



Coastal & Environmental Services

Report Title: Airports Company South Africa (ACSA) Proposed Filling Station on Jones Road, Ekurhuleni Metropolitan Municipality

Report Version: Draft Report

Project Number: 266

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environmental affairs

Department: Environmental Affairs **REPUBLIC OF SOUTH AFRICA**

(For official use only)

File Reference Number: Application Number: Date Received:

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.

Kindly note that:

- 1. This **basic assessment report** is a standard report that may be required by a competent authority in terms of the EIA Regulations, 2014 and is meant to streamline applications. Please make sure that it is the report used by the particular competent authority for the activity that is being applied for.
- 2. This report format is current as of **08 December 2014**. It is the responsibility of the applicant to ascertain whether subsequent versions of the form have been published or produced by the competent authority
- 3. 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.
- 4. Where applicable tick the boxes that are applicable in the report.
- 5. An incomplete report may be returned to the applicant for revision.
- 6. 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 competent authority for assessing the application, it may result in the rejection of the application as provided for in the regulations.
- 7. This report must be handed in at offices of the relevant competent authority as determined by each authority.
- 8. No faxed or e-mailed reports will be accepted.
- 9. The signature of the EAP on the report must be an original signature.
- 10. The report must be compiled by an independent environmental assessment practitioner.
- 11. Unless protected by law, all information in the report will become public information on receipt by the competent authority. Any interested and affected party should be provided with the information contained in this report on request, during any stage of the application process.
- 12. A competent authority may require that for specified types of activities in defined situations only parts of this report need to be completed.
- 13. Should a specialist report or report on a specialised process be submitted at any stage for any part of this application, the terms of reference for such report must also be submitted.

- 14. Two (2) colour hard copies and one (1) electronic copy of the report must be submitted to the competent authority.
- 15. Shape files (.shp) for maps must be included in the electronic copy of the report submitted to the competent authority.

SECTION A: ACTIVITY INFORMATION

Has a specialist been consulted to assist with the completion of this section? $YES \checkmark$ If YES, please complete the form entitled "Details of specialist and declaration of interest" for the specialist appointed and attach in Appendix I.

1. PROJECT DESCRIPTION

a) Describe the project associated with the listed activities applied for

The Airports Company of South Africa (ACSA) has proposed the construction of a filling station on a portion of the Farm Witkoppie 64-IR Portion 187 and Portion 197 within the OR Tambo International Airport precinct. The development will consist of a four island forecourt canopy, a $\pm 250m^2$ convenience shop and a $\pm 130m^2$ fast food outlet. These facilities will be built on a $\pm 5200m^2$ site located southwest of the airport (Figure 1).

EOH Coastal & Environmental Services have been appointed to undertake the Basic Assessment process in terms of the National Environmental Management (NEMA 107 of 1998), Environmental Impact Assessment Regulations (2014), for the proposed development.



Figure 1: Google Earth image showing the location of the proposed ACSA filling station.

Project Location:

The activity falls within the jurisdiction of the Ekurhuleni Metropolitan Municipality of the Gauteng Province. The proposed filling station site will have access to Jones Street and will serve both directions of traffic-flow. It will be the only filling station between the OR Tambo airport, the R21 and the N12 freeway. It will serve some transient traffic on Jones Street travelling between Boksburg and Kempton Park as well as the local industrial, office and casino traffic. Due to the lack of filling stations east of the R21 the existing market currently has to fill up elsewhere.

Project Description and Scope:

The proposed scope of activities will, in general, cover the following:

- The development of a convenience store, offices and change room facilities;
- The installation of four new underground fuel tanks with a total capacity of 115m³;
 - 1 x 46m³ unleaded petrol tank;
 - 1 x 23m³ unleaded petrol tank;
 - 1 x 23m³ lead replacement petrol tank;
 - \circ 1 x 23m³ diesel tank.
- The tanks will be composite fibre glass tanks manufactured according to SANS code 1535;
- The tanks will be installed to depths of 3.2m below the surface;
- The tanks will be placed on a high density polyethylene (HDPE) liner within the excavation;
- The tanks will be directly filled at filler points that will be located north of the underground tanks;
- The filler points will be located underground in sealed manholes, which are designed to contain any accidental spills;
- Monitoring wells will be installed at the edge of the tank farm and inserted 0.5m below the base of the tanks and slotted to the first 0.6 m from the base upwards;
- The forecourt will have a storm water drainage system that will discharge into the municipal storm water drains via an oil/water separator pit;
- The oil/water separator pit will be installed onsite, northeast of the underground tanks and will form part of the storm water management plan design for the facility.

Support Facilities:

Access Road - The development will be accessed via Jones Street which is an existing tarred road and in good condition. As such, the development will not require any additional access roads to be constructed however, on-site roads will be laid as per the design specifications. The site will then be accessible to the public via two entrances. One access point will be built at the intersection of Jones Road and the entrance to Jan Smuts Park and can be utilised from any direction of traffic. The other access point will be 100m further north along Jones road and can be utilised in a southerly direction. Roads will be appropriately upgraded and marked and traffic lights implemented to manage the traffic in this area. The filling station will have sufficient customer parking which will also be marked accordingly.

Water Supply - Water required for the construction and operation of the proposed development will be acquired from the Ekurhuleni Metropolitan Municipality.

Solid Waste, Wastewater and Sewage – The development will include onsite ablution facilities which will feed into the municipal sewerage reticulation system. Solid waste generated will be collected and stored in a designated area within the property to be collected weekly by the municipal waste removal system. The intended storm water management plan will include the construction of a storm water servitude along the western portion of the site and a 330m³ attenuation dam in the north-west corner of the study area to collected storm water runoff. All run off from the development will be channelled through the oil/water separator prior to its discharge into the municipal storm water drains.

Electricity supply – Electricity supply will be obtained from the existing Eskom service lines and will be derived from the National Grid.

Construction and Operation:

It is estimated that the construction phase would last for 12 months. The operational phase is undetermined at the time of writing, but will conceivably be until the facility ceases to be used or for a period of twenty years.

ACSA will not be undertaking the construction or the operation of the site, but instead will be placing a tender for the detail design, construction and operation of the filling station. ACSA will, after completion of the construction, pay for the improvements and enter into a management agreement with a petrol filling station operator for an approximately 20 year period.

b) Provide a detailed description of the listed activities associated with the project as applied for

Listed activity as described in GN 983 and 985	Description of project activity
GN R. 983, Activity 14 : The development of facilities or infrastructure, for the storage, or for the storage and handling, of a dangerous good, where such storage occurs in containers with a combined capacity of 80 cubic metres or more but not exceeding 500 cubic metres.	The proposed filling station will require fuel to be stored in containers with a combined capacity of 115m ³ .

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 as required by Appendix 1 (3)(h), Regulation 2014. Alternatives should include a consideration of all possible means by which the purpose and need of the proposed activity (NOT PROJECT) 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, competent authority 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.

The identification of alternatives should be in line with the Integrated Environmental Assessment Guideline Series 11, published by the DEA in 2004. Should the alternatives include different locations and lay-outs, the co-ordinates of the different alternatives must be provided. 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.

a) Site alternatives

Alternative 1 (preferred alternative)				
Description	Lat (DDMMSS)	Long (DDMMSS)		
Farm Witkoppie 64-IR Portion 187 and Portion 197	26° 09' 0.01" S	28° 13' 27.14" E		
Alternative 2				
Description	Lat (DDMMSS)	Long (DDMMSS)		
No site alternatives are deemed feasible for this particular project. A feasibility study was undertaken to determine the positions of existing service stations within a 3km radius, the traffic volumes in the surrounding area and the market share of each service station. It was determined that the preferred site alternative will be the only suitable site to serve the target market in this area (Appendix J1).				
Alternative 3				
Description	Lat (DDMMSS)	Long (DDMMSS)		
As per above statement				

Latitude (S):

In the case of linear activities:

Alternative:

Alternative S1 (preferred)

- Starting point of the activity
- Middle/Additional point of the activity
- End point of the activity
- Alternative S2 (if any)
- Starting point of the activity
- Middle/Additional point of the activity
- End point of the activity

Alternative S3 (if any)

- Starting point of the activity
- Middle/Additional point of the activity
- End point of the activity



Longitude (E):

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

In the case of an area being under application, please provide the co-ordinates of the corners of the site as indicated on the lay-out map provided in Appendix A of this form.

Application Area Corner (as per Appendix A)	Lat (DDMMSS)	Long (DDMMSS)
A	26° 08' 57.3" S	28° 13' 24.6" E

В	26° 08' 57.9" S	28° 13' 25.5" E
С	26° 08' 58.4" S	28° 13' 27.7" E
D	26° 09' 00.5" S	28° 13' 27.9" E
E	26° 09' 01.1" S	28° 13' 26.9" E
F	26° 09' 01.1" S	28° 13' 26.4" E

b) Lay-out alternatives

Alternative 1 (preferred alternative)				
Description	Lat (DDMMSS)	Long (DDMMSS)		
Please refer to Appendix C for the preferred layout of the	e proposed activity			
Alternative 2				
Description	Lat (DDMMSS)	Long (DDMMSS)		
No layout alternatives have been proposed for this	development. The	preferred layout		
alternative satisfies the requirements of the applicant in term of the logistical needs of a filling station and does not pose any additional environmental issues that another alternative layout could mitigate. The chosen site is a result of the feasibility study conducted for filling stations in the area (Please see Appendix J for the study).				
Alternative 3				
Description	Lat (DDMMSS)	Long (DDMMSS)		
As per above statement.				

c) Technology alternatives

Alternative 1 (preferred alternative)

As the activity is related to the construction of filling station, the most appropriate construction methods will be used based on what is available in terms of equipment as well as materials. During the construction and operation phases, water will be obtained from the municipal water supply systems. Machinery and equipment for the operational phase will depend on what is available on the market at such time that the client can commence with the operational phase. Where possible and practical standard practices regarding energy efficiency during the operational phase will be followed i.e. energy saving light bulbs, duelflush toilets etc.).

Alternative 2

There are no other technology alternatives proposed for this project as the preferred technology alternative is the only means of achieving the desired outcomes of the project and most feasible and practical options were chosen from an economical and environmental perspective.

Alternative 3

As per above statement.

d) Other alternatives (e.g. scheduling, demand, input, scale and design alternatives)

There are no other alternatives relevant to this project as the preferred alternative is the only means of achieving the desired filling station development.

e) No-go alternative

This alternative assumes that the status quo will remain unchanged and that there will be no filling station constructed on the property. There will be no clearing required and the land will continue to remain as an unused open space. However, under the No-go alternative, the absence of the filling station would result in the continuation of an increased demand on the existing service stations in the area. These existing service stations cannot meet the market demand for fuel and are also located on different roads and are inaccessible to the traffic which uses Jones Road.

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

3. PHYSICAL SIZE OF THE ACTIVITY

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

Alternative:

Alternative A1¹ (preferred activity alternative) Alternative A2 (if any) Alternative A3 (if any) Size of the activity:



or, for linear activities:

Alternative:

Alternative A1 (preferred activity alternative) Alternative A2 (if any) Alternative A3 (if any) Length of the activity:



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

Alternative:

Alternative A1 (preferred activity alternative) Alternative A2 (if any) Alternative A3 (if any)

4. SITE ACCESS

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





¹ "Alternative A.." refer to activity, process, technology or other alternatives.

The proposed site can be accessed via Jones Road which runs along the south-west corner of OR Tambo International Airport. Jones Road connects with the R21 motorway approximately 2km south of the site as well as the N12 national highway approximately 4km to the south-east of the site (Figure 2). TEIN R21 147 Joist St 0 R21 **OR** Tambo Ke. International Airport Anvil St ISANDO O.R. TAMBO 2 Emperors Palace WITKOPPIE Filling Station 64-IR JET PARK Griffiths Rd Dakota R Kelly Jones Road Rd WITKOPPIE Jones Rd Beechcraft 429A Yaldwyn Rd Rietfontein Ridge Rd Leith Rd R21 BARTLETT Dr Vosloo Rd 429 4298 429 Rietfontein Pretoria 429 12 Wild Waters - Boksburg @ 1 12 View Point Rd 10 Û 1st Rd Filling Station 429 Rietfontein Soweto Ern R21 M44 Fire Station - Leon Fereira & Training. East Rand Mall Figure 2: Locality map showing the access routes to and from the proposed filling station site.

Describe the type of access road planned:

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.

5. 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 accurate indication of the project site position as well as the positions of the alternative sites, if any;
- indication of all the alternatives identified;
- closest town(s;)
- 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 and decimal minutes. The minutes should have at least three decimals to ensure adequate accuracy. The projection that must be used in all cases is the WGS84 spheroid in a national or local projection).

Please refer to Appendix A1 for the locality map.

6. LAYOUT/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:

- the property boundaries and numbers of all the properties within 50 metres of the site;
- the current land use as well as the land use zoning of the site;
- the current land use as well as the land use zoning each of the properties adjoining the site or sites;
- the exact position of each listed activity applied for (including alternatives);
- servitude(s) indicating the purpose of the servitude;
- a legend; and
- a north arrow.

Please refer to Appendix A2 for layout/route plans.

7. SENSITIVITY MAP

The layout/route plan as indicated above must be overlain with a sensitivity map that indicates all the sensitive areas associated with the site, including, but not limited to:

- watercourses;
- the 1:100 year flood line (where available or where it is required by DWS);
- ridges;
- cultural and historical features;

- areas with indigenous vegetation (even if it is degraded or infested with alien species); and
- critical biodiversity areas.

The sensitivity map must also cover areas within 100m of the site and must be attached in Appendix A.

Please refer to Appendix A3 the sensitivity map.

8. 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 report. It must be supplemented with additional photographs of relevant features on the site, if applicable.

Please refer to Appendix B for site photographs.

9. FACILITY ILLUSTRATION

A detailed illustration of the activity must be provided at a scale of at least 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 design/layout drawings for the proposed development.

10. ACTIVITY MOTIVATION

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

1. Is the activity permitted in terms of the property's existing land use rights?	YES ✓	Please explain	
On 17 June 2014, the Ekurhuleni Metropolitan Municipality approved the rezoning application submitted to rezone a portion of Portion 187 of the farm Witkoppie 64-IR to "Aerodrome including Public Garage" – please refer to Appendix J2. According to the 2015 Ekurhuleni Metropolitan Spatial Development Framework (MSDF), the land is classified for 'Special' and 'Mixed' land use (Figure A4 in Appendix A). The 2013-2014 South African National Land-Cover Dataset defines the property as 'Thicket/Dense bush', 'Plantations/Woodlots mature' and 'Urban Industrial', while the 2009 South African National Landcover database incorrectly classifies it as a "cultivation" area (Figure A3 in Appendix A).			
2. Will the activity be in line with the following?			
(a) Provincial Spatial Development Framework (PSDF)	YES 🗸	Please explain	
The proposed development of a filling station will contribute to the in Gauteng. The proposed development contributes to "urbac Gauteng Provincial Spatial Development Framework (PSDF, 2 particular piece of transportation infrastructure actively pro- transportation system. Transportation infrastructure is listed as principles that underlie the establishment of the urban morp changing (and improving) of the urban areas. The developm reducing unemployment in the Gauteng province.	ransporta an form" 2011) as pmotes s one of hologica ent will	ation infrastructure described in the the extent that a a sensible urban the "development I elements" – the also contribute to	

(b) Urban edge / Edge of Built environment for the area	YES 🗸	Please explain		
The proposed development is suitable for both urban and rural areas, but because the main function of the filling station would be to service the industrial, business, casino and airport traffic, it would be most suited to an area within the urban edge. The development is approximately 10km within the 2011 Urban Edge as defined by the 2015 Ekurhuleni Metropolitan Spatial Development Framework (MSDF).				
(c) Integrated Development Plan (IDP) and Spatial Development Framework (SDF) of the Local Municipality (e.g. would the approval of this application compromise the integrity of the existing approved and credible municipal IDP and SDF?).	YES 🗸	Please explain		
The Ekurhuleni Integrated Development Plan (IDP, 2013/14) outlines several sustainability targets including the "improved access and mobility around the OR Tambo International Airport and its surrounds trough provision of Transport Infrastructure. The proposed filling station will perform an important role in servicing the private and public transportation systems in the Ekurhuleni Metropolitan Municipality. This is important as the transport system "remains a strong resource to attract and accommodate future development." The Ekurhuleni MSDF also highlights the needs for "improving the availability and quality of public transport services" and the need for the "modernisation of public transport infrastructure." Transport oriented development also forms part of the municipal planning principles (Ekurhuleni MSDF, 2015).				
IDP and SDF.	y or the			
(d) Approved Structure Plan of the Municipality	YES ✓	Please explain		
The proposed development does not contravene any approve Ekurhuleni Metropolitan Municipality.	ed struc	ctural plans for the		
(e) An Environmental Management Framework (EMF) adopted by the Department (e.g. Would the approval of this application compromise the integrity of the existing environmental management priorities for the area and if so, can it be justified in terms of sustainability considerations?)	YES ✓	Please explain		
The proposed development does not contravene any EMF conditions adopted by the Department.				
(f) Any other Plans (e.g. Guide Plan)	YES	NO Please explain		
The proposed development is not in contravention of any other plans, frameworks or guidelines as set out by the local government.				

3. Is the land use (associated with the activity being applied for) considered within the timeframe intended by the existing approved SDF agreed to by the relevant environmental authority (i.e. is the proposed development in line with the projects and programmes identified as priorities within the credible IDP)?	YES 🗸	Please explain	
The proposed development is in line with the key focus areas or meets the land use requirements of the surrounding area transportation infrastructure service to the OR Tambo Internation	f the IDP and in terms of nal Airport.	the SDF and providing a	
4. Does the community/area need the activity and the associated land use concerned (is it a societal priority)? (This refers to the strategic as well as local level (e.g. development is a national priority, but within a specific local context it could be inappropriate.)	YES 🗸	Please explain	
The proposed project will assist in relieving the pressure curr limited number of filling stations in an area which received a lar also contribute to the creation of employment and transfer of number of people from the surrounding areas during both the co phases of the project. Please refer to Appendix J1 for th conducted in 2006 which outlines the necessity for the proposed	ently being p rge amount of new technic onstruction an e project fea l development	laced on the f traffic. It will al skills to a d operational asibility study	
5. Are the necessary services with adequate capacity currently available (at the time of application), or must additional capacity be created to cater for the development? (Confirmation by the relevant Municipality in this regard must be attached to the final Basic Assessment Report as Appendix I.)	Not applicable ✓	Please explain	
No additional services or capacity is required for the developmer	nt to take plac	e.	
6. Is this development provided for in the infrastructure planning of the municipality, and if not what will the implication be on the infrastructure planning of the municipality (priority and placement of services and opportunity costs)? (Comment by the relevant Municipality in this regard must be attached to the final Basic Assessment Report as Appendix I.)	NO ✓	Please explain	
This is not a municipal project and will have no effect on direct infrastructure planning of the municipality. There is however an evident need for a filling station in this particular area in order to relieve the pressure being placed on other filling stations in the area.			
7. Is this project part of a national programme to address an issue of national concern or importance?	NO ✓	Please explain	
While the proposed project will improve the transportation service contribute to relieving unemployment, it will only be on a small s on a national level.	vice infrastruc cale and will r	ture and also not contribute	

8. Do location factors favour this land use (associated with the activity applied for) at this place? (This relates to the contextualisation of the proposed land use on this site within its broader context.)	YES ✓	Please explain		
The proposed filling station will serve the traffic derived from the industrial areas, business parks, casino and airport which surround the location. The location is easily accessible and centrally located in relation to these activities.				
9. Is the development the best practicable environmental option for this land/site?	YES 🗸	Please explain		
Due to its location within an urban-industrial area, the proper contain any natural environmental features which require conse need for the filling station in order to serve the traffic in the area to employment creation makes the proposed filling station the be option or this site.	osed study ervation or as well as est practica	area does not protection. The the contribution I environmental		
10. Will the benefits of the proposed land use/development outweigh the negative impacts of it?	YES ✓	Please explain		
The provision of services and the contribution to unemployme than the negative impacts (e.g. waste generation, noise pollution associated with the proposed development/	nt are sign n, air pollutio	ificantly greater on etc.) that are		
11. Will the proposed land use/development set a precedent for similar activities in the area (local municipality)?	NC	✓ Please explain		
There are already numerous existing filling station within the Eku	Irhuleni Loc	al Municipality.		
12. Will any person's rights be negatively affected by the proposed activity/ies?	NC	✓ Please explain		
The intention of the development is to provide a transportation is area surrounding the OR Tambo International Airport. The of negative effect on any person's rights.	nfrastructur developmer	e service to the nt will have no		
13. Will the proposed activity/ies compromise the "urban edge" as defined by the local municipality?	NC	✓ Please explain		
The development is approximately 10km within the 2011 Urba 2015 Ekurhuleni Metropolitan Spatial Development Framewor urban edge will not be affected in any way.	n Edge as k (MSDF).	defined by the Therefore, the		
14. Will the proposed activity/ies contribute to any of the 17 Strategic Integrated Projects (SIPS)?	YES 🗸	Please explain		
The project will have a very specific and limited contribution to the development of the Aerotropolis around OR Tambo International Airport which forms part of Strategic Infrastructure Project (SIP) No. 2 – the 'Durban-Free State-Gauteng logistics and industrial corridor.' It will also have a minor contribution to SIP No. 7 (Integrated urban space and public transport programme) which entails the planning of service infrastructure placement to support the large urban centres in South Africa.				
15. What will the benefits be to society in general and to communities?	the local	Please explain		
 Additional refuelling options for motorists; Reduction in traffic and overcrowding of existing filling station Increased revenue and contribution to the local economy; Job creation as a result of construction and operation of the formation of	ns in the sur	rrounding area;		

• Job creation as a result of construction and operation of the facility.

16. Any other need and desirability considerations related to the proposed activity?	Please explain			
 Development and transfer of skills; Increased shopping, take-away, ATM and general convenience options. 				
17. How does the project fit into the National Development Plan for 2030? Please exp				
The National Development Plan (NDP) represents a new approach by Government to promote sustainable and inclusive development in South Africa, and involves, amongst others, the following key areas of focus:				
Creating jobs and livelihoods				
Expanding infrastructure				
Transitioning to a low-carbon economy				
Transforming urban and rural spaces				
Improving education and training				
The construction of the proposed filling station will contribute in some way to all of thes				

key areas.

18. Please describe how the general objectives of Integrated Environmental Management as set out in section 23 of NEMA have been taken into account.

The general objectives of Integrated Environmental Management has been taken into account though the following aspects:

- The proponent appointed a qualified Environmental Assessment Practitioner (EAP) to ensure that the requirements of NEMA have been met;
- A comprehensive public participation process (PPP) has been conducted which provides the public with an opportunity to raise any concerns relating to the activity;
- Appropriate specialist assessments have been conducted to assess the direct impact of the activity on the environment;

The objectives of NEMA have also been taken into consideration by means of assessing various alternatives; assessing direct as well as indirect impacts and by prescribing various mitigation measures to minimise these impacts.

Furthermore, the following regulations were considered during the preparation of this Basic Assessment report.

LEGISLATION	ADMINISTERING AUTHORITY	TYPE Permit/ license/ authorisation/comment / relevant consideration (e.g. rezoning or consent use, building plan approval)	Status
The Constitution of South Africa (Act 108 of 1996)	The Constitutional Court of South Africa	Environmental rights and social development	Principles incorporate into this report
National Environmental Management Act (107 of 19989) (NEMA) and Environmental Impact Assessment (EIA) Regulations, 2010	Department of Environmental Affairs (DEA) and Department of Environmental Affairs and Development Planning (DEADP)	Principles of environmental management, procedures to be followed in a Basic Assessment process and Environmental Authorisation	Principles incorporate into this report
National Water Act (36 of 1998)	Department of Water Affairs and Sanitation	Comment or Water Use License	Not applicable – no WULA required
National Heritage Resources Act (25 of 1999)	South African Heritage Resource Agency	Submission of NID or Phase 1 HIA.	An Notice of Intent to Develop will be submitted to SAHRA

19. Please describe how the principles of environmental management as set out in section 2 of NEMA have been taken into account.

As part of the Basic Assessment process, various impacts have been identified and mitigation measures formulated to protect the environment in terms of functionality, ecological integrity, pollution, heritage resources and social sustainability. An Environmental Management Programme (EMPr) also forms part of this assessment which will include all aspects of the NEMA principles which will be applied during the construction and operation of the proposed development.

11. 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	Applicability to the project	Administering authority	Date
Constitution of the Republic of South Africa (108 of 1966)	 Chapter 2 of the Constitution, includes an environmental right (Section 24): Obligation to ensure that the proposed development will not result in pollution and ecological degradation; and Obligation to ensure that the proposed development is ecologically sustainable, while demonstrating economic and social development. 	National, Provincial and Local Government	1996
Environmental Impact Assessment Regulations (2014)	The activity triggers activities listed in NEMA GN R983 and GN R985.	Department of Environmental Affairs	2014
National Environmental Management Act No 107 of 1998 (as amended)	The activity triggers activities listed in NEMA GN R983 and GN R985.	Department of Environmental Affairs	2013
Occupational Health & Safety Act (Act No. 85 of 1993)	The applicant must be mindful of the principles and broad liability and implications contained in the OH&S Act and mitigate any potential impacts. Compensation as a result of injuries and/or diseases will need to be addressed according to the Compensation for Occupation Injuries and Diseases Act (Act 130 of 1993) in the event of any legitimate matter arising.	Department of Labour	1993
National Environmental Management: Air Quality Act (39 of 2004)	The construction of the proposed filling station will create limited dust and vehicle emissions which will need to be managed. During operation, vehicle emissions will need to be managed as there will be an increase in the traffic entering the site.	Department of Environmental Affairs	2004
National Environmental Management: Waste Act (Act No. 59 of 2008)	The proposed development will create general waste during the construction and operational phase and will need to adhere to the waste management legislation	Department of Environmental Affairs	2008
Hazardous Substances Act (15 of 1973)	The proposed filling station will be storing hazardous substances which will need to be correctly used and maintained	Department of Environmental Affairs	1973
National Environmental Management Act: Biodiversity Act (Act No. 10 of 2004) National Environmental Management:	 The proposed development must conserve endangered ecosystems and protect and promote biodiversity must assess the impacts of the proposed development on endangered ecosystems; No protected species may be removed or damaged without a permit; The proposed site must be cleared of alien vegetation using appropriate 	Department of Environmental Affairs	2004

Biodiversity Act, 2004 (Act no. 10 of 2004) – Alien and Invasive Species (AIS) Regulations	 means; An invasive species monitoring, control and eradication plan for land/activities under their control should be developed, as part of their environmental plans in accordance with section 11 of NEMA. 		
Environmental Conservation Act (73 of 1989)	Noise control.	Department of Environmental Affairs	1989
National Water Act 36 of 1998	 Manage the use of water as well as runoff in such a manner that it has limited pollution impacts; Prevent the unauthorised use of water; Use water sparingly. 	Department of Water and Sanitation	1998
National Forest Act 84 of 1998	If any protected trees in terms of this Act occur on site, the developer will require a licence from DAFF to perform any of the above-listed activities.	Department of Agriculture, Forestry and Fisheries	1998
National Heritage Resources Act 25 of 1999	 No person may alter or demolish any structure or part of a structure, which is older than 60 years or disturb any archaeological or paleontological site or grave older than 60 years without a permit issued by the relevant provincial heritage resources authority. No person may, without a permit issued by the responsible heritage resources authority destroy, damage, excavate, alter or deface archaeological or historically significant sites. 	SAHRA	1999
Town Planning and Township Ordinance (15 of 1986)	A rezoning application has been approved by the Ekurhuleni Metropolitan Municipality	Ekurhuleni Metropolitan Municipality	1986
South African Bureau of Standards (Part 3 of Code 089)	The proposed development will be required to adhere to standards set out for 'the installation of underground storage tanks, pumps/dispensers and pipework at service stations and consumer installations	SABS	1999
South African Bureau of Standards (Code 1535)	The proposed development will be required to adhere to standards set out for 'Glass- reinforced polyester-coated steel tanks for the underground storage of hydrocarbons and oxygenated solvents.'	SABS	2005
Municipal Bylaws	Certain activities related to the proposed development may, in addition to National legislation, be subject to control by municipal by-laws.	Ekurhuleni Metropolitan Municipality	

12. WASTE, EFFLUENT, EMISSION AND NOISE MANAGEMENT

a) Solid waste management

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

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

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

Solid waste produced during the construction phase of the proposed development will primarily consist of building rubble and litter (e.g. plastic, glass, etc.). Waste skips/bins will be provided throughout the construction site. These skips will be scavenger proof. General construction waste will be removed by the by local municipality's waste removal services.

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

The waste will be transferred by the removal services to the nearest permitted landfill site which is the Rooikraal landfill site.

Will the activity produce solid waste during its operational phase?

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

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

Solid waste will be generated at the fuel station, the convenience store and the take-away outlet which is proposed for the development. General solid waste will be removed by the by local municipality's waste removal services.

If the solid waste will be disposed of into a municipal waste stream, indicate which registered landfill site will be used.

Rooikraal landfill site - 16/2/7/C221/D24/Z1/P512 - List 1 waste and light industrial waste

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

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 competent authority 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 NEM:WA?

If YES, inform the competent authority and request a change to an application for scoping and EIA. An application for a waste permit in terms of the NEM:WA must also be submitted with this application.

Due to the nature of the development, there is the potential for limited hazardous waste to occur on site during the construction and operational phases. These may include hydrocarbon waste and hydrocarbon contaminated material. These waste could either be recycled and or removed from site to the Holfontein Hazardous Waste Disposal Site (12/9/11/L604/3) by a licenced service provider.





YES ✓

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

If YES, then the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA. An application for a waste permit in terms of the NEM:WA must also be submitted with this application.

b) Liquid effluent

Will the activity produce effluent, other than normal sewage, that will be disposed of in a municipal sewage system?

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

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

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.

Will the activity produce effluent that will be treated and/or disposed of at another facility?

If YES, provide the particulars of the facility:

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

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

Waste water (sewage) will be discharged directly into the municipal sewerage reticulation system, while storm water, which may contain hydrocarbon contaminants will be captured and channelled through an oil/water separator and discharged into the municipal storm water drains.

c) Emissions into the atmosphere

Will the activity release emissions into the atmosphere other that exhaust emissions and dust associated with construction phase activities?

NO
\checkmark
NO
\checkmark

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

If YES, the applicant must 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:

During fuel tank filling, the hydrocarbon vapours contained in the tanks are displaced. This generates minor petrol and diesel vapours into the atmosphere.



NO ✓

NO ✓

d) Waste permit

Will any aspect of the activity produce waste that will require a waste permit in terms of the NEM:WA?

If YES, please submit evidence that an application for a waste permit has been submitted to the competent authority

e) Generation of noise

Will the activity generate noise?

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



NO

Describe the noise in terms of type and level:

Noise will be generated during the construction phase where machinery required for the installation of underground tanks as well as general construction plant will be operating. The following mitigation measures will ensure that noise created during construction is managed adequately:

- Ensure that vehicles and equipment used on site are in good working order and are serviced properly;
- Limit construction activities to daylight hours i.e. 7am to 5pm;
- Apply applicable municipal by-laws with regards to noise control;
- The staff involved in the construction will not be housed on site and will also be informed as to how they can avoid any unnecessary noise pollution during working hours.

The operational phase of the development may cause an increase in noise as a result of increased vehicle traffic in the area. The noise associated with all phases of the development is considered to be negligible due to the location of the development adjacent to an industrial area and an international airport.

13. 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
-------------------------------------	--	-------	------------------------------------

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:

Not applicable

NO 🗸

Does the activity require a water use authorisation (general authorisation or water use license) from the Department of Water Affairs?

If YES, please provide proof that the application has been submitted to the Department of Water Affairs.

14. ENERGY EFFICIENCY

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

Where possible, energy saving technology (e.g. energy-saving lighting, energy-saving geysers etc.) will be used.

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

No alternative energy sources will be utilised for this development.

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 B and indicate the area, which is covered by each copy No. on the Site Plan.

Section B 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 ✓

If YES, please complete the form entitled "Details of specialist and declaration of interest" for each specialist thus appointed and attach it in Appendix I. All specialist reports must be contained in Appendix D.

Property	Province	Gauteng		
description/physi	District	Ekurhuleni Metropolitan Municipality		
cal address:	Municipality			
	Local Municipality	Ekurhuleni Metropolitan Municipality		
	Ward Number(s)	17 and 22		
	Farm name and	Witkoppie 64-IR		
	number			
	Portion number	187 and 197		
	SG Code	T0IR0000000006400187		
		T0IR000000006400197		
	attach a full list to this above.	application including the same information as indicated		
urrent land-use oning as per bcal municipalityOn 17 June 2014, the Ekurhuleni Metropolitan Municipality appro the rezoning application submitted to rezone a portion of Portion 18 the farm Witkoppie 64-IR to "Aerodrome including Public Gara According to the 2015 Ekurhuleni Metropolitan Spatial Develop Framework (MSDF), the land is classified for 'Special' and 'Mixed' I use.In instances where there is more than one current land-use zoning, plane				
	attach a list of current land use zonings that also indicate which portions use pertains to, to this application.			

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

NO ✓

1. GRADIENT OF THE SITE

Indicate the general gradient of the site.

Alternative S1:

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

The study area, which has a footprint of approximately 5200m², is predominantly flat with an approximately 1% slope to the east. It is located at 1703m above sea-level upon the Highveld plateau. The surrounding areas are also mostly flat with a distinct artificial elevation change to the east where the OR Tambo International Airport is located – Refer to Figure A7 in Appendix A.

2. LOCATION IN LANDSCAPE

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

2.1 Ridgeline	2.4 Closed valley		2.7 Undulating plain / low hills	
2.2 Plateau	2.5 Open valley		2.8 Dune	
2.3 Side slope of hill/mountain	2.6 Plain	\checkmark	2.9 Seafront	
2.10 At sea				

3. GROUNDWATER, SOIL AND GEOLOGICAL STABILITY OF THE SITE

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

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

 \checkmark

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.

The study area overlies the Swazian Erathem which is an Archaean lithology consisting of felsic and intermediate igneous rocks – Refer to Figure A8 in Appendix A. Please refer to the Geotechnical Investigation included on Appendix D for additional details on the geological properties of the study area.

4. GROUNDCOVER

Indicate the types of groundcover present on the site. The location of all identified rare or endangered species or other elements should be accurately indicated on the site plan(s).

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

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

5. SURFACE WATER

Indicate the surface water present on and or adjacent to the site and alternative sites?

Perennial River	NO ✓	
Non-Perennial River	NO ✓	
Permanent Wetland	NO ✓	
Seasonal Wetland	NO ✓	
Artificial Wetland	NO ✓	
Estuarine / Lagoonal wetland	NO ✓	

If any of the boxes marked YES or UNSURE is ticked, please provide a description of the relevant watercourse.

There are no surface water features within or directly adjacent to the proposed development site. The nearest surface water features, as per the National Freshwater Ecosystem Priority Areas (NFEPA), are an artificial wetland located 700m north of the study site as well as a largely modified river located 750m southwest of the study area. Please refer to Figure A6 in Appendix A which shows the NFEPA rivers and wetlands.

6. LAND USE CHARACTER OF SURROUNDING AREA

Indicate land uses and/or prominent features that 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:

Natural area	Dam or reservoir	Polo fields
Low density residential	Hospital/medical centre	Filling station ⁺
Medium density residential	School	Landfill or waste treatment site
High density residential	Tertiary education facility	Plantation
Informal residential ^A	Church	Agriculture
Retail commercial &	Old age home	River, stream or wetland
warenousing V		
Light industrial ✓	Sewage treatment plant ^A	Nature conservation area
Medium industrial ^{AN} ✓	Train station or shunting yard N	Mountain, koppie or ridge
Heavy industrial AN	Railway line [₩]	Museum
Power station	Major road (4 lanes or more) [№] ✓	Historical building
Office/consulting room ✓	Airport ^N ✓	Protected Area
Military or police	Harbour	Croveverd
base/station/compound		Giaveyaiu
Spoil heap or slimes dam ^A	Sport facilities	Archaeological site
Quarry, sand or borrow pit	Golf course	Other land uses (describe)

Please refer to Figure A3 and Figure A4 in Appendix A which show the land cover and land use zoning for the study area.

<u>Retail commercial & warehousing:</u> There are retail commercial and warehousing land uses in close proximity to the proposed development site including the Emperors Palace Casino. These existing developments will have a positive impact on the filling station as they are likely to contribute to the business success and income of the filling station. The filling station will also have a positive impact on the retail commercial and warehousing land uses as it provides an alternative refuelling location and relieves the traffic which is currently experienced at the existing fuel stations. Negligible negative impacts such as minor traffic and construction noise may be a result of the proposed development.

Light Industrial: As per the above.

Office/consulting room: As per the above.

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

<u>Major road (4 lanes or more)</u>^N: The R21 provincial motorway route, which links Johannesburg and Pretoria, is located 250m to the west of the proposed project area. The road will positively impact the development as it provides a direct access route to the site. The proposed filling station will also positively impact the R21 as it provides a filling station option for vehicles travelling along this route and will relieve the pressure placed on the capacity of other fuel stations along this route. This, in turn, may contribute to relieving the traffic along the R21 route.

<u>Airport^N:</u> The OR Tambo International Airport is located along the north-western boundary of the proposed development site. The airport will have several impacts on the proposed development. It will negatively impact the development in terms of noise pollution, but will positively impact the development as the majority of the commuters who will be using the filling station will be travelling to or from the airport. The development will have no negative impacts on the airport, but will impact it positively in that it provides an alternative refuelling site for vehicles entering and leaving the airport.

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

Medium Industrial^{AN}: There are several industries located in the various industrial parks surrounding the proposed development. The industries will have a positive impact on the filling station as they are likely to support the nearest filling station and therefore contribute to the business success of the development. The filling station will also have a positive impact on the industrial area as it provides an alternative refuelling location and relieves the traffic which is currently experienced at the existing fuel stations. Negligible negative impacts such as minor traffic and construction noise may be a result of the proposed development.

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

Not applicable.

Does the proposed site (including any alternative sites) fall within any of the following:

Critical Biodiversity Area (as per provincial conservation plan)	NO 🗸
Core area of a protected area?	NO 🗸
Buffer area of a protected area?	NO 🗸
Planned expansion area of an existing protected area?	NO 🗸
Existing offset area associated with a previous Environmental Authorisation?	NO 🗸
Buffer area of the SKA?	NO 🗸

If the answer to any of these questions was YES, a map indicating the affected area must be included in Appendix A.

Please refer to Figure A6 in Appendix A which shows the critical biodiversity areas relative to the proposed development area.

7. 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 Archaeological or paleontological sites, on or close (within 20m) to the site? If YES, explain:



If uncertain, conduct a specialist investigation by a recognised specialist in the field (archaeology or palaeontology) to establish whether there is such a feature(s) present on or close to the site. Briefly explain the findings of the specialist:

Not applicable

Will any building or structure older than 60 years be affected in any way? Is it necessary to apply for a permit in terms of the National Heritage Resources Act, 1999 (Act 25 of 1999)? NO ✓ NO ✓

If YES, please provide proof that this permit application has been submitted to SAHRA or the relevant provincial authority.

8. SOCIO-ECONOMIC CHARACTER

a) Local Municipality

Please provide details on the socio-economic character of the local municipality in which the proposed site(s) are situated.

Level of unemployment:

The unemployment rate in the Ekurhuleni Metropolitan Municipality is 28.8% and the youth (ages 15 to 34 years) unemployment rate is 36.9%. There are approximately 1.6 million economically active individuals (i.e. people who are employed or unemployed but looking for work) living within the municipality. 840 000 of the people aged 15 to 34 years old are currently employed (StatsSA, 2011).

Economic profile of local municipality:

The Ekurhuleni Metropolitan Municipality contributes 6.1% to the national production. It also contributes approximately 25% to the Gauteng Gross Domestic Product (GDP). The municipality is an important manufacturing centre and its economy grew at an average of 3.2% per annum between 1996 and 2011. While globalisation within the municipality has influenced the structure of production and the demand for labour, it has also strengthened the steel and fabricated metal industries in the area. The presence of the OR Tambo International Airport within Ekurhuleni has a positive influence on tourism not only within the municipality, but throughout the country. It also means that large airline company headquarters are located and operate from the municipality (Ekurhuleni IDP, 2014).

Level of education:

Only 3% of the total population of people aged 20 years or older living in Ekurhuleni have not received any schooling. 35.3% have some secondary education, 35.5% have completed matric and 14.6% have some form of higher education.

b) Socio-economic value of the activity

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

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

Will the activity contribute to service infrastructure?

Is the activity a public amenity?

How many new employment opportunities will be created in the development and construction phase of the activity/ies?

What is the expected value of the employment opportunities during the development and construction phase?

What percentage of this will accrue to previously disadvantaged individuals? How many permanent new employment opportunities will be created during the operational phase of the activity?

What is the expected current value of the employment opportunities during the first 10 years?

What percentage of this will accrue to previously disadvantaged individuals?

9. BIODIVERSITY

Please note: The Department may request specialist input/studies depending on the nature of the biodiversity occurring on the site and potential impact(s) of the proposed activity/ies. To assist with the identification of the biodiversity occurring on site and the ecosystem status consult http://bgis.sanbi.org or BGIShelp@sanbi.org. Information is also available on compact disc (cd) from the Biodiversity-GIS Unit, Ph (021) 799 8698. This information may be updated from time to time and it is the applicant/ EAP's responsibility to ensure that the latest version is used. A map of the relevant biodiversity information (including an indication of the habitat conditions as per (b) below) and must be provided as an overlay map to the property/site plan as Appendix D to this report.

a) Indicate the applicable biodiversity planning categories of all areas on site and indicate the reason(s) provided in the biodiversity plan for the selection of the specific area as part of the specific category)

Systematic Biodiversity Planning Category			Category	If CBA or ESA, indicate the reason(s) for its selection in biodiversity plan
Critical Biodiversity Area (CBA)	Ecological Support Area (ESA)	Other Natural Area (ONA)	No Natural Area Remaining (NNR) ✓	Not applicable

b) Indicate and describe the habitat condition on site

	Percentage of habitat	Description and additional Comments and Observations
Habitat Condition	condition class (adding up to 100%)	(including additional insight into condition, e.g. poor land management practises, presence of quarries, grazing, harvesting regimes etc).

	R 14 million				
е	R 1.4 million,				
	escalating at 8%				
	per annum over				
	a 20 year period				
	NO 🗸				
	NO 🗸				
d	Unknown				
е	Unknown				
	Unknown				
е	Unknown				
е	Unknown				
	Unknown				

Natural	0 %	There is no natural or near-natural vegetation present within the proposed development site.
Near Natural (includes areas with low to moderate level of alien invasive plants)	0 %	
Degraded (includes areas heavily invaded by alien plants)	10 %	There are some areas which are degraded with the potential for alien infestation. Mainly <u>Pinus</u> (Pine) and <i>Eucalyptus</i> (Gum) species found on site, with some minor invasive herb species as well.
Transformed (includes cultivation, dams, urban, plantation, roads, etc)	90 %	The majority of the site is transformed and is covered with planted grass and gardens. There is also an existing paved road through the site.

c) Complete the table to indicate:

- (i) the type of vegetation, including its ecosystem status, present on the site; and
- (ii) whether an aquatic ecosystem is present on site.

Terrestrial Ecosystems		Aquatic Ecosystems						
Ecosystem threat	Critical	Wetland	d (includi	ng rivers,				
status as per the	Endangered	depressio	epressions, channelled and		Fatura nt		Coostline	
Environmental	Vulnerable 🗸	seeps pans and artificial			Estuary		Coastille	
Management:	l east	wetlands)						
Biodiversity Act (Act No. 10 of 2004)	Threatened	YES	NO 🗸	UNSURE	YES	NO 🗸	YES	NO ✓

d) Please provide a description of the vegetation type and/or aquatic ecosystem present on site, including any important biodiversity features/information identified on site (e.g. threatened species and special habitats)

According to Mucina and Rutherford (2012), the vegetation classification of the proposed project area is 'Carletonville Dolomite Grassland' which is distributed throughout Gauteng, the North-West as well as parts of the Free State. This vegetation type consists of species-rich grasslands which flourish in warm-temperate, summer-rainfall regions. The Carletonville Dolomite Grassland has a 'vulnerable' conservation status and a conservation target of 24%. Almost 25% of this vegetation type has already been transformed to cultivated land or lost as a result of urban sprawl. The surrounding vegetation types include the endangered 'Soweto Highveld Grassland' as well as the least threatened 'Eastern Temperate Freshwater Wetlands' vegetation types. Please refer to Figure A9 in Appendix A for the vegetation map of the study area.

The study site itself is located in a completely transformed urban area and therefore the indigenous vegetation has been entirely lost. The 'vulnerable' conservation status of the specific site is therefore not applicable and the study area can be considered to be a 'least threatened' terrestrial ecosystem.

SECTION C: PUBLIC PARTICIPATION

1. ADVERTISEMENT AND NOTICE

Publication name	The Star Newspaper	
Date published	24 January 2017	
Site notice position	Latitude	Longitude
	26° 8'58.72"S	28°13'26.66"E
	26° 9'24.21"S	28°13'37.71"E
Date placed	15 September 2017	

Include proof of the placement of the relevant advertisements and notices in Appendix E1.

Please refer to Appendix E1 for proof of placement of the site notice. Proof of publication of the advertisement will be included in the Final Basic Assessment Report, as it was advertised and submitted on the same date, therefore not available at the time of printing.

2. DETERMINATION OF APPROPRIATE MEASURES

Provide details of the measures taken to include all potential I&APs as required by Regulation 41(2)(e) and 41(6) of GN 733.

Key stakeholders (other than organs of state) identified in terms of Regulation 41(2)(b) of GN 733

Title, Name and Surname	Affiliation/ key stakeholder status	Contact details (tel number or e-mail address)
A full I&AP list can be view		

Include proof that the key stakeholder received written notification of the proposed activities as Appendix E2. This proof may include any of the following:

- e-mail delivery reports;
- registered mail receipts;
- courier waybills;
- signed acknowledgements of receipt; and/or
- or any other proof as agreed upon by the competent authority.

In order to inform the public of the proposed project and to invite members of the public to register as Interested and Affected Parties (I&APs), the proposed project will be advertised in the Star Newspaper. A site notice was placed at the site and Background Information Documents (BIDs) distributed to the landowner, surrounding landowners and other identified I&APs where possible (please see Appendix E - PPP for proof of these notices). Notification e-mails were sent out to relevant parties (Please refer to Appendix E2) along with the BID's, informing the IAPs of both draft BAR submission, the public meeting venue and time, as well as the inception notice of the project.

3. ISSUES RAISED BY INTERESTED AND AFFECTED PARTIES

Summary of main issues raised by I&APs	Summary of response from EAP
--	------------------------------

	Name	Issue	Date	Response	Date
1	Simphiwe		Tue	Good Day Simphiwe,	Tue
	Masilela	Good day Mr.	2016/09/20		2016/09/20
		Raath,	10:36 AM	Following our telephonic	11:27 AM
				discussion I just want to	
		We have		put my response in writing.	
		received			
		herewith		This is a Basic	
		attached in		Assessment process for	
		order to conduct		the development of a filling	
		an obstacle		station (Please have a look	
		assessment.		at the Background	
		However , we		Information Document of	
		are not certain		ours that you sent me, for	
		as to which		more details on what	
		stage is the		ACSA wish to develop).	
		proposed on?		We are still in the inception	
		1) Is this an		phase, so are compiling	
		EIA phase for		specialist study work and	
		basic		the draft Basic	
		assessment and		Assessment Report. We	
		comments		are also compiling an	
		purposes or a		Interested and Affected	
		request for		Party database, so if you	
		Obstacle		have any contacts for the	
		Evaluation from		land owners of the	
		Stakeholders?		property, any neighbours,	
				or anyone that might be	
		2) Please		interested please pass	
		provide us with		those along for inclusion.	
		the following		We will then be issuing a	
		information in		inception notice to	
				everyone, containing that	
				decument emerget ethere	
		cuccosoful		to lot overvene know what	
		accossmont.		the project is about The	
				step thereafter would be to	
		FLEVATION (in		publish the draft report for	
		metres AMSL)		review by the public and	
		HEIGHT(to		commenting, but notices	
		the top of		for that are sent out as that	
		structure)		happens.	
		LOCATION was			
		provided on the		I will send your request	
		document		onwards to the client and	
				see if I can get the details	
		Your quick		for your obstacle	
		response will be		assessment, and will	
		much		revert back to you soonest.	
		appreciated.		I will also add you to the	
				IAP list, so you will receive	
		Kind Regards,		notifications going forward.	

				Please let me know if you	
				have any further queries or	
				comments.	
				Thank you,	
2	Mr	Good day	Thu	Hi Gideon	Thu
	Gideon	Simphiwe,	2016/09/22		2016/09/22
	Raath		02:56 PM	To our knowledge this	02:56 PM
		Following our		property does not affect	
		discussion		ATNS. I would however	
		yesterday, I		suggest you refer to the	
		would like to just		original EIA if approvals	
		confirm that the		were sought from ATNS.	
		attached layout			
		plan indeed		Regards	
		covers part of		Pierre Rossouw (ATNS)	
		the ATNS			
		property? I also			
		wanted to ask if			
		you nave the			
		for compone at			
		ATNS that			
		would be			
		empowered to			
		act on behalf of			
		ATNS for this			
		particular parcel			
		of land, as there			
		will likely be			
		discussions			
		between ACSA			
		and ATNS			
		should this			
		parcel be			
		affected by the			
		proposed			
		development?			
		I have attached			
		the layout plans			
		as they are at			
		present.			
		Thank vou.			

4. COMMENTS AND RESPONSE REPORT

The practitioner must record all comments received from I&APs and respond to each comment before the Draft BAR is submitted. The comments and responses must be captured in a comments and response report as prescribed in the EIA regulations and be attached to the Final BAR as Appendix E3.

Only two comments have been received to date, both included in the Issues and Response Trail table above (Section 3). Any comments received on the DBAR will be included as part of the submission of the Final Basic Assessment Report.

5. AUTHORITY PARTICIPATION

Organs of State	Organisation	Email	Landline	Cell	Postal
Nondumiso Mabe	Department of Water and Sanitation (DWS)	maben@dws.gov.za	012 392 1399	082 328 4191	Private Bag X1069, Germiston
Grant Botha	Provincial Heritage Resources Authority Gauteng	grant.botha@gauteng.gov.za	011 355 2574		2nd Floor Surrey House Building, 35 Rissik Street, Johannesburg
Mr Puseletso Loselo	DWS DG Generic	LoseloP@dwa.gov.za	012 336 7705		Private Bag X313, PRETORIA, 0001, South Africa
Qaphile Gcwensa	Ekurhuleni Metro: Waste Management	Qaphile.gcwensa@ekurhuleni.gov.za.	011 999 6017		Private Bag X1069, Germiston
Sizwe Cele	Ekurhuleni Metro: Roads and Storm Water	Sizwe.Cele@ekurhuleni.gov.za	011 999 3644		Private Bag X1069, Germiston
Hezekiel Nkosi	Ekurhuleni Metro: Environmental Resource Management and Development	<u>hezekiel.nkosi@ekurhuleni.gov.za</u>	011 999 9412		Private Bag X1069, Germiston
Mr R Swartz	Gauteng Department of Roads and Transport	<u>GPRoads.Transport@gauteng.gov.za</u>	011 355 7000		Private Bag X83, Marshalltown, 2107
Simon Lapping (Cllr ward 17)	Cllr Ward 17	<u>simon@sosimon.co.za</u>		078 350 5063	
Phillip Hine	South African Heritage Resource Agency (SAHRA)	phine@sahra.org.za	021 462 4502		PO Box 4637, Cape Town, 8000

Authorities and organs of state identified as key stakeholders:

					34 The
					Terraces
					Building C/o,
					Riebeeck &
					Bree Street ,
	Department				Cape Town
	of Energy				CBD, 8001/
	(DoE)				Department
					of Energy,
					Private Bag X
			+2721		31,
Mpho			406		Roggebaai,
Mabaso		Mpho.mabaso@energy.gov.za	7712		8012

A full I&AP list can be viewed in Appendix E7 of this report.

Include proof that the Authorities and Organs of State received written notification of the proposed activities as appendix E4.

In the case of renewable energy projects, Eskom and the SKA Project Office must be included in the list of Organs of State.

Please refer to Appendix E4 for proof of notification of Organs of State.

6. CONSULTATION WITH OTHER STAKEHOLDERS

Note that, for any activities (linear or other) where deviation from the public participation requirements may be appropriate, the person conducting the public participation process may deviate from the requirements of that sub-regulation to the extent and in the manner as may be agreed to by the competent authority.

Proof of any such agreement must be provided, where applicable. Application for any deviation from the regulations relating to the public participation process must be submitted prior to the commencement of the public participation process.

A list of registered I&APs must be included as appendix E5.

Please refer to Appendix E5 for an updated list of I&APs, showing the registered I&APs to date.

Copies of any correspondence and minutes of any meetings held must be included in Appendix E6.

No meetings have been required to date. The minutes of any meetings held during the review period of the Draft Basic Assessment Report will be included in the Final Basic Assessment Report. A public meeting is advertised for the 30th of January 2017, minutes of which will be included into the final Basic Assessment report.

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. 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

Provide a summary and anticipated significance of the potential direct, indirect and cumulative impacts 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. This impact assessment must be applied to all the identified alternatives to the activities identified in Section A(2) of this report.

Activity	Impact summary	Significance	Proposed mitigation				
Alternative 1 (pr	Alternative 1 (preferred alternative)						
Planning and	Design Phase						
Activities associated with the design and pre construction phase pertains mostly to planning and design around the proposed development, and is done at a desktop level. In some cases site visits need to take place but the impact of these visits is negligible, if any, e.g. photographs, GPS point's etc. There are thus no Planning and Design Phase impact anticipated for this development.							
Construction	Phase						
Construction of the proposed filling station	Direct impacts: Impact 1: Biodiversity Impacts Cause and Comment: Although the proposed development site consists entirely of planted grass, trees and garden areas, there remains the potential for indigenous plants to occur on site. Any indigenous vegetation which occurs on site will be lost during construction. No SCC were found on site and the likelihood of important plant species remain extremely remote, as the gardens have been cultivated and the region covered entirely by grass. The presence of invasive herb species (<i>Conyza</i>), River Red Gum (<i>Eucalyptus camaldulensis</i>) and various Pine Species (<i>Pinus</i>) on	Before Mitigation: Negligible After Mitigation: LOW +	 An Alien Invasive Control Programme must be implemented during construction and operation. Care should be taken during construction to not spread seed into and from site through earth works. 				

Activity Impact summary	Significance	Proposed mitigation
site indicate that the region has already been disturbed and previously invaded. Due to the alien invasive and the manicured gardens, the biodiversity potential of this property is deemed extremely low. Vegetation impacts from this development are thus negligible.		
Impact 2: Soil Compaction and Erosion Cause and Comment: There is a possibility that soil may be compacted by the operation and parking of construction vehicles. Compacted soil results in the reduced ability for plant growth and water absorption. The clearing of vegetation (gardens) will result in the exposure of soils. Exposed soils are easily susceptible to erosion by wind and water (i.e. run-off) during high wind or rainfall conditions.	Before Mitigation: MOD - After Mitigation: LOW –	 Newly cleared and exposed areas must be promptly rehabilitated to avoid soil erosion; Where necessary, temporary stabilization measures must be used; Plan for the worst case, that is, for heavy rainfall and runoff events, or high winds; Appropriate erosion control measures must be implemented and a monitoring programme established to ensure that no erosion is taking place. At the first sign of erosion the necessary remedial action must be taken; Care must be taken to ensure that runoff is well dispersed so as to limit erosion.
Impact 3: Stormwater and Groundwater Contamination Cause and Comment: Erosion of soil, sand or building material stockpiles may contaminate and/or block the existing stormwater system if they are stored incorrectly. Additional pollutants such as fuel, oil, construction waste and general waste may enter the stormwater system if they are not managed correctly. The development of a new filling station involves the digging of sumps for underground fuel tank placement. The implementation of the tanks produces the potential for contamination of groundwater in the unlikely case where there is a leak and seepage which traverses below the water table. Additional contaminants from construction vehicles and cement-mixing may also seep into the groundwater.	Before Mitigation: HIGH – After Mitigation: LOW –	 Establish a dedicated area for material stockpiling away from the existing stormwater drainage system; Establish a site office with a dedicated area for construction vehicles to refuel and where cement can be mixed; Vehicle re-fuelling and cement mixing must only take place on impervious surfaces a long distance from stormwater systems; Ensure that all construction machinery is in good working order to prevent oil leaks; Construction hoses should be checked for leaks on a daily basis; Temporary chemical toilets must be provided (separate toilets for males and females) for the duration of the construction period if no waterborne sewerage system is available. These toilets must be made available for all site staff during the construction phase; The developers must appoint and enter into a contract

Activity	Impact summary	Significance	Proposed mitigation
			 maintenance of the sanitation system; If toilets are not mobile they should have a concrete base and be tied down to avoid spillages etc.; Sanitary bins should be made available for female staff. Adequate waste disposal (litter) bins must be available on site. These must be properly secured and covered to prevent scavengers from tipping them; Any hazardous materials that need to be stored on site must be done so under lock and key. Surfaces must be bunded so that any excess water or spilled fuel can be trapped and stored in a container for disposal.
	Impact 4: Solid Waste Generation Cause and Comment: It is anticipated that the proposed development will produce solid waste in the form of building rubble, excavated soil, excess concrete and general waste, such as litter, during the construction phase.	Before Mitigation: MOD – After Mitigation: LOW –	 Rubble and other construction waste produced should be re-used if possible and, where it is not possible, must be disposed of at the nearest registered waste disposal facility; Rubble, which will not be reused, must be removed from site on a regular basis; If rubble is stored on site, it should be stored on designated portions of land away from the road, where access from the public can be controlled and restricted where required; Litter must be controlled during construction – adequate bins must be made available on site at all times. These must be made scavenger and weather proof and must be emptied on a regular basis; Construction materials stored at the site camp must be secured – i.e. plastics must be conducted. The activity should not contribute to any surrounding windblown litter; Skips must be covered and emptied regularly; Waste manifests must be provided by the municipality to prove legal disposal; Cement bags must be kept in a sealed container; Waste may not be removed from site by staff or

Activity	Impact summary	Significance	Proposed mitigation
_		-	members of the public.
	Impact 5: Impacts on Cultural Heritage, Archaeology and Palaeontology Cause and Comment: Due to the nature of the site, it is unlikely that features of cultural heritage, archaeological or paleontological importance occur within the study area. However, in the unlikely event that some do exist, there is the risk that they could be damaged or destroyed during the construction phase.	Before Mitigation: LOW – After Mitigation: Negligible	 Should any archaeological or cultural sites or objects be located during the construction of the proposed project, it should immediately be reported to the South African Heritage Resources Agency (SAHRA) and the Provincial Heritage Resources Authority Gauteng (PHRAG). Failure to report a site or object of archaeological and/or cultural significance is a contravention of the National Heritage Act (Act No. 25 of 1999); All construction site staff should be briefed to immediately report any sites or objects, which are located during the construction of the facility. In the event of finding what appears to be an archaeological site or a cultural and/or historic site or object, work should be terminated until a qualified archaeologist or historian can examine the item.
	Impact 6: Air Pollution Cause and Comment: During construction, dust may be generated, especially where there is exposed ground. Specific activities that may contribute to the release of dust include offloading and stockpiling of building materials such as sand, storage of excavated materials and movement of heavy vehicles. The generation of dust may be exacerbated during windy, dry periods. In addition to dust, air pollution may result from the exhaust fumes emitted by construction vehicles, especially if the vehicles have not been serviced correctly.	Before Mitigation: MOD – After Mitigation: LOW –	 Employ dust suppression measures such as wetting of the project area during dry, windy periods (Only water from a licensed source will be used); Where practical, do not leave large cleared areas exposed for longer than necessary; The area of disturbance must be kept to a minimum at all times; No unnecessary clearing of vegetation, digging or scraping should occur; Vehicle speed should be limited to the lowest possible, and should not exceed 40km/h on the construction site. Construction vehicles must be regularly maintained in order to ensure that no unnecessary exhaust fumes are being emitted.
	Impact 7: Noise Cause and Comment: Construction activities are associated with an increase in noise levels as a result of construction vehicles, plant generators and various other equipment being used on site. While these activities will produce noise, it is unlikely to have a significant impact on the surrounding industrial area which	Before Mitigation: Negligible After Mitigation: Negligible	 No construction activities may take place between sunset and sunrise; Machinery that generates noise must be regularly maintained in order to ensure that no unnecessary additional noise is produced; Equipment with lower sound levels should be selected where feasible; No construction activities after 13:00 on Saturdays,

Activity	Impact summary	Significance	Proposed mitigation
	currently experiences noise from the industrial activities, vehicle traffic adjacent to the site, and most importantly Jet testing on the neighbouring property. High volume from aircraft noise is thus frequent on site and the anticipated volume increase from construction activities is deemed insignificant.		Sundays and public holidays.
	Impact 8: Visual Impacts Cause and Comment: Construction vehicles and equipment will be evident in the existing grass and garden landscape. Generation of dust and smoke will increase the visibility of the project and may become an eyesore if not managed correctly.	Before Mitigation: LOW – After Mitigation: Negligible	 Employ techniques to suppress dust and smoke generation during construction; The contractor should maintain good housekeeping on site to avoid litter and minimise waste; Night lighting of the construction sites should be minimised within requirements of safety and efficiency; Fires and fire hazards need to be managed appropriately.
	Impact 9: Traffic Impacts Cause and Comment: During the construction phase of the proposed development, construction vehicles will be utilizing the existing road network. This may result in the impeding of traffic and damage to existing roads.	Before Mitigation: MOD – After Mitigation: LOW –	 Large construction vehicles must not be permitted to utilize public roads during peak hours (AM: 06:30 – 08:30 and PM: 16:00 – 18:30); Damages to public roads caused by large construction vehicles must be repaired immediately.
	Impact 10: Health and Safety Risks The use of construction machinery during the construction phase, together with the implementation of fuel tanks, poses a potential risk to the health and	Before Mitigation: MOD –	 All relevant Health and Safety legislation as required in South Africa should be strictly adhered to, including but not limited to the Occupational Health and Safety Act, 1993 (No. 85 of 1993);
	well as to commuters passing the site. The movement of construction vehicles within a relatively busy area also increases the risk of road accidents. The risk of accidents, fires and explosions must be mitigated effectively.	After Mitigation: LOW –	 Smoking should be prohibited in the vicinity of flammable substances; Ensure the availability of sufficient firewater tie-in points; Any welding or other sources of heating of materials should be done in a controlled environment and under appropriate supervision; Ensure availability of fire extinguishers; All employees must be aware of emergency/ contingency plans to ensure an understanding of the hazards and procedures required during an emergency situation; An emergency preparedness and response plan must be implemented for the duration of construction; Records of environmental and/or health and safety related incidents should be maintained and

Activity	Impact summary	Significance	Proposed mitigation
			 communicated to the relevant persons; During construction the site shall be fenced off to prevent access; Fencing shall be inspected weekly and maintained properly, by the Contactor, until construction is complete; The Contractor shall ensure that signage, which should be pictorial and in the vernacular, is erected on all boundary fences warning against entering the construction area; Traffic calming and speed control measures for access to construction sites shall be instigated in consultation with the local authorities.
	Impact 11: Employment Creation Cause and Comment: The construction phase of the proposed development will create a number of temporary jobs for locals within the area.	MOD +	None required
	Impact 12: Security risks Cause and Comment: During construction equipment on site will be exposed to the general public, unless proper access control is implemented. In addition, staff may be present on site working after hours. Furthermore, the demolition of the ATNS fencing for construction will also expose the electrical transformer building and the ATNS communications tower to the public, whereas it previously was access controlled	Before Mitigation: HIGH - After Mitigation: LOW –	 No unauthorized persons should be allowed onto the site and site access should be strictly controlled. Unsocial activities such as consumption or illegal selling of alcohol, drug utilisation or selling of any items on site, are prohibited. Any persons found to be engaged in such activities shall have disciplinary and / or criminal action taken against them. No person shall enter the site unless authorised to do so by the contractor, Project Coordinator or ECO. All visitors must report to the site office on arrival, undergo induction training, sign an indemnity form and be in possession of the correct PPE clothing to wear while on site. Induction programmes must communicate the rules and regulations to be adhered to on site to all persons entering the site. NO person may remain on site without having first completed induction training. If any fencing interferes with the construction process, such fencing shall be deviated until construction is completed. The deviation of fences shall be negotiated

Activity	Impact summary	Significance	Proposed mitigation
			 and agreed with the landowner in writing by the ECO. Trespassing on private / commercial properties adjoining the site is forbidden. The site must be secured in order to reduce the opportunity for criminal activity in the locality of the construction site No drugs, alcohol, fire arms or weapons of any kind allowed on site (baring medication); No hunting, trading or selling of items of any kind allowed on or near site; Intoxication while on site will not be allowed. If necessary, breathalysing may be instigated for staff members.
	Indirect impacts:		
	Impact 13: Purchasing of Materials from Local Businesses Cause and Comment: Where possible, materials will be sourced from local businesses and this will result in a boost of the local economy of the immediate vicinity and surrounding areas.	MOD +	Ensure local labour is employed as far as possible; Investigate a skills transfer component for staff during construction; Train staff in specific competencies where possible during construction.
Operational P	hase		
	Direct impacts:		
Operation of the filling station	Impact 14: Stormwater and Groundwater Contamination Cause and Comment: Contamination of stormwater may occur during the operational phase when vehicles are refuelled at the filling station. Spilled fuel, oil or other contaminants may be washed into the stormwater system unless mitigated properly. The underground fuel tanks which will be used for fuel storage have the potential to leak and result in the spillage of fuel into an underground water resource. This is a potentially cumulative impact as there are several bulk fuel tanks located east of the site where airport fuel is	Before Mitigation: HIGH – After Mitigation: MOD -	 A site specific spill contingency plan for the operation and transportation of fuel must be compiled and implemented; Monitoring of volumes of the underground storage tanks must take place on a daily basis to detect unexplained losses due to leakages; The condition of the tanks, associated piping and the monitoring wells must be inspected on a regular basis; Integrity testing of the tank must take place 5 years after installation, with repetition on a 5-year cycle thereafter; At the end of the life span of the tanks, as governed by the supplier specification, tanks are to be replaced; All waste oils, greases, fuels, chemicals etc. should be

Activity	Impact summary	Significance	Proposed mitigation
	stored.		 collected and disposed of in an appropriate manner off site. The contents of grease traps or other waste oil, grease and/ or fuel disposal/ storage containers should under no circumstances be emptied and dumped to the surrounding area. No fuels/ oils must be allowed to discharge directly into stormwater pipes or drains and sewage manholes/pipes; The clean water (e.g. surface runoff) and dirty water (e.g. contaminated water from the forecourt and filling points) must be separated to prevent contaminated run-off from entering the stormwater, groundwater and soil; The forecourt area and the filling points should be concreted and graded so that any effluent run-off will not flow to the street, or into stormwater/ sewer systems but pass through the oil water separator sump/s before discharge into the municipal storm water drains; The oil/ water separator sump/s must be checked regularly and kept clean to prevent blockage and overflow. In addition, regular monitoring and clearing of the oil/ water separator sump/s will prevent hydrocarbon liquids from discharging into the separator must be disposed of at a suitable waste handling site where Safe Disposal Certificates will be issued.
	Impact 15: Solid Waste Generation Cause and Comment: Solid waste during the operational phase will	Before Mitigation:	 Adequate waste disposal (litter) bins must be available on site. These must be properly secured and covered to prevent scavengers from tipping them;
	primarily consist of the generation of litter from the convenience store, take-away outlet and minor solid waste from the filling station itself. Solid waste has the potential to pollute the surrounding land or enter stormwater and sewerage systems unless it is managed correctly. Solid waste can also be considered a cumulative impact as it will contribute to the overall waste produced within the Ekurhuleni Metropolitan Municipality and the decrease in available landfill space.	After Mitigation: LOW –	 A responsible person must be appointed to manage the solid waste generated at the filling station in order to ensure that it is properly stored and refused regularly by municipal refuse services. Sufficient refuse collection must occur to ensure no build-up of refuse occurs on site.

Activity	Impact summary	Significance	Proposed mitigation
	Impact 16: Sewerage and Wastewater Generation Cause and Comment: The operation of a new filling station, convenience store and take-away outlet will contribute to additional effluent and wastewater being generated and disposed into the municipal sewerage system. Sewerage and wastewater has the potential to leak and contaminate the soils, stormwater and groundwater in the area.	Before Mitigation: MOD – After Mitigation: LOW –	 Waste water and effluent management must be implemented on site; Ablution facilities and associated piping must be adequately lined and checked for leaks on a regular basis. All sewage generated from the site must be discharged into the Municipal sewerage reticulation system.
	Impact 17: Hazardous Waste Generation Cause and Comment: Hazardous waste is likely to occur as a result of a large number of vehicles entering and exiting the filling station on a daily basis. The filling station management will have limited control with regards to which vehicles may enter the filling station and therefore a number of vehicles which may be leaking oil or fuel may enter onto site. In addition to this, hazardous waste will be generated during the cleaning of oil separators and may occur as a result of spilt fuel or oil during refuelling or servicing of vehicles.	Before Mitigation: HIGH – After Mitigation: LOW –	 Paved surfacing coming in contact with vehicles must be bunded such that stormwater flows into an oil/water separator, to allow for treatment of hydrocarbons and other hazardous wastes. Hazardous substances should be disposed of at an appropriate classified waste site (unless it is to be recycled by approved methods), as per the National Environmental Management Waste Act 59 of 2008; Sludge from the oil separators must be disposed of to a suitable waste-handling contractor where Safe Disposal Certificates are to be issued; All product spills within the bunded area must be appropriately cleaned up; All contaminated spill fighting material such as fibres, soil, sandbags, etc. must be disposed of in an appropriate hazardous waste landfill site. Proof of this must be made available upon request; Ensure safe disposal of Methanol/water mixture used for removal of any residual water from the fuel tanks; Any spilt material must be disposed of at a suitable licensed waste disposal facility, with chain of custody documentation supplied as proof of end recipient; The transportation, handling and storage of hazardous and flammable substances must comply with all the provisions of the Hazardous Substances Act 1973, (Act No. 15 of 1973) associated regulations as well as a SANS 10228 and SANS 10089 codes. A site-specific stormwater management plan must be

Activity	Impact summary	Significance	Proposed mitigation
		-	implemented to manage the increased stormwater runoff;
	Impact 18: Increased Stormwater Runoff and Erosion Potential Cause and Comment: The proposed development will consist of more impervious surfaces than what currently exists on site and this will result in increased runoff and potentially increased erosion.	Before Mitigation: MOD – After Mitigation: LOW –	 A site-specific stormwater management plan must be implemented to manage the increased stormwater runoff; Storm-water structures need to be implemented as part of the development and must link up with the current storm-water infrastructure in order to navigate stormwater and minimise soil erosion; At the first signs of erosion, the correct procedures must be undertaken to manage, resolve and prevent it from occurring.
	Impact 19: Air Pollution Cause and Comment: Vapour emissions may result from the exhaust fumes emitted by vehicles passing through the filling station, especially if the vehicles have not been serviced correctly. In addition to this, vapour emissions are likely to be produced during the refuelling of the fuel tanks when hydrocarbon vapours are displaced by the liquid petrol and diesel.	Before Mitigation: HIGH – After Mitigation: MOD –	 Stage 1 Volatile Organic Compound (VOC) Vapour Recovery Systems, should be installed onto fuel dispensing nozzles at the refuelling and forecourt areas; Operators must ensure that every effort is made to limit gaseous emissions; All equipment used must manufactured to limit VOC vapour emissions; Operational refuelling procedures must be put in place to limit vapour emissions during refuelling of vehicles and storage tanks.
	Impact 20: Noise Cause and Comment: The operation of a filling station, convenience store, take-away outlet and other related activities on the site will create a constant noise on a 24 hour basis. The movement of vehicles to and from site will also produce noise, but should not be any more than what is currently experienced on site. The close proximity to the OR Tambo International Airport, which produces constant noise, means that the noise from the proposed development will be negligible.	Before Mitigation: LOW – After Mitigation: Negligible	 Workers must not produce any unnecessary noise e.g. no loud music to be played, no whistles to be used etc.; The Ekurhuleni Metropolitan Municipality by-laws relating to noise must be adherer to at all times.
	Impact 21: Visual Impacts Cause and Comment: The visibility of the proposed development will be noticeable as a result of the proximity to Jones Road. The completed facility and associated facilities	Before Mitigation: LOW – After Mitigation:	 Building finishes should be of appropriate design and quality; Buildings should be designed in such a way that it fits into the surrounding industrial environment; Waste must be removed from site regularly and disposed

Activity	Impact summary	Significance	Proposed mitigation
	will be a significant visual transformation of the land	LOW –	of at a registered landfill site in order to avoid
	that is currently an open plot nowever, in relation to		unnecessary litter being viewed on site;
	the nature of the surrounding industrial areas, it will not be a significant viewal transformation		General good nousekeeping must be maintained at all times
			times.
	Impact 22: Tramic Impacts	Poforo Mitigation	 The proposed external road upgrades and site access
	The operation of the proposed filling station will		design etenderde:
	result in the interception of traffic along longs Road		Cuestigni Standards,
	This could result in increased delays to motorists	After Mitigation	• Fuel tankers required on site must avoid peak nour traince (AM: 06:20, 08:20 and DM: 16:00, 18:20):
	and an increase in potential accidents in the area. In		(Alvi. $00.50 - 00.50$ and Fivi. $10.00 - 10.50$),
	addition to this refuelling tankers will be required to	2011	 Any damage to roads caused by rule tankers must be reported to the municipality and repaired immediately;
	access the fuel station and will have a limited impact		• All mitigation accests referred to in the Traffic Access
	on traffic and contribute to road damages.		Study (WSP, 2013) must be adhered to fully.
	Impact 23: Health and Safety Risks		All relevant Health and Safety legislation as required in
	The operation of flammable liquids on site poses a	Before Mitigation:	South Africa should be strictly adhered to, including but
	potential fire and explosion risk throughout the	HIGH –	not limited to the Occupational Health and Safety Act,
	lifespan of the proposed development. In addition to		1993 (No. 85 of 1993);
	this, health and safety risks occur with regards to onsite vehicle movement, as well as cooking within	After Mitigation: LOW –	 Smoking should be prohibited in the vicinity of flammable substances;
	the convenience shop and take-away outlet.		• Ensure the availability of sufficient firewater tie-in points;
			 Ensure availability of fire extinguishers;
			All employees must be aware of emergency/ contingency
			plans to ensure an understanding of the hazards and
			procedures required during an emergency situation;
			An emergency preparedness and response plan must be
			implemented for the operational phase;
			Records of environmental and/or health and safety
			related incidents should be maintained and
			communicated to the relevant persons;
			Fencing shall be inspected weekly and maintained property by the Contenter until construction is complete:
			Traffic complete;
			 manic calming and speed control measures for access to the site shall be instigated in consultation with the local
			authorities.
			 Kitchens must be fully equipped with necessary safety
			and fire-fighting equipment;

Activity	Impact summary	Significance	Proposed mitigation
			• All staff to be trained in relevant health and safety
			 A qualified first-aider must be present on site at all times
	Impact 24: Employment		
	Cause and Comment: The operational phase of the proposed development	MODERATE +	None required
	will create a number of permanent jobs for locals		
	within the area as well as a small number of temporary jobs during routine maintenance procedures.		
	Impact 25: Increase Consumer Choice,		
	convenience and service points	MODERATE +	None required
	The implementation of a filling station in this area will		
	provide additional choice and convenience for		
	people and businesses in the immediate surrounds		
	Palace hotel and casino as well as the OR Tambo		
	International Airport. The implementation of the filling		
	station in this location also relieves the existing		
	stations.		
	Impact 26: Economic Benefits		
	Cause and Comment:	MODERATE +	None required
	The filling station and associated convenience and take-away outlet is likely to create a profit from the		
	sale of fuel, food, drinks and other items. This will		
	contribute to the overall economy of the area and		
	have a positive influence on the Gross Domestic Product at a municipal level		
Decommissio	ning Phase		
At this stage it is	unclear whether the proposed project will be decommi	ssioned Should decor	mmissioning be required, the impacts would be similar to those
listed for the con	struction phase.		

Activity	Impact summary	Significance	Proposed mitigation

BASIC ASSESSMENT REPORT

Activity	Impact summary	Significance	Proposed mitigation			
No-Go Alternative						
NB: This identifies and rates the impacts associated with the status quo of the study area. The location of the proposed development within an						
industrial urban setting in close proximity to an international airport, together with the pressure placed on existing filling station capacities, has						
impacts which are currently relevant. The impacts associated with No-Go Alternative are provided in Appendix F (Impact Assessment).						

A complete impact assessment in terms of Regulation 19(3) of GN 982 must be included as Appendix F.

Please refer to Appendix F for a detailed impact assessment.

2. 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 <u>after</u> 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.

The table below shows the significance of the impacts after mitigation is taken into account:						
IMPACT	WITHOUT MITIGATION	WITH MITIGATION	NO-GO			
Construction Phase						
1. Biodiversity Impacts	Negligible	LOW+	LOW-			
2. Soil Compaction and Erosion	MOD –	LOW –	LOW –			
3. Stormwater and Groundwater Contamination	HIGH –	LOW –	NA			
4. Solid Waste Generation	MOD –	LOW –	NA			
5. Impacts on Cultural Heritage, Archaeology and Palaeontology	LOW –	Negligible	LOW –			
6. Air Pollution	MOD –	LOW –	LOW –			
7. Noise	Negligible	Negligible	MOD –			
8. Visual Impacts	LOW –	Negligible	LOW –			
9. Traffic Impacts	MOD –	LOW –	LOW –			
10. Health and Safety Risks	MOD –	LOW –	NA			
11. Employment Creation	MOD +	MOD +	NA			
12. Security risks	HIGH -	LOW -	NA			
13. Purchasing of Materials from Local Businesses	MOD +	MOD +	NA			
Operational Phase						
14. Stormwater and Groundwater Contamination	HIGH –	MOD –	NA			
15. Solid Waste Generation	MOD –	LOW –	Negligible			
16. Sewerage and Wastewater Generation	MOD –	LOW –	LOW –			
17. Hazardous Waste Generation	HIGH –	LOW –	NA			
18. Increased Stormwater Runoff and Erosion Potential	MOD –	LOW –	LOW –			
19. Air Pollution	HIGH –	MOD –	MOD –			
20. Noise	LOW –	Negligible	MOD –			
21. Visual Impacts	LOW –	LOW –	LOW –			
22. Traffic Impacts	MOD –	LOW –	MOD –			
23. Health and Safety Risks	HIGH –	LOW –	NA			
24. Employment	MOD +	MOD +	MOD –			
25. Increase Consumer Choice and Convenience	MOD +	MOD +	MOD –			
26. Economic Benefits	MOD +	MOD +	LOW –			

Alternative A (preferred alternative)

Twenty-six (26) impacts have been identified as a result of the preferred and only alternative for the proposed project. This consists of 13 construction phase impacts and 13 operational phase impacts. With mitigation, there will be 14 negative impacts of low significance, 2 of moderate significance and 4 negligible impacts. There will also be 5 positive impacts of moderate significance and 1 of low positive significance which will result from the development. Although there are a greater number of negative impacts, the significance of the positive impacts outweighs the significance of the negative impacts. This is the only reasonable and feasible alternative considered in this application and, considering the result of the impact assessment, this preferred alternative is recommended.

No-go alternative (compulsory)

If the status quo remains, the current land use and location within an industrial urban setting would continue to result in a number of impacts which already exist at the proposed study site. There will be 10 negative impacts of low significance, 6 of moderate significance and 1 negligible impact. There are no positive impacts associated with the No-go alternative. For this reason, the No-go alternative is not recommended.

SECTION E. RECOMMENDATION OF PRACTITIONER

Is the information contained in this report and the documentation attached hereto sufficient to make a decision in respect of the activity applied for (in the view of the environmental assessment practitioner)?



If "NO", indicate the aspects that should be assessed further as part of a Scoping and EIA process before a decision can be made (list the aspects that require further assessment). Not applicable

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 competent authority in respect of the application.

OPINION OF THE EAP:

It is the opinion of the EAP that no fatal flaws are associated with the proposed development and that all impacts can be adequately mitigated to reduce the risk or significance of impacts to an acceptable level. The significance of the benefits associated with the proposed development outweighs the significance of the negative aspects. It is the opinion of the EAP that this Basic Assessment Report contains sufficient information to allow the Department of Environmental Affairs (DEA) to make an informed decision. It is therefore recommended that the application for Environmental Authorisation should be approved on condition that the recommended mitigation measures stated herein are effectively implemented.

RECOMMENDATIONS OF THE EAP:

All mitigation measures which have been outlined in this report as well as in the Environmental Management Programme (EMPr) must be fully adhered to. In addition, the following recommendations have been made:

Pre-Construction:

- The EMPr must form part of the contractor's tender documentation prior to appointment;
- Notice must be given to surrounding land owners and businesses informing them of the intended date of commencement of construction;

Construction Phase:

- An ECO must be employed to ensure that the construction activities remain within the designated area and that no unauthorised activities occur;
- The ECO should submit site audits detailing the applicant's compliance with the EMPr;
- An efficient stormwater management system must be implemented during construction;
- Workers must be educated on environmental management aspects;

Operational Phase:

- Water efficient systems, such as dual-flush toilets and water-efficient taps should be used to use water sparingly;
- Waste removal must be properly managed at all times;
- Health, Safety and Environmental monitoring should take place regularly and reports compiled on an annual basis

Is an EMPr attached?



The EMPr must be attached as Appendix G.

Please refer to Appendix G for the Environmental Management Programme (EMPr).

The details of the EAP who compiled the BAR and the expertise of the EAP to perform the Basic Assessment process must be included as Appendix H.

Please refer to Appendix H for the relevant curriculum vitae of the EAP and the project participants.

If any specialist reports were used during the compilation of this BAR, please attach the declaration of interest for each specialist in Appendix I.

Please refer to Appendix I for specialist's declaration of interest.

Any other information relevant to this application and not previously included must be attached in Appendix J.

It is important to note the environmental authorisation for the development of the proposed filling station was issued on 9 March 2009 (DEA Ref: 12/12/20/1109) with a subsequent amendment issued on 16 April 2014. The authorisation has since expired as construction was not commenced within the legislated timeframes. Therefore, the relevant assessments, specialist studies and authorisations for this development have already been undertaken.

Please refer to Appendix J for the relevant documentation.

Dr Eric Igbinigie

NAME OF EAP

SIGNATURE OF EAP

DATE

SECTION F: APPENDIXES

The following appendixes must be attached:

Appendix A: Maps

- Appendix B: Photographs
- Appendix C: Facility illustration(s)
- Appendix D: Specialist reports (including terms of reference)
- Appendix E: Public Participation
- Appendix F: Impact Assessment
- Appendix G: Environmental Management Programme (EMPr)
- Appendix H: Details of EAP and expertise
- Appendix I: Specialist's declaration of interest
- Appendix J: Additional Information