

WASTE LICENCE APPLICATION PROCESS FOR WASTE ACTIVITIES IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT:WASTE ACT 2008 (No. 59 of 2008)

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THE WASTE LICENSING APPLICATION PROCESS IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT: WASTE ACT 2008 (No. 59 of 2008) "NEMWA".

PART 1: WASTE ACTIVITIES LICENSING APPLICATION PROCESS EXPLAINED:

Licensing process:

- 1.1.1 The waste licensing process for listed activities under Schedule 1 in the National Environment Management Waste Act 2008 is as defined in the environmental impact assessment (EIA) regulations made under section 24(5) of the National Environment Management Act 2008 (NEMA) No. 107 of 1998.
- 1.1.2 This application form is the official form in terms of Regulation 13 (2) (a) of the EIA regulations R385 of 2006 and must accompany every licence application pertaining to waste activities in terms of NEMWA.

1.2 Where to submit applications

1.2.1 The Minister of Water and Environmental Affairs is the licensing authority in respect of all activities listed in both categories of Schedule 1 of NEMWA pertaining to hazardous waste. The application for a waste licence in terms of section 45 of the National Environment Management Waste Act 2008 (59 of 2008) for hazardous waste activities must be submitted by lodging an application with the National Department of Environment. The application must be marked for the attention of:

The Director: Authorisation and Waste Disposal Management

Private Bag X447 Pretoria 0001 Tel: 012 310 3920 Fax: 012 310 3753

1.2.2 The Member of the Executive Council of a province who is responsible for waste management in the province "MEC" is the licensing authority in respect of all activities listed in both categories of Schedule 1 of NEMWA pertaining to general waste. The application for a waste licence in terms of section 45 of the National Environment Management Waste Act 2008 (No. 59 of 2008) for general waste activities must be submitted by lodging an application with the relevant provincial department and applications must be marked for the attention of the Head of Department in the relevant province at the following addresses:

Head of the Department
Department of Environmental Affairs and Development Planning
Private Bag X 9086
CAPE TOWN
8000

Fax: 021 483 4425 Tel: 021 483 5109 **Head of Department**

Department of Economic Development and Environmental Affairs

Private Bag X 0054

BHISHO

5605

Fax: 040 609 4700 Tel: 040 609 4702

Head of Department

Department of Economic Development Tourism and Environment Affairs

Private Bag X 20801 **BLOEMFONTEIN**

9300

Fax: 051 400 4772 Tel: 051 400 4917

Head of Department

Department of Agriculture and Rural Development

P.O. Box 8769

JOHANNESBURG

2000

Fax: 011 333 0667 Tel: 011 355 1927

Head of Department

Department of Agriculture Environmental Affairs and Rural Development

Private Bag X 9059
PETERMARITZBURG

3200

Fax: 033 355 9593 Tel: 033 355 9621

Head of Department

Department of Economic Development, Environment and Tourism

Private Bag X 9484 **POLOKWANE**

0700

Fax: 015 291 5809 Tel: 015 291 5447

Head of Department

Department of Economic Development Environment and Tourism

Private Bag X 11219

NELSPRUIT

1200

Fax: 013 766 8445 Tel: 013 766 6063 Head of Department
Department of Agriculture, Conservation and Rural Development
Private Bag X 2039
MMABATHO

2735

Fax: 018 389 5006 Tel: 018 389 5341

Head of Department
Department of Environmental Affairs and Nature Conservation
Private Bag X 6102
KIMBERLEY
8300

Fax: (053) 807 7367

1.3 Making an Application

- 1.3.1 The applicant must fill in <u>all</u> relevant sections of this form. Incomplete applications will not be processed. The applicant will be notified of the missing information in the acknowledgement letter that will be sent within 14 days of receipt of the application. Sections in the form that do not apply to the applicant must be marked "not applicable"
- 1.3.2 There is no prescribed fee.
- 1.3.3 This application form is in effect as of 01 July 2009. It is the responsibility of the Applicant/Environmental Assessment Practitioner "EAP" to ascertain whether subsequent versions of the form have been published or produced by the licensing authority. It is the applicant's responsibility to download the current version of the application form from the South African waste information centre website (www.sawic.org.za).
- 1.3.4 The application form may be submitted electronically and four hard copies of the form must be submitted to the Directorate: Authorisation and Waste Disposal Management where the national department is the licensing authority. The applicant must contact the relevant provincial office regarding the number of copies required to process the application where provincial departments are the licensing authorities. All application forms must be signed as stipulated in the form. Applications that are not signed or completed accordingly will not be considered.
- 1.3.5 Where the national department is the licensing authority, all applications forms must be accompanied by four copies of reports and other documents required in terms of the EIA Regulations.
- 1.3.6 Where the provincial department is the licensing authority, all applications forms must be accompanied by the number of copies required by that province for reports and other documents required in terms of the EIA Regulations.

1.3.7 The applicant must clearly mark confidential sections of the information submitted in the application form and supporting documents. All other information will become public information on receipt by the licensing authority.

2. **DEFINITIONS**:

2.1 Definitions in this form are as per EIA Regulation in terms of Chapter 5 of the National Environmental Management Act, 1998 and waste management activities list in terms of the National Environmental Management: Waste Act 2008, No. 59 of 2008.

3. THE WASTE LICENSING APPLICATION STAGES:

3.1 Stage 1: Pre-application

Before making an application:

- The applicant must appoint an EAP in terms of EIA regulations
- The EAP must comply with general requirements as given in EIA regulations
- The EAP may be disqualified in terms of EIA regulations

3.2 Criteria for determining whether basic assessment or scoping is to be applied to applications

- 3.2.1 Basic assessment must be applied to an application if the authorisation applied for is in respect of an activity listed in Category A in schedule 1 of the NEMWA (59 of 2008).
- 3.2.2 Scoping and EIA must be applied to an application if the authorisation applied for is in respect of an activity listed in Category B in schedule 1 of the NEMWA (59 of 2008).



WASTE LICENCE APPLICATION FORM

PART 2: APPLICATION FORM FOR NEW LICENCE

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	(For official use only)
File Reference Number:	
Date Received:	
Classification:	

WASTE LICENCE APPLICATION FORM

in terms of the National Environmental Management: Waste Act, 2008 (No. 59 of 2008)

THE APPLICATION FORM MAY BE TYPED OR HAND-WRITTEN.

SECTION 1 – TYPE OF APPLICATION AND FACILITY:

Indicate the type of application by marking with a cross and fill in the required sections only

TYPE OF APPLICATION	MARK	SECTIONS OF THE FORM TO BE FILLED IN					
A new licence	Х	Part 2 and see table of activities below for relevant sections of part 2					
A licence amendment		Part 3 and Part 2 only if there are changes to the information or the applicant holds a permit issued in terms of section 20 of ECA (No. 78 of 1989) as amended.					
A licence for closure		Part 4, Section 2, 3a, 3b, & 3c. of part 2 of this application form					

Indicate the type of facility/operation and fill in the required sections only

TYPE OF ACTIVITY	MARK	SECTIONS OF THE FORM TO BE FILLED IN					
Recycling and/or recovery Facility		All except Section 8					
Storage and or transfer Facility		All except Section 8					
Treatment facility	x	All except Section 8					
Disposal facility		All					

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Activities applied for

An application may be made for more than one listed or specified activity that, together, make up one development proposal. All the listed activities that make up this application must be listed.

INDICATE THE NO. & DATE OF THE RELEVANT NOTICE:	ACTIVITY NUMBERS (AS LISTED IN THE WASTE MANAGEMENT ACTIVITY LIST):	DESCRIBE EACH LISTED ACTIVITY:
Notice No. 718, 3 July 2009	Category A, Activity 19	The expansion of facilities of or changes to existing facilities for any process or activity which requires an amendment of an existing permit or licence or a new permit or licence in terms of legislation governing the release of pollution, effluent or waste.
Notice No. 718, 3 July 2009	Category B, Activity 1	The storage including the temporary storage of hazardous waste in lagoons.
Notice No. 718, 3 July 2009	Category B, Activity 4	The biological, physical or physico-chemical treatment of hazardous waste at a facility that has the capacity to receive in excess of 500kg of hazardous waste per day excluding recovery that takes place as an integral part of an internal manufacturing process within the same premises or unless the Minister has approved re-use guidelines for the specific waste stream.
Notice No. 718, 3 July 2009	Category B, Activity 5	The treatment of hazardous waste using any form of treatment regardless of the size or capacity of such a facility to treat such waste.
Notice No. 718, 3 July 2009	Category B, Activity 6	The treatment of hazardous waste in lagoons.
Notice No. 718, 3 July 2009	Category B, Activity 7	The treatment of effluent, wastewater or sewage with an annual throughput capacity of 15 000 m³ or more.
Notice No. 718, 3 July 2009	Category B, Activity 11	The construction of facilities for activities listed in Category B of this Schedule (not in isolation to associated activity).

NB: Authorisation issued will only cover activities applied for and listed above. Activities added in the middle or after the processing of this authorisation may mean a totally new application.

Application for Category A (equivalent to Basic Assessment)

Is this an application for a basic assessment (as defined in the EIA regulations)?

If, YES, is a basic assessment report attached? $\,$ n/a $\,$

YES	NO
YES	NO

n/a		
Is information required as per Appendix B1 of this form attached? n/a	YES	NO
If, NO, please ensure that it is submitted together with the basic assessment report (BAR) n/a		

Application for Category B (equivalent to Scoping and Environmental Impact Assessment (EIA))

Is this an application for Scoping and EIA (as defined in the EIA regulations)?

YES NO

Please indicate when the Scoping Report and Plan of Study for EIA will be submitted:

Scoping Report, including Plan of Study for EIA, will be submitted once the scoping phase (comprising specialist studies, public participation and compilation of ESR) has been completed.

Please ensure that both Appendix B1 and B2 are completed and included in reports

The scoping report and/or the plan of study for EIA will be submitted after consultation with the competent authority.

YES	NO
YES	NO

A consultation with the competent authority is hereby requested:

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SECTION 2: SITE IDENTIFICATION, LOCATION AND LANDUSE

Please indicate all the Surveyor-general Cadastral Code 21 digit site (erf/farm/portion) reference numbers:

T	0	L	Т	0	0	0	0	0	0	0	0	0	0	1	6	1	0	0	0	0
1		2	2			3	3		4				ļ	5						

LEGEND

- 1. Refers to the Surveyor's-General Office (T = Pretoria, F = Free State, C = Cape Town & N = Kwazulu-Natal)
- 2. Major Code (Registration Division)
- 3. Minor code
- 4. Property No (i.e. Farm No./Erf No./Holding Area No./Sheme No.)
- 5. Portion Number

If the property type is not surveyed, complete the following:

Full name of leader of village, community or tribal authority	
Local Authority	
Magisterial District	
Tribal Authority/Council	

Ownership of the property (mark only one with an X)

Property owned by applicant (100% Share value)	Property leased by applicant		1
Property owned by applicant (Share value less than 100%)	The property is communal land	X	

Size of Site and Classification

Size of facility for a waste management activity

Area where the waste management activity takes place

Classification of facility in terms of climatic water balance

Classification of Facility in terms of the type and the quantity of waste received

1 329 kilolitres per day
± 6 750 m ²
N/a - not a landfill site
Sewage treatment works

Current land-use where the site is situated:

	•	
Industrial	Recreation	
Agriculture	Commercial	
Residential	Mining & quarrying	
Forestry	Wilderness areas	
Wetlands	Nature area	
Open spaces		

Other current land-use: Existing sewage treatment plant

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

Must a building plan be submitted to the local authority for approval?

Number of corner

MARK YES/NO	SECTION IN THE REPORTS WHERE RELAVANT AUTHORISATION IS ATTACHED
No	N/a
Yes	Building plans still need to be submitted to the municipality for approval

Longitude East

Geographical coordinates of all external corner points of the site:

Latitude South

1 (North-Eastern corner) 2	23° 2	4' 12.48'	30°	10'	14.29"	
2 (South-Eastern corner)	23° 2	4' 17.33'	30°	10'	11.45"	
3 (South-Western corner)	23° 2	4' 16.47"	30°	10'	09.16"	
4 (North-Western corner)	23° 2	4' 11.65'	30°	10'	11.76"	
Site Address:						
			0 51		(0.1	_
Building Name or Number		College)	Sewage Pla	ant (on the premise	es of Sekgosese	
Street		R81 (Mooketsi-C	iyani road)			
City/Closest Town		Senwamokgope				
Province		Limpopo Provinc	e			
Local Municipality		Greater Letaba Municipality				
District Municipality Property Description (Deeds Act or name of farm, town, city or agricultural holding		Mopani District Municipality				
		Farm Roerfontein 161-LT				
Postal address		Private Bag X96	87			
		Giyani				
Postal code:		0826	Cell:	072 612 3289 (M Mopani District M	Nashudu Mandiwana – Nunicipality)	
Telephone:		015 811 6300	Fax:	086 566 7112	, ,,	
E-mail:				Mashudu Mandiwa	20)	
E-man.		<u>shuduma@webi</u>	iiaii.co.za (i	viastiudu iviatidiwa	na)	-
Local authority in whose jurisdiction the activity will fall:	he proposed	d Greater Letaba Municipality				
Contact person:	Mr William Molokomme (HOD: Technical Services)					
Postal address:		PO Box 36, Mod	jadjiskloof			
Postal code:		0835	Cell:	079 872 4192		
Telephone:		015 309 9246	Fax:	015 309 9419		
E-mail:		william@glm.gov	72			

In instances where there is more than one local authority involved, please attach a list of local authorities with the contact person and contact details to this application.

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SECTION 3: CONTACT INFORMATION

A) Person to contact about application (EAP)

First name & Surname	Louise Agenbag			
Company name (if any):	Polygon Environn	Polygon Environmental Planning		
Company Registration/Identity number for individuals	2007/049025/23	2007/049025/23		
Physical address:	21C Peace Street	t		
	Tzaneen			
Postal address:	PO Box 1935			
	Tzaneen			
Postal code:	0850	Cell:	083 339 2731	
Telephone:	015 307 3606	Fax:	015 307 3080	
Email Address	louise@polygon.c	0.za		
•		co.za		

Email Address	louise@polygor	1.CO.Za		
B) Person wishing to hold licence				
First name & Surname of Applicant	N/a			
Company name (if any):	Mopani District Municipality			
Company Registration/Identity number for individuals	N/a			
Physical address	Government Buildings			
	Main Road, Giyani			
Postal address	Private Bag X96	887		
	Giyani			
Postal code:	0826	Cell:	072 612 3289 (Mashudu Mandiwana)	
Telephone:	015 811 6300	Fax:	086 566 7112	
E-mail:	shuduma@webmail.co.za (Mashudu Mandiwana)			

C) Landowner where activity takes place

First name & Surname	Kgoši Mamaila K.S.			
Company name (if any):	Mamaila Royal Council / Nahakwe Community Development Trust			
Company Registration/Identity number for individual(s)	IT 112/07 (Trust registration number)			
Physical address	Mamaila Traditional Authority office			
	Mamaila Village			
Postal address	PO Box 493, Paulusweg			
	0814	Cell:	082 570 2829	
Telephone:	None	Fax:	086 516 3225 (care of Mr Lefa Mogale of the Royal Council)	
E-mail:	lefamogale@yahoo.com (care of Mr Lefa Mogale of the Royal Council)			

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Operational times

PERIOD	FROM	UNTIL
Weekdays	The sewerage treatment facility will be operational 24 hours per day, 7 days per week.	
Saturdays		
Sunday		
Public holidays		

SECTION 4: PROCESS/ACTIVITY DESCRIPTION:

Project Title

Proposed upgrading of the existing Senwamokgope sewerage treatment plant on part of the farm Roerfontein 161-LT in the Greater Letaba municipal area, Limpopo Province.

Project Description:

Please provide a brief description of the activities and operations at the site. Provide a flow chart of the operation showing all inputs and outputs of the process. Give particulars of the source, location, nature, composition and quantity of emission to the atmosphere, surface water, sewer, and ground-water including noise emissions. Solid waste must be in tons and specify units for liquids and gases.

The existing Senwamokgope sewerage plant and reticulation system are proposed to be upgraded.

Existing infrastructure

The existing sewage plant consists of six oxidation ponds, which are supposed to receive wastewater from Senwamokgope community, but only the first pond receives wastewater emanating from the Sekgosese Secondary school only. There is a pipe break or blockage in the main outfall sewer (160mm dia) between Senwamokgope village and the Sekgosese Secondary school. According to the Mopani District Municipality's latest WSDP, Senwamokgope had 1 391 households in December 2008 and a population of 6 003. The WSDP does not indicate how many households still need to be connected, but the Technical Manager at the Greater Letaba Municipality (GLM) mentioned that only about 200 stands are currently connected to the sewerage infrastructure. This indicates a need for a properly planned sewer reticulation system of the whole Senwamokgope area.

The existing 200 stands plus the school which are currently connected to the main sewer outfall yields an estimated effluent of 200 x 0.5 kl/d = |00k|/day plus school with 710 pupils x |40l|/day = 28.4 kl/day. This totals 128.4 kl/day. Presently only the estimated 28.4 kl/day from the school reaches the first primary pond. The treatment works can be described as a facultative pond system and consist of the following elements:

Inlet structure with manually raked coarse screen and grit channels.

	Total	5 156 m ²	7 735 m ³
•	pump station		_
•	Tertiary pond no. 3	210 m ²	315 m³
•	Tertiary pond no. 2	350 m ²	526 m ³
•	Tertiary pond no. 1	336 m ²	504 m ³
•	Secondary pond no.2	570 m ²	855 m³
•	Secondary pond no.1	780 m ²	1 170m³
•	Primary Pond	2 910 m ²	4 365 m ³

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The capacity of the above system is approximately 200 kl/day. The shortfall in treatment capacity can be summarized as follows:

Senwamokgope Sewage Plant: Design capacity (pond system): 200 kl/d

Present average dry weather flow: 1 062 kl/d
Future average dry weather flow: 1 329 kl/d
Future shortfall: 1 129 kl/d
% overload: 565 %

The facultative ponds are generally maintained but due to the pipe blockage only the primary pond obtains wastewater from the Senwamokgope Secondary school. The following comments were made by officials from the Department of Environmental Affairs and GLM during a site inspection dated 24 July 2008:

- There is no operational plan and a license for the site.
- It has been three years since the blocked pipe has not been functioning.
- Wastewater from the main outfall is discharged to the ground next to the residential area.
- The area were the wastewater is discharged is not fenced to prevent unauthorized access, and it is accessible to the community.
- A foul odour emanates from the wastewater which might well cause a health hazard to the neighbouring township of Senwamokgope.
- There is no wastewater analysis done as there is no final effluent.
- Upgrading of the sewage plant and rehabilitation and new connection of the sewer reticulation network is proposed to eliminate the concerns. Other measures include obtaining a water license and developing an operational plan.

There is no wastewater analysis. Waste water analysis is required from raw sewage for the process design of a sewage plant and monitoring analysis from final effluent is required for controlling the performance of the plant. There is currently no final effluent. Effluent from pond systems that is not properly functioning can contain high concentrations of algae and faecal coliforms. This may result in the quality of the effluent discharged from oxidation pond systems not to conform to the General Quality Standards as stated in the Water Act and the direct return to a water course is therefore not permitted.

Proposed upgrading

The main objectives of the project can be set out as follows:

- To provide a properly planned sewage system that will provide for future development of the Senwamokgope area and will comply with the regulations of the National Water Act and requirements of the Department of Water Affairs.
- To minimize the possibility of pollution and contamination of groundwater sources and to reduce the risk of outbreak of waterborne diseases.
- To increase the re-useable potential of the effluent.
- To empower the local municipality for sustainable development and upliftment of living standards through the development of an improved and properly planned sewage treatment system. This will allow the municipality to provide a sustainable and cost effective service to the community.
- To provide accredited training programmes to train treatment plant operators in the proposed treatment processes and to operate and maintain the sewage treatment plant.
- Provide employment opportunities in the project area by using labour intensive construction methods where feasible, and utilizing local contractors.

There are two aspects that need to be addressed as follows:

- Provide a waterborne sewerage system to all the present households and ensure the reticulation of the system and main outfall is adequate to accommodate the total expected future peak flow.
- Upgrade the existing oxidation pond system to treat the sewage to the required standards as per the National Water Act

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Phase 1 comprises the reticulation of area A (643 stands + schools, businesses etc.) and increasing the capacity of the plant from 200kl/d to the required 1 329 kl/day.

Phase 2 involves the reticulation of the rest of the area, area B and can be catered for in future. The implementation of this phase is of importance in order to resolve the present pollution to the substratum in the area.

Sewage treatment

The Bio-filter ("Trickling Filter") process is proposed. This is a high-rate filter which is characterized by higher hydraulic loadings. This process employs high recirculation whereby the filter effluent is returned to and reapplied onto the filter increasing the contact time of the waste with the microorganisms and also helping to seed the lower portion of the filter with active organisms. This process would be compatible with the existing site condition, as the existing primary pond will be converted to an anaerobic reactor digester to cover the function of the primary settling tank as well as a sludge digester. The sludge from the humus tank (final clarifier) is also collected and pumped to the anaerobic reactor for digestion.

The Bio-filter process has the benefits of its simple and reliable process that is suitable for less land requirement. It's appropriate for small to medium-sized communities and effective in treating high concentrations of organic material depending on the type of media. Other benefits include low power requirements and moderate level of skill and technical expertise needed to manage and operate the system.

The proposed project is based on the Bio-filter process and will mainly comprise the following:

- Rehabilitate existing sewage system to accommodate new project.
- Upgrade the existing inlet structure and install a partial flume to measure the flow.
- Incorporate an anaerobic reactor-digester in the existing sewage system to cover the functions of primary sedimentation tank and sludge digester.
- Construct a bio-filter and a new humus tank (secondary clarifier).
- Construct new sludge disposal facilities (sludge drying beds).
- Employ chlorination dosing for sterilization of final effluent.
- Make use of the existing ponds as maturation ponds to polish the effluent.

It is proposed to upgrade the design capacity of the sewerage treatment works as follows:

Senwamokgope Sewage Plant From 200 kl/day to 1 329 kl/d : 8.3 kl/h to 55.4 kl/h

General

<u>Flow chart:</u> Currently no flow chart is available of the facilities that are proposed to be established onsite. This will be designed during the Design Phase, at a later stage of the project, and will be submitted to DEA once the design has been completed.

Source: Domestic sewage emanating from the Senwamokgope township which surrounds the sewerage system.

<u>Location:</u> The sewerage system is situated on the Farm Roerfontein 161-LT and final treated effluent is proposed to be released into the Middle Letaba River. Currently there is no final effluent which is released from the existing sewage system.

<u>Composition</u>: Currently, there is no final effluent emanating from the existing sewage plant, and it was therefore not possible to test the composition of such effluent. Details regarding the expected composition of effluent from the proposed upgraded system will be provided to DEA in the Environmental Scoping Report and/or the Environmental Impact Report at a later stage in the Environmental Impact Assessment, as such detailed information is not currently available. Effluent will be treated up to the standards set by the Department of Water Affairs.

Quantity: Currently, 200 kilolitres per day (which translates to 8.3 kl/hour). This is proposed to be increased to 1 329 kl/day (55.4 kl/hour).

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SECTION 5: WASTE QUANTITIES

Indicate or specify types of waste and list the estimated quantities expected to be managed daily (should you need more columns, you are advised to add more)

Hazardous waste	Non hazardous waste	Total waste handled (tonnes per day)
Sewage – 1 329 kilolitres per day (future average dry weather flow)	N/a	1 329

Source of information supplied in the table above Mark with an "X"

Determined from volumes
Determined with weighbridge/scale
Estimated

Χ	

Recovery, Reuse, Recycling, treatment and disposal quantities:

Indicate the applicable waste types and quantities expected to be disposed of and salvaged annually:

TYPES OF WASTE	MAIN SOURCE (NAME OF COMPANY)	QUANTITIES		(NAME OF RECYCLING TREATMENT OR		OFFSITE RECOVERY REUSE RECYCLING TREATMENT OR DISPOSAL	OFFSITE DISPOSAL
		TONS/ MONTH	M³/ MONTH	method & location	method location and	contractor details	
Sewage	N/a – sewage generated by Senwamokgope community	39 870 tons per month	39 870 m ³ per month	Method: Biofilter ("trickling filter") treatment process Location: Senwamokgope sewage treatment works	N/a	Disposal of treated effluent into nearby Middle Letaba River	

SECTION 6: GENERAL

Prevailing wind direction (e.g. NWW)

There is no weather station at Senwamokgope, therefore data is provided for the three closest stations:

- **Tzaneen** (± 47km north-west of Senwamokgope)

- **Thohoyandou** (± 57km north-east of Senwamokgope)

- Mara (± 66km north-west of Senwamokgope)

November - April

May - October

Tzaneen: NE Thohoyandou: SE Mara: E

Tzaneen: S Thohoyandou: W Mara: E

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The size of population to be served by the facility

	Mark with "X"	Comment
0-499		
500-9,999	x	Population served: estimated at 6 003 (year 2008 population figures), escalating by an estimated 1% per year. Population served is expected to grow to 6 309 (year 2013), 6 631 (year 2018), 6 969 (year 2023) and 7 325 (by the year 2028).
10,000-199,999		
200,000 upwards		

The geological formations underlying the site:

Granite	Quartzite	
Shale	Dolomite	
Sandstone	Dolerite	

Other: Gneiss

SECTION 7: COMPETENCE TO OPERATE SITE

It is imperative that the holder of the waste licence is a fit person in terms of section 59 of the NEMWA (59 of 2008). To assess the holder's competence to operate the site, please disclose the following:

Legal compliance

Has the applicant ever been found guilty or issued with a non compliance notice in terms of any national environmental management legislation?

Has the applicant's licence in terms of the Waste Act 2008 ever been revoked?

Has the applicant ever been issued with a non compliance notice or letter in terms of any South African Law?

√la
I/a
I/a

<u>NB</u>: Details required above include any information that the applicant wants the Department to take into consideration in determining whether they are a "fit person" and this includes reasons why the offence happened and measures in place to prevent recurrence

Technical competence

What technical skills are required to operate the site?

No specific technical experience is required, although prior experience in operation of a sewerage treatment plant will be advantageous. The person who is appointed to operate the site on a day to day basis will be **trained** after appointment. It is not yet known which institution will provide the technical training to the operator; information in this regard can be provided to DEA at a later stage in the process.

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How will the applicant ensure and maintain technical competency in the operation of the site? The operator of the site MUST be trained before he / she commences their duties. Continued training should be provided in the form of relevant courses and workshops to develop the operator's skills further. A technical support system must be in place whereby the operator can report any incidents and obtain guidance in cases where he / she is unsure how to handle a situation. The operator must have regular meetings with their manager/s in order to discuss challenges and incidents and in order to facilitate skills transfer from the manager/s to the operator in terms of proper management of a sewerage treatment site.

Details of applicant's experience and qualification along with that of relevant employees must be summarised as shown in the table below:

NAME	POSITION	DUTIES AND RESPONSIBILITIES	QUALIFICATIONS AND EXPERIENCE
Mopani District Municipality (MDM)	Water Services Provider	Owner and operator of the sewerage plant	Owner and operator of a number of sewerage treatment plants throughout MDM
Ms Albertina Rammalo	Water Service Manager at Mopani District Municipality	Responsible for all water and sanitation services at MDM	Education: National Diploma in Water Care Technology Experience: More than 8 years experience in water services
Mr MP Ngobeni	Operator of Senwamokgope sewerage plant	Day to day operation and maintenance	Education: Grade 7 Experience: 16 years experience as sewerage plant operator

Financial Provisions

Provide a plan of estimated expenditure for the following:

	ATTACHED / NOT ATTACHED	SECTION OF	THE REPORT WHERE IT I	S ATTACHED				
Environmental Monitoring	Not attached	process, eith Impact Repo - Grour - Surfac - Enviro and W	A detailed plan of estimated expenditure will be submitted to DEA at a later stage of the process, either with the Environmental Scoping Report (ESR) or with the Environmental Impact Report (EIR). Environmental monitoring costs will relate to the following: - Groundwater quality monitoring - Surface water quality monitoring (nearby streams) - Environmental compliance monitoring (compliance with EMP, Water Use Licence and Waste Licence) - Periodic environmental auditing may also be required					
Provision and	Attached – see	Operation a	and Maintenance Cas	h Flow Projection (next	5 years):	1		
replacement of infrastructure	next column	Period / Term	Expected Operating Cost (1)	Expected Maintenance Cost (2)	Total O & M Cost (3=1+2)			
		Year 1	974,200	154,528	1,128,728			
		Year 2	1,032,652	163,800	1,196,452			
		Year 3	1,094,611	173,628	1,268,239			
		Year 4	1,160,288	184,046	1,344,334			
		Year 5	1,229,905	195,089	1,424,994			
		Total	5,491,656	871,091	6,362,747			
Restoration and aftercare	Not attached	with the EIR operation (e	. Costs will relate to si	diture will be submitted to te restoration after constru of alien vegetation) and re	uction, site care durir	ng		

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SECTION 8: LANDFILL PARAMETERS

n/a				
The method of dis	posal of was	ste:		
Land-building		Land-filling E	Both	
The dimensions o	f the disposa	al site in metres		
		At commencement	After rehabilitation	
Height/Depth				
Length				
Breadth				
The total volume a	vailable for	the disposal of waste on the site	e :	
Volume Available	Mark with "X"	Source of information (Determined by su	rveyor/ Estimated)	
Up to 99				
100-34 999				
35 000- 3,5 million				
>3,5 million				
The total volume a	already used	l for waste disposal:		
(a) Will the waste boo	dy be covered da	aily	YES	NO
(b) Is sufficient cover	material availab	ble	YES	NO
(c) Will waste be com	pacted daily		YES	NO
		No, what measures will be employ eneration of nuisance?	yed to prevent the pr	oblems of burning or
The Salvage meth	od			
Mark with an "X" the	e method to b	pe used.		
Recycling installation	on			
Formal salvaging				
Contractor				
Contractor				

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anagem	ent activity:
YES	NO
	metres
	metres
	YES YES YES YES YES YES YES YES

No salvaging planned

For the wettest six month period indicated above, indicate the following for the preceding 30 years

	Total rainfall for 6 months	Total A-pan evaporation for 6 months	Climatic water balance
For the 1 st wettest year			
For the 2 nd wettest year			
For the 3rd wettest year			
For the 4 th wettest year			
For the 5 th wettest year			
For the 6 th wettest year			
For the 7 th wettest year			

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For the 8 th wettest year		
For the 9 th wettest year		
For the 10 th wettest year		

Location and depth of ground water monitoring boreholes:

Codes of	Borehole	Depth	Latitude			Long	gitude	
boreholes	locality	(m)						
			0	'	"	0	'	"
			0	'	"	٥	'	"
			0	'	"	٥	'	"
			0	'	"	٥	'	"
			0	,	"	0	,	"
			0	,	"	o	'	"
			0	,	"	o	'	"
			0	'	"	٥	'	"
			0	,	"	o	'	"
			0	'	"	0	'	"
			0	,	"	٥	'	"

Location and depth of landfill gas monitoring test pit:

Borehole locality	Latitude		L	ongitude		
 	٥	•	"	o	'	"
 	٥	'	"	0	•	"
 	٥	'	"	0	'	"
 	0	•	"	0	•	"
 	٥	'	"	0	'	"
 	٥	•	"	0	•	"
 	0	•	"	0	'	"

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SECTION 9: DECLARATIONS

The independent Environmental Assessment Practitioner

I, ______, declare under oath that I –

- act as the independent environmental assessment practitioner in this application;
- do not have and will not have any financial interest in the undertaking of the activity, other than remuneration for work performed in terms of the Environmental Impact Assessment Regulations, 2006;
- have and will not have no vested interest in the proposed activity proceeding;
- have no, and will not engage in, conflicting interests in the undertaking of the activity;
- undertake to disclose, to the competent authority, any material information that have or may have the potential to
 influence the decision of the competent authority or the objectivity of any report, plan or document required in terms of
 the Environmental Impact Assessment Regulations, 2006;
- will ensure that information containing all relevant facts in respect of the application is distributed or made available to
 interested and affected parties and the public and that participation by interested and affected parties is facilitated in
 such a manner that all interested and affected parties will be provided with a reasonable opportunity to participate and
 to provide comments on documents that are produced to support the application;
- will ensure that the comments of all interested and affected parties are considered and recorded in reports that are submitted to the competent authority in respect of the application, provided that comments that are made by interested and affected parties in respect of a final report that will be submitted to the competent authority may be attached to the report without further amendment to the report;
- will keep a register of all interested and affected parties that participated in a public participation process; and
- will provide the competent authority with access to all information at my disposal regarding the application, whether such information is favourable to the applicant or not.

Signature of the Environmental Assessment Practitioner:
Polygon Environmental Planning
Name of company:
Date:
Signature of the Commissioner of Oaths:
Date:
Designation:
Official stamp (Above)

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The Applicant

I. declare under oath that I -

- Am, or represent, the applicant in this application;
- appointed the environmental assessment practitioner as indicated above to act as the independent environmental assessment practitioner for this application;
- will provide the environmental assessment practitioner and the competent authority with access to all information at my disposal that is relevant to the application;
- will be responsible for the costs incurred in complying with the Environmental Impact Assessment Regulations, 2006, including but not limited to –
- costs incurred in connection with the appointment of the environmental assessment practitioner or any person contracted by the environmental assessment practitioner;
- costs incurred in respect of the undertaking of any process required in terms of the regulations;
- costs in respect of any fee prescribed by the Minister in respect of the regulations;
- · costs in respect of specialist reviews, if the competent authority decides to recover costs; and
- the provision of security to ensure compliance with conditions attached to an environmental authorisation, should it be required by the competent authority;
- will ensure that the environmental assessment practitioner is competent to comply with the requirements of these regulations;
- am responsible for complying with the conditions of any environmental authorisation issued by the competent authority;
- hereby indemnify, the government of the Republic, the competent authority and all its officers, agents and employees, from any liability arising out of the content of any report, any procedure or any action for which the applicant or environmental assessment practitioner is responsible in terms of these regulations; and
- will not hold the competent authority responsible for any costs that may be incurred by the applicant in proceeding with an activity prior to an appeal being decided in terms of these regulations.

Signature of Applicant
Name of company:
Date:
Signature of the Commissioner of Oaths:
Date:
Designation:
Official stamp (Above)

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APPENDIX: A1

Information needed when applying for scheduled activities listed under Category A, but is not limited thereto:

Basic Assessment Report which must include supplementing documentation such as:

Description of the environment that may be affected by the proposed activity and the manner in which the geographical, physical, biological, social, economic and cultural aspects of the environment may be affected by the proposed activity Description of significant environmental impacts, including cumulative impacts, that may occur as a result of the undertaking of the activity

Conducting public participation as outlined in EIA Regulations

Waste disposal facility designs

Closure plan (report)

Operational plan

All applicable legislation, policies and/or guidelines

End-use plan (only apply to site landfill closure)

Closure/Remedial designs (only apply to the landfill closure)

Latest external audit report (only apply for permit amendment)

Application and report documents (four hard copies for all applications)

A3 size layout plans (four hard copies for all applications)

Landfill conceptual designs (only apply for construction and decommissioning of landfill sites)

Geo-hydrological report (only apply to landfill sites, storage facilities and treatment of waste)

Consideration of alternatives

Description of mitigation measures and risk assessment

Any inputs made by specialists to the extent that may be necessary

Any specific information as may be required by the competent authority

Information needed when applying for scheduled activities listed under Category B, but is not limited thereto:

Scoping and Environmental Impact Assessment Report which should include:

Description of the environment that may be affected by the proposed activity and the manner in which the geographical, physical,

biological, social, economic and cultural aspects of the environment may be affected by the proposed activity

Description of significant environmental impacts, including cumulative impacts, that may occur as a result of the undertaking of the activity

Conducting public participation as outlined in EIA Regulations

Closure plan (report)

Operational plan

Waste disposal facility designs

End-use plan (only apply to site closure)

Closure/Remedial designs (only apply to site closure)

Latest external audit report (only apply to permit amendment)

Application and report documents (four hard copies for all applications)

A3 size layout plans (four hard copies for all applications)

Landfill conceptual designs

Geo-hydrological report (only apply to landfill sites, storage and treatment of waste)

Consideration of alternatives

Description of mitigation measures and risk assessment

Any inputs made by specialists to the extent that may be necessary

Any specific information as may be required by the competent authority

Plan of study for environmental impact assessment which must among others include:

Description of the tasks to be undertaken as part of the environmental impact assessment process, including specialist report or specialized processes, and a manner in which such tasks will be undertaken

An indication of stages of stages at which the competent authority will be consulted

Description of methods for assessing issues and alternatives, including the no-go alternative

Particulars of participation process that will be conducted during the EIA process

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APPENDIX B1

The following MUST be included in the application as supporting documentation and the applicant must indicate specific section(s) where they are appended in the reports.

REQUIRED PIECE OF INFORMATION	SECTION IN THE REPORTS WHERE IT CAN BE FOUND	COMMENTS (If any)
Extremely clear Google Earth colour picture of the site (dated not more than a month from the date of the application)	Appendix A	
1:50 000 topography /topo-cadastral map of the area showing	Appendix A.	
2.1 the site and 5km radius	Appendix A.	
2.2 Existing residential and industrial areas	Appendix A. Please refer to aerial photograph, which is much more recent than the 1:50 000 topographical map and shows expansion of Senwamokgope which is not indicated on the topographical map.	
2.3 Possible future development (indicate the type of development)	Unknown. The local municipality will be engaged in the EIA process, and information will be requested from them regarding proposed future developments in the area.	
2.4 Other waste handling sites (existing or closed) in the area	None	
2.5 Existing and possible future residential areas.	Existing residential areas indicated on aerial photograph (Appendix A). The 1:50 000 map that is available is outdated – the township of Senwamokgope has expanded to cover a much larger area than is indicated on the topographical map. The developed areas can be seen on the (very recent) aerial photograph. The local municipality will be engaged in the EIA process, and information will be requested from them regarding proposed future residential developments in the area.	
2.6 Sites which are listed as national monuments or archaeological, paleontological and cultural historical sites or objects worthy of conservation.	No archaeological sites found on or in the direct vicinity of the site.	
3. Security and access aspects of the site	Access indicated on aerial photograph. Security aspects to be addressed during the course of the process.	
The site plan drawn to scale showing the site's boundary showing:	The detailed site plan will be drawn up during the course of the process.	
4.1 Activities or development existing in all 4 directions of the site.	Appendix A	
4.2 Waste receipt, storage and handling areas	n/a	
4.3 Impermeable surfaces	Detailed design to be submitted to DEA at a later stage in the process	
4.4 Sealed drainage systems		
4.5 Drainage system for the site including sumps and discharge points		
4.6 Road names and access from all major roads in the area	Appendix A	
4.7 Land Owner's consent (letter with signature)	Appendix B	
5. Waste hierarchy implementation plan	To be compiled at a later stage in the process and submitted to DEA either with the Environmental Scoping Report (ESR) or with the Environmental Impact Report (EIR).	
6. Emergency preparedness plan	To be compiled at a later stage in the process and submitted to DEA either with the ESR or with the EIR.	

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APPENDIX B2

The following MUST be included in the application documentation for landfill sites and the applicant must indicate specific section(s) where they are appended in the reports.

Not applicable – application <u>not</u> for a landfill site

	SECTION IN THE REPORTS WHERE IT CAN	2011-1-1-2 (1)
REQUIRED PIECE OF INFORMATION	BE FOUND	COMMENTS (If any)
Design for site roads		
The 1 in 50 year flood-line of all watercourses		
Laboratory facilities		
Design and location of fuel storage areas		
Design and location waste quarantine areas		
Design and location of waste Inspection areas		
Site's drainage system		
Site's emergency control system and plan		
Liner specifications		
Leak detection system and monitoring		
Leachate management plan		
Calculations of leachate generation		
Leachate collection and treatment		
Gas generation and management		
Air quality monitoring and management		
Co-disposal ratio calculation		
Stability monitoring and management		
Daily and intermediate cover requirements		
Temporary and permanent capping requirements		

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