

ECONOMIC DEVELOPMENT, ENVIRONMENT & TOURISM

BASIC ASSESSMENT REPORT - EIA REGULATIONS, 2014

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

File Reference Number:	12/1/9/1-V328
	(For official use only)
NEAS Reference Number:	
Date Received:	
Due date for acknowledgement:	
Due date for acceptance:	
Due date for decision	
Kindly note that:	

- 1. The report must be compiled by an independent Environmental Assessment Practitioner.
- 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. 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 Department of Economic Development, Environment and Tourism as the competent authority (Department) for assessing the application, it may result in the rejection of the application as provided for in the regulations.
- 5. An incomplete report may be returned to the applicant for revision.
- 6. Unless protected by law, all information in the report will become public information on receipt by the department. Any interested and affected party should be provided with the information contained in this report on request, during any stage of the application process.

- 7. The Act means the National Environmental Management Act (No. 107 of 1998) as amended.
- 8. Regulations refer to Environmental Impact Assessment (EIA) Regulations of 2014.
- 9. The Department may require that for specified types of activities in defined situations only parts of this report need to be completed. No faxed or e-mailed reports will be accepted.
- 10. This application form must be handed in at the offices of the Department of Economic Development, Environment and Tourism:-

Postal Address:	Physical Address:
Central Administration Office	Central Administration Office
Environmental Impact Management	Environmental Affairs Building
P. O. Box 55464	20 Hans Van Rensburg Street / 19 Biccard
POLOKWANE	Street
0700	POLOKWANE
	0699

Queries should be directed to the Central Administration Office: Environmental Impact Management:-

For attention: Mr E. V. Maluleke **Mobile:** 082 947 7755

Email: malulekeev@ledet.gov.za

View the Department's website at http://www.ledet.gov.za/ for the latest version of the documents.

SECTION A: ACTIVITY INFORMATION

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

YES	NO

If YES, please complete the form entitled "Details of specialist and declaration of interest" or 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 detail¹:

The proposed Mukwevho filling station and Associated Infrastructure at Tshino Nesengani village on portion of portion 1 of the Farm Schuynshoogte 29 LT within Makhado Local Municipality under the jurisdiction of Vhembe District, Limpopo Province.

The proposed development will occupy 2130 square metres, and it will include landscaping, internal roads, parking, shops, filling station and wash bay.

Filling station will include the following: Petrol (93 and 95 unleaded), Diesel (50 ppm and 100 ppm).

Filling station will occupy space at 2130 square metres, and will consist of the installation of four underground storage tanks of which two will store (23 000 L) X 2 of each petrol (Unleaded 93 and Unleaded 95) and the other two tanks will store (23 000 L) X 2 of each diesel (50 ppm and 100 ppm). The combined storage capacity of the tanks will be 92 000 litres.

There will be convenience shops which include:

- Tuck-shop
- Fast food
- Tyre fitment shop, etc.

Site Location

The proposed development coordinates are 23° 07' 39.95" S and 30° 22' 31.48" E in Tshino Nesengani village (Ndiitwani) on portion of portion 1 of the Farm Schuynshoogte 29 LT, within the jurisdiction Makhado Local Municipality under the jurisdiction of Vhembe District Municipality in Limpopo Province. Tshino Nesengani village (Ndiitwani) its approximately 5 km to Vuwani Township and also 25 km to Malamulele Township.

Land use

The land is currently zoned for agricultural activities but rezoning has been submitted with the Local Municipality. See attached Proof of Submission and acknowledgement as Appendix 12

	ic Aspects	

Please note that this description should not be a verbatim repetition of the listed activity as contained in the relevant Government.	ent Notice,
but should be a brief description of activities to be undertaken as per the project description.	
LEDET BA Report, EIA 2014: Project Name:Mukwevho Filling Station	3

The establishment of a Mukwevho filling station and its associated infrastructure will boost the local economic sector and there will be creation of jobs for the surrounding community.

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 Department may also request the applicant to assess additional alternatives that could possibly accomplish the purpose and need of the proposed activity if it is clear that realistic alternatives have not been considered to a reasonable extent.

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

3. ACTIVITY POSITION

Indicate the position of the activity using the latitude and longitude of the centre point of the site for each alternative site. The co-ordinates should be in degrees, minutes and seconds. The projection that must be used in all cases is the Hartebeeshoek 94 WGS84 spheroid in a national or local projection.

List alternative sites, if applicable.

Latitude (S):	Longitude ((F):
Latitude (0).	Longitude	L).

Alternative:

Alternative S1² (preferred or only site alternative)

Alternative S2 (if any)

Alternative S3 (if any)

23°	07'	39.95	30°	22'	31.48
0	1	II	0	1	11
0	ı	11	0	ī	11

In the case of linear activities:

² "Alternative S" refer to site alternatives.		
LEDET BA Report, EIA 2014: Project Name: _	Mukwevho Filling Station	4

Alternative:	Latitude (S):		Longitude (E):			
Alternative S1 (preferred or only route alternative)						
 Starting point of the activity 	0	1	11	0	1	11
Middle/Additional point of the activity	0	1	11	0	1	11
End point of the activity	0	1	11	0	1	11
Alternative S2 (if any)						
Starting point of the activity	0	1	ш	0	1	11
Middle/Additional point of the activity	0	1	11	0	1	11
End point of the activity	o	1	11	0	1	11
Alternative S3 (if any)						
Starting point of the activity	0	1	11	0	1	11
Middle/Additional point of the activity	o	1	11	0	1	11
End point of the activity	0	1	11	0	1	"

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:

Alternative A1³ (preferred activity alternative)

Size of the activity:

The anticipated footprint of the development is 2130m² for the construction phase material and equipement that will be stored on site. This area allows for the storage of such.

³ "Alternative A.." refer to activity, process, technology or other alternatives.

LEDET BA Report, EIA 2014: Project Name: _____Mukwevho Filling Station_

Alternative A2 (if any)	m ²
Alternative A3 (if any)	m ²
or,	
for linear activities:	
	Length of the activity:
Alternative:	
Alternative A1 (preferred activity alternative)	m
Alternative A2 (if any)	m
Alternative A3 (if any)	m
Indicate the size of the alternative sites or servitudes (within which the	above footprints will occur):
	Size of the site/servitude:
Alternative:	
Alternative A1 (preferred activity alternative)	2130m ²
Alternative A2 (if any)	m ²
Alternative A3 (if any)	m ²
5. SITE ACCESS	
Does ready access to the site exist?	YES NO
If NO, what is the distance over which a new access road will be	built N/A
Describe the type of access road planned:	
The proposed development will gain access from the main road. App	lication with the provincial
Department has been logged see Appendix 6. Road Agency Lir	npopo has approved the
application see attached approval as Appendix 6A	

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.

LEDET BA Report FIA 2014: Project Name:	Mukweyho Filling Station	- h

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 Department of Water Affairs);
 - 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.

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.

11. ACTIVITY MOTIVATION

9(a) Socio-economic value of the activity

What is the expected capital value of the activity on completion?

What is the expected yearly income that will be generated by or as a result of the activity?

Will the activity contribute to service infrastructure?

Is the activity a public amenity?

How many new employment opportunities will be created in the development phase of the activity?

R 10 000 000.00

-/+ 5million

YES NO

120 persons

What is the expected value of the employment opportunities during the development	-/+ 6 million
phase?	
What percentage of this will accrue to previously disadvantaged individuals?	25%
How many permanent new employment opportunities will be created during the	25 people
operational phase of the activity?	
What is the expected current value of the employment opportunities during the first 10	30 Million
years?	
What percentage of this will accrue to previously disadvantaged individuals?	25%

9(b) Need and desirability of the activity

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

NEE	D:		
i.	Was the relevant municipality involved in the application? The local municipality and district municipality where notified of the proposed filling station development. The draft basic assessment was made available to local municipality and the district municipality before the final basic assessment report being submitted to the Department for review and authorization. The comment no comments were received from the Local Municipality and District Municipality if comments are received at later stage they will be addressed and sent to the Department to be incorporated in the authorization. If the addressing of the comments requires significant changes to the BAR that was made available for comments, the amended BAR or supplementary documentation will be made available to the registered Interested and affected parties.	YES / NO	
ii. iii.	Does the proposed land use fall within the municipal Integrated Development Plan? The local municipality IDP does not specifically identify specific locations for filling stations. Filling stations are developed in rural and urban areas and are developed at strategic localities where the sites are accessible from roads, very visible, large enough for fuel supplier to moving cars and trucks traveling along the roads. If the answer to questions 1 and / or 2 was NO, please provide further motivation / explan	YES NO ation:	
	Daft Basic Assessment was submitted to Makhado Local Municipality for considerations by so doing as part of the stakeholder engagement, Municipality will then consider the within the IDP-Integrated Development Plan.		•

The proposed development includes the construction of tuck shops, fast food and tyre fitment shops. The project will promote the investment into areas of under-utilized economic potential, and will also promote both spatial and sectoral growth poles. Poverty and unemployment are the main challenges facing South Africa. This development project is a good example of Local Economic Development Strategies as required by the government of the Republic of South Africa to economically empower developing communities.

DES	RABILITY:		
i.	Does the proposed land use / development fit the surrounding area?	YES /	NO
	The proposed filling station will supply fuel to the motorist using the busy road from Elim	$ \rangle / $	
	via Vuwani town and towards Malamulele and Giyani in Limpopo. The filling station will	$ \setminus / $	
	not be in competition with the service station, which is situated approximately -+5km	$ \ \ $	
	form the site, as everyone will have its own target market. A traffic impact assessment	$ \lambda $	
	will be done and attached in the final report. The filling station will be access through	$ \ /\ $	
	motor vehicle and pedestrians from neighboring village/Township. The convenience	/	
	store and the food outlet will be open 24 hours a day and may sell fast food products.	/ \	
ii.	Does the proposed land use / development conform to the relevant structure plans,	YES /	NO
	Spatial development Framework, Land Use Management Scheme, and planning visions	$ \rangle / $	
	for the area?	$ \setminus / $	
	The municipal SDF is not earmarking the study area or any other site in there SDF for a filling station. A filling station is however not a use that is limited to an urban area or rural area. A filling station is a service, which support urban and rural developments. The locality of a filling station is justified by traffic volumes in combination with access arrangements and a filling station is usually regarded as feasible if the fuel pump figures are above 300 00 liters per month.		
iii.	Will the benefits of the proposed land use / development outweigh the negative impacts	YES \	NO
	of it?	\ <i> </i>	
	The proposed filling station will be constructed along the busy unamed road, which connect the N1, via Elim and Vuwani township towards Malamulele. The Unamed road is regarded as important as it accommodate high traffic volumes from both directions.		
	The filling station and the convenience store will offer variety of services to the pass by motorists. The station will operate 24hours a day and will make certain essentials as well as petrol available after hours in a safe and secured environment.		
	The proposed development will promote sustainable development and that will uplift the	/	
	general welfare of the area. The site earmarked for the development is not regarded as		
LEDET	BA Report, EIA 2014: Project Name:Mukwevho Filling Station	 	9

	ecological sensitive and no watercourses or wetland are situated in the immediate		
	vicinity of the site. If it is well planned, implemented and managed, the proposed filling		
	station development will have positive impacts on the social. Ecological and economic		
	environment. No significant long-term negative impacts are anticipated.		
iv.	If the answer to any of the questions 1-3 was NO, please provide further motivation / expla	anation:	
٧.	Will the proposed land use / development impact on the sense of place?	YES	NO/
	The proposed filling station will create a prominent landmark in Tshino Ndiitwani village.		X
vi.	Will the proposed land use / development set a precedent?	YES	NO /
	The proposed filling station is the third one in approximately 20km radius of the site.		
	Therefore it has the potential to inspire similar activities from local community members		
	at it bring economic injection within the area.		
vii.	Will any person's rights be affected by the proposed land use / development?	YES	NO /
	The project will not affect the right of the local community; infact it will economically		
	benefit the local community by creating job opportunities. The project has positive socio-		
	economic benefits for the community.		
viii.	Will the proposed land use / development compromise the "urban edge"?	YES	WO /
	The proposed development is located outside the urban edge as defined by the		$\mid \times \mid$
	municipality.		
ix.	If the answer to any of the question 5-8 was YES, please provide further motivation / expla	nation.	,

BEN	IEFITS:					
i.	Will the land use / development have any benefits for society in general?					
ii. Explain:						
	Explain: The proposed development of Mukwevho Filling Station and associated infrastructure will					
benefit road users with easy access to shops and filling station. This will also increase the econ						
	the Makhado Local Municipality since Tshino Nesengani village (Ndiitwani) falls within its jurisdiction.					
	Jobs will be created during construction phase of Mukwevho Filling Station and associated infrastructure					
	and also on the operational of the retails shops will have a positive impact on the community by creating					

	jobs and easy access of shops and filling station in a close proximity to their homes. The establishment of the filling station attracts other developments that will be beneficial for the local people. Overall, the proposed filling station will cater for the local market and national market using the road.								
iii.	Will the land use / development have any benefits for the local communities where it will be located? Explain:								
	 Employment opportunities mostly in a form of general work will be created during the construction phase of the filling station. Another form of employment opportunities will be created during operations. Saving of time due to reduced travelling times The amount of kilometers travelled for people to access services elsewhere will be reduced. This will also mean that the communities will save some costs on travelling 								

10. APPLICABLE LEGISLATION, POLICIES AND/OR GUIDELINES

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

Title of legislation, policy or guideline:	Administering authority:	Date:
1. National Environmental Management Act,1998 (Act No.107 of 1998)	National Department of Environmental Affairs (DEA) and	1998
10.107 01 1990)	provincial Authorities in the case of this development LEDET	
2. National Environmental Management :Air Quality	DEA, Provinces and Municipalities (if municipality have capacity	2004
Act,2004 (Act No.39 of 2004)		0000
3. National Environmental Management Waste Act, 2008	DEA and Provinces	2008
(Act 59 of 2008)		
4. The National Water Act,1998 (Act No. 36 0f 1998)	National Department of water and Sanitation	1998
5. National Environmental Management: Biodiversity Act,	National	2004
(Act 10 of 2004)		
6. Occupational Health and Safety Act (Act 85 of 1993)	National	1993
7.Conservation of Agricultural Resource Act (Act 43 of	National	1993

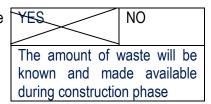
1993)		
8.Municipal By-Laws	Local	

11. WASTE, EFFLUENT, EMISSION AND NOISE MANAGEMENT

11(a) Solid waste management

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

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



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

All solid waste generated during the construction phase will be placed in bulk waste collection area in the construction camp. Litter collection bins will be within the construction site not far from each other and will regularly be disposed to the registered landfill site. Separation of waste and recycling of papers, glass, cardboards etc. There will be no burning of waste on site and construction materials that will not be used will be taken out once construction comes to an end. A waste management plan and agreement on tariffs with Makhado Local Municipality will be submitted and it will be obtained from the municipality.

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

All construction solid waste will be disposed at the nearest registered landfill site. There will be an agreement between the applicant and municipality to dispose waste at registered municipality site

Will the activity produce solid waste during its operational phase? If yes, what estimated quantity will be produced per month?

YES	NO)	
The estim	nation	will	be
determined			
operational	phase	of	the
project			

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

Different kinds of waste will be produced during the operational phase of the filling station, however, the filling station will have the following disposal methods:

- ➤ Hazardous materials that require disposal will be disposed of at a registered hazardous landfill site. These materials may be removed by an appropriate hazardous waste contractor
- ➤ Different waste type bins will be made available onsite to encourage the process of recycling and discourage littering.

An independent landfill site from a third-party company or organization to accommodate the filling station. 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 department to determine whether it is necessary to change to an application for scoping and EIA. YES Can any part of the solid waste be classified as hazardous in terms of the relevant legislation? If yes, inform the department 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 ИC If yes, then the applicant should consult with the Department to determine whether it is necessary to change to an application for scoping and EIA. 11(b) Liquid effluent Will the activity produce effluent, other than normal sewage, that will be disposed of in a YES municipal sewage system? If yes, what estimated quantity will be produced per month? m^3 *M*0 Will the activity produce any effluent that will be treated and/or disposed of on site? YES If yes, the applicant should consult with the Department 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? YES 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: 11(c) **Emissions into the atmosphere** Will the activity release emissions into the atmosphere? YES NO The major source of air pollution associated with the proposed filling station will not significantly contribute to air pollution and health concerns in the area. These emissions could potentially occur during the filling of the storage Tanks from the breather pipes, during dispensing of product and minor spillages. Legal requirements as prescribed by the Department of Labor should be implemented, which generally LEDET BA Report, EIA 2014: Project Name: Mukwevho Filling Station 13

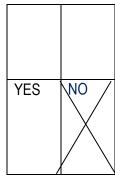
Where will the solid waste be disposed if it does not feed into a municipal waste stream (describe)?

includes Personal Protective Equipment (PPEs).

Some dust will be released into the atmosphere during the construction phase, but regular damping down of the exposed areas during the windy periods will be mitigate the anticipated impacts to acceptable levels.

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

The National Environmental Management: Air Quality Act requires that an air emission license be obtained for filling stations with combined tank sizes larger than 500m³. The combined tank sizes of the proposed Mukwevho Filling Station is below 200m³ and therefore air emission not required.



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.

The threshold is below the threshold as set out for license. Only a basic assessment Report process is required for the proposed development.

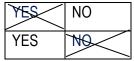
If no, describe the emissions in terms of type and concentration:

The emission released by the proposed filling station will be in line with the emission as released by any other filling station developments. The emissions to be released will not exceed the levels as set in the applicable legislation. If the combined tank capacity of a filling station exceeds 500m² it will be necessary for a filling station developer to obtain an air emission license.

11(d) Generation of noise

Will the activity generate noise?

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:

No noise will be produced if not noise to be generated by vehicles and machines that will be operating on site during pre-construction and construction phase and noise pollution can also be expected during operation from vehicles hooters which will contribute to noise pollution.

12. WATER USE

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

municipal	water board	Groundwater	river,	stream,	other	the activity will not use water
			dam or	· lake		

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:

5 000 Litres every day during construction

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

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:

Design measures will completely be Environmentally friendly. The following will be considered:

- The architectural design will ensure that there will be a proper natural flow of air into and outside of the building occurs deliberately as ventilation.
- ➤ Proper insulation of the ceilings is required because as much as 50% of heat losses in a building can be attribute to a lack of ceilings and ceiling insulation, this will significantly reduce heating and cooling expenses.

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

Air Conditioners

- Energy efficient air conditioners must be purchased and used.
- The outdoor cooling units must not be directly to the sun

Power Supply

Conservation of energy or the usage of renewal and sustainable energy technology must be a priority. This can be in the form of solar panels that generate and store electricity

Cooking and Refrigerator

- It is encouraged that the convenience store to implement the usage of gas appliance for cooking and other requirements.
- Convection ovens must be installed as they use less energy than the conventional ovens and cooking time is substantially reduced.
- Every hazardous material that is stored must comply with OHSA.

Lightning

Compact fluorescent light bulbs are recommended as compared to ordinary light bulbs as they also assist for security purpose too.

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	С	Сору	No.	1	
(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?



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:

The property will be located at Tshino Nesengani Village on portion of portion 1 of the farm Schuynshoogte 29 LT, Makhado Local Municipality under the jurisdiction of Vhembe District in Limpopo Province

(Farm name, portion etc.) Where a large number of properties are involved (e.g. linear activities), please attach a full list to this application.

Current land-use zoning:

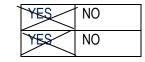
In instances where there is more than one town or district involved, please attach a list of towns or districts to this application.

Currently zoned for Agricultural use. Rezoning has been submitted to the Local Municipality, see attached proof of Application as Appendix 12

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?



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,
 minutes and seconds. 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.

Δ	ltarr	ative	91.
_		IOIIVE	. 7 1

LEDET BA Report, EIA 2014: Project Name: _____Mukwevho Filling Station______ - 16

Flat	1:50 – 1:20	1:20 - 1:15	1:15 – 1:10	1:10 – 1:7,5	1:7,5 – 1:5	Steeper than 1:5	
Alternative	e S2 (if any):						
Flat	1:50 – 1:20	1:20 – 1:15	1:15 – 1:10	1:10 – 1:7,5	1:7,5 – 1:5	Steeper than 1:5	
Alternative S3 (if any):							

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

LOCATION IN LANDSCAPE 2.

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

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

3. GROUNDWATER, SOIL AND GEOLOGICAL STABILITY OF THE SITE

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

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

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

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).

Natural veld good condition ^E	Natural veld with scattered aliens ^E	Natural veld with heavy alien infestation ^E	Veld dominated by alien species ^E	Gardens
Sport field Cultivated land		Paved surface	Building or other structure	Bare soil

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

A Biodiversity study was conducted see Appendix 11 for the report, no endangered species were identified.

5. LAND USE CHARACTER OF SURROUNDING AREA

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

5.1 Natural area	X	5.22 School	
5.2 Low density residential	X	5.23 Tertiary education facility	
5.3 Medium density residential		5.24 Church	
5.4 High density residential		5.25 Old age home	
5.5 Medium industrial ^{AN}		5.26 Museum	
5.6 Office/consulting room		5.27 Historical building	
5.7 Military or police base/station/compound		5.28 Protected Area	
5.8 Spoil heap or slimes dam ^A		5.29 Sewage treatment plant A	

5.9 Light industrial		5.30 Train station or shunting yard N	
5.10 Heavy industrial AN		5.31 Railway line N	
5.11 Power station		5.32 Major road (4 lanes or more)	
5.12 Sport facilities		5.33 Airport N	
5.13 Golf course		5.34 Harbour	
5.14 Polo fields		5.35 Quarry, sand or borrow pit	
5.15 Filling station ^H		5.36 Hospital/medical centre	
5.16 Landfill or waste treatment site		5.37 River, stream or wetland	
5.17 Plantation		5.38 Nature conservation area	
5.18 Agriculture	Х	5.39 Mountain, koppie or ridge	
5.19 Archaeological site		5.40 Graveyard	
5.20 Quarry, sand or borrow pit		5.41 River, stream or wetland	
5.21 Dam or Reservoir		5.42 Other land uses (describe)	

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

N/A		

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

If YES, specify and explain:	N/A
If NO, specify:	No heavy industrial developments within the surrounding

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

If YES, specify and explain:	N/A
If NO, specify:	No filling station around the proposed development.

6. CULTURAL/HISTORICAL FEATURES

Are there any signs of culturally or historically significant elements, as defined in section 2 of YES he National Heritage Resources Act, 1999, (Act No. 25 of 1999), including				
Archaeological or palaeontological sites, on or close (within 20m) to the site?	Uncertain			
If YES, explain:				
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:			
Will any buildin	g or structure older than 60 years be affected in any way?	YES	MO (
Is it necessary to apply for a permit in terms of the National Heritage Resources Act, 1999 YES NO			
(Act 25 of 1999)?		

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 department) 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 department;
- (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 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 department, 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 department 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
 - (v) 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 department 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 these Regulations.

Advertisements and notices must make provision for all alternatives.

4. DETERMINATION OF APPROPRIATE MEASURES

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

5. COMMENTS AND RESPONSE REPORT

The practitioner must record all comments and respond to each comment of the public before the application is submitted. The comments and responses must be captured in a comments and response report as prescribed in these Regulations and be attached to this application. The comments and response report must be attached under 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.

Name	of Authority informed:	Comments received (Yes or No)
1.	J GROBLER (council of Geoscience)	No comments
2.	A SOLOMON (S.A Heritage Agency)	No comments
3.	J MALULEKE (Department of Water and Sanitation)	No comments
4.	Schmidk (ESKOM)	No comments
5.	Tribal Authority	No comments
6.	Department of Economic Development, Environment & Tourism	1.Specialist declaration forms for all specialists who will be undertaking investigations on the proposed site must be signed and attached" 2."Public participation of at least 30 days and must reflect the incorporation of comments received")

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 department.

Proof of any such agreement must be provided, where applicable.

Has any comment been received from stakeholders?



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

See attached comments and response register attached as Appendix 5G

SECTION D: IMPACT ASSESSMENT

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

ISSUES RAISED BY INTERESTED AND AFFECTED PARTIES

List the main issues raised by interested and affected parties.

See response attached as Appendix 5G

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 response attached as Appendix 5G

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.

Altern	native	(preferre	ed alto	ernative)

The proposed project will result in various environmental impacts. The following section assesses the potential Environmental Impacts associated with the construction of Mukwevho Filling Station and its associated infrastructure. The significance of the environmental impacts of the proposed activity before and after mitigation will be discussed. Environmental impacts are assessed by different criteria to assign relative significance to each predicted impacts associated with an activity. The criteria to be used to evaluate the impacts of this activity are as follows: nature, extent, duration, intensity and probability of occurrence

Nature	A brief written statement of the environmental aspect being impacted upon by a particular action of activity
Extent	The area over which the impact will be expressed
Duration	Indicates what the life-time of the impact will be
Intensity	Describes whether an impact is destructive or benign
Probability	Describes the likelihood of the impact actually occurring

Significance is determined through a synthesis of impact characteristics. Significance is an indication of the importance of the impact of both physical extent and time scale, and therefore indicates the level of mitigation required. The total number of points scored for each impact indicates the level of significance of the impact.

Significance is derived using the following formula:

Significance=Extent+ Duration +Intensity x Probability of Occurrence

Degree to which the impact can be reversed

The reversibility or temporal scale of an impact is directly linked to the duration of impacts. For e.g. permanent impacts are irreversible impacts, whereas, short impacts are immediately reversible.

Immediately reversible	Short term impacts
Quickly reversible	Medium term impacts
Reversible over time	Long term impacts
Irreversible	This is where the impacts are permanent

Design/Planning Phase

Potential impacts:	Significance rating of impacts (positive or negative):	Proposed mitigation:	Significance rating of impacts after mitigation:	
	D	irect Impacts		
Poor Design- Structural High (Negative) Ensure compliance with the Industry standards Low (Negative)				
Indirect Impacts				

Disregard of legislative requirement	High (Negative)	Ensure compliance with the relevant legislation and legal standards	Low (Negative)
	Cons	struction Phase	
IMPACT	SIGNIFICANCE RATING OF IMPACT BEFORE MITIGATION	PROPOSED MITIGATION	SIGNIFICANCE RATING
	D	rect Impacts	
Loss of terrestrial vegetation and faunal habitat, specifically the secondary woodland areas from construction of the filling station	Medium (Negative)	 Maintain the viability of the indigenous seed bank in excavated soil so that it can be used for subsequent re-vegetation of any disturbed areas. Prevent impact of construction activities to extend on to neighbouring land demarcated and fenced construction camp; strict control of labourers Avoid unnecessary loss of indigenous tree. 	Low (Negative)
Increased risk of dust and erosion from clearing of vegetation and earth moving vehicles	Medium (Negative)	 All the vehicles must be along existing lines or tracks. Erosion protection measures must be implemented on the site to reduce erosion and sedimentation of the receiving environment. Measures could include:	Low (Negative)

			mission during ransportation.	
Increased risk for soil, groundwater pollution resulting from poor waste management	Medium (Negative)	si m w si	Vaste on site shall be trictly controlled and nonitored. Only approved vaste disposal methods hall be allowed, and it neludes the following: Topsoil — Topsoil must be spread unto areas that are to be grassed on site. Material — Landfilled spoiled in closed borrowed pit with permission from landowner or the pit owner. General Construction Waste- Must be removed from bins at sufficient intervals to prevent overflow. This waste must be stored in skips within a designated waste storage in the Contractors camp. General waste must be transported to the Local Municipal General waste be transported to the Local Municipal General waste Landfill site by the Municipality, the contractor or a private waste disposal. Service agreements in this regard must be obtained by the applicant/ contractor prior to the commencement of construction activities. Hazardous construction waste-Must be stored in designated access	Low (Negative)
ı		I	100000	

		, , , , , , , , , , , , , , , , , , ,
		controlled, sign posted and bunded storage area. This waste must be collected as and when necessary by an appropriately trained Service Provider and must be transported to a Hazardous Waste Landfill Site for disposal - Waste must not be buried on site
Potential noise impact from the use of construction equipment (for the construction of the proposed diesel depot and associated infrastructure)	Medium (Negative)	 Limit construction activities to day time hours. Construction personnel must wear personal protective equipment where appropriate. All machines to be utilised on the site must be fitted with muffers and must be maintained in good working conditions in order to minimize noise. The contractor shall warn all the local community that could be affected by the noise generation from construction activities.
Potential health injuries to construction personnel as a result of construction work (i.e. welding fumes. This impact is rated a neutral.	Medium (Neutral)	The contractor must ensure that all construction personnel re provided with adequate PPE for use where appropriate
Socio-economic Impact: Employment creation and skills development opportunities during the construction phase which is expected to give rise to approximately 20 new jobs.	Medium (Positive)	 Enhance the use of local labour and local skills as far as reasonably possible. Where the required skills doo not occur locally and where appropriate and

This impact is rated as positive.		applicable, ensure that relevant local individuals are trained. ❖ Ensure that an equitable percentage allocation I provided for local labour employment as well as specify the use of small-to-medium enterprises and training specifications in the Contractors contract.	
Air quality impact: Emissions from construction vehicles and generation of dust as a results of earthworks, demolition, as well as the delivery and mixing of construction materials	Medium (Negative)	 Ensure that cleared (excavated) areas and unpaved surfaces are sprayed with water (obtained from an approved source) to minimise dust generation. Approved soil stabilisers may be utilised to limit dust generation. Adequate dust control strategies should be applied to minimise dust deposition, for example: Periodic spraying of the entrance road and environmentally friendly dust control measures (e.g. mulching and wetting) where and when dust is problematic. 	Medium (Positive)
	Inc	direct Impacts	
Socio-economic Impact Secondary industries may benefit from the proposed project in the form of the provision of produce and pork products. This impact is rated as positive	Low (Positive)	Ensure that local industries are utilised as suppliers where applicable/practical	Medium (Positive)
	No	-go alternative	

Direct Impacts:

- None of the impacts mentioned will occur
- ❖ The existing site will remain un-cleared which will result in no clearance of indigenous vegetation
- ❖ If the proposed project does not proceed, increased income and economic spin-off activities will not be realised.
- If the proposed project does not proceed, motorist and community that rely on the supply of petroleum products will continue to suffer.

Indirect Impacts:

There are no indirect impacts during the construction phase for the No-go Option

Cumulative Impacts:

There are no cumulative impacts during the construction phase for the No-go Option

Operational phase					
IDENTIFIED IMPACTS- OPERATIONAL PHASE					
IMPACT	SIGNIFICANCE RATING OF IMPACT BEFORE MITIGATION	PROPO	OSED MITIGATION	SIGNIFICANCE RATING	
Groundwater contamination caused by leaks from the above ground storage tanks	High (Negative)		should be regularly checked and kept clean to prevent blockages an overflow. Any material collected must be disposed at an appropriately registered waste disposal site. Follow acceptable maintenance and operational practices to ensure consistent, effective and safe performance of the infrastructure.	Low (Negative)	

		*	water separator. Potential impacts to groundwater to be monitored at observation wells. Light non-aqueous phase liquids (LNALP) to be monitored using an electronic interface meter and groundwater samples collected, should a leak be suspected based on the leak detection monitoring. Monitoring and sampling of groundwater in this instance is to be carried out by a competent practitioner.	
Land contamination as a result of spillages that could occur during the transfer of petroleum products from road tanker to storage tanker.	Medium(Negative)		Measure for emergency reporting and be provided. There must be compliance with SABS 089-3, 1999 when the installation of aboveground storage tanks, pumps and pipe work at service stations ab consumer installations. Train forecourt staff on implementation of spillage containment emergency plan including usage spill containment kill.	Low (Negative)
Spillages that could result from vehicles fuelling	Medium	*	Spillages must be restricted on the forecourt to greatest extent possible. Forecourt spillages are to be directed to an oil / water	

		*	separator. Small spills (less than 1 liter) are to mopped from hardened surfaces immediately to prevent contamination of storm water runoff. Dry sand and sawdust can be utilised to soak up the spill. Water is not to be used as it will aid in	
Potential impact on the health of operating personnel resulting in potential health injuries. This impact is rated as neutral	Medium (Neutrals)	*	spreading the fuel or oil. Operational personnel must wear basic PPE as necessary during the operational phase. A complete First Aid Kit must be readily available on site and regularly serviced. Personnel must be trained in health and safety awareness and management of emergency situations.	Low (Neutral)
Risk of fire explosion	Medium(Negative)	*	Prevent spread of the fire to surrounding buildings or vegetation. Adequate firefighting training must be given to staff. Emergency numbers must be displayed with the correct details of the nearest firefighting station at all times. Prevent effluent from firefighting (foam, water, fuel, chemicals) from entering surface/groundwater, storm-water systems, and	Low (Negative)

П		
Atmospheric pollution due to vapour tanks	Medium (Neutral)	septic tanks. Insure that relevant signage e.g. no smoking in displayed in potentially dangerous areas and is abided by. Insure that relevant signage e.g. no smoking in displayed in potentially dangerous areas and is abided by. Insure that relevant signage e.g. no smoking in displayed in potentially dangerous areas and is abided by. Insure that relevant signage e.g. no smoking in displayed in potentially dangerous areas and is abided by. Insure that relevant signage e.g. no smoking in displayed in potentially dangerous areas and is abided by. Insure that relevant signage e.g. no smoking in displayed in potentially dangerous areas and is abided by. Insure that relevant signage e.g. no smoking in displayed in potentially dangerous areas and is abided by. Insure that relevant signage e.g. no smoking in displayed in potentially dangerous areas and is abided by. Insure that relevant signage e.g. no smoking in displayed in potentially dangerous areas and is abided by. Insure that relevant signage e.g. no smoking in displayed in potentially dangerous areas and is abided by. Insure that relevant signage e.g. no smoking in displayed in potentially dangerous areas and is abided by. Insure that relevant signage e.g. no smoking in displayed in potentially dangerous areas and is abided by.
Casia aganamia Impagat Chilla	Modium (Popitivo)	drip tanks thus eliminating vapour within the site.
Socio-economic Impact Skills development opportunities and economic spin off activities will also occur during the operational phase. This impact is rated as positive	Medium (Positive)	 ❖ Enhance the use of local labour and local skills as far as reasonably possible. ❖ Where the required skills do not occur locally. And where appropriate and applicable, ensure that relevant local individuals are trained. ❖ Ensure that goods and services are sourced from the local and regional economy as far as reasonably possible.
	In	direct Impacts
Impact on the surrounding community in terms of visibility and great environment	Medium (Negative)	 Ensure that surrounding gardens are well maintained. The planting of indigenous vegetation is encouraged Use water sparingly in maintaining gardens. Ensure that service station lighting does not disturb the surrounding residents or users of surrounding roads (e.g.

	direction, glare, flashing). Institute an appropriate building and site maintenance programme. Regularly inspect paving						
	at filing points for impermeability.						
No-go Alternative							
Direct Impacts: None of the impacts me If the proposed project realised.	ntioned will occur does not proceed, increased income and economic spin-off activities will not be						
Indirect Impacts: There are no indirect impacts during the construction phase for the No-go Option Cumulative Impacts:							

LEDET BA Report, EIA 2014: Project Name: _____Mukwevho Filling Station_

\

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)

From the impact assessment of the biophysical and socio-economic aspects discussed in detail in this report it is evident that the proposed development Mukwevho filling Station is suitable for the site assessed.

It should however be noted that this is only if the development is planned and managed in accordance with the mitigation measures supplied described in this report the specialist studies (especially the mitigation measures as supplied in the Geotechnical, and ecological reports) and in the Environmental Management Programme (EMPr) are attached as Appendix

From the detailed impact assessment, it is clear that most of the impacts can be mitigated to an acceptable standard and it is also expected that the development will contribute to the eradication of alien and invasive plant species and soil and vegetation rehabilitation.

If the proposed development in managed appropriately the filing station will have significant socio-economic environment and could even have positive impacts on the biophysical environment. If measured over the long term it is expected that the development will outweigh the negative bio-physical and socio-economic aspects.

The socio-economic environment

During Construction Phase:

The proposed development will have a positive impact on the economy due to temporary employment especially to the surrounding community. It will also have appositive impact on the social environment as there will be visible investment from the private sector within rural areas. It is expected that it will have a negative impact as it may cause nuisance due to dust and noise generation, but this can be mitigated to an acceptable standard.

During Operational Phase:

The proposed development will have a positive impact on the socio-economic environment during the operational phase due to permanent employment opportunities.

The biophysical environment

During the Construction phase:

- The biophysical environment will be affected by construction activities that could result in excessive noise and dust, However, there are mitigation measures put in place to prevent the impacts or minimizing them as explained on the Environmental Management Programme.
- Construction and operational phase storm-water management and pollution prevention are the two most important issues to consider and address.

During Operational Phase:

All negative impacts that are likely to occur in this phase are not of significance as there are mitigation measures that are already put in place to control and protect the environment, especially groundwater and soil. Storm water management will be put in place and there shall be strong effective measures put in place to prevent spillages and leaks from the UST's and pumps.

Results of the impact assessment

None of the adverse impacts that were identified are regarded as impacts that cannot be mitigated to acceptable levels and therefore TM Environmental Consultancy is of the opinion that there are no "permanent flaws" associated with the proposed development.

Based on the results the specialist reports the proposed filing station is deemed as a good and profitable business concept. The impacts that are brought about can be mitigated.

No-go alternative (compulsory)

The No Go Alternative implies that the site is not developed for the purpose of the filing station and would probably be incorporated for the other business use.

This option will come to the party if the proposed development has significant negative impact that cannot be mitigated effectively. The proposed site does not have any environmental constraints.

Alternative B

Not Applicable

Site alternative can be either for the entire development where the activity is proposed. In terms of the proposed development, the site alternative will not be further investigated since the land is privately owned, and since the land is privately owned the client does not have any alternatives it is only the proposed preferred site, and has no other land available for the development in the area, which results in the proposed development occurring in the preferred proposed site which is on portion of portion 1 of the farm Schuynshoogte 29 LT or not occurring at all in such instances the no-go alternative will play an important role.

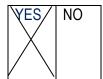
Alternative C

N/A

For more alternatives please continue as alternative D, E, etc.

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)?



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):

LEDET BA Papart EIA 2014: Project Name:	Mukweyho Filling Station	35

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 department in respect of the application:

GENERAL ENVIRONMENTAL MANAGEMENT STATEMENT Roles and Responsibilities

Roles and Responsibilities

- An EMPr for site establishment, construction and operational phase must be finalized and approved by LEDET prior to the contractor moving onto site
- The Environmental Control Officer (ECO) must be appointed prior to site development and construction to prevent contravention of the approved EMPr and Environmental Authorization.
- An Environmental Liaison Officer (ELO) must inspect the site during the construction phase on a weekly basis.
- The working areas must be clearly demarcated by the ECO prior to commencement of the construction and no access is to be allowed in sensitive areas.
- The ECO is to conduct monthly audits and prepare monthly audit reports. Copies of these reports are to be provided by the ECO to the developer and LEDET. The ECO duties extend to the end of the construction phase.
- The proponent will ultimately be responsible for the implementation of the operational EMPr.

DESIGN PHASE

Engineering Design

- Must accommodate spills containment slabs to assist in the containment of accidental spillage during construction phase (concrete and cement batching on site)
- A storm water management plan must be prepared once the engineering design of the site has been finalized.

CONSTRUCTION PHASE

Noise pollution

- Regular maintenance of machinery must be done, as per the manufacturer's instruction
- Working hours should be limited from 07:00 to 17:00 on weekdays, from 07:00 to 13:00 on Saturday and no work must be conducted on Sundays
- Construction employees should be encouraged to not generate noise, which is not essential to construction
- In the event of employment being noisy during lunch breaks It could impact neighboring properties

Air Pollution

- Water should be sprayed on the construction access road during the dry/windy periods
- Construction phase stockpiles which have the potential of generating dust must be covered with tarpaulin/plastic sheeting
- Maintain construction vehicles and machinery to control exhaust emissions.

Water Pollution

- Construction activities must remain within the footprint of the development
- Construction machinery must be maintained by a suitably qualified mechanic, at an appropriately lined site, during working hours, so that diesel and /or oil leaks are avoided
- Prevent run-off by constructing diversion berms and / or placing straw bales on denuded areas.

Erosion Measures

- Should erosion become a problem during the construction phase then diversion berms and drains shall be constructed to divert run-off away from exposed area.
- During this phase, bales can be used as filters across run-off pathways

Accidental Spillage

- Spills shall be cleared up immediately
- The contaminated soils and the spilled material shall be taken to the nearest registered landfill site capable of receiving such spills
- A registered of all incidents shall be kept on site showing measures taken to clear up the spillages

Heritage Issues

 During construction, if heritage findings are made (graves, archaeological objects, etc), LHIRA should be contacted and works to be stopped immediately

Health and Safety

- Traffic signage shall be erected to advice people of machinery/ construction vehicles, driving in the area.
- Pollution that could be detrimental to humans, flora and fauna shall be prevented as much as possible.
- Construction employees must be restricted to the development area; they must be warned not to trespass on the neighboring properties
- Point's men must be used at areas where children will be crossing to ensure their safety to school or their homes/households
- Emergency contact numbers must be available on site, and an emergency kit to assist if someone get injured before help arrives
- Fire protection equipment such as, fire extinguisher and hose.

Is an EMPr attached?
The EMPr must be attached as Appendix F.

YES NO

SECTION F: APPENDIXES

Appendix A: Site plan(s)

Appendix B: Photographs

Appendix C: Facility illustration(s)

Appendix D: Specialist reports

Appendix E: Comments and responses report

Appendix F: Environmental Management Programme (EMPr)

Appendix G: Other information

LEDET BA Report, EIA 2014: Project Name: Mukwevho Filling Station - 37

SECTION G: DECLARATION BY THE ENVIRONMENTAL ASSESSMENT PRACTITIONER

I, Sigidi Muthotho declare that I –

- (a) act as the independent environmental practitioner in this application;
- (b) 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, 2014;
- (c) do not have and will not have a vested interest in the proposed activity proceeding;
- (d) have no, and will not engage in, conflicting interests in the undertaking of the activity;
- (e) undertake to disclose, to the competent authority, any material information that has 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;
- (f) 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;
- (g) will ensure that the comments of all interested and affected parties are considered and recorded in reports that are submitted to the Department 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 Department may be attached to the report without further amendment to the report;
- (h) will keep a register of all interested and affected parties that participated in a public participation process; and
- (i) will provide the Department 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:						
Name of company:						
LEDET BA Papart EIA 2014: Project Name:	Mukwoyho Filling Station	38				

Date:		