LIMPOPO
PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF
ECONOMIC DEVELOPMENT, ENVIRONMENT & TOURISM

DRAFT 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:	
	(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 Environmental Impact Management P. O. Box 55464 **POLOKWANE** 0700	Central Administration Office Environmental Affairs Building Cnr Suid and Dorp Streets **POLOKWANE** 0699

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

For attention: Mr E. V. Maluleke
Tel: (015) 290 7138/ (015) 290 7167
Fax: (015) 295 5015
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 detail[1]:

1.1. INTRODUCTION

MMP Property (Pty) Ltd, is proposing the construction of a petroleum filling station and associated facilities at Ga Molepo Mankgaile, Mashalang extension 1 on a portion of the farm Nooitgedacht 189 within Capricorn District Municipality, Polokwane Local Municipality. The site falls within the Capricorn District Municipality of the Limpopo Province (please refer to the locality map in Appendix A). Applicant is granted to use the proposed site for the development by the tribal authority of Molepo Traditional Council and Department of Rural Development and Land Reform. Crysbol (Pty) Ltd has been appointed by MMP Property (Pty) Ltd to conduct the application process for Environmental Authorisation.

The location of the site is indicated on the locality map under Appendix A, with photographs of the site shown under Appendix B. The target property is vacant with a site area of 20 0000 m2 (2.00 ha) in extent.

The subject site is situated in an area that is fairly developed, most of which accommodate low to lower middle-income residence. It is located on the eastern side of the Giyani town (with GPS coordinates: S 23°53'46.21" and E 29°26'54.98"). There are significant vacant lands in the surrounding area with a good development potential.

The subject property is located approximately 21.5 km from Paledi Mall. It is located on the portion of a vacant land, which in turn is situated on the northern side of the D4020 tar road which lead to the Chuenespoort road and connect to the R71 road. The entrance and the exit of the filling station will be through Limpopo Road Agency (RAL) road which in this case is the Polokwane Local Municipality. Road D4020 is a Provincial residential route for commuters travelling to their place of employment or to the shopping facilities in the Mankweng and Polokwane area.

The proposed filling station on this site would furthermore be in an ideal position to serve passers-by on these roads. Though there are other existing filling stations in the vicinity, it is anticipated that this proposed filling station would fill a niche that is not filled by the existing filling stations. The proposed filling station will mostly serve the local areas, namely: - Mankgaile Mashalang Extension 1 and Ramphere. The traffic shared between existing stations and the study site does not imply the same or proportional decrease in fuel sales. Passing road users are more likely to purchase fuel or turn into a filling station.

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

1.2. COMPETITOR PETROL STATIONS

There are two (1) competitor stations within the normal 10 km radius of influence and two (3) other competitor stations are slightly out of the normal influence radius. The closest competitor site (Shell Boyne) is located approximately 6.5 km north of the subject site while the other one (shell Makanye) falls on the normal influence radius, located approximately 15.3 km to the north east of the subject site. The other two competitor sites are situated along major route (R71). One (Sasol Ga Thoka) is approximately 21.5 km north east of the subject site while the other (Exell Haenesb urg) is approximately 13 km East of the subject site. The subject site will mostly share traffic with the Shell Boyne site. The nearby Shell Boyne site is non-contemporary and fairly dilapidated and will therefore be less preferred than a new modern facility within close proximity but will still constitute a threat. The overall threat to the proposed station is therefore fair, given that most of the local residents will still be used to the existing Shell Boyne site.

1.3. DESCRIPTION OF THE PROPOSED DEVELOPMENT

The service station would consist of three 10.5m³ USTs and associated infrastructure. The total tank capacity on site would be 31.5m³ for leaded petrol, unleaded petrol and diesel, and an associated convenience shop be developed on the area to serve members of the local community and passing traffic. The forecourt is to contain customer parking bays and four pump islands.

The applicant intends to undertake the following activities at the site of the proposed development:

- 3 x 10.5m3 USTs;
- associated pipelines;
- pump islands and dispensers;
- canopy;
- paved forecourt;
- convenience store;
- fast food restaurant;
- car wash;
- ATMS;
- rest rooms and
- vehicle access points.

1.4. AUTHORISATIONS

List of Listed Activities in Terms of the EIA Regulations

The construction of the filling station constitutes a listed activity as identified under Listing Notice one (Government Notice No. R983, 2014). It requires that a Basic Assessment be undertaken in support of an application for environmental authorization prior to commencement of the activity. The following listed activity is triggered by the proposed development:

Table 1. EIA listing activity

Indicate the number and date of the relevant notice: e.g. R. 983, 08 December 2014	Activity No (s) (in terms of the relevant notice) e.g. 1(a)	Describe each listed activity as per project description[2]: e.g. Construction of a 600 mW generator
GNR 327 Listing Notice 1, 7 April 2017	Activity 14	The proposed development will store dangerous goods such as petrol and diesel which will be used by the proposed filling station into storage tanks with a combined capacity of 31.5 cubic metres.
GNR 327 Listing Notice 1, 7 April 2017	Activity 9	The proposed development will include installation of civil services. The proposed development`s water and storm water transport will exceed 1000 meters in length.
GNR 327 Listing Notice 1, 7 April 2017	Activity 10	The proposed development will include installation of toilets and/or sanitation facilities for both the staff and for public use.
GNR 327 Listing Notice 1, 7 April 2017	Activity 11	The proposed development is outside an urban area and will distribute more than 33 kilovolts but less than 275 kilovolts.
GNR 327 Listing Notice 1, 7 April 2017	Activity 10	The construction of access road to the proposed filling station.
GNR 327 Listing Notice 1, 7 April 2017	Activity 56	The proposed development will entail the widening of an existing road by more than 6 metres.
GNR 327 Listing Notice 1, 7 April 2017	Activity 12	An attenuation pond will be included into the storm water plan of the proposed site. The attenuation pond volume will sum up to 200m²
GNR 985 Listing Notice 3, 4 December 2014	Activity 12	The proposed development is on the portion that is surrounded and traverse through Ecological Support Area. There is a possibility of clearing more than one hectare of vegetation.

1.5. DESIGN OF THE PROPOSED FILLING STATION

There are industries specific Standard Operating Procedures (SOPs) in place to guide the design and installation of underground storage tanks, pumps and / or dispensers and related pipe work at filling stations. The requirements of the SOPs are summarized below.

The following guides and publications have informed the development of the SOP:

- South African Bureau of Standards (SABS):

SABS 089-3 1999	The installation of underground storage tanks, pumps / dispensers and pipe work at service stations and consumer installations
SABS 0140-2	Identification colour marking – Part 2 Identification of hazards and equipment in work situations
SABS 62-1	Steel pipes – Part 1 Steel pipes of nominal bore not exceeding 200 mm

[2] Please note that this description should not be a verbatim repetition of the listed activity as contained in the relevant Government Notice, but should be a brief description of activities to be undertaken as per the project description

SABS 62-2	Steel Pipes – Part 2 Pieces and pipe fittings of nominal bore not exceeding 150 mm made from steel pipe
SABS 1123	Steel pipe flanges
SABS 1200	Standardized specifications for civil engineering construction
SABS 1535	Glass-reinforced polyester-coated steel tanks for the underground storage of hydrocarbons and oxygenated solvents and intended for burial horizontally
SABS 0400	The application of the National Building Regulations

The tanks must be manufactured in accordance with SABS 1535. The manholes and manhole fittings are to be supplied in accordance with the current accepted norms.

The tank pit must be located at least 3 m clear of any building. Tanks should be so situated at distances from buildings, roadways or other structures as to comply with the relevant provisions of SANS 10400.

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;

No property alternatives have been considered as the constructions developments will occur on property where MMP Property (Pty) Ltd has applied for.

- The proposed development site is the ideal site for a filling station, as it satisfies all the conditions required of a filling station site in terms of convenience and safety to the motoring public;
- The Molepo Tribal Authority and The Department of Rural Development and Land Reform have approved the proposed filling station on this particular site;
- No sensitive ecological features were found to occur on this site,
- No heritage sites or features were found onsite;
- There are no sensitive surface water resources on the site;
- The proposed filling station would be a complementary use to the informal market as it will bring more market for them in the area;

Disadvantages

- There is potential impact such as noise, dust and visual are the most likely to impact residential amongst other things.

(b) the type of activity to be undertaken;

The proposed development activity relates to the ideal site for a filling station, as it satisfies all the conditions required of a filling station site in terms of convenience and safety to the motoring public. No alternatives to the activities listed have been considered.

- The Molepo Tribal Authority and The Department of Rural Development and Land Reform has approved the proposed filling station on this site;
- There are no sensitive surface water resources on the site;
- The proposed development site satisfies all the conditions required of a filling station site in terms of convenience and safety to the motoring public;
- Any filling station on the around the area carries no significant threat to the economical sustainability of the competitor service station sites in the identified local trading area;
- Though there are other existing filling stations, it is anticipated that this proposed filling station would fill a niche that is not filled by the existing filling stations, through provision of a wider range of products and services as well as a consistent level of service.

(c) the design or layout of the activity;

No site layout alternatives were considered. The proposed site layout is the most efficient and appropriate one. The design and layout of the proposed activities will be most acceptable.

(d) the technology to be used in the activity;

No alternative in terms of the technology to be used was considered

(e) the operational aspects of the activity; and

There are no alternate development types or technologies under consideration. There are no alternate operational aspects available for consideration.

(f) the option of not implementing the activity.

If the site is not developed and the current use is maintained the following may apply:

- The inferior space, offering and fuel access will continue at the existing filling station.
- Traffic volumes within the vicinity of the proposed site will not be marginally increased.
- Potential impacts to groundwater will be removed.
- Future developments along the road will most likely be hindered as transport will need to make use of filling stations further from this site.
- Job creation opportunities in this area will be lost
- The existing competition between the current filling stations will remain.
- The current waste management practices will continue, with the use of an informal landfill site.

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.

Alternative:	**Latitude (S):**			**Longitude (E):**		
Alternative S1[3] (preferred or only site alternative)	29˚	59'	59.84"	29˚	46'	49.79"
Alternative S2 (if any)	°	'	"	°	'	"
Alternative S3 (if any)	°	'	"	°	'	"

In the case of linear activities:

Alternative:	**Latitude (S):**			**Longitude (E):**		
Alternative S1 (preferred or only route alternative)						
• Starting point of the activity	°	'	"	°	'	"
• Middle/Additional point of the activity	°	'	"	°	'	"
• End point of the activity	°	'	"	°	'	"
Alternative S2 (if any)						
• Starting point of the activity	°	'	"	°	'	"
• Middle/Additional point of the activity	°	'	"	°	'	"
• End point of the activity	°	'	"	°	'	"
Alternative S3 (if any)						
• Starting point of the activity	°	'	"	°	'	"
• Middle/Additional point of the activity	°	'	"	°	'	"
• End point of the activity	°	'	"	°	'	"

[3] "Alternative S.." refer to site alternatives.

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

4. PHYSICAL SIZE OF THE ACTIVITY

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

Alternative:	**Size of the activity:**
Alternative A1[4] (preferred activity alternative)	20 000 m^2
Alternative A2 (if any)	m^2
Alternative A3 (if any)	m^2

or,

<u>for linear activities:</u>

Alternative:	**Length of the activity:**
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):

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

5. SITE ACCESS

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

Describe the type of access road planned:

[4] "Alternative A.." refer to activity, process, technology or other alternatives.

The existing driveway providing access to the site through main road which is the D4020 road to the Sanral tar road. The Limpopo Road Agency (RAL) road will provide entrance and the exit of the filling station. Please see site layout attached as Appendix A.

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

6. SITE OR ROUTE PLAN

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

The site or route plans must indicate the following:

6.1 the scale of the plan which must be at least a scale of 1:500;
6.2 the property boundaries and numbers of all the properties within 50 meters 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 meters;
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 meters 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-meter 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?	R16 000 000	
What is the expected yearly income that will be generated by or as a result of the activity?	R7 000 000	
Will the activity contribute to service infrastructure?	YES	NO
Is the activity a public amenity?	YES	NO
How many new employment opportunities will be created in the development phase of the activity?	±20	
What is the expected value of the employment opportunities during the development phase?	To be confirmed by the contractor	
What percentage of this will accrue to previously disadvantaged individuals?	80%	
How many permanent new employment opportunities will be created during the operational phase of the activity?	±10	
What is the expected current value of the employment opportunities during the first 10 years?	To be confirmed by the contractor	
What percentage of this will accrue to previously disadvantaged individuals?	80%	

9(b) Need and desirability of the activity

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

NEED:			
i.	Was the relevant municipality involved in the application?	YES	NO
ii.	Does the proposed land use fall within the municipal Integrated Development Plan?	YES	NO
iii.	If the answer to questions 1 and / or 2 was NO, please provide further motivation / explanation:		

DESIRABILITY:			
i.	Does the proposed land use / development fit the surrounding area?	YES	NO
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 for the area?		
iii.	Will the benefits of the proposed land use / development outweigh the negative impacts of it?	YES	NO
iv.	If the answer to any of the questions 1-3 was NO, please provide further motivation / explanation:		
v.	Will the proposed land use / development impact on the sense of place?	YES	NO
vi.	Will the proposed land use / development set a precedent?	YES	NO
vii.	Will any person's rights be affected by the proposed land use / development?	YES	NO
viii.	Will the proposed land use / development compromise the "urban edge"?	YES	NO
ix.	If the answer to any of the question 5-8 was YES, please provide further motivation / explanation.		
	There is a need for a filling station construction at this site for motorists as the other filling stations in the area are always occupied and busy. The filling station would provide a convenient stop for all motorists traveling in both directions on the road from Chuenespoort road (D4020), as they would not need to deviate off their planned route in order to refuel. At present, there are filling stations available from a distance of the site. The long term economic sustainability of the existing filling stations is not anticipated to be compromised by the construction of this proposed station. There is a perceived need for a construction of fuel station in the area to meet the increasing fuel retail demands. The fuel station would be located in close proximity to users and should be ideally placed to meet demand.		

BENEFITS:			
i.	Will the land use / development have any benefits for society in general?	YES	NO
ii.	Explain:		
	There will be an increase in employment opportunities. There is a perceived need and desirability for a petroleum filling station at Ga Molepo to better service the fuel retail demand. The petroleum filling station will be in close proximity to users and should reduce congestion and waiting times in and around petroleum filling stations.		

iii.	Will the land use / development have any benefits for the local communities where it will be located?	YES	NO
iv.	Explain:		
	Numerous socio-economic benefits would apply such as the creation of employment opportunities of local people during construction and operational phases as well as the improvement of local services to the public travelling along this route.		

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:
The Constitution of South Africa, 1996 (Act No. 108 of 1996), including the Bill of Rights (Chapter 2) and the Environmental Right (Section 24)	National Government	1996
NEMA: National Environmental Management Act 1998 (Act No. 107 Of 1998) As Amended	National Department of Environmental Affairs (DEA)	1998
EIA Regulations as contained in GN R 983 of 8 December 2014, promulgated in terms of the NEMA	National Department of Environmental Affairs (DEA) and Limpopo Department of Economic Development, Environment and Tourism (LEDET)	2014
National Water Act (Act 36)	Department of Water Affairs (DWA)	1998
National Heritage Resources Act (Act No.27 Of 1998)	South African Heritage Resources Agency (SAHRA)	1998
National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004)	National Department of Environmental Affairs (DEA)	2004
National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008)	National Department of Environmental Affairs (DEA)	2008
Occupational Health and Safety Act (Act 85 of 1993)	Department of Labour	1993
Conservation of Agricultural Resources Act (Act 43 of	National Department of	1983

1983)	Environmental Affairs	
Manual for Traffic Impact Studies	Department of Transport	1995
Hazardous Substances Act 15 of 1973.	Department of Health	1973
South African Bureau of Standards, SABS 089-3-1999, Third Edition. Code of practise - The petroleum industry, Part 3: The installation of underground storage tanks, pumps dispensers and pipework at service station and consumer installations.	South African Bureau of Standards	1999
Minerals and Petroleum Resources Development Act (Act No 28 of 2002)	Department of Mineral and Energy Affairs	2002

11. WASTE, EFFLUENT, EMISSION AND NOISE MANAGEMENT

11(a) Solid waste management

Will the activity produce solid construction waste during the construction/initiation phase?	YES	NO
If yes, what estimated quantity will be produced per month?	10 m^3	

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

Solid waste generated during the construction phase will be stored in skips which will be a marrell type of approximately 6 cubic meters. These skips will be transported by certified waste contractor to the local municipal landfill site using a skip grab truck. General waste and hazardous waste will be collected and stored separately, according to the requirements of the waste type. They will be disposed of at a licensed municipal landfill site and hazardous wastes will be collected by an approved waste disposal service provider and will be disposed of at a licensed hazardous waste landfill site. All construction waste will be cleared from the site by the end of the contract.

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

The rubble that is generated by means of building activities must be crushed and re-utilised as aggregate and binding material during soil rehabilitation. General wastes will be directed to the nearest landfill, managed by the Polokwane Local Municipality. Hazardous wastes will be directed to the licensed Landfill site.

Will the activity produce solid waste during its operational phase?	YES	NO
If yes, what estimated quantity will be produced per month?	This amount would fluctuate based on the number of customers making use of the facility	

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

All solid waste will be removed by Polokwane Local Municipality to landfill sites that has been approved. Waste generated on site will feed into the Municipal waste stream.

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

Sludges cleared from the oil / grease traps on the wash water and stormwater management systems will be collected and transported off site to an appropriate treatment and disposal facility by an appropriate waste handling company.

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.

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

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

The hazardous wastes generated by the operational facility would include fuel/oil contaminated containers / materials and sludges collected in the oil / grease traps on the wash water and stormwater management systems. Storage and handling activities proposed as part of the operational phase of this project (i.e. for the storage and handling of fuel-contaminated materials and containers, sump and oil / grease trap contents), do not exceed the thresholds and therefore do not trigger any of the Listed Activities published in GN 983 of 04 December 2014, in terms of the NEMWA, 2008. There is therefore no requirement to change the application process to a Scoping and EIA.

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

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 municipal sewage system?	YES	NO
If yes, what estimated quantity will be produced per month?		m^3

Will the activity produce any effluent that will be treated and/or disposed of on site?	Yes	NO

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	NO

If yes, provide the particulars of the facility:

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

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

Waste water will be used for irrigation of landscaped areas however emphasis will be placed mainly on minimization of water loss.

11(c) Emissions into the atmosphere

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

If yes, the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.

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

Dust and vehicle emissions will be released into the atmosphere during the construction phase. Construction activities such as excavation and grading carried out by construction vehicles and machinery will result in the production of dust. Although dust produced during these processes settles quickly, dust suppressants such as watering will be used. Dust amelioration measures, such as temporary halting of dust generating construction activities during periods of high wind will be implemented.

Ultimately, given the relatively small scale of the proposed development, the dust emissions will be of low concentration and predicted to be insignificant should appropriate mitigation measures be employed in the implementation of the Environmental Management Programme (EMPr), (Appendix F).

Sources of emissions during the operational phase will include transfer of fuel from tankers to the storage tanks, transfer of fuel from the storage tanks to vehicles and exhaust fumes from vehicles at the petroleum filling station.

Emissions released from the site during the construction and operational phases are considered to be negligible and are expected to be well below the ambient emission standards.

11(d) Generation of noise

Will the activity generate noise?	YES	NO
If yes, is it controlled by any legislation of any sphere of government?	YES	NO

If yes, the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.
If no, describe the noise in terms of type and level:

Limited noise will be generated by construction vehicles and machinery during construction. There will be noise generated from vehicles utilizing the facility during the operational phase. The amount of noise generated at the site during the construction and operational phases is considered to be negligible, and is not expected to exceed the existing ambient noise levels in the area.

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, dam or lake	other	the activity will not use water
The preferred option.		The water alternative if the local authority cannot provide municipal water.			

If water is to be extracted from groundwater, river, stream, dam, lake or any other natural feature, please indicate

the volume that will be extracted per month:	±1000.000 Kℓ	
Does the activity require a water use permit from the Department of Water Affairs?	YES	NO

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

13. ENERGY EFFICIENCY

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

The proposed activity will require pumps to transfer the fuel oil into the proposed tank. These pumps will need electricity to operate. The delivery trucks generally use their own power generated from their own engines. Where possible, energy saving light bulbs will be utilised.

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

- The filling station building will be orientated and designed in such a way that is will be more energy efficient (i.e. big windows with maximum light exposure);
- Where possible, gas will be used in the food preparation areas;
- A back-up generator will be provided at the sewage treatment facility and at the filling station in order to cater for power outages.

SECTION B: SITE/AREA/PROPERTY DESCRIPTION

Important notes:

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

Section C Copy No. (e.g. A): [ ]

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

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

If YES, please complete 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:	Ga Molepo Mankgaile, Mashalang extension 1 on a portion of the farm Nooitgedacht 189 within Capricorn District Municipality, Polokwane Local Municipality.

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

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

Current land-use zoning:	Bussiness

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?	YES	NO
Must a building plan be submitted to the local authority?	YES	NO

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.

Alternative S1:

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 S2 (if any):

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

Alternative S3 (if any):

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

2. LOCATION IN LANDSCAPE

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

2.1 Ridgeline		2.6 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)?

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

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

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.

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		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:	
If NO, specify:	

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

If YES, specify and explain:	
If NO, specify:	

6. CULTURAL/HISTORICAL FEATURES

Are there any signs of culturally or historically significant elements, as defined in section 2 of the National Heritage Resources Act, 1999, (Act No. 25 of 1999), including	YES	NO
Archaeological or palaeontological sites, on or close (within 20m) to the site?	No	
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:	There are no significant cultural, historical or other artefacts, structures, and graves identified on site or in a close proximity. The development would have no significant impact on culturally historical sites as none could be identified. "No further studies/Mitigations recommended for the proposed site and there are no archaeological or place of historical significance that will be impacted by the proposed activities. However, should any chance archaeological or any other physical cultural resources be discovered subsurface, heritage authorities should be informed. From an archaeological and cultural heritage resources perspective, there are no objections to the proposed construction of the filling station and we recommend to the Heritage Resources Authority to approve the project as planned".	
Will any building or structure older than 60 years be affected in any way?	YES	NO
Is it necessary to apply for a permit in terms of the National Heritage Resources Act, 1999 (Act 25 of 1999)?	YES	NO
If yes, please submit or, make sure that the applicant or a specialist submits the necessary application to SAHRA or the relevant provincial heritage agency and attach proof thereof to this application if such application has been made.		

SECTION C: PUBLIC PARTICIPATION

1. ADVERTISEMENT

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

(a) fixing a notice board (of a size at least 60cm by 42cm; and must display the required information in lettering and in a format as may be determined by the 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)
Polokwane Local Municipality	No
Capricorn District Municipality	No
Molepo Tribal Council	No
Department of Water and Sanitation	No
Department of Agriculture	No

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?	**YES**	**NO**

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

SECTION D: IMPACT ASSESSMENT

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

1. ISSUES RAISED BY INTERESTED AND AFFECTED PARTIES

List the main issues raised by interested and affected parties.

There are no issues of concerns raised from the interested and affected parties thus far. Consultation is still in process and follow up will be made in order remind all stakeholders to submit their issues.

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):

N/A

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

List the potential direct, indirect and cumulative property/activity/design/technology/operational alternative related impacts (as appropriate) that are likely to occur as a result of the planning and design phase, construction phase, operational phase, decommissioning and closure phase, including impacts relating to the choice of site/activity/technology alternatives as well as the mitigation measures that may eliminate or reduce the potential impacts listed.

Alternative (preferred alternative)

2.1. PLANNING AND DESIGN PHASE

2.1.1 Socio-Economic impacts

Direct Impacts

Employment opportunities for design and assessment-related services, such as engineers and environmental consultants. In addition, input would be required from the regional authorities responsible for reviewing the applications made in terms of the relevant legislation.

Proposed Mitigation

There are no foreseeable negative impacts; therefore, no mitigation measures are necessary.

Indirect Impacts:

2.1.2 Location of Storm Water Drains

Storm water location unable to efficiently channel water away from site may result in ground and surface water pollution.

Proposed Mitigation

That uncontaminated stormwater runoff, e.g. from roofs, be directed around the contaminated stormwater system and released to the municipal stormwater system

That a dedicated contaminated stormwater management system for the forecourt area be put in place, and that such a system includes a grit trap and oil/water separator

That a management system for the cleaning and maintenance of the grit trap and oil/water separator be maintained by the filling station operator

That stormwater outfalls are appropriately designed to minimise the likelihood of soil erosion.

Cumulative Impacts:

Cumulative loss of natural habitat

Deterioration of soil fertility and downstream water quality.

2.1.3 NO- GO

Positive

No potential impacts on ground and surface water

No potential soil erosion.

Negative

No additional job opportunities created

No contribution to infrastructure and development of the area.

2.2. CONSTRUCTION PHASE

2.2.1 Soils and Groundwater

Direct Impacts:

Potential disturbances on the soil include compaction, physical removal and potential pollution by hydrocarbons.

Contamination of the environment, specifically the soil and groundwater could arise during the construction phase. The potential exists for construction activities, workers and materials to transfer contaminants to the surrounding environment. This could arise as a result of, for example, inadequate ablution facilities, spillage of hazardous substances stored on the site, inappropriate responses to hazardous spills and improper waste handling, storage and disposal.

Indirect Impacts:

The clearance of vegetation and the exposure of the soil will increase the risk of erosion off the site.

Altered hydrological regime as a result of artificial hardening of the soil surface, cut and fill activities and compaction of soils on the site.

Proposed Mitigation

A stormwater and erosion control plan must be implemented across the entire development site to prevent and control erosion impacts.

Construction vehicles must make use of designated access routes and should not be permitted to drive over the entire site, so as to minimize compaction impacts.

All construction vehicles will be properly maintained to prevent leaks.

• Cement mixing must be confined to a designated area and must be done on an impervious surface.

• Any fuel stored on site must be kept in a bunded containment area.

• Drip trays are to be utilised during daily greasing and re-fuelling of machinery and to catch incidental spills and pollutants.

• Drip trays are to be inspected on a weekly basis for leaks and effectiveness, and emptied when necessary. This is to be closely monitored during rain events to prevent overflow.

2.2.2 Stormwater

Direct Impact:

During the construction phase, building materials such as building sand, cement, rubble and litter from construction workers can accrue on site. These materials can contaminate the stormwater and then be washed into the stormwater system.

Proposed Mitigation

During construction, all material excavated must be protected, screened or covered to prevent off site movement (primarily wind-blown soil or surface runoff) and the surplus material must be removed from site weekly to a licensed waste disposal site or re-used if appropriate.

All storm water channels around the outside of the site should be inspected regularly to ensure that they are not blocked and/or obstructed to ensure their efficient operation.

Storm water runoff must be controlled to ensure that on-site activities do not result in off-site pollution.

Soil erosion on site must be prevented at all times. If the storm water is of such a quality that suspended solids are present, then detention ponds for removal of suspended solids must be considered.

2.2.3 Traffic

Direct Impacts:

Increased traffic volumes will be generated, including heavy vehicles delivering materials to the site. This could cause slight delays in existing traffic operations on the D4020. The heavy vehicles may also cause damage to the public road.

Proposed Mitigation

A detailed Traffic Management Plan should be compiled by the Contractor to ensure that traffic on the local roads is disrupted as little as possible.

This plan should include measures for the optimization of the amount of travel on the local roads, thereby reducing impacts.

The delivery of construction equipment and material should be limited to hours outside peak traffic times (including weekends).

Where obvious damage to the road infrastructure has occurred as a result of the project, repairs should be undertaken in accordance with the relevant authority's specifications and requirements.

2.2.4 Air Quality

Direct Impacts:

Air quality impacts may arise during the construction phase as a result of dust generated by the exposure and disturbance of soil.

Fugitive dust may become a nuisance for surrounding land users and occupiers.

It may also create a hazard for users of the D4020 Road and must therefore be tightly controlled.

Further air quality impacts will arise as a result of the exhaust emissions from construction vehicles.

The significance of this impact is however expected to be minimized by the proximity of the proposed development site to the road, on which traffic volumes are high, resulting in relatively poor ambient air quality due to vehicle emissions, under normal conditions. The contribution made by construction vehicles is deemed to be negligible.

Proposed Mitigation

Dust minimisation and control measures should be implemented on the construction site at regular intervals. This could include irrigation by water tankers.

The frequency of implementation of dust suppression measures should be increased when it is expected that high wind conditions will develop.

Vegetation clearing should only take place immediately prior to the commencement of construction activities in an area, in order to minimise the amount of exposed soil on the site.

Stock piles and spoil heaps must be covered with tarpaulins or straw to prevent fugitive dust.

All construction vehicles must be appropriately maintained to minimise exhaust emissions.

2.2.5 Vegetation

Direct Impacts:

The site has no vegetation of value; only grass which is covering the site would be cleared for the new development.

Loss of vegetation will occur as a result of vegetation clearing to prepare the site for construction activities.

The size of the site proposed for development is small enough, however, that its clearance will not compromise the functioning of the corridor. The site is not located along a “movement corridor” such as a valley or watercourse, rather it is located between two main transport routes further minimizing the significance of the site in the functioning of the ecological corridor.

Indirect Impacts:

Spread of alien invasive plant species as a result of the disturbance of vegetation and soils on the site by construction activities.

Cumulative Impacts:

Fragmentation of habitat and disturbance of ecological process areas.

Proposed Mitigation

The extent of the construction footprint must be limited as much as possible.

Limit vegetation removal to the construction footprint only. Retain natural vegetation as much as possible.

Re-vegetate disturbed areas, which are not intended to be developed, as soon as construction activities have been completed.

Rehabilitation must make use of indigenous grasses and should be undertaken by means of in-situ grass sods and hydro-seeding.

Indigenous, low maintenance and water-wise plants should be utilised in landscaped areas.

Alien plants must be removed by the Contractor, where these plants establish in the construction footprint during the construction period.

2.2.6 Solid gaseous and liquid Waste Generation.

The three forms of waste will be generated at the site during construction and operation phases of the projects infrastructure. Such waste will consist of metal cuttings, rejected materials, surplus materials, spoilt, excavated materials, waste oils and grease, pieces of tyres, paper bags, empty cartons, empty paint and solvent containers, broken glass among others. Such solid waste materials can be injurious to the environment through blockage of drainage systems, choking of water bodies and negative impacts on human and animal health. This may be accentuated by the fact that some of the waste materials contain hazardous substances such as oils and grease, paints, cement, adhesives and cleaning solvents, while some of the waste materials including metal cuttings and plastic containers are not biodegradable and can have long-term and cumulative effects on the environment. They also pose danger to the safety of the public in case of accidental cutting or injury.

Proposed Mitigation

The waste materials should be properly segregated and separated to encourage recycling of some of them such as concrete debris which can be used as backfills with the approval of the site engineer.

On completion, the property management should adapt a waste management system to handle any waste that would be generated from various operations.

2.2.7 Noise Impacts

Direct Impacts:

Noise impacts will arise as a result of the use of construction vehicles and machinery on the development site.

These noise impacts may be a nuisance to surrounding land users and occupiers.

It must be noted that the significance of the nuisance is somewhat reduced by the location of the proposed development site in close proximity to a busy road. These create noise impacts and affect ambient noise levels. It is not anticipated that the construction activities will contribute significantly to ambient noise levels.

Proposed Mitigation

Construction activities should be limited to normal working hours (08:00 – 17:00) and limited to weekdays.

No work should occur on weekends or on public holidays.

The contractor will adhere to local authority by-laws relating to noise control.

Mechanical equipment with lower sound power levels must be selected to ensure that the permissible occupation noise-rating limit of 85 dBA is not exceeded.

Equipment must be fitted with silencers as far as possible to reduce noise.

All equipment to be adequately maintained and kept in good working order to reduce noise.

Neighbouring landowners should be informed prior to any very noisy activities e.g. high intensity drilling. A grievance procedure will be established whereby noise complaints can be received, recorded and responded to appropriately.

Construction workers and personnel will wear hearing protection when required.

Noise levels must comply with the SANS 100103 – 0994 (recommended noise levels).

2.2.8 Visual Impacts

Direct Impacts:

Visual impacts will be caused by construction-related activities such as the stockpiling of material, trucks, construction offices, clearance of vegetation, excavation and storage of construction materials and equipment. This impact will be temporary in nature, being limited to the construction phase.

Cumulative Impacts:

Litter (if wastes are improperly handled, stored and disposed of).

Proposed Mitigation

The construction site, material stores, stockpiles and lay-down area should be kept tidy.

Measures to control wastes and litter should be included in the contract specification documents.

Wind-blown dust from stockpiles and construction activities should be controlled.

2.2.9 Occupational Health and Safety

Direct Impacts:

Occupational health and safety risks will exist during the construction phase as a result of open excavations, vehicle movement and other construction activities. These may pose a health and safety hazard to construction workers.

Proposed Mitigation

The construction site must be fenced off to prohibit unauthorised access and site access must be strictly controlled.

All employees, contractors and sub- contractors to wear appropriate Personal Protective Equipment (PPE).

Open excavations must be clearly marked.

Appropriate health and safety signage must be displayed on site.

2.2.10 Fire safety

Fire safety measures should be considered in any development plan. Fire outbreaks are common occurrences in many premises mainly due to poor installation of electric devices or poor handling of fire equipments or flammable substances. In this development proposal; proper care will be taken into account during and after the implementation phase so as to minimize chances of fire outbreaks.

Proposed Mitigation

Fire alarm and fighting equipments should be installed within the facility once it is complete. A “No smoking” notice

should be placed strategically on site.

Ensure that all firefighting equipments installed on the site once it is complete are regularly maintained and serviced.

Dry sand buckets should be placed in strategic places in case of fire.

The facility operators should be trained on how to use various firefighting devices.

Emergency chart numbers should be placed strategically in case of any emergency.

2.2.11 Archaeology / Palaeontology

Direct Impacts:

The construction phase may potentially result in the loss of cultural heritage resources and artefacts buried beneath the surface.

It is deemed unlikely that there will be any resources of heritage significance on the site, as much of the property falls within the road reserve area of the D4020 and has therefore been previously disturbed by construction activities on these roads.

In addition, it is understood that the site has previously been cultivated. Any heritage resources would have been uncovered at that time.

Proposed Mitigation

• If an artefact of potential historical significance is uncovered during construction, the Limpopo Heritage Resources Authority (LIHRA) or South Africa Heritage Resource Authority (SAHRA) must be notified immediately.

2.2.12 Socio-Economic Impacts

The proposed development will have numerous positive impacts to the area residents and to the general area. Some of the anticipated benefits include:

Direct Impacts:

Based on the anticipated value of construction, it is projected that approximately 25 construction-phase jobs would be created. These positions may, however be filled at various times by numerous people on a part-time basis, increasing the actual number of jobs created.

The contractors are likely to utilise existing, skilled staff. However, should the need for unskilled, short term labor arise, these workers would, most likely, be sourced from the local community.

The construction phase will provide job security for the existing employees of the appointed contracting company.

The street vendors will be benefited as this development will extract even more customers for their market.

The large number of project staff required provides ready market for various goods and services, leading to several business opportunities for small-scale traders such as food vendors around the construction site.

Indirect Impacts:

The proposed development is predicted to provide an input stimulus into the local economy. The direct impact on the economy of construction spending and labourer/employee spending, could result in growth in the local economy. The extent to which the Polokwane Local Municipality would benefit from construction phase spending would depend on the extent to which construction goods and labour are sourced from local suppliers and communities.

The project will require supply of large quantities of building materials most of which will be sourced locally and from the surrounding areas. This provides ready market for building material suppliers such as quarrying companies, hardware shops and individuals with such materials

Potential increase in criminal activity in the areas surrounding the construction site, associated with the presence of transient job seekers on the site.

Cumulative Impacts:

Increased wealth in the community.

Skills development.

An Environmental Control Officer (ECO) must be appointed to oversee the implementation of the Environmental Management Programme (EMPr) for the duration of the construction phase.

2.3. OPERATIONAL PHASE

2.3.1 Soil and Groundwater Contamination

Direct Impacts:

There is potential for soil and/ or groundwater contamination during the operation phase, as a result of accidental spills or leaks from the underground fuel storage and handling infrastructure, including pipework and underground storage tanks.

Contamination could furthermore arise as a result of the spillage of hazardous substances, inappropriate responses to hazardous spills, improper waste handling, storage and disposal, and the failure of the effluent management system or stormwater management system.

Proposed Mitigation

The following recommendations must be complied with. These include:

- Fuel storage tanks must be constructed according to SABS guidelines (see Section A, Part 1.4 this Report) and good engineering practice.
- Monitoring wells should be installed in each corner of any underground storage tank excavations in line with the requirements of the SABS, and should be monitored regularly, as an early warning leak detection system. Underground storage tanks should also be fitted with automatic leak detectors that alert management to a leak.
- Sanitation facilities should be well maintained and serviced, any breakages or leaks should be fixed immediately to prevent loss of containment.
- Stormwater management from the forecourt area should be designed to collect all runoff which should pass through an oil/water separator prior to being discharged.
- As a first response, emergency spill kits on site are a necessity for handling any minor spills that may impact on the land for emergency response to any surface spills.
- Refuse handling areas should be confined to concrete lined facilities that are covered to prevent ingress of rainfall.
- Baseline water quality of the nearby boreholes should be established.

Any significant spills or leak incidents must be reported in terms of the National Environmental Management Act, 1998 and the National Water Act, 1998.

Fuel dispenser pumps must be located on a hardened surface to contain spillages.

The accumulated contents of the oil/water separator must be removed by an accredited company.

The oil/water separator must be inspected regularly to ensure that it is functioning at all times.

Overfill and spillages during tanker refuelling and fuel dispensing should be prevented by the installation of automatic cut off devices.

Tanker delivery drivers must be present during delivery of fuel with the emergency cut off switch.

In the event of the pump dispenser or the hoses being knocked over or ripped off, the fuel supply must be cut off by shear-off valves.

All forecourt staff must undergo appropriate training, which must include training to prevent spillages during fuel dispensing.

The underground storage tanks, pipelines and other associated infrastructure must be inspected regularly for leaks and to ensure structural integrity.

A closed coupling must be used when fuel is being transferred from the bulk delivery vehicle to the underground storage tanks.

An Emergency Response Plan must be in place for the site, this must clearly describe emergency procedures and include emergency contact numbers.

If contamination or leakage is detected, this Emergency Response Plan must be followed.

Following a leak or accidental spill, a remediation plan must be compiled and executed.

Accidental spills that may occur on the forecourt must be cleaned up immediately using a spill absorbent, which must then be removed by a licenced contractor.

Fuel stock must be monitored on a daily basis and these records must be kept on site.

USTs must have corrosion protection and secondary containment.

Inspection wells will be installed within the underground storage tank containment area, at all four corners of the containment area. These wells must be inspected on a monthly basis so that leaks can be detected early.

The forecourt must have an impervious surface, such that fuel and oil products will not leak into the soil or groundwater below the forecourt.

The design must ensure that all runoff from the forecourt is directed into the storm water management system, which must direct runoff into an oil/water separator and then into the wastewater treatment system established for the project, prior to being released to the environment.

All pipework will be double walled and comply with SANS 62- 1 and 2, SANS 1132 (pipework).

The underground storage tank installation must comply with SANS 10089 part 1 (storage of dangerous goods in underground storage tanks).

Monitoring of the quality of groundwater should be undertaken on a regular basis. The results of this monitoring should be compared against the baseline quality conditions. If any contamination is detected, immediate steps must be taken to locate the source of the contamination and to correct it.

2.3.2 Stormwater

Direct Impacts:

Increase in impervious surfaces which may promote erosion and flash floods.

Cumulative Impacts:

The impact will be cumulative due to surrounding road network and existing petrol station, which also have associated hardened surfaces discharging runoff to the municipal storm water system.

Proposed Mitigation

Soil Management (erosion control): Erosion control measures should be installed to stabilize the banks and prevent future erosion that may affect the development and the vegetation.

Pollution Control: Sewerage and waste water systems should be properly connected to the existing structures.

Measures to mitigate against cumulative stormwater impacts can only be controlled on and adjacent to the site and as such the proposed mitigation measures outlined above still apply

2.3.3 Air Quality Impacts

Direct Impacts:

Impacts on air quality will arise due to exhaust fumes from motor vehicles, emissions from vent pipes and the release of Volatile Organic Compounds (VOCs) during fuel transfer.

The VOCs released during fuel transfer and from vents will dissipate into the atmosphere shortly after being released and are not likely to travel to the surrounding areas.

Proposed Mitigation

The underground storage tanks must be designed and installed in accordance with the SABS 089-3-1999, Third Edition. Code of practice - The petroleum industry, Part 3: The installation of underground storage tanks, pumps/dispensers and pipework at service station and consumer installations). SANS standards adequately address various potential air quality impacts via the implementation of required engineering measures.

Underground storage tanks must be fitted with breather pipes.

Vent pipes are to be fitted such that they face away from neighbouring residential areas.

All fuel delivery vehicles must be adequately maintained to reduce exhaust emissions.

2.3.4 Traffic Impacts

Direct Impacts:

The operational filling station will result in an increase in traffic volumes on the road network surrounding the site. The existing road network has sufficient capacity to accommodate this increased volume of traffic.

Proposed Mitigation

A surface sidewalk should be constructed along the southern side of the D4020 for the entire length of the site.

Sufficient parking and loading bays must be provided on the site

2.3.5 Noise Impacts

Direct Impacts

During operation, the noises that may be associated with the filling station may include staff talking amongst one another and vehicles revving as they leave the station.

Proposed Mitigation

A grievance procedure will be established whereby noise complaints can be received, recorded and responded to appropriately.

Equipment such as mechanical equipment, extraction fans, refrigerators that are fitted with noise reduction facilities (e.g. side flaps, silencers etc.) must be used as per operating instructions and maintained properly.

Noise levels should comply with the SANS Code of Practice 100103 – 0994 (recommended noise levels).

Local by-laws for noise levels must be adhered to.

2.3.6 Visual Impacts

Direct Impacts:

The presence of the station in a previously agricultural area will have a visual impact in the area, particularly for the neighbouring landowners.

In order for the station to attract customers, there is a need for identifiable corporate and direction signage, most of which will be illuminated at night.

The lighting used for signage will increase the visual impact of the facility during the night time for both neighbours and road users.

Proposed Mitigation

Building and landscaping should receive on-going maintenance to avoid visual decay.

Litter and waste should be effectively managed to avoid visual problems in the area.

All yards and storage areas to be enclosed by masonry walls or screens.

The forecourt apron and parking bays should be paved with brick or other unit pavers to minimise expansive asphalt areas.

External lighting should be confined to the dispensing forecourt, commercial outlets and other essential areas.

Lights should be low-level, where possible, and fitted with reflectors to avoid light spillage.

Lights and signage should be fixed to buildings or walls, where possible, to avoid unnecessary masts and visual clutter.

Signage related to the enterprise should be confined to the tower, canopy and entrances. Other corporate or advertising signage and flags should be avoided or restricted.

Health and Safety Impacts

Direct Impacts

Petroleum and diesel fuel are considered dangerous substances as they are volatile and could potentially ignite under specific circumstances. Therefore, there is a risk of fire or explosions on site, which would pose a threat to on-

site employees and surrounding land users and occupiers.

However, this impact is highly unlikely to occur as there are numerous imbedded mitigation measures to minimize the risk of fires and explosions.

Proposed Mitigation

Fire extinguishers and sandbags must be readily available onsite and easily accessible.

Firefighting equipment must comply with SANS 1151 (Portable rechargeable fire extinguishers - Halogenated hydrocarbon type extinguishers) and must be inspected regularly.

Appropriate health and safety signage must be displayed on site.

An Emergency Response Plan must be in place for the site, this must clearly describe emergency procedures and include emergency contact numbers.

No smoking may be permitted on site.

No cell phones may be used during fuel dispensing.

Staff must be trained adequately so as to identify potential high-risk situations and implement the Emergency Response Plan.

Overfill and spillages during tanker refuelling and fuel dispensing should be prevented by the installation of automatic cut off devices.

Tanker delivery drivers must be present during delivery of fuel with the emergency cut off switch and a fire extinguisher.

A closed coupling must be used when fuel is being transferred from the bulk delivery vehicle to the underground storage tanks to prevent fugitive emissions.

2.3.7 Socio-economic Impact

Direct Impacts:

It is expected that ±10 people will be employed during the operational phase of the development, with approximately 80 percent of the employment positions being made available to previously disadvantage South Africans from the local community.

2.3.8 Improved access to Fuel Retailer

Direct Impacts:

At present, there are no existing filling stations located in proximity to the proposed site on the D4020 the closest filling station is the Shell Boyne. This proposed development will fulfil a need for a fuel supplier and convenience store for this identified market and demand.

2.3.9 Pollution from sanitation system

Indirect

Improperly treated wastewater can contaminate soil and water quality, causing disease. I Infectious diseases are spread by mosquitoes and flies that breed in areas where liquid wastewater reaches the surface.

Risk to the public, especially children and animals who come into contact with surface flows.

Proposed Mitigation

The detection of leakages/malfunctioning of septic tank must be reported and repaired immediately.

It should be designed and used in such a way that the tank takes the longest possible time to fill, without causing environmental damage.

The use of water (grey water) is able to reduce the sludge accumulation rate in the tank, and also to reduce potential problems odours.

The septic tank should not be used as a disposal site for household waste.

By ensuring that an effective solid waste removal system is in place and educating users about the consequences of putting non-degradable refuse into the tank, the lifespan of this tank will be substantially enhanced.

The septic tank must be pumped and maintained to avoid it to have blockage and overflow in the environment. Regular maintenance is the single most important consideration in making sure the septic system works well over time. Regular pumping helps prevent solids from escaping into the drainfield and clogging soil pores.

2.3.10 Socio-economic Impacts:

Indirect Impacts:

The proposed development is projected to provide an input stimulus into the local economy. The direct impact on the economy, through the associated larger development, could result in growth in the local economy.

Cumulative Impacts:

Skills development.

• Increased wealth in the community.

2.4. DECOMMISSIONING AND CLOSURE PHASE

2.4.1 Soil and Groundwater Contamination

There is potential for soil and groundwater contamination as a result of accidental spills and leaks from underground storage tanks and associated infrastructure that may have occurred during the operation phase.

Hydrocarbon contamination may persist in the subsurface for an extended period before degradation takes place.

Proposed Mitigation

Residual product must be removed from the underground storage tanks and associated infrastructure.

Underground storage tanks must be degassed before removal.

Soil samples must be taken from the base and sides of the underground storage tank excavation to determine whether or not the soil has been impacted during the lifespan of the underground storage tank.

Excavated soil will be screened with a PID to ensure appropriate handling of impacted soil (i.e. bioremediation at an appropriately licensed facility) or reuse of the soil as backfill onsite. Should it be determine that the site has been impacted and the soil and/or groundwater have been contaminated, a Remediation Action Plan must be developed

and implement by appropriately qualified personnel.

2.4.2 Air Quality Impacts

There is potential for the air quality to be impacted through the decommissioning activities that may generate dust through excavation activities and disturbing the ground.

Exhaust emissions produced by construction equipment will be dispersed and it is not anticipated that they will cause a nuisance to surrounding landowners.

Proposed Mitigation

Dust suppression methods, such as wetting or laying straw, should be applied where there are large tracks of exposed surfaces.

Stockpiles and soil heaps must be covered with tarpaulins or straw to prevent fugitive dust.

All construction vehicles must be appropriately maintained to minimise exhaust emissions

2.4.3 Traffic Impacts

Vehicle traffic around the site may increase during the decommissioning phase and impact the natural traffic flow around the site.

Proposed Mitigation

Co-ordination of movement of vehicles on and off site to reduce risks and prevent congestion on roads in the vicinity of the site.

No vehicles or machinery should be serviced or refuelled onsite.

Peak traffic hours should be avoided.

Large vehicle turning must take place onsite and not in the adjacent roads.

In cases where activities may obstruct traffic, local traffic officials must be contacted.

2.4.4 Loss of Employment

The closure of the filling station will mean that those employed at the station will no longer be required, and their employment may be terminated.

Proposed Mitigation

Existing employees may be transferred to another station if feasible.

Employees must be given adequate notice prior to closure, to allow them time to seek alternative employment.

Station management must supply employees with a letter of recommendation and certificate of skills to assist them with future job applications.

2.4.5 Occupational Health and Safety

During the decommissioning phase, open excavations, vehicle movement and other construction activities may pose a health and safety hazard to workers.

Proposed Mitigation

The construction site must be fenced off to prohibit unauthorised access and site access must be strictly controlled.

All employees, contractors and sub- contractors to wear appropriate PPE.

Open excavations must be clearly marked.

All employees, contractors and sub- contractors must comply with the relevant Health and Safety Policy.

Appropriate health and safety signage must be displayed on site.

2.4.6 Noise and Vibrations

Vehicles and other machinery required for decommissioning will increase the noise levels during working hours.

Decommissioning activities which are likely to cause vibrations include:

- gaining access to the underground tanks through the demolition of concrete by excavation machinery; and
- entry and use of construction vehicles as well as cranes on site.

Proposed Mitigation

The contractor will adhere to local authority by-laws relating to noise control.

Decommissioning activities will be restricted to regular working hours, i.e. Monday to Friday (08:00 – 17:00).

Mechanical equipment with lower sound power levels will be selected to ensure that the permissible occupation noise-rating limit of 85 dBA is not exceeded.

Equipment will be fitted with silencers as far as possible to reduce noise.

All equipment to be adequately maintained and kept in good working order to reduce noise.

Neighbouring landowners should be informed prior to any very noisy activities e.g., high intensity drilling.

A grievance procedure will be established whereby noise complaints can be received, recorded and responded to appropriately.

Workers and personnel will wear hearing protection when required.

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)

Likely impacts associated with the proposed development have been identified through the undertaking of site visits, consultation of published information and independent assessment by the Environmental Project Team.

3.1 Methodology

Impacts identified were assessed according to the criteria outlined below. Each impact was ranked according to extent, duration, magnitude and probability. A significance rating was calculated as per the methodology outlined below. Where possible, mitigatory measures were recommended for the impacts identified.

3.1.1 Status of the Impact

The impacts were assessed as having either a:

- Negative effect (i.e. at a cost to the environment);
- Positive effect (i.e. a benefit to the environment); or
- Neutral effect on the environment.

3.1.2 Extent of the Impact

The extent of each impact was rated as being one of the following:

(1) Site - within the boundaries of the development site;

(2) Local - the area within 5 km of the site;

(3) Municipal - the Polokwane Local Municipality;

(4) Regional - The Limpopo Province;

(5) National – South Africa; or

(6) International – Southern Africa.

3.1.3 Duration of the Impact

The duration of each impact was rated as being one of the following:

(1) Immediate - > 1 year;

(2) Short term – 1 – 5 years;

(3) Medium term – 6 – 15 years;

(4) Long Term – the impact will cease when the operation stops; and

(5) Permanent – no mitigation measure will reduce the impact after construction.

3.1.4 Magnitude of the Impact

The intensity or severity of each impact was rated as being one of the following:

(0) None – where the aspect will have no impact on the environment'

(2) Minor – where the impact affects the environment in such a way that natural, cultural and social functions / processes are not affected;

(4) Low – where the impact affects the environment in such a way that the natural, cultural and social functions / processes are slightly affected;

(6) Moderate – where the affected environment is altered but natural, cultural and social functions / processes continue, albeit in a modified way;

(8) High – natural, cultural or social functions / processes are altered to the extent that they will temporarily cease; or

(10) Very high / unknown – natural, cultural or social functions / processes are altered to the extent that they will permanently cease.

3.1.5 Probability of Occurrence

The likelihood of the impact actually occurring is indicated as either:

(0) None – the impact will not occur;

(1) Improbable – the possibility of the impact materialising is very low as a result of design, historic experience or implementation of adequate corrective actions;

(2) Low – there is a probability that the impact will occur;

(3) Medium – the impact may occur;

(4) High – it is most likely that the impact will occur; or

(5) Definite / unknown – the impact will occur regardless of the implementation of any prevention or corrective actions, or it is not known what the probability will be, based on a lack of published information.

3.1.6 Significance of the Impact

Based on the information contained in the points above, the potential impacts have been assigned a significance weighting (S). This weighting is formulated by adding the sum of the numbers assigned to extent (E), duration (D) and magnitude (M) and multiplying this sum by the probability (P) of the impact.

S = (E+D+M) *P

The significance weightings are:

- (< 30) Low – the impact would not have a direct influence on the decision to develop in the area;
- (30 – 60) Medium – the impact could influence the decision to develop in the area unless it is effectively managed / mitigated; and
- (> 60) High - the impact must have an influence on the decision-making process for development in the area.

It must be noted that in identifying and describing the potential impacts of the development, as well as in determining the significance ratings for the impacts, a team of specialist sub- consultants were consulted and appointed to undertake individual specialist studies. These studies informed the findings of this report and are appended in Appendix D.

DESIGN AND CONSTRUCTION PHASE

Impacts	Impact				Significance Pre-Mitigation	Significance Post-Mitigation
	Extent	Duration	Magnitude	Probability		
Job creation	(3) Municipal	(2) Short Term	(6) Moderate	(5) Definite	Medium (+)	Medium (+)
Soil disturbance	(2) Local	(2) Short Term	(6) Moderate	(3) Medium	Low (-)	Low (-)
Ground water contamination	(2) Local	(2) Short Term	(4) Low	(2) Low	Low (-)	Low (-)
Stormwater	(1) Site	(2) Short Term	(4) Low	(3) Medium	Low (-)	Low (-)
Increased traffic volumes, congestion and damage to roads	(2) Local	(1) Immediate	(4) Low	(2) Low	Low (-)	Low (-)
Dust generation and exhaust emissions	(2) Local	(1) Immediate	(4) Low	(3) Medium	Low (-)	Low (-)
Vegetation Clearing	(1) Site	(4) Long term	(4) Low	(5) Definite	Medium(-)	Low (-)
Spread of alien Vegetation	(1) Site	(2) Short Term	(4) Low	(2) Low	Low (-)	Low (-)
Noise generation	(2) Local	(1) Immediate	(2) Minor	(2) Low	Low (-)	Low (-)
Visual Impacts	(2) Local	(1) Immediate	(2) Minor	(3) Medium	Low (-)	Low (-)
Litter	(2) Local	(1) Immediate	(4) Low	(3) Medium	Low (-)	Low (-)
Occupational Health and Safety risks	(1) Site	(1) Immediate	(4) Low	(1) Improbable	Low (-)	Low (-)
Damage of sub-surface heritage	(1) Site	(1) Immediate	(0) None	(1) Improbable	Low (-)	Low (-)
Job creation and skills development	(3) Municipal	(1) Immediate	(4) Low	(5) Definite	Medium (+)	Medium (+)
Job security	(3) Municipal	(1) Immediate	(6) Moderate	(5) Definite	Medium (+)	Medium (+)
Increase criminal activity	(2) Local	(2) Short Term	(6) Moderate	(2) Low	Low (-)	Low (-)

Stimulus of Local Economy	(3) Municipal	(2) Short Term	(6) Moderate	(5) Definite	Medium (+)	Medium (+)

OPERATIONAL PHASE

DESIGN AND CONSTRUCTION PHASE

Impacts	Impact				Significance Pre-Mitigation	Significance Post-Mitigation
	Extent	Duration	Magnitude	Probability		
Soil and Ground water contamination	(2) Local	(3) Medium term	(4) Low	(1) Improbable	Low (-)	Low (-)
Air quality	(2) Local	(1) Immediate	(2) Minor	(1) Improbable	Low (-)	Low (-)
Traffic	(2) Local	(1) Immediate	(4) Low	(2) Low	Low (-)	Low (-)
Loss of Employment	(3) Municipal	(1) Immediate	(6) Moderate	(3) Medium	Low (-)	Low (-)
Occupational Health and Safety	(1) Site	(1) Immediate	(4) Low	(1) Improbable	Low (-)	Low (-)
Noise and vibration	(2) Local	(1) Immediate	(2) Minor	(2) Low	Low (-)	Low (-)

The proposed project would result in limited negative impacts on the biophysical and socio- economic environment during the construction phase. Those negative impacts that would arise on the biophysical and socio-economic environments would have a low significance if the recommended mitigation measures are implemented.

Potential construction related impacts were assessed, in general, to be of low significance, due to their local nature and short-term durations. Impacts would decrease to lower levels of significance with the implementation of the recommended mitigation measures.

During the operational phase, the impacts relating to the contamination of the surrounding area through operational activities was found to be of medium to low significance, however through the implantation of the recommended mitigation measures these could be reduced to low significance.

No-go alternative (compulsory)

The No-Go alternative would result in the status quo continuing on the site. New employment opportunities would be lost both during the construction and operational phases and competition would not occur with existing nearby filling stations.

Without the proposed development, the location will remain in its current abandoned state. This no-action alternative in itself, presents environmental concerns, as the site in its current state is prime but underutilized. From a socio-economic perspective, the no-action alternative will definitely not yield any benefit to the proponent and the surrounding communities. This alternative would mean that the project does not proceed.

Advantages

Air pollution from dust as a result of the construction process will not occur.

There would not be soil compaction as a result of heavy machinery use.

There would be no soil or water contamination.

Disadvantage

There will be no creation of employment.

There will be no additional facility to drive socio-economic development.

The improvement in infrastructure as a result of the project would not be realized.

The value of land might improve but it will remain under development.

The expected income in the form of profits to the developer and in the form of taxes to the government will not be realized.

Provision and supply of construction materials will not improve.

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)?	YES	NO

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

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

The EAP recommends that the implementation and strict adherence to the EMPr forms part of the conditions of an Environmental Authorisation for the development. The EAP also recommends that all mitigation measures as described in this Basic Assessment Report be included as part of the conditions of the authorisations grantedfor the development. Furthermore, the developer should accept responsibility for appointing service providers that comply with the legislative requirements of the country and who have standing agreements with the necessary authorities where required.

The following measures/ plans must also be required as part of the approval:

- The dust suppression measures must be employed at reasonable intervals to reduce the community's exposure to dust.
- The Waste Management Plan must be developed approved; and implemented.
- Communication or awareness must be undertaken to the project team to ensure maximum participation and compliance to the EMPr.
- An ECO must be appointed to monitor compliance with the authorization and develop compliance reports to be submitted to the Department during the construction phase.
- The EMP attached and the mitigation measures related to it must be adhered to at all times and the appointed ECO must ensure that the developer complies with the EMP.
- It is recommended that adequate storm water management be incorporated in the design of the proposed development in order to prevent erosion and the associated sedimentation of the surrounding areas. All areas affected by construction which are to remain as open space areas should be rehabilitated upon the completion of the construction phase of the development.

All of the recommendations in the specialist reports that are included as a part of this application should be implemented & strictly adhered to in order to counteract adverse and cumulative impacts to the biophysical & social environments.
Installation of monitoring wells to trace any leakage from the underground storage tanks and or the installation of leak detectors.

- Preventing spillage due to overfill.
- Compliance with the No. 85 of 1993: Occupational Health and Safety Act as amended by Occupational Health and Safety Amendment Act, No 181 Of 1993.
- Tanks and the installation of tanks should comply with the South African National Standards
- The implementation of a service station Emergency Plan.
- An Emergency/Fine Response Plan needs to be complied with before construction commences.

Filling Station Layout and Design

- The final, detailed design and construction of the proposed filling station must comply fully with the relevant standards and guidelines. These have been outlined in Section A, Part 1.4 of this Report, which summarizes the industry-specific Standard Operating Procedures (SOPs) in place to guide the design and

installation of underground storage tanks, pumps and / or dispensers and related pipework at petrol filling stations.

- The layout and design of the facility must include a stormwater management system that collects and directs all contaminated / potentially stormwater runoff from the site into an oil / grease separator and then into the effluent treatment system, prior to discharge to the environment.

Is an EMPr attached? The EMPr must be attached as Appendix F.	YES	NO

SECTION F: APPENDIXES

The following appendixes must be attached as appropriate:

Appendix A: Site plan(s)

Appendix B: Photographs

Appendix C: Facility illustration(s)

Appendix D: Specialist reports

Appendix E: Comments and responses report

Appendix F: Environmental Management Programme (EMPr)

Appendix G: Other information

SECTION G: DECLARATION BY THE ENVIRONMENTAL ASSESSMENT PRACTITIONER

I, **Thendo Nelwamondo** 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:

Crysbol (Pty) Ltd
Name of company:

05 December 2019
Date: