 m <sup>2</sup>
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Alternative A2 (if any)

m <sup>2</sup>
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Alternative A3 (if any)

m <sup>2</sup>
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<sup>3</sup> "Alternative A.." refer to activity, process, technology or other alternatives.

## BASIC ASSESSMENT REPORT

### 5. SITE ACCESS

Does ready access to the site exist?

YES	<input type="checkbox"/>
m	<input type="checkbox"/>

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

Describe the type of access road planned:

Not applicable, there is an existing access 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.

### 6. SITE OR 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:

- 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;
- 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);
- 6.10 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
- 6.11 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.



## BASIC ASSESSMENT REPORT

### 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.

<b>Appendix C</b>
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### 9. ACTIVITY MOTIVATION

#### 9(a) Socio-economic value of the activity

What is the expected capital value of the activity on completion?	R22 304 876.56
What is the expected yearly income that will be generated by or as a result of the activity?	R0
Will the activity contribute to service infrastructure?	YES <input type="checkbox"/>
Is the activity a public amenity?	YES <input type="checkbox"/>
How many new employment opportunities will be created in the development phase of the activity?	7
What is the expected value of the employment opportunities during the development phase?	N/A
What percentage of this will accrue to previously disadvantaged individuals?	0%
How many permanent new employment opportunities will be created during the operational phase of the activity?	N/A
What is the expected current value of the employment opportunities during the first 10 years?	I/NA
What percentage of this will accrue to previously disadvantaged individuals?	70%

#### 9(b) Need and desirability of the activity

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

<b>NEED:</b>		
1.	Was the relevant provincial planning department involved in the application?	YES <input type="checkbox"/>
2.	Does the proposed land use fall within the relevant provincial planning framework?	YES <input type="checkbox"/>
3.	If the answer to questions 1 and / or 2 was NO, please provide further motivation / explanation:	

<b>DESIRABILITY:</b>		
1.	Does the proposed land use / development fit the surrounding area?	YES <input type="checkbox"/>

### BASIC ASSESSMENT REPORT

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

#### **BENEFITS:**

1.	Will the land use / development have any benefits for society in general?	YES	
2.	Explain: <b>The community will benefit from the development as the Municipality will be able to deliver basic service in a regulated manner and as prescribed by the Constitution which stipulates among others that "Everyone has the right to an environment that is not harmful to their health and well-being".</b>		
3.	Will the land use / development have any benefits for the local communities where it will be located?	YES	
4.	Explain: <b>Having the set conditions in place will ensure that Municipality will work towards improving the waste management in the local community. The proposed upgrade of the facility will ensure that the site is regulated in accordance to the National Environmental Management Act and the conditions of operation as set out in the authorisation issued by the competent authority. The proposed upgrade of the facility will contribute positively in a way that will help the Municipality in handling and managing the waste to the benefit of the local community. The municipality will have an increase in number of employees therefore combating poverty and unemployment and operation of the landfill will reduce the environmental degradation, poor aesthetics and wind-blown litter.</b>		

#### **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:

## BASIC ASSESSMENT REPORT

Title of legislation, policy or guideline:	Administering authority:	Date:
National Environmental Management Waste Act (Act 59 of 2008) and all the relevant regulations	Department of Environmental Affairs(National and Provincial Departments)	2008
National Environmental Management Act(Act 107 of 1998) as amended and all the relevant regulations	Department of Environmental Affairs(National and Provincial Departments)	1998
The South African Constitution, 1996 (Act 5 of 1996)	Republic of South Africa	1996
National Environmental Management: Air Quality Act ( Act 39 of 2004)	Department of Environmental Affairs (National and Provincial Departments)	2004
Environmental Conservation Act, 1989 (Act 73 of 1989)	Department of Environmental Affairs (National and Provincial Departments)	1989
National Water Act, 1998 (Act 36 of 1998)	Department of Water Affairs	1998
DWAF Minimum Requirements for Waste Disposal by Landfill	Department of Water Affairs	1998
Occupational Health and Safety Act, 1993 (Act 85 of 1993)	Department of Labour	1993
Mineral and Petroleum Resources Development Act, 2002 (Act 28 of 2002)	Department of Minerals and Energy	2002
Municipal Systems Act, 2000 (Act 32 of 2000)	Department of Local Government and Municipalities	2000

### 11. WASTE, EFFLUENT, EMISSION AND NOISE MANAGEMENT

#### 11(a) Solid waste management

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

	NO
m <sup>3</sup>	

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

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

**N/A**

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

**N/A**

Will the activity produce solid waste during its operational phase?

YES	
m <sup>3</sup>	

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

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

**The operations of the waste site do not generate waste but receive waste from the area**

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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?  YES

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.

**The application is for an existing facility which is already handling general waste.**

### 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?

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**

### 11(c) Emissions into the atmosphere

Will the activity release emissions into the atmosphere?  NO

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

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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.

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

**The emissions that are currently emitted and will continue to be emitted during the operation of the facility are exhaust emissions emitted by vehicles when transporting waste on site for disposal. These are low in concentration and are not regulated**

### 11(d) Generation of noise

Will the activity generate noise?

YES	
	NO

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

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:

**The noise generated will occur during construction and will continue during the operation of the facility which is generated by the vehicles when dropping waste at the facility. This is the normal operations noise and is not regulated.**

### 12. WATER USE

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

municipal					
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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:

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Does the activity require a water use permit from the Department of Water Affairs?

YES	
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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:

**There is currently no energy that is being utilised on site nor any infrastructure that uses energy**

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

**None**

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### 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	
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If YES, please complete the form entitled "Details of specialist and declaration of interest"

for each specialist thus appointed:

All specialist reports must be contained in Appendix D.

Property description/physical address:

Dorp Frankfort No- 74
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(Farm name, portion etc.) Where a large number of properties are involved (e.g. linear activities), please attach a full list to this application.


In instances where there is more than one town or district involved, please attach a list of towns or districts to this application.

Current land-use zoning:

<b>Agriculture</b>
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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?  
Must a building plan be submitted to the local authority?

	NO
	NO

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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 indication of the project site position as well as the positions of the alternative sites, if any;
- 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)

### 1. GRADIENT OF THE SITE

Indicate the general gradient of the site.

**Alternative S1:**

	1:3					
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**Alternative S2 (if any):**

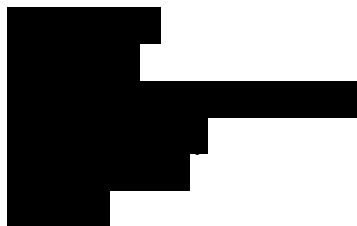
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**Alternative S3 (if any):**

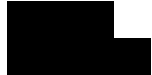
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### 2. LOCATION IN LANDSCAPE

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



2.7 Undulating plain / low hills



**BASIC ASSESSMENT REPORT**

**3. GROUNDWATER, SOIL AND GEOLOGICAL STABILITY OF THE SITE**

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

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

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).

<input type="checkbox"/>	Natural veld with scattered aliens <sup>E</sup>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>It is an existing landfill site whereby random disposal occur therefore the groundcover consists of mostly bare soil and the other part to the west is natural cover disturbed by anthropogenic activities such as burning and overgrazing.</b></p>				

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.



## BASIC ASSESSMENT REPORT

### 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:

No	Land Use/Character	Yes	No
5.1	Natural area		No
5.2	Low density residential		No
5.3	Medium density residential		No
5.4	High density residential		No
5.5	Informal residential <sup>A</sup>		No
5.6	Retail commercial & warehousing		No
5.7	Light industrial		No
5.8	Medium industrial <sup>AN</sup>		No
5.9	Heavy industrial		No
5.10	Power station		No
5.11	Office/consulting room		No
5.12	Military or police base/compound		No
5.13	Spoil heap or slimes dam <sup>A</sup>		No
5.14	Quarry, sand or borrow pit	Yes	
5.15	Dam or reservoir		No
5.16	Hospital/medical centre		No
5.17	School		No
5.18	Tertiary education facility		No
5.19	Church		No
5.20	Old age home		No
5.21	Sewage treatment plant <sup>A</sup>		No
5.22	Train station or shunting yard <sup>N</sup>		No
5.23	Railway line <sup>N</sup>		No
5.24	Major road (4 lanes or more)		No
5.25	Airport <sup>N</sup>		No
5.26	Harbour		No
5.27	Sport facilities		No
5.28	Golf course	Yes	
5.29	Polo fields		No
5.30	Filling station <sup>H</sup>		No
5.31	Landfill or waste treatment site	Yes	
5.32	Plantation		No
5.33	Agriculture		No
5.34	River, stream or wetland	Yes	
5.35	Nature conservation area		No
5.37	Mountain, koppie or ridge		No
5.38	Museum		No
5.39	Historical building		No
5.40	Protected Area		No
5.41	Graveyard		No

### BASIC ASSESSMENT REPORT

5.42	Archaeological site		No
5.43	Other land uses (describe)		No

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

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:

If YES, specify:

|

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:

If YES, specify:

|

|

## BASIC ASSESSMENT REPORT

### 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 palaeontological sites, on or close (within 20m) to the site?		NO
If YES, explain:	NO	
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:	<b>N/A</b>  <b>No sites, features or material of cultural heritage (archaeological and/or historical) origin or significance were identified in the study area during the physical assessment. If any did exist here in the past it would have been largely disturbed or destroyed by recent activities including the adjacent quarrying and dumping.</b>	
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 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

#### 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;

## BASIC ASSESSMENT REPORT

- (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.

**SEE APPENDIX E**

### 4. DETERMINATION OF APPROPRIATE MEASURES

## BASIC ASSESSMENT REPORT

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.

**Stakeholder databases, public notice, including newspaper advertisement where placed and are deemed to be adequate measures for public participation process in terms of EIA regulations 2017, Section 40-44.**

### 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.

SEE APPENDIX E

### 6. AUTHORITY PARTICIPATION

**Please note that a complete list of all organs of state and or any other applicable authority with their contact details must be appended to the basic assessment report or scoping report, whichever is applicable.**

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.

List of authorities from whom comments have been received:

Comments were received and the EAP's response to the comments made, will be included 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 subregulation 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.

Has any comment been received from stakeholders?

NO

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

## BASIC ASSESSMENT REPORT

### 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.

SEE APP 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 as Annexure E):

SEE APP 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

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)

##### Impact Assessment Methodology

The following requirements as stipulated in the Environmental Impact assessment Regulations, 2010, promulgated in terms of Section 24(5) of the National Environmental Management Act (Act 107 of 1998) as amended in 2014 were considered when undertaking an impact assessment, that-

- When undertaking an impact assessment a description and assessment of the significance of any environmental impacts, including;
  - i. Cumulative impacts, that may occur as a result of the undertaking of the activity during project life cycle;
  - ii. Nature of the impact;
  - iii. Extent and Duration of impact;
  - iv. The probability of Impact occurring
  - v. The degree to which the impact can be reversed;
  - vi. The degree to which the impact may cause irreplaceable loss of resources; and

## BASIC ASSESSMENT REPORT

vii. The degree to which the impact can be mitigated; should be considered  
The method for determining the impact risk as well as the description for determining the impact risk is provided below:

### 1) Cumulative Impacts

Cumulative impacts<sup>1</sup> can simply be defined as the total impact that a series of developments, either present, past or future, will have on the environment within a specific region over a particular period of time

The spatial scale can be local, regional or global, whilst the frequency or temporal scale includes past, present and future impacts on a specific environment or region, therefore the potential cumulative impacts on the entire receiving environment are addressed for all the project phases and the mitigation measures implemented before and after.

### 2) Nature of the Impact

A description of what causes the effect, what will be affected and how will it be affected

### 3) Extent of Impacts

Extent indicates whether the impact will be local (limited to the immediate area or site of development), regional, national or international.

A score of between 1 and 5 is assigned. (with a score of 1 being low and a score of 5 being high)

Value	Rating (Exposure)	Description
5	Global/National	The effect of the impact will occur on a national/ and or global scale
4	Regional/Provincial	The effect will occur on the entire province or region
3	Local	The effect will extend as far as the development site area
2	Limited	The effect will be limited to the site and its immediate surroundings
1	Very limited	The effect will be limited to the specific isolated parts of the site

### 4) Probability of Impact occurring

The probability of an impact refers to the likelihood of an impact occurring. Probability is estimated on a scale, and a score of 1-5 is assigned.

Rating	Description
1	Very improbable( probably will not happen)
2	Improbable (some possibility, but low likelihood)
3	Probable (distinct possibility)
4	Highly Probable (most likely)

## BASIC ASSESSMENT REPORT

5	Definite (impact will occur regardless of any prevention measure)
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### 5) Duration of impacts and degree to which impacts can be reversed

**Duration** refers to the actual impact timeframe. The reversibility of impacts is directly linked to the duration of the impacts. A factor is awarded in accordance with the following:

- Immediate: 0- <1 year- Factor 1
- Short term: 1 to 5 years - Factor 2
- Medium term: 5 to 15 years - Factor 3
- Long term: impact will only cease after the operational life of the activity, either because of natural process or by human intervention - Factor 4.
- Permanent: mitigation, either by natural process or by human intervention, will not occur in such a way or in such a time span that the impact can be considered transient - Factor 5.

Value/Factor	Description	Reversibility
1	Immediate	Immediately reversible
2	Short-term	Quickly reversible
3	Medium term	Reversible over time
4	Long term	Reversible over the long term
5	Permanent	Irreversible/ No mitigation measures will reduce the impact after implementation

### 6) Degree to which the impact may cause irreplaceable loss of resources (Magnitude)

The magnitude of the impact refers to the importance of the impact in relation to the significance of the development.

The magnitude is quantified on a scale from 1-10, where 1 is small and 10 is very high

Value	Description
1	Small and will have no effect on the environment
2	Minor and will result in an impact on processes
4	Low and will cause a slight impact on processes
6	Moderate and will result in processes continuing but in a modified way
8	High (processes are altered to the extent that they temporarily cease)
10	Very high (results in complete destruction of patterns and permanent cessation of processes)

7) The significance which is determined through a synthesis of the characteristics described above (refer to formula below) and can be assessed as low, medium or high

The **significance weightings** for each potential impacts are as follows:

Value	Description



## BASIC ASSESSMENT REPORT

<30 points	Low (the impact would not have a direct influence on the decision to develop in the area)
30-60 points	Medium (the impact could influence the decision to develop in the area unless it is effectively mitigated)
>60 points	High ( the impact must have an influence on the decision process to develop in the area)

The significance is determined by combining the criteria in the following formula:

**S = (E+D+M)P**; where

S= Significance weighting

E= Extent

D= Duration

M= Magnitude

P= Probability

<sup>1</sup> DEAT (2004) Cumulative Effects Assessment, Integrated Environmental Management, Information Series 7, Department of Environmental Affairs and Tourism (DETA), Pretoria.

### A. CONSTRUCTION PHASE

NATURE OF IMPACT: TRANSFORMATION OF VEGETATION		
	Without Mitigation	With Mitigation
<b>Extent</b>	Local (3)	Very limited (1)
<b>Duration</b>	Long term (4)	Medium term (3)
<b>Magnitude</b>	High (8)	Low (4)
<b>Probability</b>	Definite (5)	Probable (3)
<b>Significance</b>	High (75)	Low (24)
<b>Status (positive or negative)</b>	Negative	Negative
<b>Reversibility</b>	Yes	Yes
<b>Irreplaceable loss of resources?</b>	Yes	No
<b>Can impacts be mitigated</b>		No
<b>Mitigation:</b> None		
<b>Cumulative impacts:</b> None expected		
<b>Residual Impacts:</b> No residual impacts are expected		
<b>Discussion:</b> The site is environment is degraded due to anthropogenic activities		

## BASIC ASSESSMENT REPORT

<b>NATURE OF IMPACT: DESTRUCTION/ DAMAGE OF PROVINCIALY PROTECTED SPECIES</b>		
	<b>Without Mitigation</b>	<b>With Mitigation</b>
<b>Extent</b>	Provincial (4)	Limited (2)
<b>Duration</b>	Permanent (5)	Short term (2)
<b>Magnitude</b>	Very High (10)	Minor (2)
<b>Probability</b>	Definite (5)	improbable (2)
<b>Significance</b>	Medium (95)	Low (12)
<b>Status (positive or negative)</b>	Negative	Negative
<b>Reversibility</b>	Yes	Yes
<b>Irreplaceable loss of resources?</b>	Yes	No
<b>Can impacts be mitigated</b>		yes
<b>Mitigation:</b> Relocation of species		
<b>Cumulative impacts:</b> With mitigation is low		
<b>Residual Impacts:</b> No residual impacts are expected		
<b>Discussion:</b> Plant relocation management plan to be compiled and no site camps to be established. Rehabilitation of the surrounding area of the landfill site must be executed as soon as construction phase is done.		

<b>NATURE OF IMPACT: EROSION</b>		
	<b>Without Mitigation</b>	<b>With Mitigation</b>
<b>Extent</b>	Local (3)	Limited (2)
<b>Duration</b>	Short term (2)	Short term (2)
<b>Magnitude</b>	Moderate (6)	Minor (2)
<b>Probability</b>	Definite (5)	Highly probable (4)
<b>Significance</b>	Medium (55)	Low (24)
<b>Status (positive or negative)</b>	Negative	Negative
<b>Reversibility</b>	Yes	Yes
<b>Irreplaceable loss of resources?</b>	Yes	No
<b>Can impacts be mitigated</b>		yes
<b>Mitigation:</b> Limit activities to the assessment		
<b>Cumulative impacts:</b> Low with mitigation		
<b>Residual Impacts:</b> No residual impacts are expected		
<b>Discussion:</b> Stormwater management plan to be compiled and submitted and rehabilitation within the immediate and surrounding to prevent continuous erosion .		

## BASIC ASSESSMENT REPORT

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<b>NATURE OF IMPACT: DUST GENERATION AND EMISSION</b>		
	<b>Without Mitigation</b>	<b>With Mitigation</b>
<b>Extent</b>	Local (3)	Very limited (1)
<b>Duration</b>	Short term (2)	Immediately (1)
<b>Magnitude</b>	Moderate (6)	Small (1)
<b>Probability</b>	Highly probable (4)	improbable (2)
<b>Significance</b>	Medium (44)	Low (6)
<b>Status (positive or negative)</b>	Negative	Negative
<b>Reversibility</b>	Yes	Yes
<b>Irreplaceable loss of resources?</b>	Yes	Yes
<b>Can impacts be mitigated</b>		yes
<b>Mitigation:</b> Dust control measures		
<b>Cumulative impacts:</b> Low		
<b>Residual Impacts:</b> No residual impacts are expected		
<b>Discussion:</b> N/A		

<b>NATURE OF IMPACT: CONTAMINATION OF WILGE RIVER</b>		
	<b>Without Mitigation</b>	<b>With Mitigation</b>
<b>Extent</b>	National (5)	Local (3)
<b>Duration</b>	immediate (1)	immediate (1)
<b>Magnitude</b>	Very High (10)	Minor (2)
<b>Probability</b>	Highly probable (4)	improbable (2)
<b>Significance</b>	High (64)	Low (12)
<b>Status (positive or negative)</b>	Negative	Negative
<b>Reversibility</b>	Yes	Yes
<b>Irreplaceable loss of resources?</b>	Yes	Yes
<b>Can impacts be mitigated</b>		yes
<b>Mitigation:</b> Implement storm water management		
<b>Cumulative impacts:</b> Low		
<b>Residual Impacts:</b> No residual impacts are expected		
<b>Discussion:</b>		

## BASIC ASSESSMENT REPORT

Water use licence to applied for with the Department of water and sanitation, Aquatic-biomonitoring assessment to be conducted and water samples to be collected directly at downstream before construction to be tested at a laboratory for water quality monitoring purpose and storm water management plan is implemented to separate rain/run off and dirty water.

### B. OPERATIONAL PHASE

NATURE OF IMPACT: EROSION		
	Without Mitigation	With Mitigation
<b>Extent</b>	Limited (2)	Very Limited (1)
<b>Duration</b>	Long term (4)	Long term (4)
<b>Magnitude</b>	Moderate (6)	Minor (2)
<b>Probability</b>	Highly probable (4)	Probable (3)
<b>Significance</b>	Medium (48)	Low (21)
<b>Status (positive or negative)</b>	Negative	Negative
<b>Reversibility</b>	Yes	Yes
<b>Irreplaceable loss of resources?</b>	Yes	Yes
<b>Can impacts be mitigated</b>		yes
<b>Mitigation:</b> Storm water management plan		
<b>Cumulative impacts:</b> Low		
<b>Residual Impacts:</b> No residual impacts are expected		
<b>Discussion:</b> Aquatic-biomonitoring assessment to be conducted and water samples to be collected directly at downstream before construction to be tested at a laboratory for water quality monitoring purpose and storm water management plan is implemented to separate rain/run off and dirty water.		

NATURE OF IMPACT: LAND USE		
	Without Mitigation	With Mitigation
<b>Extent</b>	Local (3)	Local (3)
<b>Duration</b>	Permanent (5)	Permanent (5)
<b>Magnitude</b>	Moderate (6)	Low (4)
<b>Probability</b>	Definite (5)	Definite (5)
<b>Significance</b>	High (70)	Medium (60)
<b>Status (positive or negative)</b>	Negative	Negative
<b>Reversibility</b>	Yes	Yes
<b>Irreplaceable loss of resources?</b>	Yes	Yes

## BASIC ASSESSMENT REPORT

<b>Can impacts be mitigated</b>	No
<b>Mitigation:</b> Stay within the assessment area	
<b>Cumulative impacts:</b> Medium	
<b>Residual Impacts:</b> No residual impacts are expected	
<b>Discussion:</b> The site is an existing waste facility is already used as the waste facility therefore the land use will remain unchanged except for remainder of assessment area to the west, where the environment is already degraded due to overgrazing and other anthropogenic activities.	

NATURE OF IMPACT: INGESTION OF PLASTIC BY ANIMALS		
	Without Mitigation	With Mitigation
<b>Extent</b>	Local (3)	Local (3)
<b>Duration</b>	Long term (4)	Long term (4)
<b>Magnitude</b>	High (8)	Moderate (1)
<b>Probability</b>	Definite (5)	Highly Probable (4)
<b>Significance</b>	High (75)	Medium (32)
<b>Status (positive or negative)</b>	Negative	Negative
<b>Reversibility</b>	No	No
<b>Irreplaceable loss of resources?</b>	Yes	Yes
<b>Can impacts be mitigated</b>		No
<b>Mitigation:</b> Establish a 1.8meter high fence		
<b>Cumulative impacts:</b> Member		
<b>Residual Impacts:</b> None expected		
<b>Discussion:</b> Municipality to implement annual clean up initiatives around the landfill and have measures to prevent wind blown litter.		

## BASIC ASSESSMENT REPORT

<b>NATURE OF IMPACT: SOCIO-ECONOMIC</b>		
	<b>Without Mitigation</b>	<b>With Mitigation</b>
<b>Extent</b>	Local (3)	Local (3)
<b>Duration</b>	Long term (4)	Long term (4)
<b>Magnitude</b>	Moderate (6)	Moderate (6)
<b>Probability</b>	Definite (5)	Definite (5)
<b>Significance</b>	High (65)	High (65)
<b>Status (positive or negative)</b>	Negative	Positive
<b>Reversibility</b>	No	Yes
<b>Irreplaceable loss of resources?</b>	No	No
<b>Can impacts be mitigated</b>		Yes
<b>Mitigation:</b> A complaints registry should be in place for recordkeeping. If there are issues raised by the labourers, they should be addressed promptly to avoid conflicts		
<b>Cumulative impacts:</b> N/A		
<b>Residual Impacts</b> N/A		
<b>Discussion:</b> The impact is considered positive the municipality intends to hire the locals during the life span of the life span		

### 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)**

The impacts that are expected from the operational phase and construction are to be adequately mitigated provided the recommendation stipulated in the Environmental Management Plan are implemented and adhered to throughout the life span of the proposed project.

#### **REASONED OPINION AS TO WHETHER THE ACTIVITY SHOULD OR SHOULD NOT BE AUTHORISED**

Detailed geohydrological studies was conducted for determining the impact of the proposed project on the water resources in proximity and the outcomes are that a water monitoring plan must be established and carried at the Wilge River and samples to be collected downstream. Additional boreholes were drilled for water monitoring purposes by the recommendation of the Geohydrologist. The technical designs were aligned with minimum requirements for waste disposal by landfill (MR2, 1998) to promote cost effectiveness and pollution prevention on the environment. The current landfill is not fenced off, no restricted access, not clearly demarcated, no security and no monitoring therefore an approval of

## BASIC ASSESSMENT REPORT

the licence will ensure compliance and monitoring conditions to be adhered to will be set by the competent authority.

The Frankfort waste disposal site is regarded as a small site in terms of the Minimum Requirements where more than 25 tons of waste is disposed of daily and it is located inside an old quarry hence the design had to be suitable. The material that are absent for the purpose of layering alternatives are in place. During operation of the site, rehabilitation is to occur progressively throughout the life of the site on completed areas. It is important that land shaping is undertaken correctly from the beginning to avoid returning at the closure of the landfill to conduct further earthworks as this will compromise vegetation that has established itself to that point.

Progressive rehabilitation will include the placement of capping material, consisting of a 300mm thick layer of clay and a further 150mm thick layer of topsoil. The capping material must be distributed evenly, and compaction of the topsoil must be avoided, as this will inhibit vegetation regrowth. The soil should be seeded with indigenous grasses tolerant of methane gas as traces may percolate through the soil from the waste below. The progressive rehabilitation plan will be stipulated in detail in the Landfill Operational Plan.

In an ideal planning for the waste disposal sites applied for, attention during the construction phase of the proposed upgrade would have focused on the diversion of clean storm water away from the waste disposal site and the trapping of contaminated storm water. Leachate collection system and a leachate pond to contain contaminated liquid from the waste body. Leachate collection (pipes) system will be in a fishbone structure. Having said this, it in no way lessens the importance of all the other impacts identified and the need to comply with the mitigation measures associated with each. It would also be essential that a suitable liner, storm water management system, leachate pond and leachate pump be installed according to the engineering design layout plans provided by the engineers.

However, since the sites is an existing site, the environmental impacts associated with this development and the associated mitigation measures were considered, and it is clear that each identified negative impact can be mitigated.

EAP recommend that DESTEA approve the upgrading licensing, so that a properly designed and monitored waste site can be developed by the Municipality.

### **No-Go option:**

**The 'No-Go' option is not feasible for this application as it means that the site will remain as is and the facility will continue operating without proper management and will remain non-compliant .**

## BASIC ASSESSMENT REPORT

### 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	
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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:

All mitigation measures contained in the Draft BAR as well as monitoring and mitigation measures in the EMPr should be adhered to. Should the facility be licensed, then the Operational Plan to be attached hereto as **Appendix G2** should be implemented to ensure that it is operated in an environmentally sensitive manner and the responsibilities and duties of responsible persons are communicated thorough to the relevant personnel.

A Closure plan should be submitted to the relevant competent authority for review and approval should the site be decommissioned/or closed

Is an EMPr attached?

YES	
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The EMPr must be attached as Appendix F.



## BASIC ASSESSMENT REPORT

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### **SECTION F: APPENDICES**

The following appendixes must be attached as appropriate:

Appendix A: Locality Map

Appendix B: Photographs

Appendix E: Comments and Response

Appendix F: Environmental Management Programme (EMPr)

Appendix G1: Readiness Report for Mafube Local Municipality

Appendix G2: Operational Plan for Mafube Local Municipality