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# DRAFT SCOPING REPORT

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## The proposed construction of a diesel depot on Portion 1 of Plot 42, Estoire, Bloemfontein

**Applicant:** Mack's Petroleum (PTY) LTD  
**MDA Ref No:** 40813  
**Date:** March 2020



Town & Regional Planners,  
Environmental & Development  
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## Executive Summary

The proposed project entails the construction / development of a diesel depot with ancillary amenities, including a wash bay on Portion 1 of Plot 42, Sand du Plessis Avenue, Estoire Small Holdings, Bloemfontein.

The storage tanks will be above ground of nature. The above ground tanks will be bunded to carry at least 110% of the total volume of fuel to be kept in the tanks. It is proposed that the following above ground tanks be installed during various phases:

- Phase 1: 1 x 79 000ℓ
- Phase 2: 5 x 83 000 ℓ
- Phase 3: 5+ x 83 000 ℓ

A borehole monitoring system will be implemented should any fuel be stored underground in future.

The applicant provides road transportation of bulk fuel products and operates its own fleet of tankers. Thus, the main purpose of the project is to construct fuel tanks for the storage of fuel. The stored fuel will mainly be used by the applicant to fill the tanks of its own fuel transportation trucks.

Due to the existing land use, the site is in a degraded condition and the natural vegetation composition has been transformed to a large degree.

An Environmental Impact Assessment (EIA) will be conducted in terms of the 2014 regulations EIA Regulations as amended in 2017 which fall under the National Environmental Management Act 107 of 1998 (NEMA) to obtain Environmental Authorisation (EA). The EIA Regulations under the NEMA consist of two categories of activities namely:

- Activities which require a Basic Assessment Process, and
- Activities which require both a Scoping and an EIA Report.

The activities associated with the proposed project require a Scoping and an EIA Report for an EA and fall under Regulation GNR 325 (Listing Notice 2) of the 2014 EIA Regulations, as well as Regulation GNR 327 (Listing Notice 1) of the 2014 EIA Regulations as amended on 07 April 2017.

The Scoping and an EIA process will fall under Activity 4 of Listing Notice 2 (GNR 325) of the 2014 EIA Regulations as amended on 07 April 2017:

*'The development and related operation of facilities or infrastructure, for the storage, or storage and handling of a dangerous good, where such storage*

*occurs in containers with a combined capacity of more than 500 cubic metres.'*

The key objectives of the Scoping Report are to:

- Facilitate the introduction of stakeholders to the project and to provide information regarding the project;
- Assist in the identification process of main stakeholders;
- Identify possible issues, concerns and values relating to the project;
- Identify important issues and impacts related to the project and set the stage for these impacts and issues to be addressed in the EIA;
- Identify all regulatory and legislative requirements;
- Define the process ahead and establish the extent of the subsequent EIA;
- Scope for issues that would be associated with this planned project;
- Conduct an initial investigation into biophysical and socio-economic aspects, focusing on key issues;
- Advise the proponent about the potential impacts (positive and negative impacts) of their planned development, as well as the implications for the design, construction and operational phases of the project;
- Facilitate public input on environmental and social matters.

**List of Abbreviations**

**DESTEA:** Department of Economic, Small Business Development, Tourism and Environmental Affairs

**EAP:** Environmental Assessment Practitioner

**EIA:** Environmental Impact Assessment

**EMPr:** Environmental Management Programme

**IAPs:** Interested and / or Affected Parties

**MMM:** Mangaung Metropolitan Municipality

**NEMA:** National Environmental Management Act

**SDF:** Spatial Development Framework

**DWS:** Department of Water and Sanitation

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## 1. PROJECT SUMMARY

TABLE 1. SUMMARY OF THE PROPOSED PROJECT	
Project Name	The proposed construction of a Diesel Depot on Portion 1 of Plot 42, Estoire, Bloemfontein.
Site Location	Portion 1 of Plot 42, Estoire, Bloemfontein.
Surveyor-General 21 Digit Code	F 003 003 100 000 042 000 01
Development Footprint	Less than 2 hectares
Project Description	<p>The proposed project entails the construction / development of a diesel depot with ancillary amenities, including a wash bay on Portion 1 of Plot 42, Sand du Plessis Avenue, Estoire Small Holdings, Bloemfontein.</p> <p>The Fuel Storage Tanks will be above ground of nature. The above ground tanks will be bunded to carry at least 110% of the total volume of fuel to be kept in the tanks. It is proposed that the following above ground tanks be installed during various phases:</p> <ul style="list-style-type: none"> <li>•Phase 1: 1 x 79 000ℓ (no listed activity triggered due to the volume of fuel to be stored on site during this phase)</li> <li>•Phase 2: 5 x 83 000 ℓ</li> <li>•Phase 3: 5+ x 83 000 ℓ</li> </ul> <p>A borehole monitoring system will be implemented should any fuel be stored underground in future.</p>
Proposed Layout	Please refer to Annexure C for a copy of the proposed design layout.

## 2. EAP INFORMATION

### 2.1. Details of Environmental Assessment Practitioners

A multi-disciplinary team of specialists contributed to the information presented in this document. TABLE 2 and TABLE 3 summarize the environmental assessment practitioner's (EAP) expertise and involvement in the proposed project.

TABLE 2. EAP DETAILS	
Division / Aspect	Key EAP
Co-ordination, supervision, management	Mr. Neil Devenish (MDA Consultants)
Biophysical and Visual Aspects Public Participation and Report Writing	Me. Hanlie Stander (MDA Consultants)

### 2.1.1. Expertise of the EAPs to carry out the scoping procedures

TABLE 3. EXPERTISE OF THE EAPS	
EAP	Key Qualifications
Mr. Neil Devenish	<p><b>Key qualifications:</b></p> <ul style="list-style-type: none"> <li>• Key competencies and experience include development control applications (applications and appeals pertaining to rezoning, consolidations, subdivisions etc.), township establishment applications, environmental management and control applications.</li> </ul> <p><b>Education:</b></p> <ul style="list-style-type: none"> <li>• B.A. (Sociology, Geography) University of the Free State, SA, 1994</li> <li>• Master of Town and Regional Planning, University of the Free State, SA, 1996</li> <li>• Managing the Environmental Impact Assessment Process, Environmental Management Unit, PU for CHE, 2000</li> <li>• Environmental Management Consulting, South African Institute of Ecologists &amp; Environmental Scientists, 2001</li> <li>• Water Law of South Africa, The South African Institution of Civil Engineers (SAICE), 2006</li> <li>• Introduction to SAMTRAC, Hazard Identification and Risk Assessment, NOSA, NQF Level 5, 2015</li> </ul>
Me. Hanlie Stander	<p><b>Key qualifications:</b></p> <ul style="list-style-type: none"> <li>• Environmental management &amp; research</li> <li>• Environmental impact assessment and report writing</li> </ul> <p><b>Education:</b></p> <ul style="list-style-type: none"> <li>• B.Sc. (Zoology), University of the Free State, South Africa, 2005</li> <li>• B.Sc. Honours (Zoology), University of the Free State, South Africa, 2006</li> <li>• M.Sc. (Zoology), University of the Free State, South Africa, 2012</li> </ul>

### 2.1.2. Contact Details of the EAP

TABLE 4. MDA CONTACT DETAILS	
	
Telephone no:	051 447 1583
Postal Address:	P.O. Box 100982 Brandhof Bloemfontein 9324
Email addresses:	neil@mdagroup.co.za hanlie@mdagroup.co.za

### 2.2. EAP Declaration

Please refer to **Annexure E** for the EAP declaration.

### 3. INTRODUCTION

MDA was appointed by the Applicant [Mack's Petroleum (PTY) LTD] to undertake the Environmental Impact Assessment (EIA) process for the proposed construction of a Diesel Depot on Portion 1 of Plot 42, Estoire, Bloemfontein.

The applicant of the above mentioned property identified a need to develop the property by constructing a diesel depot mainly to be utilized for filling of its own fleet of tankers.

The location of the property as well as the existing development trends in the surrounding areas suit the proposed development. Therefore the applicant wishes to apply for an Environmental Authorisation to the Free State Department of Economic, Small Business Development, Tourism and Environmental Affairs (DESTEA) in order to establish the Diesel Depot on the said property. This Scoping Report focuses on the possible environmental impacts that the proposed development may have on the receiving environment.

#### 3.1. Objectives of the Scoping Report

The key objectives of the Scoping Report are to:

- Facilitate the introduction of stakeholders to the project and to provide information regarding the project;
- Assist in the identification process of main stakeholders;
- Identify possible issues, concerns and values relating to the project;
- Identify important issues and impacts related to the project and set the stage for these impacts and issues to be addressed in the EIA;
- Identify all regulatory and legislative requirements;
- Define the process ahead and establish the extent of the subsequent EIA;
- Scope for issues that would be associated with this planned project;
- Conduct an initial investigation into biophysical and socio-economic aspects, focusing on key issues;
- Advise the proponent about the potential impacts (positive and negative impacts) of their planned development, as well as the implications for the design, construction and operational phases of the project;

- Facilitate public input on environmental and social matters.

### 3.2. Project Schedule

The Scoping Report is undertaken in accordance with the National Environmental Management Act (NEMA) EIA Regulations, 2014. Please refer to Table 5 for the anticipated time frames in accordance to the NEMA EIA Regulations 2014.

The proposed schedule for the EIA process application will be determined mainly by the feedback from the responsible DESTEA official, as linked to the timeframes listed below.

<b>TABLE 5. SUMMARY OF THE PROPOSED PROJECT SCHEDULE</b>			
<b>Project Phase</b>	<b>Description</b>	<b>Duration</b>	<b>Status</b>
<b>Initial notification of proposed project</b>	IAPs & Stakeholder identification	30 days	Completed
<b>Submit Application to DESTEA</b>	Application submitted to DESTEA	30 days	Completed
<b>Submit Draft Scoping Report</b>	Draft Scoping Report submitted to DESTEA	5 days	To be completed
<b>Processing of comments and information received</b>	Process comments and amend information	30 days	To be completed
<b>Final Scoping Report</b>	Amendments and update PPP; Submission of final Scoping Report to DESTEA	5 days	To be completed
<b>Draft EIA and Draft EMP submission/ amendments</b>	Provision of information in terms of studies, impacts, mitigation measures and recommendations	30 days	To be completed
<b>Final EIA and final EMP submission</b>	Amendments and final submission	+/-120 days	To be completed

<b>Record of Decision</b>	Granting / refusal of Environmental Authorisation (EA)	N/A	To be completed
<b>Appeal process and notification of EA</b>	Notifying IAPs, including stakeholders of EA	35 days	To be completed

### **3.3. Authority consultation / identification of competent authority to assess the proposed project**

The competent authority to assess the proposed diesel depot development is the DESTEA. The site does not have implications for international environmental commitments or relations; and will not take place within an area protected by means of an international environmental instrument, or the site is not a conservancy; a protected natural environment; a proclaimed private nature reserve; a natural heritage site; the buffer zone or transitional area of a biosphere reserve; or the buffer zone or transitional area of a world heritage site. Therefore, the competent authority has been correctly identified, based on the above reasons.

### **3.4. Applicable legislation**

This process has been conducted in terms of the relevant legislative requirements, namely in terms of:

- National Environmental Management Act (Act No 107 of 1999)
- National Heritage Resources Act (Act No 25 of 1999)
- National Environmental Management Biodiversity Act, 2004 (Act 10 of 2004)
- Occupational Health and Safety Act (Act 85 of 1993)

### **3.5. Applicable Specialist Studies**

The relevance of Activity 27 of Listing Notice 1 (GNR 327) of the 2014 EIA Regulations as amended on 07 April 2017 to the proposed project was assessed. Activity 27 of Listing Notice 1 (GNR 327) of the 2014 EIA Regulations as amended on 07 April 2017 reads as follows:

*'The clearance of an area of 1 hectare or more, but less than 20 hectares of indigenous vegetation, except where such clearance of indigenous vegetation is required for*

- (i) the undertaking of a linear activity; or*  
*(ii) maintenance purposes undertaken in accordance with a maintenance management plan.'*

The entire proposed development site is highly disturbed and transformed by past and present human activities and is entirely surrounded by urban sprawl. It was identified that no suitable habitat, on and surrounding the proposed development site for any Red Data faunal species and no rupicolous (living among, inhabiting, or growing on rocks), arboreal (pertaining to moving about, living in or among trees) or wetland habitats are present. The site was found to be disturbed and that the proposed development would not have a negative effect in on any Red Data faunal species or any other faunal species found on site. No natural / indigenous vegetation is located on site. Therefore, no ecological assessment (including vegetation assessment) is required.

The site is located in Sand du Plessis Avenue. The Estoire residential smallholdings have been established more than sixty years ago, but many of the original residential structures have been replaced by commercial and industrial properties. The affected area covers an area of degraded land, containing several modern commercial building structures. No historically significant building structure older than 60 years of age is present at the site. Existing roads already provide access to the site. The proposed development will take place on land formerly altered by modern industrial / commercial activities. Potential archaeological impact at the proposed site is considered to be non-existent. Underlying geology at the site consist of potentially fossil-bearing Beaufort Group (Adelaide Subgroup) strata. Superficial sediments are made up of residual soils of varying depth that are not considered to be palaeontologically significant. The likelihood of palaeontological impact on bedrock sediments underneath the degraded overburden is considered to be extremely low given latter's overall depth, the low topography terrain and the fact that no subsurface development is planned for this project. During the site visit, no graves or items of archaeological or palaeontological significance where observed. Should any items of archaeological or palaeontological significance be unearthed or found on the site during construction all activities will cease and a specialist will be appointed to investigate the finds. SAHRA will also be notified thereof. With the

above in mind, it is recommended that the proposed development is exempted from a Phase 1 Heritage Impact Assessment.

No electrical or civil studies are required, as adequate electrical supply and civil services are available on site.

Please note that a geohydrological study will be required in future, should the applicant decide to construct underground fuel tanks in future.

A traffic impact assessment will be undertaken to determine and report on the traffic impact of the planned Rezoning of Plot 1/42 Estoire Small Holdings, Bloemfontein in order to establish a Diesel Depot.

## 4. BACKGROUND INFORMATION ON THE PROJECT

Development around cities and towns are necessary to accommodate an ever-growing population. Areas along the boundaries of cities and towns are usually in a degraded state due to the impact of the large population these areas house.

The proposed project entails the construction / development of a diesel depot with ancillary amenities, including a wash bay on Portion 1 of Plot 42, Sand du Plessis Avenue, Estoire Small Holdings, Bloemfontein.

The storage tanks will be above ground of nature. The above ground tanks will be bunded to carry at least 110% of the total volume of fuel to be kept in the tanks. It is proposed that the following above ground tanks be installed during various phases:

- Phase 1: 1 x 79 000ℓ (no listed activity triggered due to the volume of fuel to be stored on site during this phase)
- Phase 2: 5 x 83 000 ℓ
- Phase 3: 5+ x 83 000 ℓ

A borehole monitoring system will be implemented should any fuel be stored underground in future.

### 4.1. Locality

If approved, the proposed diesel depot will be constructed on Portion 1 of Plot 42, Estoire, Bloemfontein. The site is bordered on the east by Sand Du Plessis Avenue. The N8 / Rudolph Greyling avenue crossing is less than 500m south west of the site. The extent of the property associated with the proposed development is approximately 2 hectares.

Please refer to the locality plan **Annexure A** for more information.

### 4.2. Layout

The layout of the proposed diesel depot makes provision for the proposed fuel storage tanks, wash bay, access route as well as additional associated amenities. Access to the site will be obtained from Sand du Plessis Avenue.

Please refer to the proposed layout plan attached in **Annexure C**.

## 5. NEMA AND APPLICABLE LEGISLATION

The identified applicable listed activities as identified in the National Environmental Management Act (NEMA) Regulations for the proposed construction of the said diesel depot is depicted in TABLE 6.

TABLE 6. DESCRIPTION OF IDENTIFIED LISTED ACTIVITIES	
Regulation 984 2014, EIA, as amended on 7 April 2017 (Regulation no. 325)	
Listed Activity	Project activity Description
<p><b>Activity No 4:</b> The development and related operation of facilities or infrastructure for the storage, or storage and handling of a dangerous good, where such storage occurs in containers with a combined capacity of more than 500 cubic metres.</p>	<p>It is anticipated that more than 500 cubic meters of fuel will be stored on site.</p>

Take note that the listed activities itself will not produce effluent that will be treated and / or disposed of at another facility. However, the wash bays as well as waste associated with the ablution facility will be handled as follows:

### Wash bay:

- Pre-treatment by oil & grease separators will be used to remove free oil and grit from the waste stream prior to discharge to the sewer stream.
- All oil and grease will thus be trapped and the collected material will be removed from site via a hazardous waste removal company.
- The quality of water to be transferred to the sewage stream will be tested on a monthly basis.

### Ablution Facility:

- The site will make use of septic tanks for sewage disposal.
- The size of the septic tank, the amount of use, and the type of material discharged will determine how often your septic tank will need to be drained.

An Environmental Impact Assessment (EIA) process is followed for activities listed in GN325 Listing Notice 2 of 2014 (as amended April 2017) and will

therefore be prepared in accordance with the Environmental Impact Assessment Regulations, 2014 (Government Notice No. 326 as amended 7 April 2017) promulgated in terms of Sections 24(5) and 44 of the National Environmental Management Act (Act No. 107 of 1998). Application for Scoping and EIA has therefore been made to the Free State Department of Economic, Small Business Development, Tourism and Environmental Affairs (DESTEA).

## **6. PUBLIC PARTICIPATION**

### **6.1. Background**

The objectives of the Public Participation Process (PPP) is to provide the local community, all applicable departments, the competent authority and potential / identified Interested and Affected Parties (IAPs) with adequate information and give them an opportunity to raise their issues and concerns. Methods used to inform the various IAPs of the project included direct contact, an on-site notice, hand delivered notifications, registered mail, and an advertisement in the local newspaper. All potential IAPs were included as required by Regulation 41(2)(e) and 41(6) of GN 326. Furthermore, key stakeholders (other than organs of state) were identified in terms of Regulation 41(2)(b) of GN 326.

### **6.2. Identification of possible IAPs**

The identified possible IAPs included the following:

- MMM City Manager
- MMM Planning Division
- MMM Environmental Division
- MMM Ward Councillor: Ward 47
- Department of Water and Sanitation
- Department Police, Roads and Transport
- South African Heritage Resources Agency (SAHRA)
- Free State Heritage Resources Agency (FSAHRA)
- Adjacent Land Owners

Please note that notifications were sent out to the identified IAPs as listed above.

### **6.3. Adjacent Land Owners**

Due to the residential / small business nature of the surrounding environment related to this project all adjacent landowners were included as possible IAPs. All identified adjacent landowners have been provided with a notification letter. All registered parties were also provided with a copy of the Draft Scoping Report. Furthermore all registered IAPs were given an opportunity to comment on the said document.

#### 6.4. Public Participation methods used

A site notice was placed on site at the proposed development entrance on the 15<sup>th</sup> of July 2019. Furthermore a legal notice was published in Die Volksblad on the 28<sup>th</sup> of June 2019. Notification letters were sent to all organs of state and applicable departments.

The following comments were received to date:

##### Comments Received by:

- Department of Police, Roads and Transport

##### Contact Person:

- Hannes Maree  
Room 106, Medfontein Building, 155 St Andrew Street  
P.O. Box 119, Bloemfontein, 9300  
MareeH@freetrans.gov.za
- F. van Heerden  
Medfontein Building, 155 St Andrew Street  
P.O. Box 119, Bloemfontein, 9300  
fabriavanheerden@gmail.com  
0514098280

##### Comments:

- The provincial tertiary road T4730 will be affected by the proposed project. The Department will formulate comments subsequent to obtaining a site development plan and information on the expected traffic to determine the impact on the provincial road network

##### Response:

- A proposed layout map (attached as Appendix C of the dScoping Report) was forwarded to the said Department.
- A Traffic Impact Assessment will be undertaken and the findings thereof will be included in the Environmental Impact Assessment Report.
- The said report will be forwarded to all registered IAPs.
- Copies of the dScoping Report were forwarded to all registered IAP

**Comments Received by:**

- Environmental Division, Mangaung Metropolitan Municipality

**Contact Person:**

- Me. Mpolokeng Kolobe  
Mangaung Metro Municipality  
P.O. Box 3704  
Bloemfontein  
9300  
T: 051 4098280

**Comments:**

- A complete EMPr must be compiled.
- A geohydrological study & a storm water management plan must be conducted should any fuel be stored underground in future.
- ECO must be appointed.
- Waste Management Plan must be compiled.
- Material Safety Data Sheet should be available on site.
- Occupational Health and Safety Act 1993 (Act No 85 of 1993) and the National Building Regulations should be adhered to.
- A Health and Safety Representative should be appointed if more than 20 persons are employed.
- Proposed facility must register with the Local Fire Fighters Organization.
- Proposed project must comply with other environmental legislation and requirements that are related to issues such as noise and light pollution, air quality, water use and management, solid waste management and storm water management.

**Response:**

- The EMPr will form part of the Environmental Impact Assessment Report.
- It is not anticipated that any fuel will be stored underground. However, should any fuel be stored underground in future, the necessary specialists will assess the site.
- And ECO and Health and Safety Officer will be appointed by the contractor during the construction phase of the project.
- The necessary environmental legislations and requirements regarding issues such as noise, light, air and water pollution will be adhered to. Solid Waste – and Storm Water Management will also be undertaken according to Best Practices.

- The proposed facility will register with the Local Fire Fighters Organization.
- Copies of the dScoping Report will be forwarded to all registered IAPs

**Comments Received by:**

- Department of Water and Sanitation

**Contact Person:**

- D Ramuhovhi  
Private Bag X528  
Bloemfontein  
9300

**Comments:**

- The applicant should ensure that the bund wall of the fuel tank will be within the capacity to be able to contain spillages.
- Effluent from the wash bay should be disposed of in a properly constructed drain and must be situated as far as possible from a watercourse.
- Only domestic wash water should be allowed to enter the drain and any effluent containing oil and grease or other industrial substances must be collected in a suitable receptacle and removed from site.
- The name of the company to handle the hazardous waste should be forwarded to DWS. A written agreement between the applicant and the said company should also be submitted to DWS.
- The applicant should ensure that the septic tank is approved and is sited in such a way that it does not cause water or other pollution. Mitigation measures must be in place to prevent contamination of local groundwater and surface water.
- The applicant should indicate where the effluent will be discharged after it is drained from the septic tank. A Section 21(g) application of National Water Act (Act 36 of 1998) should be submitted to DWS, if required.
- Any spillages of chemicals during the operations should be reported to DWS and relevant authority.
- It must be ensured that no unacceptable impact on the quality of both surface and groundwater in the area are undertaken. If pollution of any surface or groundwater occurs, it must be immediately report to DWS and appropriate mitigation measures must be implemented.
- All specialist studies that forms part of the EIA Process, must be submitted to DWS before construction commence.
- All relevant sections and regulation of the National Water Act, 1998 (Act 36 of 1998) regarding water use must be adhered to.

**Response:**

- The bund wall will be able to contain 110% of the volume of the tanks.
- Comments regarding the wash bay, domestic wash water and effluent are noted.
- The name of the company that will remove any hazardous waste will be forwarded to DWS. The said company's contact information and a copy of the agreement between the company and the applicant will also be forwarded to DWS.
- The septic tank will be constructed / operated according to Best Practices.
- Content drained from the septic tank will be handled according to Best Practices. More information will be made available in the EIA Report.
- DWS and all relevant authorities will be notified of any spillages of hazardous waste on site.
- It will be ensured that no unacceptable impact on the quality of both surface and groundwater are undertaken.
- All specialist reports that form part of the EIA Process will be attached to the EIA Report. DWS will be provided with a copy of the Draft EIA Report, as well as the Final EIA Report.
- It is noted that all relevant sections and regulation of the National Water Act, 1998 (Act 36 of 1998) regarding water use must be adhered to.
- Copies of the dScoping Report will be forwarded to all registered IAPs

Please refer to **Annexure D** for the report and proof of PPP.

### 6.5. List of all possible IAPs

TABLE 7. LIST OF IDENTIFIED POSSIBLE IAPS				
Name	Organisation / Interest	Contact details	Manner in which contacted	Comments / concerns
Mangaung Metro Municipality The City Manager	Mangaung Metro Municipality	P.O. Box 3704 Bloemfontein 9300	Registered Mail	None to date
Clr John de Bruin The Ward Councillor Ward:47	Mangaung Metro Municipality: Ward Councillor	johndebruin38@gmail.com 0603461410 DA Offices 7 Barnes Street Westdene Bloemfontein 9301	Per hand	None to date
Mr. W Grobler	Department of Water and Sanitation (Free State)	Mr. W Grobler (groblerw@dwa.gov.za) P.O. Box 528 Bloemfontein 9300	Per hand	<ul style="list-style-type: none"> <li>The applicant should ensure that the bund wall of the fuel tank will be within the capacity to be able to contain spillages.</li> <li>Effluent from the wash bay should be disposed of in a properly constructed drain and must be</li> </ul>

TABLE 7. LIST OF IDENTIFIED POSSIBLE IAPS				
Name	Organisation / Interest	Contact details	Manner in which contacted	Comments / concerns
				<p>situated as far as possible from a watercourse.</p> <ul style="list-style-type: none"> <li>• Only domestic wash water should be allowed to enter the drain and any effluent containing oil and grease or other industrial substances must be collected in a suitable receptacle and removed from site.</li> <li>• The name of the company to handle the hazardous waste should be forwarded to DWS. A written agreement between the applicant and the said company should also be submitted to DWS.</li> <li>• The applicant should ensure that the septic tank is approved and is sited in such a way that it does not cause water or other pollution. Mitigation measures must be in place to prevent contamination of local groundwater and surface</li> </ul>

TABLE 7. LIST OF IDENTIFIED POSSIBLE IAPS				
Name	Organisation / Interest	Contact details	Manner in which contacted	Comments / concerns
				<p>water.</p> <ul style="list-style-type: none"> <li>• The applicant should indicate where the effluent will be discharged after it is drained from the septic tank. A Section 21 (g) application of National Water Act (Act 36 of 1998) should be submitted to DWS, if required.</li> <li>• Any spillages of chemicals during the operations should be reported to DWS and relevant authority.</li> <li>• It must be ensured that no unacceptable impact on the quality of both surface and groundwater in the area are undertaken. If pollution of any surface or groundwater occurs, it must be immediately report to DWS and appropriate mitigation measures must be implemented.</li> <li>• All specialist studies that forms part of the EIA Process, must be</li> </ul>

TABLE 7. LIST OF IDENTIFIED POSSIBLE IAPS				
Name	Organisation / Interest	Contact details	Manner in which contacted	Comments / concerns
				<p>submitted to DWS before construction commence.</p> <ul style="list-style-type: none"> <li>All relevant sections and regulation of the National Water Act, 1998 (Act 36 of 1998) regarding water use must be adhered to.</li> </ul>
Me. Mpolokeng Kolobe	Mangaung Metro Municipality: Environmental Division	Me. Mpolokeng Kolobe Tel: 051 405 8871 Fax: 051 405 8310 Email: mpolokeng.kolobe@mangaung.co.za P.O. Box 3704 Bloemfontein 9300	Per hand	<ul style="list-style-type: none"> <li>A complete EMPr must be compiled.</li> <li>A geohydrological study &amp; a storm water management plan must be conducted should any fuel be stored underground in future.</li> <li>ECO must be appointed.</li> <li>Waste Management Plan must be compiled.</li> <li>Material Safety Data Sheet should be available on site.</li> <li>Occupational Health and Safety Act 1993 (Act No 85 of 1993) and the National Building Regulations should be adhered to.</li> <li>A Health and Safety Representative should be appointed if more than 20</li> </ul>

TABLE 7. LIST OF IDENTIFIED POSSIBLE IAPS				
Name	Organisation / Interest	Contact details	Manner in which contacted	Comments / concerns
				<p>persons are employed.</p> <ul style="list-style-type: none"> <li>• Proposed facility must register with the Local Fire Fighters Organization.</li> <li>• Proposed project must comply with other environmental legislation and requirements that are related to issues such as noise and light pollution, air quality, water use and management, solid waste management and storm water management.</li> </ul>
Mrs. Grace Mkhosana	Free State Department of Economic Development, Tourism and Environmental Affairs	Tel: 051 400 4843 Fax: 051 400 4842 Private Bag X20801 Bloemfontein 9300 Mkhosana@deta.fs.gov.za	Per hand	None to date
Collin Dihemo	Mangaung Metro	Collin Dihemo Tel: 051 405 8212	Per hand	None to date

TABLE 7. LIST OF IDENTIFIED POSSIBLE IAPS				
Name	Organisation / Interest	Contact details	Manner in which contacted	Comments / concerns
	Municipality: Planning Division	Fax: 051 405 8707 Email: Collin.dihemo@m angaung.co.za P.O. Box 3704 Bloemfontein 9300		
Hannes Maree	Department of Police, Roads and Transport	Hannes Maree Room 106, Medfontein Building, 155 St Andrew Street P.O. Box 119, Bloemfontein, 9300 MareeH@freetra ns.gov.za	Per hand	<ul style="list-style-type: none"> <li>• The provincial tertiary road T4730 will be affected by the proposed project</li> <li>• The Department will formulate comments subsequent to obtaining a site development plan and information on the expected traffic to determine the impact on the provincial road network</li> </ul>
Mr A. Solomon	SAHRA	Mr A. Solomon Tel: 021 462 4509 South African Heritage Resources	Online Notification	None to date

TABLE 7. LIST OF IDENTIFIED POSSIBLE IAPS				
Name	Organisation / Interest	Contact details	Manner in which contacted	Comments / concerns
		Agency (SAHRA) Head Office 111 Harrington Street Cape Town 8001		
SAHRA (Free State) Ntando Mbatha	SAHRA (Free State)	FSAHRA Cell: 074 945 3255 Email: mbatha.npz@sac r.fs.gov.za C/o Henry & East Burger Street Business Partner Building Office 307 Bloemfontein 9301	Per hand	None to date
Adjacent Landowner	Owner of the Remainder of Plot 42, Estoire, Bloemfontein	M & J trust 19 Sand du Plessis Estoire Bloemfontein	Registered Post	None to date

TABLE 7. LIST OF IDENTIFIED POSSIBLE IAPS				
Name	Organisation / Interest	Contact details	Manner in which contacted	Comments / concerns
		9323		
Adjacent Landowner	Owner of Plot 61, Estoire, Bloemfontein	BBT Elec & Plumbing cons P.O. Box 2341 Bloemfontein 9300	Registered Post	None to date
Adjacent Landowner	Owner of the Remainder of Plot 37, Estoire, Bloemfontein	Wiehanhn Eiedomme Boland Pty Private Bag x34 Suite 203 Somerset –West 7103	Registered Post	None to date
Adjacent Landowner	Owner of Portion 1 of Plot 37, Estoire, Bloemfontein	Vodacom P.O. Box 100958 Brandhof 9324	Registered Post	None to date
Adjacent Landowner	Owner of Portion 1 of Plot 38, Estoire, Bloemfontein	Mile Investments P.O. Box 28966 Danhof 9310	Registered Post	None to date
Adjacent Landowner	Owner of Portion 3 of Plot	TNT Trust	Per hand	None to date

TABLE 7. LIST OF IDENTIFIED POSSIBLE IAPS				
Name	Organisation / Interest	Contact details	Manner in which contacted	Comments / concerns
	41, Estoire, Bloemfontein			
Adjacent Landowner	Owner of Portion 1 of Plot 41, Estoire, Bloemfontein	TNT Trust, Notification was delivered by hand	Per hand	None to date
Adjacent Landowner	Owner of the Remainder of Plot 62, Estoire, Bloemfontein	Lougat Property Investments P.O. Box 167 Bedfordview 2008	Registered Post	None to date

## **7. NEED AND DESIRABILITY**

The applicant provides road transportation of bulk fuel products and operates its own fleet of tankers. The applicant identified the need to construct fuel tanks for the storage of fuel. The stored fuel will mainly be used by the applicant to fill the tanks of its own diesel transportation trucks.

The site is extremely well located for this type of development given numerous favourable locality aspects such as;

a) Access

Easy access to the site can be obtained from Sand du Plessis Avenue.

b) Surrounding land uses

The proposed development site is surrounded by housing, agricultural and light industrial land uses. This makes the proposed development suitable to the area.

## **8. MOTIVATION FOR NO ALTERNATIVES**

### **8.1. Preferred Alternative**

The preferred site is ideally located for the proposed diesel depot as easy access can be obtained from Sand du Plessis Avenue. The proposed development site is surrounded by housing, agricultural and light industrial land uses.

The applicant is also in process to obtain legal ownership of the proposed development property.

### **8.2. Alternative 2 - Locality**

As an alternative, the construction of a diesel depot at another site, in an industrial part of Bloemfontein can be considered. However, this option is not economically viable, as the applicant is in process to obtain legal ownership of the preferred site.

No other alternatives will be discussed or considered for this EIA process or in this Scoping Report due to the above mentioned reasons.

### **8.3. No-go Alternative**

Not constructing a diesel depot. The applicant will then have to buy diesel from other companies (at a higher price) and this will have cost implications.

## 9. RECEIVING ENVIRONMENT

### 9.1. Topography

The proposed site is situated on a relatively flat plain. Typical grasses are found on site, with a few trees. Please note that the trees will not be removed as part of the proposed construction activities.

### 9.2. Geology and Soil Characteristics

Sedimentary mudstones and layers of sandstone mainly of the Adelaide Subgroup (Beaufort Group, Karoo Supergroup) occur in the Bloemfontein Dry Grassland Region. This vegetation type occurs in the South-central part of the province, with Bloemfontein more or less centrally. It extends from Petrusburg in the west to the Rustfontein Dam in the east and from Reddersburg in the South to the Soetdoring Nature Reserve in the north.

Volksrust Formation mudstones of the Eccca Group (also Karoo Supergroup) dominate the western part of the Dry Grassland Region. Deep (>300 mm) layer of red sand (Aeolian origin) covers the more clayey B-horizons. Soil forms such as arable Hutton, Bainsvlei and Bloemdal occur in this area and are typical of the Ca land type. The Ea land type has shallow gravelly soils underlain by dolerite sills. Ca and Ae land types are nearly equally represented (Musina & Rutherford, 2006).

### 9.3. Ground and Surface Water

No surface or groundwater resources were identified during the site assessment.

### 9.4. Climate

The Bloemfontein area is a moderate region with primarily summer rainfall. The rainfall is between 250mm and 500mm per year. The monthly distribution of average daily maximum temperatures shows that the average midday temperatures for Bloemfontein ranges from 16°C in June to 29.2°C in January. The region is the coldest during July when the mercury drops to 0°C on average during the night. Figure 1 and Figure 2 is a summary of the average monthly and total annual rainfall for Bloemfontein according to Weather station C5E009 Uitvlugt – West at Krugersdrift Dam situated at 28°53'4.37"S and 25°56'56.87"E. This

weather station was chosen according to its distance to Bloemfontein and most recent available rainfall data.

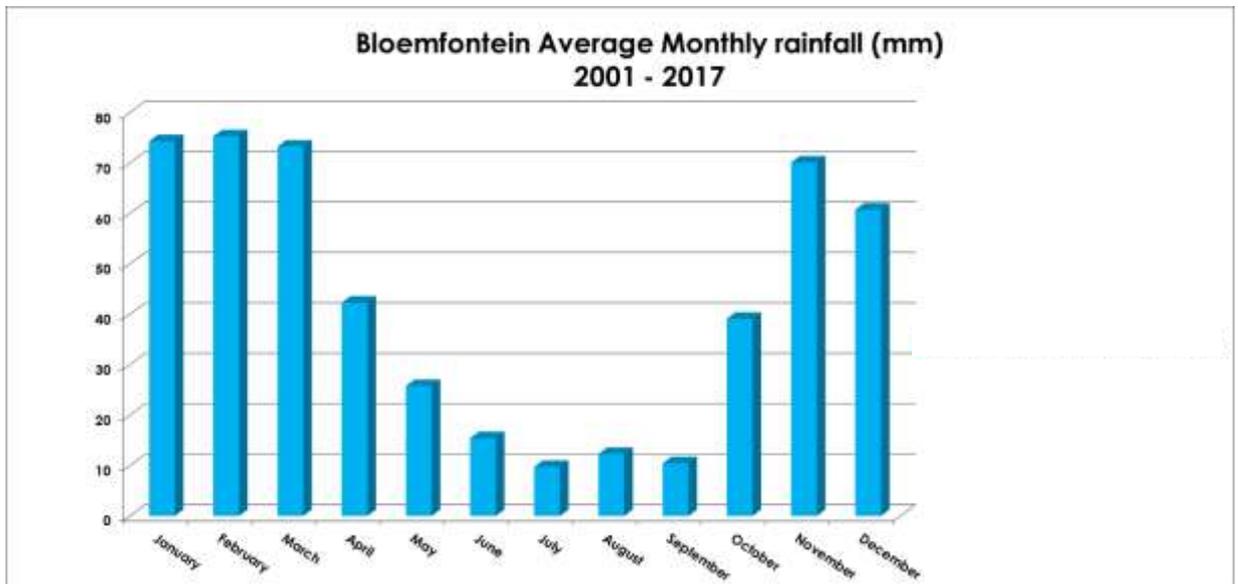


Figure 1. Bloemfontein average monthly rainfall (mm)

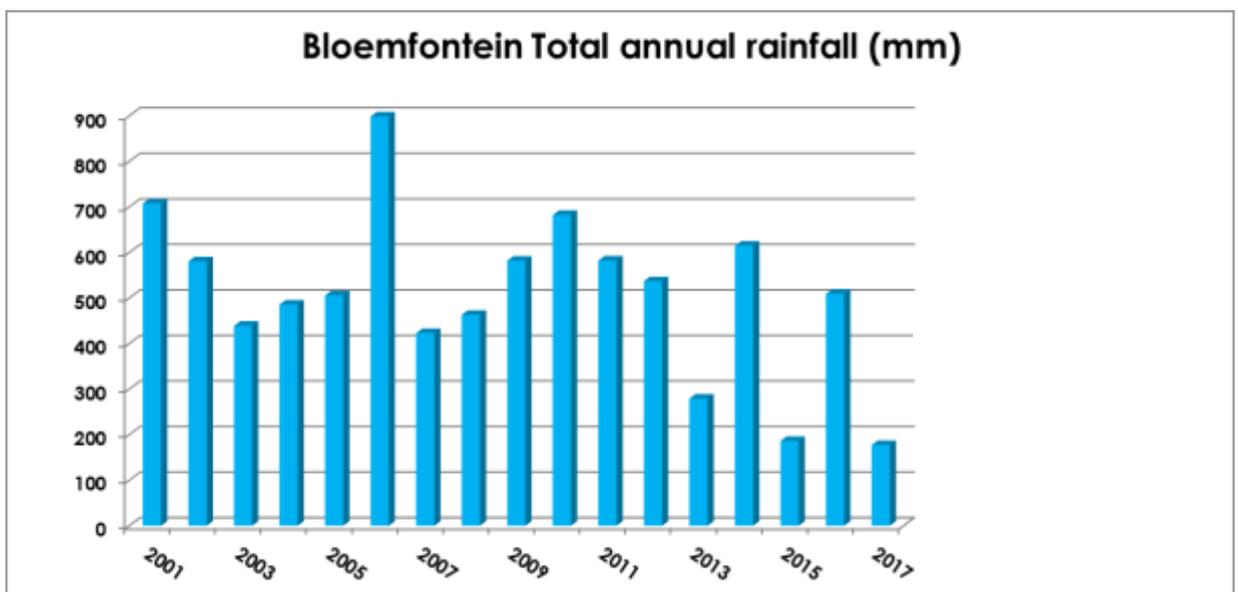


Figure 2. Bloemfontein total annual rainfall (mm)

## 9.5. Air Quality

In general the Bloemfontein area has exceptionally good air quality. It should be noted that there are no major contributors to atmospheric emissions in the Bloemfontein area due to the absence of Power stations.

## 9.6. Vegetation

The relevance of Activity 27 of Listing Notice 1 (GNR 327) of the 2014 EIA Regulations as amended on 07 April 2017 to the proposed project was assessed. Activity 27 of Listing Notice 1 (GNR 327) of the 2014 EIA Regulations as amended on 07 April 2017 reads as follows:

*'The clearance of an area of 1 hectare or more, but less than 20 hectares of indigenous vegetation, except where such clearance of indigenous vegetation is required for*

- (i) the undertaking of a linear activity; or*
- (ii) maintenance purposes undertaken in accordance with a maintenance management plan.'*

The entire proposed development site is highly disturbed and transformed by past and present human activities and is surrounded by urban sprawl. It was identified that no suitable habitat, on and surrounding the proposed development site for any Red Data faunal species and no rupicolous (living among, inhabiting, or growing on rocks), arboreal (pertaining to moving about, living in or among trees) or wetland habitats are present. The site was found to be disturbed and that the proposed development would not have a negative effect in on any Red Data faunal species or any other faunal species found on site. No natural / indigenous vegetation is located on site. Therefore, no ecological assessment (including vegetation assessment) is required.

## 9.7. Animal Life

The proposed development site is highly disturbed and transformed by past and present human activities and is surrounded by urban sprawl. It was identified that no suitable habitat, on and surrounding the proposed development site for any Red Data faunal species and no rupicolous (living among, inhabiting, or growing on rocks), arboreal (pertaining to moving about, living in or among trees) or wetland habitats are present. The site was found to be disturbed and that the proposed development would not have a negative effect in on any Red Data faunal species or any other faunal species found on site.

## 9.8. Surrounding Land Uses

The proposed development is surrounded by housing, agricultural and light industrial land uses. This makes the proposed development suitable to the area.

## 9.9. Noise

Given the associated activities in close proximity to the proposed development (residential, agricultural and light industrial) there are no industrial facilities associated with the area which elevates the ambient noise levels.

## 9.10. Socio-Economic Character of the Area

Mangaung Metropolitan Municipality has an unemployment rate of 27.7% (Stats SA, 2011). Below are some statistics relating to the level of education in the MMM area.

- No Schooling 3,3%
- Some Primary 37,7%
- Completed Primary 5,4%
- Some Secondary 30,6%
- Completed Secondary 16,5%
- Higher Education 3,7% (data derived from: Stats SA, 2011).

## 9.11. Historical or Cultural Importance

The site is located in Sand du Plessis Avenue. The Estoire residential smallholdings have been established more than sixty years ago, but many of the original residential structures have been replaced by commercial and industrial properties. The affected area covers an area of degraded land, containing several modern commercial building structures. No historically significant building structure older than 60 years of age is present at the site. Existing roads already provide access to the site. The proposed development will take place on land formerly altered by modern industrial / commercial activities. Potential archaeological impact at the proposed site is considered to be non-existent.

Underlying geology at the site consist of potentially fossil-bearing Beaufort Group (Adelaide Subgroup) strata. Superficial sediments are made up of residual soils of varying depth that are not considered to be palaeontologically significant. The likelihood of palaeontological

impact on bedrock sediments underneath the degraded overburden is considered to be extremely low given latter's overall depth, the low topography terrain and the fact that no subsurface development is planned for this project.

During the site visit, no graves or items of archaeological or palaeontological significance were observed. Should any items of archaeological or palaeontological significance be unearthed or found on the site during construction all activities will cease and a specialist will be appointed to investigate the finds. SAHRA will also be notified thereof.

With the above in mind, it is recommended that the proposed development is exempted from a Phase 1 Heritage Impact Assessment.

**10. POSSIBLE ENVIRONMENTAL IMPACTS, ISSUES AND CUMULATIVE IMPACTS**

The possible environmental impacts and issues were identified by evaluating different aspects of the receiving environment from both an urban and environmental point of view relating to the proposed development.

TABLE 8 below is a summary of the preliminary possible environmental impacts identified at this stage of the project.

<b>TABLE 8. POTENTIAL IDENTIFIED IMPACTS</b>	
<b>Possible Environmental Impacts</b>	
<b>Geology</b>	
<b>Potential impacts</b>	<b>Preliminary significance of potential impacts</b>
<ul style="list-style-type: none"> <li>• Loss of topsoil. The correct management tools for the storage thereof will be needed during the construction phase.</li> <li>• The characteristics of the soil can be altered due to possible spillage/ disturbance during construction activities.</li> </ul>	<ul style="list-style-type: none"> <li>• Proper management along with implementation of best practices will ensure that the possible impacts on soil characteristics will be low.</li> </ul>
<b>Cumulative impacts</b>	<b>Preliminary significance of cumulative impacts</b>
<ul style="list-style-type: none"> <li>• There will be a negligible cumulative impact.</li> </ul>	<ul style="list-style-type: none"> <li>• Negligible significance.</li> </ul>
<b>Climate</b>	
<b>Potential impacts</b>	<b>Preliminary significance of potential impacts</b>
<ul style="list-style-type: none"> <li>• It is not expected that the proposed diesel depot will have an impact on the climate in the area.</li> </ul>	<ul style="list-style-type: none"> <li>• N/A</li> </ul>
<b>Cumulative impacts</b>	<b>Preliminary significance of cumulative impacts</b>
<ul style="list-style-type: none"> <li>• It is not expected that the proposed diesel depot will have an impact on the climate in the area.</li> </ul>	<ul style="list-style-type: none"> <li>• N/A</li> </ul>
<b>Air Quality</b>	
<b>Potential impacts</b>	<b>Preliminary significance of potential impacts</b>
<ul style="list-style-type: none"> <li>• The air quality may be negatively impacted by vehicle emissions and dust, especially during the construction phase.</li> </ul>	<ul style="list-style-type: none"> <li>• The impact can be low if the proper management measures are implemented during this phase.</li> </ul>
<b>Cumulative impacts</b>	<b>Preliminary significance Preliminary significance of cumulative impacts</b>
<ul style="list-style-type: none"> <li>• No impacts</li> </ul>	<ul style="list-style-type: none"> <li>• No impacts</li> </ul>

<b>TABLE 8. POTENTIAL IDENTIFIED IMPACTS</b>	
<b>Possible Environmental Impacts</b>	
<b>Ground &amp; Surface Water</b>	
<b>Potential impacts</b>	<b>Preliminary significance of potential impacts</b>
<ul style="list-style-type: none"> <li>Ground and surface (if applicable) water could be contaminated during the construction &amp; operational phases due to spillages of hazardous chemicals and storm water runoff from stockpiles.</li> </ul>	<ul style="list-style-type: none"> <li>Impacts will be low should proper housekeeping and storm water management principles be implemented during the construction &amp; operational phase.</li> </ul>
<b>Cumulative impacts</b>	<b>Preliminary significance Preliminary significance of cumulative impacts</b>
<ul style="list-style-type: none"> <li>There will be a negligible cumulative impact.</li> </ul>	<ul style="list-style-type: none"> <li>Negligible significance.</li> </ul>
<b>Land Use</b>	
<b>Potential impacts</b>	<b>Preliminary significance of potential impacts</b>
<ul style="list-style-type: none"> <li>The land-use is currently zoned as Special Business: Type 2. Land Use for purposes of Special Business: Type 2 will be lost on the development property.</li> </ul>	<ul style="list-style-type: none"> <li>Impact will be low as similar types of land-uses occur on nearby properties.</li> </ul>
<b>Cumulative impacts</b>	<b>Preliminary significance Preliminary significance of cumulative impacts</b>
<ul style="list-style-type: none"> <li>Impact will be low as similar types of land-uses occur on nearby properties.</li> </ul>	<ul style="list-style-type: none"> <li>Low</li> </ul>
<b>Vegetation</b>	
<b>Potential impacts</b>	<b>Preliminary significance of potential impacts</b>
<ul style="list-style-type: none"> <li>Loss of vegetation</li> </ul>	<ul style="list-style-type: none"> <li>The impact will be low-medium as the proposed development site is highly disturbed and transformed due to past and present human activities. The site is also surrounded by urban sprawl.</li> <li>The loss of vegetation will be localised (to the construction site).</li> </ul>

<b>TABLE 8. POTENTIAL IDENTIFIED IMPACTS</b>	
<b>Possible Environmental Impacts</b>	
<b>Cumulative impacts</b>	<b>Preliminary significance Preliminary significance of cumulative impacts</b>
<ul style="list-style-type: none"> <li>The population in and around Bloemfontein is expanding and therefore will result in the removal of vegetation for future developments / expansions.</li> </ul>	<ul style="list-style-type: none"> <li>Medium.</li> </ul>
<b>Animal Life</b>	
<b>Potential impacts</b>	<b>Preliminary significance of potential impacts</b>
<ul style="list-style-type: none"> <li>Due to the current operational activities on site, it is not believed that a large number of animal species use the site for feeding / sleeping activities.</li> </ul>	<ul style="list-style-type: none"> <li>Medium – Low.</li> <li>Some animal habitats will be disturbed. However, this will be localised.</li> </ul>
<b>Cumulative impacts</b>	<b>Preliminary significance Preliminary significance of cumulative impacts</b>
<ul style="list-style-type: none"> <li>The growth of the population, increasing urbanisation and expansion of cities will result of the relocation of many animals and the loss of habitats in these areas on the outer boundaries of towns and cities as they expand.</li> </ul>	<ul style="list-style-type: none"> <li>Medium.</li> </ul>
<b>Cultural Heritage</b>	
<b>Potential impacts</b>	<b>Preliminary significance of potential impacts</b>
<ul style="list-style-type: none"> <li>The proposed site and surrounding area is not known for elements of archaeological or palaeontological value.</li> </ul>	<ul style="list-style-type: none"> <li>Low.</li> </ul>
<b>Cumulative impacts</b>	<b>Preliminary significance Preliminary significance of cumulative impacts</b>
<ul style="list-style-type: none"> <li>No cumulative impacts on paleontological and archaeological assets are foreseen.</li> </ul>	<ul style="list-style-type: none"> <li>Negligible significance.</li> <li>The impact is expected to be low as it is only temporary and can be managed by proper housekeeping on site during the construction</li> </ul>

<b>TABLE 8. POTENTIAL IDENTIFIED IMPACTS</b>	
<b>Possible Environmental Impacts</b>	
	phase.
<b>Noise</b>	
<b>Potential impacts</b>	<b>Preliminary significance of potential impacts</b>
<ul style="list-style-type: none"> <li>The construction activities and specific activities that will be associated with the Construction Phase will result in elevated noise levels.</li> </ul>	<ul style="list-style-type: none"> <li>The impact is expected to be medium during the construction activities. However with the implementation of management tools such as the limiting of construction activities where possible to normal working hours, the significance of noise can be made bearable to surrounding land owners.</li> </ul>
<b>Cumulative impacts</b>	<b>Preliminary significance Preliminary significance of cumulative impacts</b>
<ul style="list-style-type: none"> <li>The existing land uses in the area ranges from residential, agricultural and light industrial. It is therefore not foreseen that the proposed activities will have a potential increase in the ambient noise levels of the area during the operational phase.</li> </ul>	<ul style="list-style-type: none"> <li>Low</li> </ul>
<b>Aesthetics</b>	
<b>Potential impacts</b>	<b>Preliminary significance of potential impacts</b>
<ul style="list-style-type: none"> <li>The existing land uses in the area ranges from residential, agricultural and light industrial.</li> <li>Possible impacts on the areas aesthetics during the construction phase.</li> </ul>	<ul style="list-style-type: none"> <li>Medium, during the construction phase.</li> </ul>
<b>Cumulative impacts</b>	<b>Preliminary significance Preliminary significance of cumulative impacts</b>
<ul style="list-style-type: none"> <li>The existing land uses in the area ranges from residential, agricultural and light industrial</li> </ul>	<ul style="list-style-type: none"> <li>Low significance.</li> </ul>

<b>TABLE 8. POTENTIAL IDENTIFIED IMPACTS</b>	
<b>Possible Environmental Impacts</b>	
<b>Traffic Impacts</b>	
<b>Potential impacts</b>	<b>Preliminary significance of potential impacts</b>
<ul style="list-style-type: none"> <li>The site is zoned Special Business 2, with the zoning allowing Business Buildings, which allows shops. The proposed diesel depot and overnight facilities will result in a reduction in the development potential, and thus a reduction in the potential trip generation is possible.</li> </ul>	<ul style="list-style-type: none"> <li>It is not anticipated that a high volume of additional vehicles will make use of the road towards the access road, as it is mainly the applicant's own tankers that will make use of the proposed diesel depot.</li> <li>The impact is expected to be low as additional traffic restrictions can be implemented depending on the findings of the Traffic Impact Assessment to be conducted.</li> <li>Given the relatively inaccessible location of the development it is in any event highly unlikely to attract other trips.</li> </ul>
<b>Cumulative impacts</b>	<b>Preliminary significance Preliminary significance of cumulative impacts</b>
<p>The site is zoned Special Business 2, with the zoning allowing Business Buildings, which allows shops. The proposed diesel depot and overnight facilities will result in a reduction in the development potential, and thus a reduction in the potential trip generation is possible.</p>	<ul style="list-style-type: none"> <li>Low significance.</li> <li>The expected trip generation of the applied for facilities will be limited due to: <ul style="list-style-type: none"> <li>- Diesel depot will mainly serve the developers own fleet of trucks;</li> <li>- The site is relatively inaccessible from higher order roads.</li> <li>- The overnight facilities will be used by employees</li> </ul> </li> <li>Considering the above, the change in land use will reduce the potential trip generation of the development and is not expected to generate in excess of 50 peak hour trips, with a result that capacity analyses are not required.</li> </ul>

## **11. ENVIRONMENTAL MANAGEMENT PROGRAMME**

The EMPr will be included in the EIA phase of the proposed development.

### **11.1. Objectives of the EMPr**

The EMPr aims to fulfil the requirements in terms of the National Environmental Management Act (Act 107 of 1998), with the following objectives:

- To identify, predict and evaluate actual and potential impacts on the environment, socio-economic conditions and cultural heritage;
- To identify the risks and consequences and alternatives and options for mitigation of activities, in order to minimize negative impacts, maximize benefits and promote compliance with the principles of environmental management;
- To identify and employ the modes of environmental management best suited to ensuring that the activity is pursued in accordance with best environmental management practices;
- To be able to respond to unforeseen events; and
- To provide feedback on compliance.

### **11.2. Implementation of the EMPr**

The proponent, namely Mack's Petroleum (PTY) LTD is responsible for the implementation of the EMPr. All contractors should be supplied with a copy of the EMPr and should ensure that construction staff adheres to the mitigation measures.

## 12. SPECIALIST STUDIES

The relevance of Activity 27 of Listing Notice 1 (GNR 327) of the 2014 EIA Regulations as amended on 07 April 2017 to the proposed project was assessed. Activity 27 of Listing Notice 1 (GNR 327) of the 2014 EIA Regulations as amended on 07 April 2017 reads as follows:

*'The clearance of an area of 1 hectare or more, but less than 20 hectares of indigenous vegetation, except where such clearance of indigenous vegetation is required for*

*(i) the undertaking of a linear activity; or*

*(ii) maintenance purposes undertaken in accordance with a maintenance management plan.'*

The proposed development site is highly disturbed and transformed by past and present human activities and is surrounded by urban sprawl. It was identified that no suitable habitat, on and surrounding the proposed development site for any Red Data faunal species and no rupicolous (living among, inhabiting, or growing on rocks), arboreal (pertaining to moving about, living in or among trees) or wetland habitats are present. The site was found to be disturbed and that the proposed development will not have a negative effect in on any Red Data faunal species, or any other faunal species found on site. No natural / indigenous vegetation is located on site. Therefore, no ecological assessment (including vegetation assessment) is required.

The site is located in Sand du Plessis Avenue. The Estoire residential smallholdings have been established more than sixty years ago, but many of the original residential structures have been replaced by commercial and industrial properties. The affected area covers an area of degraded land, containing several modern commercial building structures. No historically significant building structure older than 60 years of age is present at the site. Existing roads already provide access to the site. The proposed development will take place on land formerly altered by modern industrial / commercial activities. Potential archaeological impact at the proposed site is considered to be non-existent. Underlying geology at the site consist of potentially fossil-bearing Beaufort Group (Adelaide Subgroup) strata. Superficial sediments are made up of residual soils of varying depth that are not considered to be palaeontologically significant. The likelihood of palaeontological impact on bedrock sediments underneath the degraded overburden is considered to be extremely low given latter's

overall depth, the low topography terrain and the fact that no subsurface development is planned for this project. During the site visit, no graves or items of archaeological or palaeontological significance were observed. Should any items of archaeological or palaeontological significance be unearthed or found on the site during construction all activities will cease and a specialist will be appointed to investigate the finds. SAHRA will also be notified thereof. With the above in mind, it is recommended that the proposed development is exempted from a Phase 1 Heritage Impact Assessment.

No electrical or civil studies are required, as adequate electrical supply and civil services are available on site.

Please note that a geohydrological study will be required in future, should the applicant decide to construct underground fuel tanks in future.

A traffic impact assessment will be undertaken to determine and report on the traffic impact of the planned Rezoning of Plot 1/42 Estoire Small Holdings, Bloemfontein in order to establish a Diesel Depot.

## 13. PLAN OF STUDY (APPROACH TO EIA)

### 13.1. Assessment

The main objective of the EIA process will be to assess and quantify the potential impacts that were identified by the project team, specialists and IAPs during the Scoping Phase.

All specialist studies will be added in the Draft EIA Report. A Traffic Impact Assessment will be compiled and available upon completion in the Draft EIA Report. Through the results and outcomes of the specialist study(ies), an accurate and comprehensive Impact Assessment can be compiled through the concept of significance.

The concept of significance is at the core of impact identification, evaluation and decision-making during the EIA process and can be differentiated into impact magnitude and impact significance. Impact magnitude is the measurable change (i.e. intensity, duration and likelihood), while impact significance is the value placed on the change by different affected parties (i.e. level of acceptability) (DEAT, 2002).

The significance is rated from Low to High as indicated in the table below with an explanation of the impact magnitude and a guide that reflects the extent of the proposed mitigatory measures deemed necessary.

#### 13.1.1. Concluding Consequence

Consequence analysis is a mixture of quantitative and qualitative information and the outcome can be positive or negative. Several factors can be used to determine consequence.

For the purpose of determining the environmental significance in terms of consequence, the following factors were chosen:

- Severity / Intensity
- Duration and
- Extent / Spatial Scale.

Each factor is assigned a rating of 1 to 5, as described below.

### **13.1.2. Determination of Severity**

Severity relates to the nature of the event, aspect or impact to the environment and describes how severe the aspects impact on the biophysical and socio-economic environment. TABLE 9 indicates the severity rating on a quantitative and qualitative level.

TABLE 9. SEVERITY RATING					
Type of Criteria	Rating Score				
	1	2	3	4	5
Quantitative	0-20%	21-40%	41-60%	61-80%	81-100%
Qualitative	Insignificant / Non-harmful	Small / Potentially Harmful	Significant / Harmful	Great / Very harmful	Disastrous Extremely harmful
Social/Community response	Acceptable / IAPs satisfied	Slightly tolerable / Possible objections	Intolerable/ Sporadic complaints	Unacceptable / Widespread complaints	Totally unacceptable / Possible legal action
Irreversibility	Very low cost to mitigate/ High potential to mitigate impacts to level of insignificance / Easily reversible	Low cost to mitigate	Substantial cost to mitigate / Potential to mitigate impacts / Potential to reverse impact	High cost to mitigate	Prohibitive cost to mitigate / Little or no mechanism to mitigate impact Irreversible
Biophysical (Air quality, water quantity & quality, waste production,	Insignificant change / deterioration or disturbance	Moderate change / deterioration or disturbance	Significant change / deterioration or disturbance	Very significant change / deterioration or disturbance	Disastrous change / deterioration or disturbance

### 13.1.3. Determination of Duration

Duration refers to the amount of time that the environment will be affected by the event, risk or impact, if no intervention e.g. remedial action takes place. TABLE 10 indicates the rating of duration according to a measure of the life span of the possible impact.

TABLE 10. DURATION RATING	
Rating	Description
1: Low	One month
2: Low-Medium	Between 1 and three months
3: Medium	3 months to 1 year
4: Medium-High	1 to 10 years
5: High	More than 10 years

### 13.1.4. Determination of Extent / Geographical Extent

Extent refers to the spatial influence related to an impact (thus immediate area/surrounding area / regional / national / international).

TABLE 11. EXTENT RATING AND DESCRIPTION		
Rating	Exposure	Description
1: Low	Very limited	Immediate site/ limited to site and immediate areas
2: Low-Medium	Limited	Surrounding areas
3: Medium	Municipal area	Municipal area
4: Medium-High	Province/Region	Province
5: High	National/international	National/International

### 13.1.5. Determination of Overall Consequence

Overall consequence is determined by adding the factors determined above (severity, duration and extent) as summarised in the example below, and then dividing the sum by 3 (3 factors; severity, duration and extent).

TABLE 12. OVERALL CONSEQUENCE CALCULATION	
Consequence	Rating
Severity	3
Duration	2
Extent	4
<b>Subtotal: 9</b>	
<b>Total Consequence : 3</b>	

### 13.1.6. Likelihood

The determination of likelihood is a combination of Frequency and Probability. Each factor is assigned a rating of 1 to 5, as described below and in TABLE 13 and TABLE 14.

### 13.1.7. Determination of Frequency

Frequency refers to how often the specific activity, related to the event, aspect or impact, is undertaken.

TABLE 13. RATING AND DESCRIPTION OF FREQUENCY	
Rating	Description
1: Low	Once / twice a year
2: Low-Medium	Once or more every 6 months
3: Medium	Once or more on a monthly basis
4: Medium-High	Once or more on a weekly basis
5: High	On a daily basis

### 13.1.8. Determination of probability

Probability refers to how often the activity/event or aspect has an impact on the environment.

TABLE 14. RATING AND DESCRIPTION OF PROBABILITY	
Rating	Description
1: Low	Almost never / almost impossible
2: Low-Medium	Very seldom /highly unlikely
3: Medium	Infrequent / unlikely/seldom
4: Medium-High	Often / regularly / likely / possible
5: High	Daily / highly likely / definitely

### 13.1.9. Overall likelihood

Overall likelihood is calculated by adding the factors determined above and summarised below, and then dividing the sum by 2.

TABLE 15. CALCULATING OVERALL LIKELIHOOD	
Overall Likelihood	Rating
Frequency	3
Probability	2
<b>Subtotal: 5</b>	
<b>Total Consequence: 2.5</b>	

### 13.1.10. Determination of Overall Environmental Significance

The multiplication of overall consequence with overall likelihood will provide the environmental significance, which is a number that will then fall into a range of LOW, LOW-MEDIUM, MEDIUM, MEDIUM-HIGH or HIGH, as shown in TABLE 15 below.

TABLE 15. DETERMINATION OF OVERALL ENVIRONMENTAL SIGNIFICANCE AND DESCRIPTION					
Significance / risk	Low	Low-Medium	Medium	Medium-High	High
Overall Consequence Multiplied (x) by Overall Likelihood	1 – 4.9	5 – 9.9	10 – 14.9	15 – 19.9	20 – 25

### 13.1.11. Qualitative Description of Environmental Significance

The qualitative description relating to environmental significance is used to supply us with an indication of the nature of the significance of a risk or potential impact. This can be used as a valuable tool to guide the decision making process relating to a particular event, impact or aspect.

<b>TABLE 16. QUALITATIVE DESCRIPTION AND RATING OF ENVIRONMENTAL SIGNIFICANCE</b>					
<b>Significance</b>	<b>Low</b>	<b>Low-Medium</b>	<b>Medium</b>	<b>Medium-High</b>	<b>High</b>
<b>Impact Magnitude</b>	<ul style="list-style-type: none"> <li>Impact is of very low order and therefore likely to have very little real effect.</li> </ul>	<ul style="list-style-type: none"> <li>Impact is of very low order and therefore likely to have very little real effect.</li> </ul>	<ul style="list-style-type: none"> <li>Impact is of very low order and therefore likely to have very little real effect.</li> </ul>	<ul style="list-style-type: none"> <li>Impact is of very low order and therefore likely to have very little real effect.</li> </ul>	<ul style="list-style-type: none"> <li>Impact is of very low order and therefore likely to have very little real effect.</li> </ul>
<b>Action Required</b>	<ul style="list-style-type: none"> <li>Maintain current management measures.</li> <li>Where possible improve.</li> </ul>	<ul style="list-style-type: none"> <li>Maintain current management measures.</li> <li>Implement monitoring and evaluate to determine potential increase in risk. Where possible improve.</li> </ul>	<ul style="list-style-type: none"> <li>Implement monitoring. Investigate mitigation measures and improve management measures to reduce risk, where possible.</li> </ul>	<ul style="list-style-type: none"> <li>Improve management measures to reduce risk.</li> </ul>	<ul style="list-style-type: none"> <li>Implement significant mitigation measures or implement alternatives</li> </ul>

Should any fatal flaws be identified during the EIA process which will be indicated by a “high” significance rating, the activity related with the potential impact will undergo the “no-go” alternative (i.e. be excluded from the proposed project) if the impact cannot not be managed and / or mitigated to acceptable levels.

## **13.2. Tasks Anticipated for the EIA Process**

### **13.2.1. Proceeding with the Public Participation Process**

Following the acceptance of the Scoping Report by the DESTEA, the PPP for the EIA can proceed according to Section 41 of the NEMA 2014 Regulations.

A copy of the Environmental Impact Assessment (EIA), Environmental Management Programme Report (EMPr) together with any specialist reports (if any) will be made available at a public space in Bloemfontein for public comment. All registered IAPs will be notified of the availability of the report and provided with a time period of 30 days to comment.

### **13.2.2. Steps in Accordance with the Plan of Study for EIA**

All activities and processes will be undertaken in accordance with the submitted Plan of Study for EIA for the relevant project. This process is subject to acceptance of the Scoping Report by the DESTEA.

### **13.2.3. Register IAPs**

#### **13.2.3.1. List of Possible IAPs**

All departments and organisations having jurisdiction in respect of any aspect of the proposed development will be included in the list of IAPs. Also all persons giving written comments (positive or negative) will be registered.

The initial list of possible IAPs is as follows:

- Stakeholders
- Public registered
- Surrounding landowners

#### **13.2.3.2. Issues, Comments and Concerns Raised by IAPs**

A summary of all issues raised by the IAPs, as well as the responses from the Environmental Assessment Practitioner (EAP) or relevant specialists will be included in the EIA Report. The compilation of a Comments and Response Report will be included which will state all comments received during the process (including comments received on any draft reports) as well as the response taken and feedback given by the EAP to address these comments where possible. Should it be deemed necessary a public meeting will be scheduled with all IAPs.

#### **13.2.4. Development Alternatives**

Site and activity alternatives are not applicable for this project. Therefore the proposed activity and the alternative to not proceed with the proposed activity will be assessed. Also to be listed in this section will be the advantages and disadvantages of the proposed activity and the no-go alternative, for the environment and the community.

#### **13.2.5. Assessment of Identified Potentially Significant Impacts**

The identified potential impacts listed in the Scoping Report will be discussed in terms of its:

- Cumulative impact
- Nature of the impact
- Extent and duration of the impact
- The probability of the impact occurring
- Degree to which the impact can be reversed
- Degree to which the impact can cause irreplaceable loss of resources and;
- Degree to which the impact can be mitigated

A summary of all the significant findings in the previous section will be drawn up. Overall, this will include the following:

- Summary of the key findings of the EIA;
- An indication of the extent to which the issues could be addressed by the adoption of listed mitigation measures.
- Recommendations from the environmental practitioner and specialists;
- Any specialist reports or reports on specialized processes;
- Description of any assumptions, uncertainties and gaps in knowledge;
- Option to whether the activity should be authorized and any conditions that should be made in respect of the authorization.

#### **13.2.6. Specialist Reports and Specialised Processes**

The required process regarding specialist reports and specialized processes for the relevant development is as follows:

- Specialists will be appointed either by the EAP or the developer;
- The reports and processes will be performed and obtained from the relevant specialists as mentioned in Section 12 of the final Scoping Report;
- Obtained reports and processes will be incorporated in the EIA Report;
- Project plans will be reviewed according to recommendations of specialists to ensure minimum environmental impact;
- The proposed development site is highly disturbed and transformed by past and present human activities and is surrounded by urban sprawl. It was identified that no suitable habitat, on and surrounding the proposed development site for any Red Data faunal species and no rupicolous (living among, inhabiting, or growing on rocks), arboreal (pertaining to moving about, living in or

among trees) or wetland habitats are present. The site was found to be disturbed and that the proposed development will not have a negative effect in on any Red Data faunal species, or any other faunal species found on site. No natural / indigenous vegetation is located on site. Therefore, no ecological assessment (including vegetation assessment) is required.

- No historically significant building structure older than 60 years of age is present at the site. Existing roads already provide access to the site. The proposed development will take place on land formerly altered by modern industrial / commercial activities. Potential archaeological impact at the proposed site is considered to be non-existent. Superficial sediments are made up of residual soils of varying depth that are not considered to be palaeontologically significant. With the above in mind, it is recommended that the proposed development is exempted from a Phase 1 Heritage Impact Assessment.
- No electrical or civil studies are required, as adequate electrical supply and civil services are available on site.
- Please note that a geohydrological study will be required in future, should the applicant decide to construct underground fuel tanks in future.
- A traffic impact assessment will be undertaken.

### **13.2.7. Stages of Authority Consultation**

The DESTEA will be consulted at stages when guidance is required in terms of clarification of listed activities, as well as correct processes to follow in the case of unusual projects or requests.

### **13.2.8. Methodology of Assessing Environmental Issues**

The EIA Report will address the biophysical, as well as the socio-economic environments for all alternative site locations and activities. The information will be captured in the following manner:

- Site visits to determine the setting, visual character and land-uses in the area;

- Site surveys to address the identified impacts of the development on any plant and animal populations;
- The project plans will be superimposed onto the gathered baseline environmental information of identified impacts;
- The project plans will be revised according to the identified environmental sensitive areas to ensure the least environmental impact possible;
- Detailed discussions will be held with the client to address specific aspects of the development which could affect environment;
- IAPs will be consulted by phone, letters and meetings, if necessary, to capture additional issues of importance at this stage;
- Making recommendations and presenting guidelines for the mitigation of impacts addressed during this exercise;
- The option of not proceeding with the development will be considered and evaluated.

#### **13.2.9. Specific information required from the Competent Authority**

Additional relevant information will be provided on request of the Competent Authority.

#### **13.2.10. Consideration of Scoping Reports**

Steps to be taken by the Competent Authority after submission of the Scoping for EIA:

- Consider the Scoping Report;
- Accept the Scoping Report and the Plan of Study for EIA;
- Advise EAP to proceed with tasks contemplated in the Plan of Study for EIA;
- Request EAP to amend the Scoping Report or Plan of Study for EIA;
- Reject the Scoping Report or EIA if it:
  - does not contain material / information required;
  - has not taken the relevant guidelines into account.

## 14. CONCLUSION

This draft Scoping Report focuses on the possible environmental impacts of the proposed construction of a Diesel Depot on Portion 1 of Plot 42, Estoire, Bloemfontein.

The overall terms of reference for this scoping exercise are to:

- Scope for issues that would be associated with this proposal;
- Conduct an initial assessment of the biophysical and socio-economic aspects, thus focusing on key issues;
- Identify and advise the client about the potential impacts (negative as well as positive) of the planned development, and the implications for the design, construction and operation of the project, and
- Facilitate public input on environmental matters.

Identified issues documented in this report are related to the biophysical environment, which will require appropriate mitigation by the proponent as will be specified in the EIA Report.

The following potential issues were identified during the scoping phase:

- Destruction of natural vegetation
- Soil suitability
- Impact on groundwater
- Visual impact
- Impact on air quality

The identified issues will be addressed and mitigated by means of specialist assessments, which will be included in the EIA Report.

- No historically significant building structure older than 60 years of age is present at the site. Existing roads already provide access to the site. The proposed development will take place on land formerly altered by modern industrial / commercial activities. Potential archaeological impact at the proposed site is considered to be non-existent. Superficial sediments are made up of residual soils of varying depth that are not considered to be palaeontologically significant. With the above in mind, it is recommended that the proposed development is exempted from a Phase 1 Heritage Impact Assessment.
- The proposed development site is highly disturbed and transformed by past and present human activities and is surrounded by urban sprawl. It was identified that no suitable habitat, on and surrounding the

proposed development site for any Red Data faunal species and no rupicolous (living among, inhabiting, or growing on rocks), arboreal (pertaining to moving about, living in or among trees) or wetland habitats are present. The site was found to be disturbed and that the proposed development will not have a negative effect in on any Red Data faunal species, or any other faunal species found on site. No natural / indigenous vegetation is located on site. Therefore, no ecological assessment (including vegetation assessment) is required.

- No electrical or civil studies are required, as adequate electrical supply and civil services are available on site.
- Please note that a geohydrological study will be required in future, should the applicant decide to construct underground fuel tanks in future.
- A traffic impact assessment will be undertaken.

The Plan of Study for EIA stipulates the steps to be taken and the information to be included in the EIA Report, which will be submitted after approval of the Scoping Report.

## 15. LIST OF REFERENCES

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