



# LIMPOPO

PROVINCIAL GOVERNMENT  
REPUBLIC OF SOUTH AFRICA

## DEPARTMENT OF ECONOMIC DEVELOPMENT, ENVIRONMENT & TOURISM

### BASIC ASSESSMENT REPORT - EIA REGULATIONS, 2014

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

File Reference Number:

NEAS Reference Number:

(For official use only)

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: -

<p><b><u>Postal Address:</u></b>  Central Administration Office  Environmental Impact Management  P. O. Box 55464  <b>POLOKWANE</b>  0700</p>	<p><b><u>Physical Address:</u></b>  Central Administration Office  Environmental Affairs Building  Cnr Suid and Dorp Streets  <b>POLOKWANE</b>  0699</p>
<p><b>Queries should be directed to the Central Administration Office: Environmental Impact Management:-</b></p> <p><b>For attention:</b> Mr E. V. Maluleke  <b>Tel:</b> (015) 290 7138/ (015) 290 7167  <b>Fax:</b> (015) 295 5015  <b>Email:</b> <a href="mailto:malulekeev@ledet.gov.za">malulekeev@ledet.gov.za</a></p>	

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
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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<sup>1</sup>:

The existing Prima Phalaborwa filling station at 6 Coster Street, in Phalaborwa’s industrial area, is proposed to be upgraded through the installation of new and additional fuel storage tanks. The facility currently has an installed capacity of 28m<sup>3</sup> underground and one above-ground 9m<sup>3</sup> paraffin tank; this is proposed to be increased to 152m<sup>3</sup>, through installation of the following:

- Three above-ground diesel tanks with 23m<sup>3</sup> capacity each (total 69m<sup>3</sup>). Should approval for above-ground placement not be given by the municipality’s fire department, the tanks will be placed underground.
- One underground diesel tank with 46m<sup>3</sup> capacity
- The two existing tanks of 14m<sup>3</sup> capacity each (total 28m<sup>3</sup>) will remain in place. One of these may at a later stage be used for petrol.
- One above-ground paraffin tank with 9m<sup>3</sup> capacity

The filling station has been in operation for many years (since 2000 by the current operators; before that by a different operator) and is now due for an upgrade to improve its appearance, technology, and ability to serve customers. The current fuel storage capacity is so limited that the tanks need to be refilled every two days. It also can’t take a standard “full load” of 40m<sup>3</sup> as supplied by the oil companies and therefore need to make special arrangements every time to take partial loads. This is a big logistical challenge. With a larger onsite storage capacity, it will be possible to space deliveries at longer intervals and to take full loads, which can be more easily supplied by most oil companies.

The existing pumps are also very close to each other (an outdated type of layout that was used in old filling stations), which means that only one pump can be utilised at a time due to the lack of space for two cars behind each other. The facility therefore cannot operate at full capacity and increases waiting times for customers.

The facility is proposed to be upgraded through the following:

- Installation of additional storage capacity as described above. This is likely to be done in a phased manner; the full proposed 152m<sup>3</sup> will not be reached immediately.
- Replacing the two fuel pumps with two new ones using newer technology
- The new pumps will be placed in a different configuration to improve the flow of traffic / customers to the

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

filling station and allow it to operate at full capacity, as there is currently not enough space for two vehicles to park one behind the other at the existing pumps. The pumps will be placed on separate islands in order to be able to serve two vehicles each at the same time.

- Replacing the current canopy of 48m<sup>2</sup> with a new, larger canopy (96m<sup>2</sup>) so that all vehicles that are being served will be under the canopy. The new canopy will also be better-looking to improve the facility's appearance as compared to the old one.
- A convenience shop is proposed to be added at a later stage.

Above-ground tanks will be within sufficiently-sized bunds to intercept any spillage or leakage. Underground tanks will comply with relevant standards to minimise the risk of leakage. Various monitoring measures will be in place to quickly detect any loss of product, which could indicate a leak. The forecourt will be covered with a reinforced concrete slab edged with shallow channels, so that potentially contaminated storm water from the forecourt drains into underground sump(s) instead of entering the storm water infrastructure.

All services – water, sewerage and electricity – at the site are provided by the municipality (the site is connected to the municipal bulk infrastructure), and this will continue to be the case after upgrading.

Solid waste generated at the existing facility is collected on a weekly basis by the municipal refuse removal service, and this will continue to be the case after the proposed upgrade (if approved).

The facility is located within a built-up industrial area, and the site itself is also entirely transformed (built up and/or paved). The footprint of the facility will not be extended and will still be confined to the same built-up stand, which is 0,24ha in extent (2 359m<sup>2</sup>).

## 2. FEASIBLE AND REASONABLE ALTERNATIVES

**“alternatives”**, in relation to a proposed activity, means different means of meeting the general purpose and requirements of the activity, which may include alternatives to—

- (a) the property on which or location where it is proposed to undertake the activity;
- (b) the type of activity to be undertaken;
- (c) the design or layout of the activity;
- (d) the technology to be used in the activity;
- (e) the operational aspects of the activity; and
- (f) the option of not implementing the activity.

Describe alternatives that are considered in this application. Alternatives should include a consideration of all possible means by which the purpose and need of the proposed activity could be accomplished in the specific instance taking account of the interest of the applicant in the activity. The no-go alternative must in all cases be included in the assessment phase as the baseline against which the impacts of the other alternatives are assessed.

The determination of whether site or activity (including different processes etc.) or both is appropriate needs to be informed by the specific circumstances of the activity and its environment. After receipt of this report the Department may also request the applicant to assess additional alternatives that could possibly accomplish the purpose and need of the proposed activity if it is clear that realistic alternatives have not been considered to a reasonable extent.

### **Activity Alternatives**

No activity alternatives (alternative uses of the site) – were investigated, as a filling station is already operational on this site, with a solid customer base and successful business. It would not make business sense for the applicant to decommission the filling station and develop something completely new or different on the site. Furthermore, the filling station fits with the surrounding land uses and there are no unfavourable conditions or problems that would preclude / prevent the upgrading of the facility.

### **Site Alternatives**

No site alternatives were investigated, as the filling station is already operational on this site. Establishment of a new facility on a greenfield site would most likely have a greater impact than simply upgrading the existing facility. Furthermore, most of the infrastructure is already in place on this site and a customer base has already been developed

### **Layout Alternatives**

The existing layout was considered, in which case the configuration of the pumps and canopy would remain unchanged, and only additional tanks would be installed. However, the current layout is not ideal, as the facility cannot be used to its full capacity – there is not enough space for two vehicles to park one behind the other at the two pumps, therefore only two vehicles (instead of four) can be assisted at a time (one on either side of a single pump).

The layout that is preferred and which is included in this application (refer to Appendix C) makes provision for two separate pump islands configured in such a way that more vehicles can be helped at one time. The canopy will then also be expanded to ensure that the entire forecourt is covered. The tanks are proposed to be installed in the remaining open areas of the stand.

### **Design / Technology Alternatives**

No design / technology alternatives were investigated, as the type of tanks, pumps and piping proposed to be installed makes use of up-to-date technology that is used across the industry for this type of installation.

### **No-go Alternative**

The 'no-go' alternative refers to the scenario in which the filling station is not upgraded. In that case, the conditions and trends on site would remain as they currently are. If the no-go alternative is taken, the proposed



**4. PHYSICAL SIZE OF THE ACTIVITY**

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

**Alternative:**

Alternative A1<sup>3</sup> (preferred activity alternative)

Alternative A2 (if any)

Alternative A3 (if any)

or,

for linear activities:

**Size of the activity:**

±2 359m <sup>2</sup> / 0,23 ha
m <sup>2</sup>
m <sup>2</sup>

**Length of the activity:**

**Alternative:**

Alternative A1 (preferred activity alternative)

Alternative A2 (if any)

Alternative A3 (if any)

m
m
m

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

**Size of the site/servitude:**

**Alternative:**

Alternative A1 (preferred activity alternative)

Alternative A2 (if any)

Alternative A3 (if any)

m <sup>2</sup>
m <sup>2</sup>
m <sup>2</sup>

**5. SITE ACCESS**

**Does ready access to the site exist?**

YES	NO
n/a	

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

**Describe the type of access road planned:**

n/a

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

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 – **refer to Appendix A and C;**
- 6.2 the property boundaries and numbers of all the properties within 50 metres of the site – **refer to locality map under Appendix A;**
- 6.3 the current land use as well as the land use zoning of each of the properties adjoining the site or sites – **refer to Appendix A;**
- 6.4 the exact position of each element of the application as well as any other structures on the site – **refer to proposed layout plan under Appendix C;**
- 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 - **refer to layout map under Appendix C;**
- 6.6 all trees and shrubs taller than 1.8 metres – **refer to layout map under Appendix C;**
- 6.7 walls and fencing including details of the height and construction material – **pre-fab concrete wall along the stand boundary as indicated on locality map (Appendix A). Height 1.8m high along the western boundary, 2m along northern and eastern boundaries;**
- 6.8 servitudes indicating the purpose of the servitude – **refer to proposed layout plan under Appendix C;**
- 6.9 sensitive environmental elements within 100 metres of the site or sites including (but not limited thereto):
  - Rivers – **none;**
  - the 1:100 year flood line (where available or where it is required by Department of Water Affairs) – **none;**
  - ridges – **none;**
  - Cultural and historical features – **none;**
  - areas with indigenous vegetation (even if it is degraded or invested with alien species) – **none;**
- 6.10 for gentle slopes the 1 metre contour intervals must be indicated on the plan and whenever the slope of the site exceeds 1:10, the 500mm contours must be indicated on the plan – **refer to Appendix C;** and
- 6.11 the positions from where photographs of the site were taken – **refer to Appendix B.**

## 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.

**Please refer to Appendix B.**



## 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.

**Please refer to Appendix C for the proposed layout.**

## 11. ACTIVITY MOTIVATION

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

What is the expected capital value of the activity on completion?	±R 1,5 million	
What is the expected yearly income that will be generated by or as a result of the activity?		
Will the activity contribute to service infrastructure?	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?	21	
What is the expected value of the employment opportunities during the development phase?	±R400 000	
What percentage of this will accrue to previously disadvantaged individuals?	93%	
How many permanent new employment opportunities will be created during the operational phase of the activity?	±6-9	
What is the expected current value of the employment opportunities during the first 10 years?	±R5 million	
What percentage of this will accrue to previously disadvantaged individuals?	±80-90%	

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

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

<b>NEED:</b>			
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:		
	<b>The filling station upgrade is not included in the IDP, but the IDP also does not preclude activities related to filling stations in the area. The proposed upgrading of the filling station would not clash with anything planned / indicated in the IDP.</b>		

<b>DESIRABILITY:</b>
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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, Spatial development Framework, Land Use Management Scheme, and planning visions for the area? <b>The SDF and IDP both do not indicate any priority for development of a filling station where this project is proposed and the SDF does not indicate any planning visions that would conflict with the proposed filling station (e.g. conservation or mining).</b>	YES	NO
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: n/a		
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. n/a		

<b>BENEFITS:</b>			
i.	Will the land use / development have any benefits for society in general?	YES	NO
ii.	Explain: <b>Benefits will be felt locally.</b>		
iii.	Will the land use / development have any benefits for the local communities where it will be located?	YES	NO
iv.	Explain: - Small-scale job creation and sustaining existing jobs at the facility		

## 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 Act (No 108 of 1996), Chapter 2, Section 24	Dept of Water and Sanitation (DWS) & Dept of Environmental Affairs (DEA)	1996
National Environmental Management Act (No 107 of 1998)	In this case LEDET	19 Nov 1998, as

LEDET BA Report, EIA 2014: Project Name: Proposed Upgrading of an Existing Filling Station on Stand 1861, Phalaborwa

and regulations		amended
Environmental Impact Assessment (EIA) Regulations	In this case LEDET	2014, as amended 2017
National Heritage Resources Act (No 25 of 1999), Section 34 – 36	South African Heritage Resources Agency (SAHRA)	28 April, 1999
Occupational Health and Safety Act (No 85 of 1993), Sections 8 and 9	Department of Labour	1993
National Water Act (No 36 of 1998), Section 19 and 20 and Chapter 4 (Sections 21 – 55)	DWS	26 August 1998, as amended
National Environmental Management: Air Quality Act	DEA	2004
National Environmental Management: Waste Act (No 59 of 2008)	The sections relevant to this project are administered by BPLM	2008
Occupational Health and Safety Act (No 85 of 1993)	Department of Labour	1993
Petroleum Products Act (No 120 of 1977)	Department of Mineral Resources (DMR)	1977

## 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
$\pm 2m^3$	

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

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

Building rubble will mostly be used as fill material on this project. All waste that cannot be used as fill will be disposed of at the Phalaborwa municipal landfill site.

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

Building rubble will mostly be used as fill material on this project. All waste that cannot be used as fill will be disposed of at the Phalaborwa municipal landfill site.

Will the activity produce solid waste during its operational phase?

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

YES	NO
$\pm 2.5m^3$	

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

Solid waste will be collected by the municipal refuse removal service on a weekly basis, for disposal at the municipal landfill site. The waste that is currently generated at the existing filling station is already collected and disposed of in this way.

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

It will feed into the municipal waste stream.

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

Is the activity that is being applied for a solid waste handling or treatment facility?

YES	NO
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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
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If yes, what estimated quantity will be produced per month?

n/a

Will the activity produce any effluent that will be treated and/or disposed of on site?

YES	NO
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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
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If yes, provide the particulars of the facility:

Facility name:

Municipal sewerage works

Contact person:

Postal address:

Postal code:

Telephone:

Cell:

E-mail:

Fax:

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

n/a

### 11(c) Emissions into the atmosphere

Will the activity release emissions into the atmosphere?

YES	NO
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If yes, is it controlled by any legislation of any sphere of government?

YES	NO
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If yes, the applicant should consult with the competent authority to determine whether it is

necessary to change to an application for scoping and EIA.  
 If no, describe the emissions in terms of type and concentration:

- Exhaust emissions from vehicles and machinery used in construction.
- Some dust during construction phase.
- Fugitive emissions during filling of fuel storage tanks from fuel trucks, or when filling vehicles from pumps.

**11(d) Generation of noise**

Will the activity generate noise?

YES	NO
YES	NO

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

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

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

**Vehicles (both construction and operational phases) and people's voices; possibly also music from customers' vehicles.**

**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
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If water is to be extracted from groundwater, river, stream, dam, lake or any other natural feature, please indicate the volume that will be extracted per month:

$\pm m^3$ / month		
<table border="1"> <tr> <td>YES</td> <td style="background-color: #cccccc;">NO</td> </tr> </table>	YES	NO
YES	NO	

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

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

**13. ENERGY EFFICIENCY**

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

**LED lighting to minimize electricity usage.**

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

**Backup generator. Solar power is planned to be installed at a later stage.**

**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
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If YES, please complete the form entitled "Details of specialist and declaration of interest" for each specialist thus appointed:

All specialist reports must be contained in Appendix D.

Property description/physical address: 

<b>Property description:</b> Stand 1861, Phalaborwa <b>Physical address:</b> 6 Coster Street Phalaborwa, 1389
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(Farm name, portion etc.) Where a large number of properties are involved (e.g. linear activities), please attach a full list to this application.

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

Current land-use zoning: 

<b>Industrial</b>
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In instances where there is more than one current land-use zoning, please attach a list of current land use zonings that also indicate which portions each use pertains to, to this application.

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

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

YES	NO
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Locality map:

An A3 locality map must be attached to the back of this document, as Appendix A. The scale of the locality map must be relevant to the size of the development (at least 1:50 000. For linear activities of more than 25 kilometres, a smaller scale e.g. 1:250 000 can be used. The scale must be indicated on the map.) The map must indicate the following:

- an indication of the project site position as well as the positions of the alternative sites, if any;
- road access from all major roads in the area;
- road names or numbers of all major roads as well as the roads that provide access to the site(s);
- all roads within a 1km radius of the site or alternative sites; and
- a north arrow;
- a legend; and
- locality GPS co-ordinates (Indicate the position of the activity using the latitude and longitude of the centre point of the site for each alternative site. The co-ordinates should be in degrees, 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	<b>1:50 – 1:20</b>	<del>1:20 – 1:15</del>	<del>1:15 – 1:10</del>	<del>1:10 – 1:7,5</del>	<del>1:7,5 – 1:5</del>	Steeper than 1:5
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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
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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
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## 2. LOCATION IN LANDSCAPE

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

2.1 Ridgeline		<b>2.6 Plain</b>	<b>X</b>
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. GROUND COVER

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).

<del>Natural veld in good condition<sup>E</sup></del>	<del>Natural veld with scattered aliens<sup>E</sup></del>	<del>Natural veld with heavy alien infestation<sup>E</sup></del>	<del>Veld dominated by alien species<sup>E</sup></del>	Gardens
Sport field	Cultivated land	<b>Paved surface</b>	<b>Building or other structure</b>	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		5.23 Tertiary education facility	
5.3 Medium density residential	X	5.24 Church	
5.4 High density residential		5.25 Old age home	
5.5 Medium industrial <sup>AN</sup>		5.26 Museum	
5.6 Office/consulting room	X	5.27 Historical building	
5.7 Military or police base/station/compound		5.28 Protected Area	
5.8 Spoil heap or slimes dam <sup>A</sup>		5.29 Sewage treatment plant <sup>A</sup>	
5.9 Light industrial	X	5.30 Train station or shunting yard <sup>N</sup>	
5.10 Heavy industrial <sup>AN</sup>		5.31 Railway line <sup>N</sup>	
5.11 Power station		5.32 Major road (4 lanes or more)	
5.12 Sport facilities		5.33 Airport <sup>N</sup>	
5.13 Golf course		5.34 Harbour	
5.14 Polo fields		5.35 Quarry, sand or borrow pit	
5.15 Filling station <sup>H</sup>	X	5.36 Hospital/medical centre	
5.16 Landfill or waste treatment site		5.37 River, stream or wetland	X
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	X
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?

**No boxes marked with an "AN" are ticked**

If YES, specify and explain:

n/a

If NO, specify:	n/a
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If any of the boxes marked with an "H" are ticked, how will this impact / be impacted upon by the proposed activity.

**No boxes marked with an "H" are ticked**

If YES, specify and explain:	n/a
If NO, specify:	n/a

## 6. CULTURAL/HISTORICAL FEATURES

Are there any signs of culturally or historically significant elements, as defined in section 2 of the National Heritage Resources Act, 1999, (Act No. 25 of 1999), including	YES	NO
Archaeological or palaeontological sites, on or close (within 20m) to the site?	Uncertain	
If YES, explain:	n/a	
If uncertain, conduct a specialist investigation by a recognised specialist in the field to establish whether there is such a feature(s) present on or close to the site.		
Briefly explain the findings of the specialist:	Heritage impact assessment was not undertaken, as the entire site is already built up and/or paved over (it would therefore be difficult to identify any heritage sites / artefacts) and the developed area will not be extended.	
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)
Ba- Phalaborwa Local Municipality	Not yet

Mopani District Municipality	Not yet
Department of Water and Sanitation	Not yet
Department of Rural Development & Land Reform	Not yet
Department of Agriculture, Forestry and Fisheries	Not yet
South African Heritage Resources Authority	Not yet

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

The owner of the nearby Total Tusk filling station requested more information, which was then supplied to him.

## 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.

.  
The owner of a nearby filling station requested more information on the proposed project.

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):

The requested information was provided. Please refer to Appendix E for a copy of the communication.

## 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 A (preferred alternative): DEVELOPMENT / CONSTRUCTION PHASE**

#### ***Direct impacts:***

##### Bio-physical impacts:

- Risk of contamination of soil by cement, paint, etc during construction;
- Air-borne dust during construction;
- Generation of construction waste.

##### Socio-economic impacts:

- Noise related to construction activities;
- Negative visual impact of construction activities during this phase;
- Potential littering by construction workers;
- Disruption of traffic by slow-moving development-related vehicles;
- Job creation during the development phase – labour will be sourced from the local community where possible;
- Supporting local businesses through local procurement of materials and services.

#### ***Indirect and cumulative impacts:***

- Risk of disorderly or criminal activity associated with construction workers or persons posing as workers.

## **Alternative A (preferred alternative): OPERATIONAL PHASE**

### ***Direct impacts:***

#### Bio-physical impacts:

- Increased risk of contamination of soil and/or groundwater in case of leakage or spillage from the fuel tanks;
- Increased risk of contamination of surface water resources in case of contaminated storm water entering the storm water drainage infrastructure, or in the unlikely event of a major above-ground spill that is not intercepted by a bund and enters the storm water infrastructure;
- Increased generation of solid waste;
- Increased pressure on municipal services infrastructure (water provision, sewerage and electricity supply).

#### Socio-economic impacts:

- Possible reduction in fuel sales at nearby filling stations (especially Total, the nearest filling station), which may potentially lead to associated job losses at these facilities;
- Visual impact of the filling station through upgrading the appearance of the facility (new canopy, signage, etc and improvements to the structures onsite to improve the overall appearance);
- Night-time light pollution;
- Job creation;
- Ongoing health risk to employees associated with fumes from fuel pumps, exhaust fumes from idling vehicles, or in case of physical contact with fuel during refuelling or if a spillage or leakage occurs;
- Increased risk of explosion and/or fire associated with the flammable substances to be stored onsite.
- Increased traffic on local access road (customers' vehicles).

## **Alternative A (preferred alternative): DECOMMISSIONING PHASE**

In the event of demolition or decommissioning, a decommissioning management plan must be developed at that stage, taking into consideration the particular demolition or decommissioning activities that are planned, conditions and trends on and around the site at that stage, and legislation in place at that point in time. General impacts which may be anticipated in the unlikely event of demolition are listed below together with management measures; however, impacts and suitable management measures will be dictated by conditions onsite and legislation in place at that time.

**Direct impacts:**Bio-physical impacts:

- Possible contamination of soil or groundwater in case of spillage when removing the fuel tank from underground;
- Removal of the long-term risk of groundwater or surface water contamination;
- Generation of construction waste and debris as well as sewage and general domestic solid waste associated with the workers undertaking the demolition activities;
- Temporary increase in soil erosion risk while soil is exposed;
- Airborne dust.

Socio-economic impacts:

- Noise associated with activities such as demolition or blasting;
- Negative visual impact;
- Risk of disorderly or criminal behaviour associated with workers or persons posing as workers;
- Littering;
- Safety risk in the event of potentially dangerous activities such as demolition taking place;
- Disruption of traffic by slow-moving vehicles involved in demolition or in removal of demolition rubble;
- Temporary job creation during decommissioning;
- Loss of long-term jobs related to operation of the facility.

**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.

**No other site or project alternatives were investigated as part of the BA.**

**Alternative A (preferred alternative)**

	TYPE	STATUS	DURATION	LIKELIHOOD	MAGNITUDE	SIGNIFICANCE
<b>Bio - physical</b>	Possible contamination of soil by e.g. cement, paint, etc during construction	Negative	Short term	Possible	Very low	Negligible
	Increase in the risk of contamination of groundwater, surface water resources or soil through accidental spillage, overflow or leakage of fuel, or through ingress of contaminated storm water into the storm water drainage infrastructure	Negative	Long term	Possible	Unknown	Medium – High



	Air-borne dust during construction	Negative	Short term	Highly probable	Very Low	Negligible
	Generation of solid waste and construction rubble during the construction phase.	Negative	Short term	Definite	Very Low	Very Low
	Increased generation of solid waste (which will be disposed of at the municipal landfill)	Negative	Long term	Definite	Low	Very low
	Increased pressure on municipal services (water, sewerage and electricity provision)	Negative	Long term	Definite	Very low	Very low
<b>Socio-economic impacts</b>	Noise associated with construction activities	Negative	Short term	Definite	Low	Very low
	Visual impact of construction activities	Negative	Short term	Definite	Very low	Very low
	Visual impacts of improvement to the facility's appearance – operational phase	Positive	Long term	Highly probable	Low	Low
	Possible increase in night-time light pollution – operational phase	Negative	Long term	Possible	Very low	Very low
	Littering during construction	Negative	Short term	Highly probable	Very low	Negligible
	Supporting local businesses through local procurement of materials, equipment & services	Positive	Short term	Highly probable	Low	Low
	Risk of criminal behaviour, trespassing or rowdiness during construction phase	Negative	Short term	Possible	Unknown	Low
	Disruption of traffic by construction activities	Negative	Short term	Possible	Very Low	Negligible
	Increased traffic (from customers) on local access road	Negative	Long term	Highly probable	Very Low	Very Low
	Job creation – construction phase	Positive	Short term	Definite	Very low	Negligible
	Job creation – operational phase	Positive	Long term	Highly probable	Very low	Very low
	Possible reduction in fuel sales at existing nearby filling stations	Negative	Long term	Possible	Low	Low
	Possible job losses at existing nearby filling stations	Negative	Long term	Highly probable	Very low	Low (any jobs that may be lost at existing filling stations will likely be absorbed or

						offset by new job opportunities at this facility)
	Health risk to employees due to fumes or in case of contact with hazardous substances	Negative	Long term	Possible	Low	Very low
	Increased risk of explosion and/or fire	Negative	Long term	Possible	Unknown	Medium – High

**No-go alternative (compulsory)**

	TYPE	STATUS	DURATION	LIKELIHOOD	MAGNITUDE	SIGNIFICANCE
<b>Bio-physical impacts</b>	No contamination of soil by e.g. cement, paint, etc during construction	Neutral	Short term	Definite	Very low	Negligible
	No change in the current long-term / operational risk of contamination of groundwater, surface water or soil	Neutral	Long term	Highly probable	Unknown	Medium – High
	No construction-phase air-borne dust	Neutral	Short term	Definite	Very Low	Negligible
	No construction-phase generation of solid waste and rubble	Neutral	Short term	Definite	Very Low	Very Low
	No change in volumes of solid waste generated onsite during operation	Neutral	Long term	Highly probable	Low	Very low
	No change in water, sewerage and electricity use	Neutral	Long term	Highly probable	Very low	Very low
<b>Socio-economic impacts</b>	No construction-related noise	Neutral	Short term	Definite	Low	Very low
	No visual impact of construction activities	Neutral	Short term	Definite	Very low	Very low
	No change to the facility's appearance – operational phase	Neutral	Long term	Highly probable	Low	Low
	No change in long-term night-time light pollution	Neutral	Long term	Highly probable	Very low	Very low
	No littering during construction	Neutral	Short term	Definite	Very low	Negligible
	No construction-phase supporting of local businesses through local procurement of materials, equipment & services	Neutral	Short term	Definite	Low	Low
	No risk of criminal behaviour, trespassing or rowdiness during construction phase	Neutral	Short term	Definite	Unknown	Low
	No disruption of traffic by construction activities	Neutral	Short term	Definite	Very Low	Negligible
	No increased traffic (from customers) on local access road	Neutral	Long term	Highly probable	Very Low	Very Low

No job creation – construction phase	Neutral	Short term	Definite	Very low	Negligible
No job creation – operational phase	Neutral	Long term	Highly probable	Very low	Very low
No change to fuel sales at existing nearby filling stations	Neutral	Long term	Highly probable	Low	Low
No job losses at existing nearby filling stations	Neutral	Long term	Highly probable	Very low	Low
No change to the health risk to employees associated with fumes or contact with hazardous substances	Neutral	Long term	Highly probable	Low	Very low
No change in the risk of explosion or fire	Neutral	Long term	Highly probable	Unknown	Medium – High

### Alternative C

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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)?

<b>YES</b>	<b>NO</b>
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If “NO”, indicate the aspects that should be assessed further as part of a Scoping and EIA process before a decision can be made (list the aspects that require further assessment):

n/a
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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:

<p>It is recommended that the following be included in any authorisation that may be granted by LDEDET in respect of the application:</p> <ul style="list-style-type: none"> <li>- Appointment of an Environmental Control Officer (ECO) to monitor implementation of the EMPR during the construction phase;</li> <li>- Submittal of environmental compliance monitoring reports to LDEDET on a six-monthly basis and at the end of the construction phase;</li> <li>- When employing workers during the construction phase, local labourers (within BPLM's boundaries or within 50km of the site) must be given preference as far as availability of appropriate skills permit;</li> </ul>
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- Local suppliers (within BPLM's boundaries or within 50km of the site) must be given preference in the sourcing of services and materials as far as availability and quality permits;
- The impact mitigation measures in the EMPr as well as the conditions of the EA and any other authorization(s) must be adhered to.

Is an EMPr attached?

YES

NO

**The EMPr is attached as Appendix I.**

## SECTION F: APPENDICES

The following appendixes must be attached as appropriate:

**Appendix A:** Maps and aerial photographs

**Appendix B:** Site photographs

**Appendix C:** Facility illustration

**Appendix D:** Specialist reports:  
 - Hydrogeological assessment

**Appendix E:** I&AP correspondence  
 - List of I&APs  
 - Issues trail / comments and responses report  
 - Copies of comments and responses

**Appendix F:** Proof of advertisement of first public comment period / I&AP registration period

**Appendix G:** Proof of advertisement of consultative BAR public comment period

**Appendix H:** LEDET consultation

**Appendix I:** Environmental Management Programme (EMPr)

## SECTION G: DECLARATION BY THE ENVIRONMENTAL ASSESSMENT PRACTITIONER

I, \_\_\_\_\_ 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.

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**Signature of the Environmental Assessment Practitioner:**

**Polygon Environmental Planning CC**

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**Name of company:**

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**Date:**