



BASIC ASSESSMENT REPORT

**THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT NO. 107 OF 1998) AND
THE ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS.**

NOVEMBER 2019

(For official use only)	
Pre-application Reference Number (if applicable):	
EIA Application Reference Number:	
NEAS Reference Number:	
Exemption Reference Number (if applicable):	
Date BAR received by Department:	
Date BAR received by Directorate:	
Date BAR received by Case Officer:	

GENERAL PROJECT DESCRIPTION

(This must Include an overview of the project including the Farm name/Portion/Erf number)

Proposed construction of a filling station and convenience store on Remainder of Erf 41, Atlantic Hills, Giel Basson Drive, Durbanville, Cape Town.

IMPORTANT INFORMATION TO BE READ PRIOR TO COMPLETING THIS BASIC ASSESSMENT REPORT

1. **The purpose** of this template is to provide a format for the Basic Assessment report as set out in Appendix 1 of the National Environmental Management Act, 1998 (Act No. 107 of 1998) ("NEMA"), Environmental Impact Assessment ("EIA") Regulations, 2014 (as amended) in order to ultimately obtain Environmental Authorisation.
2. The Environmental Impact Assessment ("EIA") Regulations is defined in terms of Chapter 5 of the National Environmental Management Act, 1998 (Act No. 107 of 1998) ("NEMA") hereinafter referred to as the "NEMA EIA Regulations".
3. The required information must be typed within the spaces provided in this Basic Assessment Report ("BAR"). The sizes of the spaces provided are not necessarily indicative of the amount of information to be provided.
4. All applicable sections of this BAR must be completed.
5. Unless protected by law, all information contained in, and attached to this BAR, will become public information on receipt by the Competent Authority. If information is not submitted with this BAR due to such information being protected by law, the applicant and/or Environmental Assessment Practitioner ("EAP") must declare such non-disclosure and provide the reasons for believing that the information is protected.
6. This BAR is current as of **November 2019**. It is the responsibility of the Applicant/ EAP to ascertain whether subsequent versions of the BAR have been released by the Department. Visit this Department's website at <http://www.westerncape.gov.za/eadp> to check for the latest version of this BAR.
7. This BAR is the standard format, which must be used in all instances when preparing a BAR for Basic Assessment applications for an environmental authorisation in terms of the NEMA EIA Regulations when the Western Cape Government Department of Environmental Affairs and Development Planning ("DEA&DP") is the Competent Authority.
8. Unless otherwise indicated by the Department, one hard copy and one electronic copy of this BAR must be submitted to the Department at the postal address given below or by delivery thereof to the Registry Office of the Department. Reasonable access to copies of this Report must be provided to the relevant Organs of State for consultation purposes, which may, if so indicated by the Department, include providing a printed copy to a specific Organ of State.
9. This BAR must be duly dated and originally signed by the Applicant, EAP (if applicable) and Specialist(s) and must be submitted to the Department at the details provided below.
10. The Department's latest Circulars pertaining to the "One Environmental Management System" and the EIA Regulations, any subsequent Circulars, and guidelines must be taken into account when completing this BAR.
11. Should a water use licence application be required in terms of the National Water Act, 1998 (Act No. 36 of 1998) ("NWA"), the "One Environmental System" is applicable, specifically in terms of the synchronisation of the consideration of the application in terms of the NEMA and the NWA. Refer to this Department's Circular EADP 0028/2014: One Environmental Management System.
12. Where Section 38 of the National Heritage Resources Act, 1999 (Act No. 25 of 1999) ("NHRA") is triggered, a copy of Heritage Western Cape's final comment must be attached to the BAR.
13. The Screening Tool developed by the National Department of Environmental Affairs must be used to generate a screening report. Please use the Screening Tool link <https://screening.environment.gov.za/screeningtool> to generate the Screening Tool Report. The screening tool report must be attached to this BAR.

14. Where this Department is also identified as the Licencing Authority to decide on applications under the National Environmental Management: Air Quality Act (Act No. 29 of 2004) ('NEM:AQA"), the submission of the Report must also be made as follows, for- Waste Management Licence Applications, this report must also (i.e., another hard copy and electronic copy) be submitted for the attention of the Department's Waste Management Directorate (Tel: 021-483-2728/2705 and Fax: 021-483-4425) at the same postal address as the Cape Town Office.

Atmospheric Emissions Licence Applications, this report must also be (i.e., another hard copy and electronic copy) submitted for the attention of the Licensing Authority or this Department's Air Quality Management Directorate (Tel: 021 483 2888 and Fax: 021 483 4368) at the same postal address as the Cape Town Office.

DEPARTMENTAL DETAILS

<p align="center">CAPE TOWN OFFICE: REGION 1 and REGION 2</p> <p align="center">(Region 1: City of Cape Town, West Coast District) (Region 2: Cape Winelands District & Overberg District)</p>	<p align="center">GEORGE OFFICE: REGION 3</p> <p align="center">(Central Karoo District & Garden Route District)</p>
<p>BAR must be sent to the following details:</p> <p>Western Cape Government Department of Environmental Affairs and Development Planning Attention: Directorate: Development Management (Region 1 or 2) Private Bag X 9086 Cape Town, 8000</p> <p>Registry Office 1st Floor Utilitas Building 1 Dorp Street, Cape Town</p> <p>Queries should be directed to the Directorate: Development Management (Region 1 and 2) at: Tel: (021) 483-5829 Fax (021) 483-4372</p>	<p>BAR must be sent to the following details:</p> <p>Western Cape Government Department of Environmental Affairs and Development Planning Attention: Directorate: Development Management (Region 3) Private Bag X 6509 George, 6530</p> <p>Registry Office 4th Floor, York Park Building 93 York Street George</p> <p>Queries should be directed to the Directorate: Development Management (Region 3) at: Tel: (044) 805-8600 Fax (044) 805 8650</p>

MAPS

<p>Provide a location map (see below) as Appendix A1 to this BAR that shows the location of the proposed development and associated structures and infrastructure on the property.</p>	
<p>Locality Map:</p>	<p>The scale of the locality map must be at least 1:50 000. For linear activities or development proposals of more than 25 kilometres, a smaller scale e.g., 1:250 000 can be used. The scale must be indicated on the map.</p> <p>The map must indicate the following:</p> <ul style="list-style-type: none"> • an accurate indication of the project site position as well as the positions of the alternative sites, if any; • road names or numbers of all the major roads as well as the roads that provide access to the site(s) • a north arrow; • a legend; and • a linear scale. <p>For ocean based or aquatic activity, the coordinates must be provided within which the activity is to be undertaken and a map at an appropriate scale clearly indicating the area within which the activity is to be undertaken.</p> <p>Where comment from the Western Cape Government: Transport and Public Works is required, a map illustrating the properties (owned by the Western Cape Government: Transport and Public Works) that will be affected by the proposed development must be included in the Report.</p> <p>Refer to Appendix A.</p>

Provide a detailed site development plan / site map (see below) as Appendix B1 to this BAR; and if applicable, all alternative properties and locations.	
Site Plan:	<p>Detailed site development plan(s) must be prepared for each alternative site or alternative activity. The site plans must contain or conform to the following:</p> <ul style="list-style-type: none"> • The detailed site plan must preferably be at a scale of 1:500 or at an appropriate scale. The scale must be clearly indicated on the plan, preferably together with a linear scale. • The property boundaries and numbers of all the properties within 50m of the site must be indicated on the site plan. • On land where the property has not been defined, the co-ordinates of the area in which the proposed activity or development is proposed must be provided. • The current land use (not zoning) as well as the land use zoning of each of the adjoining properties must be clearly indicated on the site plan. • The position of each component of the proposed activity or development as well as any other structures on the site must be indicated on the site plan. • Services, including electricity supply cables (indicate aboveground or underground), water supply pipelines, boreholes, sewage pipelines, storm water infrastructure and access roads that will form part of the proposed development must be clearly indicated on the site plan. • Servitudes and an indication of the purpose of each servitude must be indicated on the site plan. • Sensitive environmental elements within 100m of the site must be included on the site plan, including (but not limited to): <ul style="list-style-type: none"> ○ Watercourses / Rivers / Wetlands ○ Flood lines (i.e., 1:100 year, 1:50 year and 1:10 year where applicable); ○ Coastal Risk Zones as delineated for the Western Cape by the Department of Environmental Affairs and Development Planning ("DEA&DP"); ○ Ridges; ○ Cultural and historical features/landscapes; ○ Areas with indigenous vegetation (even if degraded or infested with alien species). • Whenever the slope of the site exceeds 1:10, a contour map of the site must be submitted. • North arrow <p>A map/site plan must also be provided at an appropriate scale, which superimposes the proposed development and its associated structures and infrastructure on the environmental sensitivities of the preferred and alternative sites indicating any areas that should be avoided, including buffer areas.</p> <p>Refer to Appendix B.</p>
Site photographs	<p>Colour photographs of the site that shows the overall condition of the site and its surroundings (taken on the site and taken from outside the site) with a description of each photograph. The vantage points from which the photographs were taken must be indicated on the site plan, or locality plan as applicable. If available, please also provide a recent aerial photograph. Photographs must be attached to this BAR as Appendix C. The aerial photograph(s) should be supplemented with additional photographs of relevant features on the site. Date of photographs must be included. Please note that the above requirements must be duplicated for all alternative sites.</p> <p>Refer to Appendix C.</p>
Biodiversity Overlay Map:	<p>A map of the relevant biodiversity information and conditions must be provided as an overlay map on the property/site plan. The Map must be attached to this BAR as Appendix D.</p> <p>Refer to Appendix D.</p>
Linear activities or development and multiple properties	<p>GPS co-ordinates must be provided in degrees, minutes and seconds using the Hartebeeshoek 94 WGS84 co-ordinate system.</p> <p>Where numerous properties/sites are involved (linear activities) you must attach a list of the Farm Name(s)/Portion(s)/Erf number(s) to this BAR as an Appendix.</p> <p>For linear activities that are longer than 500m, please provide a map with the co-ordinates taken every 100m along the route to this BAR as Appendix A3.</p> <p>N/A</p>

ACRONYMS

DEA& DP	Department of Environmental Affairs and Development Planning
EA	Environmental Authorisation
ELA	Environmental Law Association
EMF	Environmental Management Framework
EMPr:	Environmental Management Programme
IAIASa	International Association of Impact Assessors South Africa
NEM: AQA	National Environmental Management: Air Quality Act
NEM: WA	National Environmental Management: Water Act

NOI	Notice of Intent
SAIE&ES	South African Institute of Ecologists and Environmental Scientists
WISA	Water Institute of Southern Africa

ATTACHMENTS

Note: The Appendices must be attached to the BAR as per the list below. Please use a ✓ (tick) or a x (cross) to indicate whether the Appendix is attached to the BAR.

The following checklist of attachments must be completed.

APPENDIX		✓ (Tick) or x (cross)	
Appendix A:	Maps		
	Appendix A1:	Locality Map	✓
	Appendix A2:	Coastal Risk Zones as delineated in terms of ICMA for the Western Cape by the Department of Environmental Affairs and Development Planning	
	Appendix A3:	Map with the GPS co-ordinates for linear activities	
Appendix B:	Appendix B1:	Site development plan(s)	✓
	Appendix B2:	A map of appropriate scale, which superimposes the proposed development and its associated structures and infrastructure on the environmental sensitivities of the preferred site, indicating any areas that should be avoided, including buffer areas;	
Appendix C:	Photographs	✓	
Appendix D:	Biodiversity overlay map	✓	
Appendix E:	Permit(s) / license(s) / exemption notice, agreements, comments from Department/Organs of state and service letters from the municipality.		
	Appendix E1:	Final comment/ROD from HWC	
	Appendix E2:	Copy of comment from the DAFF	
	Appendix E3:	Final Comment from the DAFF	
	Appendix E4:	Comment from the DEA: Oceans and Coast	
	Appendix E5:	Comment from the DAFF	
	Appendix E6:	Comment from WCG: Transport and Public Works	
Appendix E7:	Comment from WCG: DoA		

TO BE ADDED AFTER FIRST COMMENT PERIOD.

	Appendix E8:	Comment from WCG: DHS	
	Appendix E9:	Comment from WCG: DoH	
	Appendix E10:	Comment from DEA&DP: Pollution Management	
	Appendix E11:	Comment from DEA&DP: Waste Management	
	Appendix E12:	Comment from DEA&DP: Biodiversity	
	Appendix E13:	Comment from DEA&DP: Air Quality	
	Appendix E14:	Comment from DEA&DP: Coastal Management	
	Appendix E15:	Comment from the local authority	
	Appendix E16:	Confirmation of all services (water, electricity, sewage, solid waste management)	
	Appendix E17:	Comment from the District Municipality	
	Appendix E18:	Copy of an exemption notice	
	Appendix E19	Pre-approval for the reclamation of land	
	Appendix E20:	Proof of agreement/TOR of the specialist studies conducted.	
	Appendix E21:	Proof of land use rights	✓
	Appendix E22:	Proof of public participation agreement for linear activities	
Appendix F:	Public participation information: including a copy of the register of I&APs, the comments and responses Report, proof of notices, advertisements and any other public participation information as is required.		
Appendix G:	Specialist Report(s): G1 Site Traffic Assessment G2 Geotechnical Report G3 Stormwater Management Plan		✓
Appendix H:	EMPr		✓
Appendix I:	Screening tool report		✓
Appendix J:	The impact and risk assessment for each alternative		

Appendix K:	Need and desirability for the proposed activity or development in terms of this Department's guideline on Need and Desirability (March 2013)/DEA Integrated Environmental Management Guideline	✓
Appendix L:	Site Verification Report	✓

SECTION A: ADMINISTRATIVE DETAILS

Highlight the Departmental Region in which the intended application will fall	CAPE TOWN OFFICE:		GEORGE OFFICE:
	REGION 1 (City of Cape Town, West Coast District)	REGION 2 (Cape Winelands District & Overberg District)	REGION 3 (Central Karoo District & Garden Route District)
Duplicate this section where there is more than one Proponent Name of Applicant/Proponent: Name of contact person for Applicant/Proponent (if other): Company/ Trading name/State Department/Organ of State: Company Registration Number: Postal address: Telephone: E-mail:	Absshelf 33 (Pty) Ltd		
	James Cresswell		
	Same as above		
	2018/507002/07		
	C/O Norton Rose Fulbright South Africa Incorporated 10th Floor Norton Rose House 8 Riebeeck Street		
	Cape Town		Postal Code: 8001
	(021) 418 1205		Cell: 083 636 1754
	James.cresswell@ablant.co.za		Fax: ()
	Company of EAP: KHULA Environmental Consultants		
	EAP name: Monique Sham		
Postal address: 71 Kommetjie Road, Fish Hoek			
		Postal code: 7975	
Telephone: ()		Cell: 072 989 5119	
E-mail: monique@khulaec.co.za		Fax: (086) 546 5552	
Qualifications: BA [Env Sci]; BSc Honours [Env Man] Member: IAAsa; ELA; WISA; SAIE&ES			
EAPASA registration no: 2019/235			
Duplicate this section where there is more than one landowner Name of landowner: Name of contact person for landowner (if other): Postal address: Telephone: E-mail:	Atlantic Hills Co-Owners (Equibond, GGP Investments and The Pivotal Fund)		
	James Cresswell		
	Same as above		
			Postal code:
	Telephone:		Cell:
	E-mail:		Fax:
Name of Person in control of the land: Name of contact person for person in control of the land: Postal address: Telephone: E-mail:	Atlantic Hills Co-Owners (Equibond, GGP Investments and The Pivotal Fund)		
			Postal code:
	Telephone: ()		Cell:
	E-mail:		Fax: ()
	Duplicate this section where there is more than one Municipal Jurisdiction Municipality in whose area of jurisdiction the proposed activity will fall: Contact person: Postal address: Telephone: E-mail:	City of Cape Town: Environmental Management Department	
Pat Titmuss			
PO Box 35			
Milnerton		Postal Code: 7435	
(021) 444 0597		Cell: N/A	
Pat.titmuss@capetown.gov.za		Fax: (021) 444 0605	

SECTION B: CONFIRMATION OF SPECIFIC PROJECT DETAILS AS INCLUDED IN THE APPLICATION FORM

1.	Is the proposed development (please tick):	New	✓	Expansion	
2.	Is the proposed site(s) a brownfield or greenfield site? Please explain.				
<p>The proposed filling station is located within an existing Mixed-Use development known as Atlantic Hills. The Atlantic Hills development has an existing environmental authorisation (EA) for the development of a Mixed-Use Industrial Park (Amended EA issued on 31 March 2017, DEADP Ref: 16/3/3/5/A5/20/2093/16) with an approved Environmental Management Programme (EMPr). The Atlantic Hills development (which this erf forms part of) has been prepared with roads, services and building platforms. The site is therefore a brownfield site.</p> <p>Refer to the Locality Plan in Appendix A.</p>					
3.	For Linear activities or developments NOT APPLICABLE				
3.1.	Provide the Farm(s)/Farm Portion(s)/Erf number(s) for all routes:				
3.2.	Development footprint of the proposed development for all alternatives:				—m ²
3.3.	Provide a description of the proposed development (e.g. for roads the length, width and width of the road reserve in the case of pipelines indicate the length and diameter) for all alternatives.				
3.4.	Indicate how access to the proposed routes will be obtained for all alternatives.				
3.5.	SG Digit codes of the Farms/Farm Portions/Erf numbers for all alternatives				
3.6.	Starting point co-ordinates for all alternatives				
	Latitude (S)	°	'	″	
	Longitude (E)	°	'	″	
	Middle point co-ordinates for all alternatives				
	Latitude (S)	°	'	″	
	Longitude (E)	°	'	″	
	End point co-ordinates for all alternatives				
	Latitude (S)	°	'	″	
	Longitude (E)	°	'	″	
Note: For Linear activities or developments longer than 500m, a map indicating the co-ordinates for every 100m along the route must be attached to this BAR as Appendix A3.					
4.	Other developments				
4.1.	Property size(s) of all proposed site(s):				6523m ²
4.2.	Developed footprint of the existing facility and associated infrastructure (if applicable):				N/A m ²
4.3.	Development footprint of the proposed development and associated infrastructure size(s) for all alternatives:				3530m ²
4.4.	Provide a detailed description of the proposed development and its associated infrastructure (This must include details of e.g. buildings, structures, infrastructure, storage facilities, sewage/effluent treatment and holding facilities).				
<p>The proposed filling station will comprise of the following:</p> <ul style="list-style-type: none"> • Access roads (tarmac surface): 656 m² • Forecourt (tarmac surface): 1507 m² • Concrete slabs (pumps): 308 m² • Concrete containment slabs (aver tanks): 89 m² • Convenience store: 455 m² • Paving sidewalk (around convenience store): 235 m² • Parking bays (tarmac surface): 180 m² • Delivery Bay (tarmac surface): 100 m² • 4 pumps • 4 underground fuel tanks of 30m³ each (i.e.120m³ in total) <p>The remaining area (2993m²) will be landscaped.</p>					

The site is fully serviced as it forms part of the overall Atlantic Hills development which has been developed over the last four years. The Atlantic Hills development has an existing environmental authorisation (EA) for the development of a Mixed Use Industrial Park (Amended EA issued on 31 March 2017, DEADP Ref: 16/3/3/5/A5/20/2093/16) with an approved EMPr.

Electricity will be obtained from an existing Eskom substation, potable water will be obtained from the City of Cape Town, and sewage will be disposed of via the existing municipal sewerage system.

The development alternative under consideration is an alternative layout which accommodates the underground storage tanks in a different location on site and which therefore has a slightly different internal traffic layout configuration. The footprints remain generally the same for each alternative and both have the same infrastructure components.

Refer to Appendix B for the Site Development Plans.

4.5. Indicate how access to the proposed site(s) will be obtained for all alternatives.

Two access points are proposed for both layout alternatives: one off Giel Basson Drive (south west corner of the site) and the other off an internal private road on to the east, which links to Welbeloond Road to the west. The access/egress points have been specifically designed and located by a traffic engineer to ensure safe entry and exit and optimal flow through the site by vehicular traffic.

4.6.	SG Digit code(s) of the proposed site(s) for all alternatives:	C	O	1	6	0	0	8	0	0	0	0	0	0	4	1	0	0	0	0	0
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4.7.	Coordinates of the proposed site(s) for all alternatives:				
	Latitude (S)		33°	81'	75.65"
	Longitude (E)		18°	55'	26.98"

SECTION C: LEGISLATION/POLICIES AND/OR GUIDELINES/PROTOCOLS

1. Exemption applied for in terms of the NEMA and the NEMA EIA Regulations

Has exemption been applied for in terms of the NEMA and the NEMA EIA Regulations. If yes, include a copy of the exemption notice in Appendix E18.	YES	NO ✓
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2. Is the following legislation applicable to the proposed activity or development.

The National Environmental Management: Integrated Coastal Management Act, 2008 (Act No. 24 of 2008) ("ICMA"). If yes, attach a copy of the comment from the relevant competent authority as Appendix E4 and the pre-approval for the reclamation of land as Appendix E19.	YES	NO ✓
The National Heritage Resources Act, 1999 (Act No. 25 of 1999) ("NHRA"). If yes, attach a copy of the comment from Heritage Western Cape as Appendix E1.	YES	NO ✓
The National Water Act, 1998 (Act No. 36 of 1998) ("NWA"). If yes, attach a copy of the comment from the DWS as Appendix E3.	YES	NO ✓
The National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004) ("NEM:AQA"). If yes, attach a copy of the comment from the relevant authorities as Appendix E13.	YES	NO ✓
The National Environmental Management Waste Act (Act No. 59 of 2008) ("NEM:WA")	YES	NO ✓
The National Environmental Management Biodiversity Act, 2004 (Act No. 10 of 2004 ("NEMBA").	YES	NO ✓
The National Environmental Management: Protected Areas Act, 2003 (Act No. 57 of 2003) ("NEMPAA").	YES	NO ✓
The Conservation of Agricultural Resources Act, 1983 (Act No. 43 of 1983). If yes, attach comment from the relevant competent authority as Appendix E5.	YES	NO ✓

3. Other legislation

<p>List any other legislation that is applicable to the proposed activity or development.</p> <ul style="list-style-type: none"> National Environmental Management Act (Act No. 107 of 1998) EIA Regulations (2014) Western Cape Land Use Planning Act Regulations, 2015 National Building Regulations and Building Standards Act, Act 103 of 1977 and the National Building Regulations as published under GN 1985/R441 Hazardous Substances Act (No. 15 of 1973) <p>The underground storage tanks and related infrastructure will be installed in accordance with the various Health, Safety and Environmental Policies and Standard Specifications of the relevant oil company. In addition, all work at the filling station will be done in accordance to the following SANS standards:</p> <ul style="list-style-type: none"> SANS 10089 Part 3 (2010): The Petroleum Industry Part 3: The installation, modification, and decommissioning of underground storage tanks, pumps/dispensers and pipework at service stations and consumer installations. SANS 10089 Part 2 (2007): The petroleum industry Part 2: Electrical and other installations in the distribution and marketing sector. SANS 1535 (2007): Glass-reinforced polyester-coated steel tanks for the underground storage of hydrocarbons and oxygenated solvents and intended for burial horizontally.
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4. Policies

<p>Explain which policies were considered and how the proposed activity or development complies and responds to these policies.</p> <p>Relevant consideration was taken into account with respect to the following:</p> <ul style="list-style-type: none"> Spatial Planning Land Use Management Act (Act 16 of 2013): SPLUMA provides a framework for spatial planning and land use management. The location of certain land uses within regions is managed by this Act which promotes the development of certain businesses (such as filling stations) in areas and along routes which need them and within specifically designated (zoned) areas. A land use application will be submitted to the municipality in line with this Act. Western Cape Provincial Spatial Development Framework (2014): WCPSDF prioritises the creation of growth and job opportunities as well as the promotion of social and inclusion objectives. The construction of a filling station will generate jobs for the local community. <p>The proposed filling station reflects the development/planning principles of the above policies, as the proposed construction is within an existing authorised mixed use development (Atlantic Hills) and the site is considered a good location for a filling station for homeward bound trips (there is an outgoing filling station located on the N7 approximately 20km north of the site but south-bound traffic is unable to access this site).</p>
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5. Guidelines

List the guidelines which have been considered relevant to the proposed activity or development and explain how they have influenced the development proposal.

Relevant consideration was taken into account with respect to the following:

- Guideline on Need and Desirability (2013): this guideline was consulted in completing the Need and Desirability report.
- Guideline on Alternatives (2013): this guideline informed the range of alternatives that were considered, during and prior to the Basic Assessment process.
- Guideline on Public Participation (2013): this guideline informed the public participation process followed.
- Guideline on Environmental Management Plans (June 2005): this guideline informed the development of the project EMPr.

6. Protocols

Explain how the proposed activity or development complies with the requirements of the protocols referred to in the NOI and/or application form

The following specialist studies were identified to be conducted by the DEFF screening tool report:

- Agricultural Impact Assessment;
- Archaeological and Cultural Heritage Impact Assessment;
- Palaeontology Impact Assessment
- Terrestrial Biodiversity Impact Assessment;
- Aquatic Biodiversity Impact Assessment;
- Hydrology Assessment;
- Noise Impact Assessment;
- Traffic Impact Assessment;
- Geotechnical Assessment;
- Socio-Economic Assessment; and
- Animal Species Assessment.

As previously stated, the proposed filling station is located within an existing Mixed-Use development known as Atlantic Hills. A site sensitivity verification has been undertaken by the EAP and it has been confirmed that the site has been cleared and prepared for a Mixed-Use development in line with its existing rights and approvals. The following specialist studies are therefore not considered necessary based on the site verification:

- Agricultural Impact Assessment – there is no vegetation on the site;
- Archaeological and Cultural Heritage Impact Assessment – the site has been prepared for development with a building platform (civils work including earthworks has already been completed);
- Palaeontology Impact Assessment – the site has been prepared for development with a building platform (civils work including earthworks);
- Terrestrial Biodiversity Impact Assessment – the site is cleared and there is no habitat or any fauna or flora on the site;
- Aquatic Biodiversity Impact Assessment – there are no wetlands or watercourses on the site or within close proximity;
- Noise Impact Assessment – the site is within an existing approved Mixed-Use development located on the corner of two major roads and there is therefore no additional noise impacts anticipated compared to those already allowed for by the Mixed-Use development;
- Socio-Economic Assessment – development of Atlantic Hills has already undergone a Socio-Economic assessment and the proposed filling station is considered to fall within this;
- Animal Species Assessment – the site is completely cleared and there are no animals species or habitat for animal species on the site.

The following specialist studies have been included in the assessment (refer to Appendix G):

- Hydrology Assessment – although there are not freshwater systems on the site or within close proximity a Stormwater Management Plan has been developed to manage water flow on the site;
- Traffic Impact Assessment – a traffic engineer has been appointed to compile a Site Traffic Assessment;
- Geotechnical Assessment – A geotechnical assessment of this portion of the Atlantic Hills development was previously undertaken and forms part of this report.

SECTION D: APPLICABLE LISTED ACTIVITIES

List the applicable activities in terms of the NEMA EIA Regulations

Activity No(s):	Provide the relevant Basic Assessment Activity(ies) as set out in Listing Notice 1	Describe the portion of the proposed development to which the applicable listed activity relates.
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 construction of a filling station comprised of four underground fuel tanks of 30 cubic metres each for a total of 120 cubic metres.
Activity No(s):	Provide the relevant Basic Assessment Activity(ies) as set out in Listing Notice 3	Describe the portion of the proposed development to which the applicable listed activity relates.
N/A		
<p>Note:</p> <ul style="list-style-type: none"> The listed activities specified above must reconcile with activities applied for in the application form. The onus is on the Applicant to ensure that all applicable listed activities are included in the application. If a specific listed activity is not included in an Environmental Authorisation, a new application for Environmental Authorisation will have to be submitted. Where additional listed activities have been identified, that have not been included in the application form, and amended application form must be submitted to the competent authority. 		

List the applicable waste management listed activities in terms of the NEM:WA

Activity No(s):	Provide the relevant Basic Assessment Activity(ies) as set out in Category A	Describe the portion of the proposed development to which the applicable listed activity relates.
N/A		

List the applicable listed activities in terms of the NEM:AQA

Activity No(s):	Provide the relevant Listed Activity(ies)	Describe the portion of the proposed development to which the applicable listed activity relates.
N/A		

SECTION E: PLANNING CONTEXT AND NEED AND DESIRABILITY

1.	Provide a description of the preferred alternative.
<p>The proposed development comprises the construction of a filling station, including the following components:</p> <ul style="list-style-type: none"> • Access roads (tarmac surface): 656 m² • Forecourt (tarmac surface): 1507 m² • Concrete slabs (pumps): 308 m² • Concrete containment slabs (aver tanks): 89 m² • Convenience store: 455 m² • Paving sidewalk (around convenience store): 235 m² • Parking bays (tarmac surface): 180 m² • Delivery Bay (tarmac surface): 100 m² • 4 pumps • 4 underground fuel tanks of 30m³ each (i.e.120m³ in total) <p>The remaining area (2993m²) will be landscaped or grassed.</p> <p>The <u>site is fully serviced</u> as it forms part of the overall Atlantic Hills development which has been developed over the last four years. The Atlantic Hills development has an existing environmental authorisation (EA) for the development of a Mixed Use Industrial Park (Amended EA issued on 31 March 2017, DEADP Ref: 16/3/3/5/A5/20/2093/16) with an approved Environmental Management Programme (EMPr).</p> <p>Electricity will be obtained from an existing Eskom substation, potable water will be obtained from the City of Cape Town, and sewage will be disposed of via the existing municipal sewerage system.</p> <p>The development alternative under consideration is an alternative layout which provides an alternative location for the underground storage tanks, slightly smaller convenience store and fewer parking bays. The overall footprints remain generally the same for each alternative and both have the same infrastructure components. This alternative is not preferred from an operational perspective as the filling of the underground storage tanks will affect internal traffic flow.</p> <p>Refer to the Site Development Plan in Appendix B.</p>	
2.	Explain how the proposed development is in line with the existing land use rights of the property as you have indicated in the NOI and application form? Include the proof of the existing land use rights granted in Appendix E21.
<p>The current zoning of the property is Mixed Use, and therefore no rezoning is required. A subdivision application is currently underway to subdivide the filling station site from the larger erf and a consent use application for a service station will then be submitted.</p> <p>Refer to Appendix E for the Zoning Map.</p>	
3.	Explain how potential conflict with respect to existing approvals for the proposed site (as indicated in the NOI/and or application form) and the proposed development have been resolved.
There are no potential conflicts.	
4.	Explain how the proposed development will be in line with the following?
4.1	The Provincial Spatial Development Framework.
The proposed filling station is within the urban edge, and within the previously authorised development of Atlantic Hills. The fact that the existing development is approved shows that the development aligns with the PSDF.	
4.2	The Integrated Development Plan of the local municipality.
The City of Cape Town's IDP promotes economic growth and job creation. The proposed filling station will provide employment during both the construction and operational phases (for example, petrol station attendants and cashiers, amongst others).	
4.3.	The Spatial Development Framework of the local municipality.
<p>The proposed filling station is within the urban edge, and within the existing development of Atlantic Hills.</p> <p>City of Cape Town Municipal Spatial Development Framework (2017-2022): MSDF states that "Fundamental to the MSDF is the vision of achieving spatial transformation via dense and transit-oriented growth and development". The proposed development falls within the MSDF's Consolidation Areas. The proposed development thus fulfills the requirements of the MSDF.</p>	
4.4.	The Environmental Management Framework applicable to the area.
The Atlantic Hills development is located within the industrial business node as per the Environmental Management Framework (EMF) for the Northern District of the City of Cape Town (2012) which promotes industrial development on land zoned for industrial use.	
5.	Explain how comments from the relevant authorities and/or specialist(s) with respect to biodiversity have influenced the proposed development.
The erf is completely transformed through the clearing of the land, shaping of building platforms, installation of underground services, and construction of roads and sidewalks; no biodiversity of conservation concern is present on site.	
6.	Explain how the Western Cape Biodiversity Spatial Plan (including the guidelines in the handbook) has influenced the proposed development.

This is not applicable as the proposed filling station is located within an existing Mixed-Use development of Atlantic Hills, and has been completely transformed through the clearing of the land, shaping of buildings platforms, installation of underground services, and construction of roads and sidewalks.	
7.	Explain how the proposed development is in line with the intention/purpose of the relevant zones as defined in the ICMA.
Not applicable.	
8.	Explain whether the screening report has changed from the one submitted together with the application form. The screening report must be attached as Appendix I.
No, the screening report has not changed.	
<p>As previously stated, the proposed filling station is located within an existing Mixed-Use development known as Atlantic Hills. The Atlantic Hills development (which this erf forms part of) has been prepared with roads, services and building platforms, and there is therefore nothing of any environmental sensitivity left on site, and most of the sensitivities highlighted in the screening report are therefore not applicable. Those that have been included in this assessment are:</p> <ul style="list-style-type: none"> • Hydrology Assessment – although there are not freshwater systems on the site or within close proximity a Stormwater Management Plan has been developed to manage water flow on the site; • Traffic Impact Assessment – a traffic engineer has been appointed to compile a Site Traffic Assessment; • Geotechnical Assessment – A geotechnical assessment of this portion of the Atlantic Hills development was previously undertaken and forms part of this report. 	
9.	Explain how the proposed development will optimise vacant land available within an urban area.
The erf on which the proposed filling station is to be developed is within the existing Mixed-Use development of Atlantic Hills.	
10.	Explain how the proposed development will optimise the use of existing resources and infrastructure.
Electricity will be obtained from an existing Eskom substation, potable water will be obtained from the City of Cape Town, and sewage will be disposed of via the existing municipal sewerage system.	
11.	Explain whether the necessary services are available and whether the local authority has confirmed sufficient, spare, unallocated service capacity. (Confirmation of all services must be included in Appendix E16).
The site is already serviced as It is part of the Atlantic Hills development which has received environmental authorisation.	
12.	In addition to the above, explain the need and desirability of the proposed activity or development in terms of this Department's guideline on Need and Desirability (March 2013) or the DEA's Integrated Environmental Management Guideline on Need and Desirability. This may be attached to this BAR as Appendix K.
Refer to the Needs and Desirability Report in Appendix K.	

SECTION F: PUBLIC PARTICIPATION

The Public Participation Process ("PPP") must fulfil the requirements as outlined in the NEMA EIA Regulations and must be attached as Appendix F. Please note that If the NEM: WA and/or the NEM: AQA is applicable to the proposed development, an advertisement must be placed in at least two newspapers.

1. Exclusively for linear activities: Indicate what PPP was agreed to by the competent authority. Include proof of this agreement in Appendix E22.

Not applicable

2. Confirm that the PPP as indicated in the application form has been complied with. All the PPP must be included in Appendix F.

The PPP is being conducted as per the Public Participation Plan submitted to DEA&DP. As this is the first PPP proof will be obtained during this period and attached to the revised BAR.

3. Confirm which of the State Departments and Organs of State indicated in the Notice of Intent/application form were consulted with.

- City of Cape Town: Environmental and Heritage Management
- Department of Environmental Affairs and Development Planning
- DEA&DP: Pollution and Chemicals Management
- Department of Economic Development and Tourism
- Department of Trade and Industry
- CapeNature
- Western Cape Department of Science and Industry
- South African National Roads Agency Limited
- Heritage Western Cape
- Western Cape Department of Agriculture: Land Use Management
- Department of Water and Sanitation

4. If any of the State Departments and Organs of State were not consulted, indicate which and why.

N/A

5. if any of the State Departments and Organs of State did not respond, indicate which.

N/A

6. Provide a summary of the issues raised by I&APs and an indication of the manner in which the issues were incorporated into the development proposal.

Not yet available as this is the first round of public participation.

Note:

A register of all the I&AP's notified, including the Organs of State, and all the registered I&APs must be included in Appendix F. The register must be maintained and made available to any person requesting access to the register in writing.

The EAP must notify I&AP's that all information submitted by I&AP's becomes public information.

Your attention is drawn to Regulation 40 (3) of the NEMA EIA Regulations which states that "*Potential or registered interested and affected parties, including the competent authority, may be provided with an opportunity to comment on reports and plans contemplated in subregulation (1) prior to submission of an application but **must** be provided with an opportunity to comment on such reports once an application has been submitted to the competent authority.*"

All the comments received from I&APs on the pre -application BAR (if applicable and the draft BAR must be recorded, responded to and included in the Comments and Responses Report and must be included in Appendix F.

All information obtained during the PPP (the minutes of any meetings held by the EAP with I&APs and other role players wherein the views of the participants are recorded) and must be included in Appendix F.

Please note that proof of the PPP conducted must be included in Appendix F. In terms of the required "proof" the following is required:

- a site map showing where the site notice was displayed, dated photographs showing the notice displayed on site and a copy of the text displayed on the notice;

- in terms of the written notices given, a copy of the written notice sent, as well as:
 - if registered mail was sent, a list of the registered mail sent (showing the registered mail number, the name of the person the mail was sent to, the address of the person and the date the registered mail was sent);
 - if normal mail was sent, a list of the mail sent (showing the name of the person the mail was sent to, the address of the person, the date the mail was sent, and the signature of the post office worker or the post office stamp indicating that the letter was sent);
 - if a facsimile was sent, a copy of the facsimile Report;
 - if an electronic mail was sent, a copy of the electronic mail sent; and
 - if a "mail drop" was done, a signed register of "mail drops" received (showing the name of the person the notice was handed to, the address of the person, the date, and the signature of the person); and
- a copy of the newspaper advertisement ("newspaper clipping") that was placed, indicating the name of the newspaper and date of publication (of such quality that the wording in the advertisement is legible).

SECTION G: DESCRIPTION OF THE RECEIVING ENVIRONMENT

All specialist studies must be attached as Appendix G.

1. Groundwater

1.1.	Was a specialist study conducted?	YES ✓	NO
1.2.	Provide the name and or company who conducted the specialist study.	R.A. Bradshaw & Associates conducted a Geotechnical assessment of the Atlantic Hills development in 2016 – refer to Appendix G.	
1.3.	Indicate above which aquifer your proposed development will be located and explain how this has influenced your proposed development.	N/A, the site is located north of the Cape Flats Aquifer in the Helderberg Basin region.	
1.4.	Indicate the depth of groundwater and explain how the depth of groundwater and type of aquifer (if present) has influenced your proposed development.	No groundwater was identified during the investigation.	

2. Surface water

2.1.	Was a specialist study conducted?	YES ✓	NO
2.2.	Provide the name and/or company who conducted the specialist study.	Aurecon engineers compiled a Stormwater Management Plan (which is approved) for the Atlantic Hills development – refer to Appendix G.	
2.3.	Explain how the presence of watercourse(s) and/or wetlands on the property(ies) has influenced your proposed development.	There are no watercourses or wetlands within or in the vicinity of the proposed development.	

3. Coastal Environment

3.1.	Was a specialist study conducted?	YES	NO ✓
3.2.	Provide the name and/or company who conducted the specialist study.	N/A	
3.3.	Explain how the relevant considerations of Section 63 of the ICMA were taken into account and explain how this influenced your proposed development.	N/A	
3.4.	Explain how estuary management plans (if applicable) has influenced the proposed development.	N/A	
3.5.	Explain how the modelled coastal risk zones, the coastal protection zone, littoral active zone and estuarine functional zones, have influenced the proposed development.	N/A	

4. Biodiversity

4.1.	Were specialist studies conducted?	YES	NO ✓
4.2.	Provide the name and/or company who conducted the specialist studies.	N/A as the site has been cleared in line with the existing Atlantic Hills Environmental Authorisation.	
4.3.	Explain which systematic conservation planning and other biodiversity informants such as vegetation maps, NFEPA, NSBA etc. have been used and how has this influenced your proposed development.	Due to the transformation of the site, this is not applicable.	
4.4.	Explain how the objectives and management guidelines of the Biodiversity Spatial Plan have been used and how has this influenced your proposed development.	Due to the transformation of the site, this is not applicable.	
4.5.	Explain what impact the proposed development will have on the site-specific features and/or function of the Biodiversity Spatial Plan category and how has this influenced the proposed development.	N/A	
4.6.	If your proposed development is located in a protected area, explain how the proposed development is in line with the protected area management plan.	N/A	
4.7.	Explain how the presence of fauna on and adjacent to the proposed development has influenced your proposed development.		

No faunal specialist study was conducted, as the site is highly transformed and it is therefore highly unlikely that any faunal species will be present.

5. Geographical Aspects

Explain whether any geographical aspects will be affected and how has this influenced the proposed activity or development.
 No geographical aspects will be influenced by the proposed development. The site is an already-prepared building platform.

6. Heritage Resources

6.1.	Was a specialist study conducted?	YES	NO ✓
6.2.	Provide the name and/or company who conducted the specialist study.	A specialist study was conducted for the main Atlantic Hills development which this site forms part of. No additional studies are therefore required.	
6.3.	Explain how areas that contain sensitive heritage resources have influenced the proposed development.	There are no heritage resources on the erf.	

7. Historical and Cultural Aspects

Explain whether there are any culturally or historically significant elements as defined in Section 2 of the NHRA that will be affected and how has this influenced the proposed development.
 There are no culturally or historically significant elements on or in the vicinity of the proposed development. In addition, the erf is highly transformed, and any worthwhile resource would have been lost during this extended transformation.

8. Socio/Economic Aspects

8.1.	Describe the existing social and economic characteristics of the community in the vicinity of the proposed site.	The proposed filling station is located in the approximate centre of the Atlantic Hills Development. Directly to the north of the site is the industrial development of Atlas Gardens and beyond this agricultural land. To the west lies vacant land (earmarked for development), past which is the N7 and the township of Dunoon, a previously disadvantaged, low-income, high density area, with high levels of poverty and unemployment. To east of the site is a conservation area which is part of the Atlantic Hills development and beyond this lies commercial development including the Puma head office.	
8.2.	Explain the socio-economic value/contribution of the proposed development.	The construction phase of the project will provide short-term employment, while the operational phase will provide long-term employment to the surrounding communities.	
8.3.	Explain what social initiatives will be implemented by applicant to address the needs of the community and to uplift the area.	None other than the employment of the local community during both construction and operation.	
8.4.	Explain whether the proposed development will impact on people's health and well-being (e.g. in terms of noise, odours, visual character and sense of place etc) and how has this influenced the proposed development.	The construction phase may have short-term localised noise and dust impacts, which will be mitigated by measures outlined in the EMP. In terms of visual impacts, the proposed filling station is located within an existing Mixed Use area; the visual impact will therefore be minimal.	

SECTION H: ALTERNATIVES, METHODOLOGY AND ASSESSMENT OF ALTERNATIVES

1. Details of the alternatives identified and considered

1.1.	Property and site alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts.
Provide a description of the preferred property and site alternative.	
The preferred site is located in the existing Atlantic Hills Development. The proposed filling station is in keeping with the immediate surrounding land use (mixture of industrial and commercial uses).	
Provide a description of any other property and site alternatives investigated.	
N/A, The site is best suited in terms of location and access.	
Provide a motivation for the preferred property and site alternative including the outcome of the site selection matrix.	
The motivation for the proposed site is that it provides a convenient service to the surrounding Atlantic Hills Development. The nearest filling station is in Burgundy Estate, approximately 4km south from the proposed site or the Engen Swartland 1 stop located about 20km north of the site. Also access to the site is currently well configured with two existing access roads ensuring efficient flow of traffic to and from the site.	
Provide a full description of the process followed to reach the preferred alternative within the site.	
The site was identified as the preferred location for a filling station by the applicant. An architect was then appointed to compile a Site Development Plan (the alternative layout). Thereafter a traffic engineer provided input in terms of the layout of the development and the site layout was amended in terms of the findings from the traffic engineer.	
Provide a detailed motivation if no property and site alternatives were considered.	
The site is best suited within the Atlantic Hills development for a filling station. There are no other sites that match the suitability of the proposed site.	
List the positive and negative impacts that the property and site alternatives will have on the environment.	
<p><u>Negative Impacts</u></p> <ul style="list-style-type: none"> • Potential negative visual impacts associated with dust and waste during the development phase. • Potential negative noise impacts associated with the use of construction machinery during the development phase. • Potential contamination of soil and groundwater associated with the spillage or leakage of fuel during the operational phase. • Potential health and safety risks associated with combustion of fuel during the operational phase. <p><u>Positive Impacts</u></p> <ul style="list-style-type: none"> • Short-term and long-term socio-economic benefits in terms of employment opportunities associated with the development and operational phases, respectively. 	
1.2.	Activity alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts.
Provide a description of the preferred activity alternative.	
Activity alternatives were not assessed.	
Provide a description of any other activity alternatives investigated.	
N/A	
Provide a motivation for the preferred activity alternative.	
The site is suited in terms of location along a major road and the fact that there are no other filling stations in close proximity for vehicles (and more specifically trucks) from the surrounding industrial development(s) to refuel at.	
Provide a detailed motivation if no activity alternatives exist.	
The site is already approved for a Mixed-Use development therefore no additional activity alternatives were assessed.	
List the positive and negative impacts that the activity alternatives will have on the environment.	
N/A	
1.3.	Design or layout alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts
Provide a description of the preferred design or layout alternative.	
The preferred layout of the filling station includes the following:	
<ul style="list-style-type: none"> • Access roads (tarmac surface): 656 m² • Forecourt (tarmac surface): 1507 m² • Concrete slabs (pumps): 308 m² • Concrete containment slabs (aver tanks): 89 m² • Convenience store: 455 m² • Paving sidewalk (around convenience store): 235 m² • Parking bays (tarmac surface): 180 m² • Delivery Bay (tarmac surface): 100 m² • 4 pumps • 4 underground fuel tanks of 30m³ each (i.e.120m³ in total) 	
The remaining area (2993m ²) will be landscaped.	

<p>The <u>site is fully serviced</u> as it forms part of the overall Atlantic Hills development which has been developed over the last four years. The Atlantic Hills development has an existing environmental authorisation (EA) for the development of a Mixed-Use Industrial Park (Amended EA issued on 31 March 2017, DEADP Ref: 16/3/3/5/A5/20/2093/16) with an approved Environmental Management Programme (EMPr).</p> <p>Electricity will be obtained from an existing Eskom substation, potable water will be obtained from the City of Cape Town, and sewage will be disposed of via the existing municipal sewerage system.</p> <p>Refer to the Site Development Plan in Appendix B.</p>	
<p>Provide a description of any other design or layout alternatives investigated.</p>	
<p>The development alternative under consideration is an alternative layout which provides an alternative location for the underground storage tanks, slightly smaller convenience store and fewer parking bays. The overall footprints remain generally the same for each alternative and both have the same infrastructure components. This alternative is not preferred from an operational perspective as the filling of the underground storage tanks will affect internal traffic flow.</p>	
<p>Refer to the alternative layout Site Development Plan in Appendix B.</p>	
<p>Provide a motivation for the preferred design or layout alternative.</p>	
<p>The preferred layout alternative has been informed by a traffic engineer.</p>	
<p>Provide a detailed motivation if no design or layout alternatives exist.</p>	
<p>N/A</p>	
<p>List the positive and negative impacts that the design alternatives will have on the environment.</p>	
<p>N/A</p>	
1.4.	<p>Technology alternatives (e.g., to reduce resource demand and increase resource use efficiency) to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts.</p>
<p>Provide a description of the preferred technology alternative:</p>	
<p>N/A</p>	
<p>Provide a description of any other technology alternatives investigated.</p>	
<p>N/A</p>	
<p>Provide a motivation for the preferred technology alternative.</p>	
<p>N/A</p>	
<p>Provide a detailed motivation if no alternatives exist.</p>	
<p>N/A</p>	
<p>List the positive and negative impacts that the technology alternatives will have on the environment.</p>	
<p>N/A</p>	
1.5.	<p>Operational alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts.</p>
<p>Provide a description of the preferred operational alternative.</p>	
<p>No operational alternatives were investigated.</p>	
<p>Provide a description of any other operational alternatives investigated.</p>	
<p>N/A</p>	
<p>Provide a motivation for the preferred operational alternative.</p>	
<p>N/A</p>	
<p>Provide a detailed motivation if no alternatives exist.</p>	
<p>N/A</p>	
<p>List the positive and negative impacts that the operational alternatives will have on the environment.</p>	
<p>N/A</p>	
1.6.	<p>The option of not implementing the activity (the 'No-Go' Option).</p>
<p>Provide an explanation as to why the 'No-Go' Option is not preferred.</p>	
<p>The 'No-Go' option entails the development of the site in line with the existing Atlantic Hills development. Due to the location of the site the development of a filling station has been identified as the most ideal activity for the property.</p>	
1.7.	<p>Provide and explanation as to whether any other alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts, or detailed motivation if no reasonable or feasible alternatives exist.</p>
<p>N/A</p>	
1.8.	<p>Provide a concluding statement indicating the preferred alternatives, including the preferred location of the activity.</p>
<p>The preferred alternative is a filling station with a layout as indicated in Appendix B on a portion of Erf 41, Atlantic Hills.</p>	

2. "No-Go" areas

<p>Explain what "no-go" area(s) have been identified during identification of the alternatives and provide the co-ordinates of the "no-go" area(s).</p>
<p>No no-go areas have been identified on the site. However, during the construction phase, construction personnel will not be allowed to venture onto other construction sites within the Atlantic Hills development or any undeveloped erven in the area.</p>

3. Methodology to determine the significance ratings of the potential environmental impacts and risks associated with the alternatives.

Describe the methodology to be used in determining and ranking the nature, significance, consequences, extent, duration of the potential environmental impacts and risks associated with the proposed activity or development and alternatives, the degree to which the impact or risk can be reversed and the degree to which the impact and risk may cause irreplaceable loss of resources.

The following methodology was used in determining and ranking the potential environmental impacts of the proposed development and alternatives (note that the assessment of potential risks was deemed to be not applicable):

Impact Rating Methodology

The methodology used to assess and rate impacts is outlined in this section.

The significance of an impact is defined as a combination of the consequence of the impact occurring and the probability that the impact will occur.

The criteria used to determine impact consequence are presented the table below.

Table 1: Criteria used to determine the Consequence of the Impact

Rating	Definition of Rating	Score
A. Extent– the area over which the impact will be experienced		
None		0
Local	Confined to project or study area or part thereof (e.g. site)	1
Regional	The region, which may be defined in various ways, e.g. cadastral, catchment, topographic	2
(Inter) national	Nationally or beyond	3
B. Intensity– the magnitude of the impact in relation to the sensitivity of the receiving environment		
None		0
Low	Natural and/or social functions and processes are negligibly altered	1
Medium	Natural and/or social functions and processes continue albeit in a modified way	2
High	Natural and/or social functions or processes are severely altered	3
C. Duration– the time frame for which the impact will be experienced		
None		0
Short-term	Up to 2 years	1
Medium-term	2 to 15 years	2
Long-term	More than 15 years	3

The combined score of these three criteria corresponds to a Consequence Rating, as set out in Table 2:

Table 2: Method used to determine the Consequence Score

Combined Score (A+B+C)	0 – 2	3 – 4	5	6	7	8 – 9
Consequence Rating	Not significant	Very low	Low	Medium	High	Very high

Once the consequence is derived, the probability of the impact occurring is considered, using the probability classifications presented in Table 3.

Table 3: Probability Classification

Probability of impact – the likelihood of the impact occurring	
Improbable	< 40% chance of occurring
Probable	40% - 70% chance of occurring
Highly probable	> 70% - 90% chance of occurring
Definite	> 90% chance of occurring

The overall significance of the individual impacts is then determined by considering consequence and probability using the rating system prescribed in Table 4.

Table 4: Impact Significance Ratings

Significance Rating	Consequence		Probability
Insignificant	Very Low	&	Improbable
	Very Low	&	Possible
Very Low	Very Low	&	Probable
	Very Low	&	Definite

	Low	&	Improbable
	Low	&	Possible
Low	Low	&	Probable
	Low	&	Definite
Medium	Medium	&	Improbable
	Medium	&	Possible
High	High	&	Probable
	High	&	Definite
Very High	Very High	&	Improbable
	Very High	&	Possible

Finally the impacts are then considered in terms of their status (positive or negative impact) and the confidence in the ascribed impact significance rating. The prescribed system for considering impacts status and confidence (in assessment) is laid out in Table 5.

Table 5: Impact status and confidence classification

Status of impact	
Indication whether the impact is adverse (negative) or beneficial (positive).	+ ve (positive – a 'benefit')
	- ve (negative – a 'cost')
	Neutral
Confidence of assessment	
The degree of confidence in predictions based on available information, EAP's judgment and/or specialist knowledge.	Low
	Medium
	High

The impact significance rating should be considered in the decision-making process based on the implications of ratings described below:

- **Insignificant:** the potential impact is negligible and will not have an influence on the decision regarding the proposed activity/development.
- **Very Low:** the potential impact should not have any meaningful influence on the decision regarding the proposed activity/development.
- **Low:** the potential impact may not have any meaningful influence on the decision regarding the proposed activity/development.
- **Medium:** the potential impact should influence the decision regarding the proposed activity/development.
- **High:** the potential impact will affect the decision regarding the proposed activity/development.
- **Very High:** The proposed activity should only be approved under special circumstances.

Practicable mitigation measures (if required) are recommended and impacts rated in the prescribed way both without and with the assumed effective implementation of the recommended mitigation measures.

Mitigation measures are either:

- Essential: must be implemented (as they minimise potentially significant negative impacts) and are non negotiable; and
- Optional: "nice-to-have's" as they do little to minimise a key potentially significant negative impacts and/or improve benefits.

4. Assessment of each impact and risk identified for each alternative

Note: The following table serves as a guide for summarising each alternative. The table should be repeated for each alternative to ensure a comparative assessment. The EAP may decide to include this section as Appendix J to this BAR.

ALTERNATIVE 1: PREFERRED ALTERNATIVE

VISUAL IMPACTS

Alternative:	Preferred Alternative
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	Visual impacts
Nature of impact:	Negative impacts associated with the development phase as a result of the presence of site camp, scaffolding, construction works, and construction machinery and materials.
Extent and duration of impact:	Extent is local (site specific) and duration is temporary (the construction period).
Consequence of impact or risk:	Low negative
Probability of occurrence:	Probable
Degree to which the impact may cause irreplaceable loss of resources:	Once construction is completed, the impact is reversible.
Degree to which the impact can be reversed:	The impact is entirely reversible.
Indirect impacts:	None
Cumulative impact prior to mitigation:	Cumulative visual impacts from construction does not constitute a significant cumulative impact due to the temporary nature of the impact.
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (-ve)
Degree to which the impact can be avoided:	Impact cannot be avoided.
Degree to which the impact can be managed:	Impact can be partially managed through the implementation of good housekeeping by the contractor (e.g. storing materials neatly and in designated, hoarded areas).
Degree to which the impact can be mitigated:	Impact can be partially mitigated through the implementation of the EMPr which prescribes good housekeeping.
Proposed mitigation:	<ul style="list-style-type: none"> Cover construction materials that are stored on site, where practicably possible. Screening through the appropriate use of hoarding.
Residual impacts:	N/A
Cumulative impact post mitigation:	N/A
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Very low (-ve)
Potential impact and risk:	
Visual impacts	
Nature of impact:	Negative impacts related to the presence of litter, erosion, and dust during construction.
Extent and duration of impact:	Extent is local (site specific) and duration is temporary (the construction period).
Consequence of impact or risk:	Increased visual impact to surrounding users.
Probability of occurrence:	Probable
Degree to which the impact may cause irreplaceable loss of resources:	N/A
Degree to which the impact can be reversed:	The impact is entirely reversible
Indirect impacts:	Possible dust-related impacts on surrounding communities.
Cumulative impact prior to mitigation:	Cumulative visual impacts from construction does not constitute a significant cumulative impact due to the temporary nature of the impact.
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (-ve)
Degree to which the impact can be avoided:	Impact cannot be avoided.
Degree to which the impact can be managed:	Impact can be partially managed through appropriate waste management, dust suppression, and rehabilitation of eroded and denuded areas.
Degree to which the impact can be mitigated:	Impact can be partially mitigated through the implementation of the EMPr which prescribes good housekeeping.
Proposed mitigation:	<ul style="list-style-type: none"> Cover construction materials that are stored on site, where practicably possible. Maintain an effective waste management programme. Implement dust suppression.
Residual impacts:	N/A

Cumulative impact post mitigation:	N/A
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Very low (-ve)
OPERATIONAL PHASE	
Potential impact and risk:	Visual impacts
Nature of impact:	Negative impacts associated with night lights and signage
Extent and duration of impact:	Long term
Consequence of impact or risk:	Increased light pollution.
Probability of occurrence:	Highly probable.
Degree to which the impact may cause irreplaceable loss of resources:	Low
Degree to which the impact can be reversed:	Fully.
Indirect impacts:	None.
Cumulative impact prior to mitigation:	Medium
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (based on the fact that the site is located within an existing approved development)
Degree to which the impact can be avoided:	Impact can be partially avoided through the correct placement of signage and lighting.
Degree to which the impact can be managed:	N/A
Degree to which the impact can be mitigated:	N/A
Proposed mitigation:	<ul style="list-style-type: none"> • Ensure that all signage complies with the local authority external signage requirements. • Avoid spot lights directed at the surrounding road network – downlighting is preferred.
Residual impacts:	N/A
Cumulative impact post mitigation:	Low
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Very low (-ve)
DECOMMISSIONING AND CLOSURE PHASE	
Potential impact and risk:	Not applicable.

NOISE IMPACTS

Alternative:	Preferred Alternative
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	Noise impacts associated with the development phase.
Nature of impact:	Negative noise impacts during construction as a result of the use of construction machinery and plant.
Extent and duration of impact:	Extent is local and duration is short term.
Consequence of impact or risk:	Low (-ive)
Probability of occurrence:	Definite
Degree to which the impact may cause irreplaceable loss of resources:	Low
Degree to which the impact can be reversed:	Entirely reversible as the impacts are limited to the construction period.
Indirect impacts:	Noise may negatively impact the surrounding land-users.
Cumulative impact prior to mitigation:	Noise may impact surrounding communities.
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (-ive)
Degree to which the impact can be avoided:	Impact cannot be avoided.
Degree to which the impact can be managed:	Impact can be managed through the implementation of the EMPr.
Degree to which the impact can be mitigated:	Impact can be mitigated through the implementation of the EMPr.
Proposed mitigation:	<ul style="list-style-type: none"> • Ensure that plant and machinery are serviced regularly. • Work will be limited to standard construction hours (07h00 to 17h00) and no work will occur on Sundays.

	It should be noted that the nearest residential area of Dunoon, which at ±500 metres away, is sufficiently far enough to ensure that construction noise will not impact on the community.
Residual impacts:	N/A
Cumulative impact post mitigation:	N/A
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Very low (-ive)
OPERATIONAL PHASE	
Potential impact and risk:	Noise impacts associated with the operational phase.
Nature of impact:	Negative impacts associated with through-traffic, and fuel and other deliveries. It should be noted that the proposed filling station is located in an existing Mixed-Use development, with the expected associated noise occurring. The proposed filling station will therefore not significantly add to the existing noise levels. In addition to this, the nearest residential area of Dunoon, which at ±500 meters away, is sufficiently far enough to ensure that operational noise will not impact on the community.
Extent and duration of impact:	Extent is local and duration is long term.
Consequence of impact or risk:	Low (-ive)
Probability of occurrence:	Definite
Degree to which the impact may cause irreplaceable loss of resources:	Low
Degree to which the impact can be reversed:	Impact cannot be reversed.
Indirect impacts:	Noise may negatively impact the surrounding landowners.
Cumulative impact prior to mitigation:	Noise may impact surrounding communities.
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (-ive)
Degree to which the impact can be avoided:	Impact cannot be avoided.
Degree to which the impact can be managed:	N/A
Degree to which the impact can be mitigated:	N/A
Proposed mitigation:	N.A
Residual impacts:	N/A
Cumulative impact post mitigation:	N/A
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (-ive)
DECOMMISSIONING AND CLOSURE PHASE	
Potential impact and risk:	Not Applicable

SOIL AND GROUNDWATER CONTAMINATION

Alternative:	Preferred Alternative
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	Impacts associated with spillages
Nature of impact:	Negative impacts on soil and groundwater as a result of spillages of hydrocarbons and other chemicals, and inappropriate storage of construction material.
Extent and duration of impact:	Extent is local and duration is short term.
Consequence of impact or risk:	High (-ive)
Probability of occurrence:	Possible
Degree to which the impact may cause irreplaceable loss of resources:	Medium
Degree to which the impact can be reversed:	Partially reversible depending on the extent of contamination.
Indirect impacts:	N/A
Cumulative impact prior to mitigation:	Medium (-ive)
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium (-ive)
Degree to which the impact can be avoided:	Impacts can be avoided through implementation of the proposed mitigation measures.

Degree to which the impact can be managed:	Impacts can be managed through implementation of the proposed mitigation measures.
Degree to which the impact can be mitigated:	Impacts can be mitigated through implementation of the proposed mitigation measures.
Proposed mitigation:	The following to be implemented as part of the EMPr: <ul style="list-style-type: none"> SANS Code 1089-3:2010: The Petroleum Industry: The installation, modification, and decommissioning of underground storage tanks, pumps/dispensers and pipework at service stations and consumer installations Adequately train construction workers to ensure that impact is minimised and, should it occur, rapid, informed action is taken to contain the spillage / leak if any paints, bitumen, sealants, excess cement missing water etc. Ensure that a spill-kit is available on site during construction.
Residual impacts:	N/A
Cumulative impact post mitigation:	N/A
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (-ive)
OPERATIONAL PHASE	
Potential impact and risk:	Impacts associated with aboveground spillages
Nature of impact:	Negative impacts on soil and groundwater as a result of fuel spillages and leaks from below ground infrastructure (e.g. underground storage tanks and pipework).
Extent and duration of impact:	Extent is local and duration is long term.
Consequence of impact or risk:	Medium (-ive)
Probability of occurrence:	Possible
Degree to which the impact may cause irreplaceable loss of resources:	High
Degree to which the impact can be reversed:	Partially reversible depending on the extent of contamination.
Indirect impacts:	N/A
Cumulative impact prior to mitigation:	None
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium (-ive)
Degree to which the impact can be avoided:	Impacts can be avoided through implementation of the proposed mitigation measures.
Degree to which the impact can be managed:	Impacts can be managed through implementation of the proposed mitigation measures.
Degree to which the impact can be mitigated:	Impacts can be mitigated through implementation of the proposed mitigation measures.
Proposed mitigation:	The following to be implemented as part of the EMPr: <ul style="list-style-type: none"> SANS Code 1089-3:2010: The Petroleum Industry: The installation, modification, and decommissioning of underground storage tanks, pumps/dispensers and pipework at service stations and consumer installations Construct and maintain the filling station in line with industry standard (i.e. ensure hardened surfaces around pumps are crack free, maintain collection pits, maintain all components of the pumps and dispensers) Adequately train all workers as to how to identify and report any possible leaks. Ensure that a spill-kit is available on site during operation.
Residual impacts:	N/A
Cumulative impact post mitigation:	N/A
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (-ive)
DECOMMISSIONING AND CLOSURE PHASE	
Potential impact and risk:	Soil and groundwater contamination during decommissioning.
Nature of impact:	Negative impacts on soil and groundwater associated with the removal of underground fuel storage tanks and associated infrastructure.
Extent and duration of impact:	Extent is local and duration is short term.

Consequence of impact or risk:	Medium (-ive)
Probability of occurrence:	Possible
Degree to which the impact may cause irreplaceable loss of resources:	High
Degree to which the impact can be reversed:	Partially reversible depending on the extent of contamination identified.
Indirect impacts:	N/A
Cumulative impact prior to mitigation:	None
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium (-ive)
Degree to which the impact can be avoided:	Impacts can be avoided through implementation of the proposed mitigation measures.
Degree to which the impact can be managed:	Impacts can be managed through implementation of the proposed mitigation measures.
Degree to which the impact can be mitigated:	Impacts can be mitigated through implementation of the proposed mitigation measures.
Proposed mitigation:	The following to be implemented as part of any decommissioning phase: <ul style="list-style-type: none"> • Purging of all tanks prior to removal. • Once tanks are removed, testing of surrounding soil and removal of any contaminated material. • Backfill excavations with clean material to ground level.
Residual impacts:	N/A
Cumulative impact post mitigation:	N/A
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (-ive)

HEALTH AND SAFETY RISK

Alternative:	Preferred Alternative
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	Health and safety risks
Nature of impact:	Health and safety risks to employees and the public associated with the risk profile of the filling station which can include loss of life, injury and/or damage to property and infrastructure
Extent and duration of impact:	Extent is local and duration is short to medium term.
Consequence of impact or risk:	High (-ive)
Probability of occurrence:	Possible
Degree to which the impact may cause irreplaceable loss of resources:	High
Degree to which the impact can be reversed:	Should an emergency situation occur, impacts can be reversed through the implementation of the proposed mitigation measures.
Indirect impacts:	Emergency situations can impact the surrounding landowners.
Cumulative impact prior to mitigation:	None
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	High (-ive)
Degree to which the impact can be avoided:	Impacts can be avoided through implementation of the proposed mitigation measures.
Degree to which the impact can be managed:	Impacts can be managed through implementation of the proposed mitigation measures.
Degree to which the impact can be mitigated:	Impacts can be mitigated through implementation of the proposed mitigation measures.
Proposed mitigation:	The following to be implemented as part of the EMP: <ul style="list-style-type: none"> • SANS Code 1089-3:2010: The Petroleum Industry: The installation, modification, and decommissioning of underground storage tanks, pumps/dispensers and pipework at service stations and consumer installations • An approved emergency preparedness and response plan • An approved health and safety plan.
Residual impacts:	N/A
Cumulative impact post mitigation:	N/A

Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (-ive)
OPERATIONAL PHASE	
Potential impact and risk:	Health and safety risks
Nature of impact:	Health and safety risks to employees and the public associated with the risk profile of the filling station which can include loss of life, injury and/or damage to property and infrastructure
Extent and duration of impact:	Extent is local and duration is short to medium term.
Consequence of impact or risk:	High (-ive)
Probability of occurrence:	Possible
Degree to which the impact may cause irreplaceable loss of resources:	High
Degree to which the impact can be reversed:	Should an emergency situation occur, impacts can be reversed through the implementation of the proposed mitigation measures.
Indirect impacts:	Emergency situations can impact the surrounding landowners.
Cumulative impact prior to mitigation:	None
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	High (-ive)
Degree to which the impact can be avoided:	Impacts can be avoided through implementation of the proposed mitigation measures.
Degree to which the impact can be managed:	Impacts can be managed through implementation of the proposed mitigation measures.
Degree to which the impact can be mitigated:	Impacts can be mitigated through implementation of the proposed mitigation measures.
Proposed mitigation:	The following to be implemented as part of the EMPr: <ul style="list-style-type: none"> • SANS Code 1089-3:2010: The Petroleum Industry: The installation, modification, and decommissioning of underground storage tanks, pumps/dispensers and pipework at service stations and consumer installations • An approved emergency preparedness and response plan • An approved health and safety plan.
Residual impacts:	N/A
Cumulative impact post mitigation:	N/A
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Very low (-ive)
DECOMMISSIONING AND CLOSURE PHASE	
Potential impact and risk:	Not applicable.

SOCIO-ECONOMIC IMPACTS

Alternative:	Preferred Alternative
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	Employment and expenditure: Short term socio-economic benefits related to the construction of the proposed filling station
Nature of impact:	The proposed development will create temporary employment in the construction industry and will result in expenditure in the local economy as a result of the purchase of goods and services, primarily in the building supplies sector.
Extent and duration of impact:	Extent is local and duration is temporary.
Consequence of impact or risk:	Local economic growth and improvement in the standard of living for the families of the employed workers.
Probability of occurrence:	Definite.
Degree to which the impact may cause irreplaceable loss of resources:	N/A
Degree to which the impact can be reversed:	N/A
Indirect impacts:	There are a number of indirect socio-economic benefits that arise from the creation of jobs and increased expenditure in the local economy but these are of negligible significance given the small scale of the development.
Cumulative impact prior to mitigation:	Employment creation and economic growth as a result of development projects constitutes one of the most important drivers

	of the South African economy (i.e. this is an important cumulative benefit).
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium (+ve)
Degree to which the impact can be avoided:	N/A
Degree to which the impact can be managed:	N/A
Degree to which the impact can be mitigated:	N/A
Proposed mitigation:	N/A
Residual impacts:	N/A
Cumulative impact post mitigation:	N/A
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium (+ive)
OPERATIONAL PHASE	
Potential impact and risk:	Employment and expenditure: Long term socio-economic impacts related to the operational phase of the proposed filling station
Nature of impact:	The proposed development will create permanent employment (petrol attendants, cashiers, etc.)
Extent and duration of impact:	Extent is Local Duration is Long Term
Consequence of impact or risk:	Local economic growth and improvement in the standard of living for the families of the permanently employed workers.
Probability of occurrence:	Definite
Degree to which the impact may cause irreplaceable loss of resources:	N/A
Degree to which the impact can be reversed:	N/A
Indirect impacts:	There are a number of indirect socio-economic benefits that arise from the creation of jobs and increased expenditure in the local economy but these are of negligible significance given the small scale of the development.
Cumulative impact prior to mitigation:	Employment creation and economic growth constitutes a significant cumulative benefit. Convenience factor for the surrounding landowners and associated savings in fuel costs (with not having to drive further to refuel)
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium (+ve)
Degree to which the impact can be avoided:	N/A
Degree to which the impact can be managed:	N/A
Degree to which the impact can be mitigated:	N/A
Proposed mitigation:	N/A
Residual impacts:	N/A
Cumulative impact post mitigation:	N/A
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium (+ve)
DECOMMISSIONING AND CLOSURE PHASE	

TRAFFIC IMPACTS

Alternative:	Preferred Alternative
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	Congestion and increased road safety risk
Nature of impact:	Increased congestion and increased road safety risks associated with the delivery of construction materials, often requiring the operation of large construction vehicles.
Extent and duration of impact:	Extent is local and duration is temporary.
Consequence of impact or risk:	Low (-ive)
Probability of occurrence:	Definite
Degree to which the impact may cause irreplaceable loss of resources:	Low
Degree to which the impact can be reversed:	N/A
Indirect impacts:	Construction traffic may negatively impact the surrounding landusers.
Cumulative impact prior to mitigation:	Traffic may impact surrounding communities.
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (-ive)

Degree to which the impact can be avoided:	Impacts can be avoided through implementation of the proposed mitigation measures.
Degree to which the impact can be managed:	Impacts can be managed through implementation of the proposed mitigation measures.
Degree to which the impact can be mitigated:	Impacts can be mitigated through implementation of the proposed mitigation measures.
Proposed mitigation:	<p>The detailed design must include:</p> <ul style="list-style-type: none"> • A 2m wide surfaced sidewalk to be provided to the west and east (optional) of the convenience store. • A 2m wide sidewalk to be provided to the convenience store, along at least the outer edge of the internal roads. <p>The following to be implemented as part of the EMPr:</p> <ul style="list-style-type: none"> • Time deliveries of construction material to the site during non-peak times. • Site manager to monitor all deliveries and ensure that no stacking of vehicles takes place in the surrounding road network.
Residual impacts:	N/A
Cumulative impact post mitigation:	N/A
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Very low (-ive)
OPERATIONAL PHASE	
Potential impact and risk:	Traffic impacts associated with the operation of a filling station
Nature of impact:	Negative impacts associated with congestion during the operation of a filling station due to deliveries of fuel and other supplies, and filling station users.
Extent and duration of impact:	Extent is local and duration is Long-term.
Consequence of impact or risk:	Medium (-ive)
Probability of occurrence:	Definite
Degree to which the impact may cause irreplaceable loss of resources:	Low
Degree to which the impact can be reversed:	N/A
Indirect impacts:	Traffic associated with vehicles accessing the site during operational phase may negatively impact the surrounding landowners
Cumulative impact prior to mitigation:	Traffic may impact surrounding communities.
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium (-ive)
Degree to which the impact can be avoided:	Impacts can be avoided through implementation of the proposed mitigation measures.
Degree to which the impact can be managed:	Impacts can be managed through implementation of the proposed mitigation measures.
Degree to which the impact can be mitigated:	Impacts can be mitigated through implementation of the proposed mitigation measures.
Proposed mitigation:	<p>The following to be implemented as part of the EMPr:</p> <ul style="list-style-type: none"> • Ensure that underground tank filling takes place during non-peak use times to avoid internal traffic flow problems. • Train workers to work efficiently to avoid stacking of vehicles waiting for fuel.
Residual impacts:	N/A
Cumulative impact post mitigation:	N/A
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (-ive)
DECOMMISSIONING AND CLOSURE PHASE	

ALTERNATIVE 2: ALTERNATIVE LAYOUT

Impacts (visual, noise, soil and groundwater contamination, emergency preparedness and socio-economic) remain the same for the Alternative Layout, with the exception of traffic impacts, which are discussed below.

TRAFFIC IMPACTS

Alternative:	Alternative Layout
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	Congestion and increased road safety risk
Nature of impact:	Increased congestion and increased road safety risks associated with the delivery of construction materials, often requiring the operation of large construction vehicles.
Extent and duration of impact:	Extent is local and duration is temporary.
Consequence of impact or risk:	Low (-ive)
Probability of occurrence:	Definite
Degree to which the impact may cause irreplaceable loss of resources:	Low
Degree to which the impact can be reversed:	N/A
Indirect impacts:	Construction traffic may negatively impact the surrounding landowners.
Cumulative impact prior to mitigation:	Traffic may impact surrounding communities.
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (-ive)
Degree to which the impact can be avoided:	Impacts can be avoided through implementation of the proposed mitigation measures.
Degree to which the impact can be managed:	Impacts can be managed through implementation of the proposed mitigation measures.
Degree to which the impact can be mitigated:	Impacts can be mitigated through implementation of the proposed mitigation measures.
Proposed mitigation:	The following to be implemented as part of the EMPr: <ul style="list-style-type: none"> • Time deliveries of construction material to the site during non-peak times. • Site manager to monitor all deliveries and ensure that no stacking of vehicles takes place in the surrounding road network.
Residual impacts:	N/A
Cumulative impact post mitigation:	N/A
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Very low (-ive)
OPERATIONAL PHASE	
Potential impact and risk:	Traffic impacts associated with the operation of a filling station
Nature of impact:	
Extent and duration of impact:	Extent is local and duration is Long-term.
Consequence of impact or risk:	Medium (-ive)
Probability of occurrence:	Definite
Degree to which the impact may cause irreplaceable loss of resources:	Low
Degree to which the impact can be reversed:	N/A
Indirect impacts:	Traffic associated with vehicles accessing the site during operational phase may negatively impact the surrounding landusers. The layout of the filling station requires that the filling trucks be located within the flow of internal traffic on the site.
Cumulative impact prior to mitigation:	Traffic may impact surrounding communities.
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium (-ive)
Degree to which the impact can be avoided:	Impacts can be partially avoided through implementation of the proposed mitigation measures.
Degree to which the impact can be managed:	Impacts can be partially managed through implementation of the proposed mitigation measures.
Degree to which the impact can be mitigated:	Impacts can be partially mitigated through implementation of the proposed mitigation measures.
Proposed mitigation:	Redesign the layout as per the preferred alternative. The following to be implemented as part of the EMPr:

	<ul style="list-style-type: none"> • Ensure that underground tank filling takes place during non-peak use times to avoid internal traffic flow problems. • Train workers to work efficiently to avoid stacking of vehicles waiting for fuel.
Residual impacts:	N/A
Cumulative impact post mitigation:	N/A
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium (-ive) if layout remains as is
DECOMMISSIONING AND CLOSURE PHASE	
Potential impact and risk:	Not applicable.

NO-GO ALTERNATIVE

The 'No-Go' option entails the development of the site with a Mixed Use development (excluding underground storage tanks) in line with the existing Atlantic Hills development, the following impacts of which have already been assessed and mitigation measures included in the existing approved EMP:

- Botanical
- Stormwater / wetlands
- Soil potential
- Visual
- Traffic
- Socio-economic
- Archaeological
- Service infrastructure

The impacts associated with the likely development of either an industrial or retail site would therefore have identical or similar impacts as the development of a filling station, with the possible exception of no contamination risk or health and safety risk associated with the operational phase – although this is dependent on what type of operator develops the platform. However, the convenience of having a filling station in Atlantic Hills would be negated, along with the associated socio-economic benefits of reduced drive time to refuel (and thus better profitability for the surrounding landusers).

SECTION I: FINDINGS, IMPACT MANAGEMENT AND MITIGATION MEASURES

1.	Provide a summary of the findings and impact management measures identified by all Specialist and an indication of how these findings and recommendations have influenced the proposed development.
<p>Limited specialist studies were required as the proposed filling station is situated in the existing, approved Atlantic Hills Mixed-Use development as the site has previously undergone a full Environmental Impact Assessment. The site is completely transformed in preparation for development in accordance with the environmental and land use approvals and currently comprises a cleared and levelled building platform.</p> <p>Noise, visual impacts, stormwater and groundwater contamination, emergency preparedness, traffic and socio-economic impacts were assessed, and with appropriate implementation of the proposed mitigation measures, with regards to the preferred alternative, all impacts were found to be very low (-ve) for the preferred alternative, apart from the socio-economic benefits which are rated as medium (+ve). The Site Traffic Assessment recommends the following design measures which will further reduce impacts associated with pedestrian movement on the site:</p> <ul style="list-style-type: none"> • A 2m wide surfaced sidewalk be provided to the west and east (optional) of the convenience store; and • A 2m wide sidewalk be provided to the convenience store, along at least the outer edge of the internal roads. 	
2.	List the impact management measures that were identified by all Specialist that will be included in the EMPr
<p>All mitigation measures proposed in this BAR have been included in the EMPr. These are as follows:</p> <p><u>Visual Impacts – Construction Phase</u></p> <ul style="list-style-type: none"> • Cover construction materials that are stored on site, where practicably possible. • Screening through the appropriate use of hoarding. • Maintain an effective waste management programme. • Implement dust suppression. <p><u>Visual Impacts – Operational Phase</u></p> <ul style="list-style-type: none"> • Ensure that all signage complies with the local authority external signage requirements. • Avoid spot lights directed at the surrounding road network – downlighting is preferred. <p><u>Noise Impacts – Construction Phase</u></p> <ul style="list-style-type: none"> • Ensure that plant and machinery are serviced regularly. • Work will be limited to standard construction hours (07h00 to 17h00) and no work will occur on Sundays. <p><u>Soil and Groundwater Contamination – Construction Phase</u></p> <ul style="list-style-type: none"> • Ensure that SANS Code 1089-3:2010: The Petroleum Industry: The installation, modification, and decommissioning of underground storage tanks, pumps/dispensers and pipework at service stations and consumer installations is implemented. • Adequately train construction workers to ensure that impact is minimised and, should it occur, rapid, informed action is taken to contain the spillage / leak if any paints, bitumen, sealants, excess cement missing water etc. • Ensure that a spill-kit is available on site during construction. <p><u>Soil and Groundwater Contamination – Decommissioning Phase</u></p> <ul style="list-style-type: none"> • Purging of all tanks prior to removal. • Once tanks are removed, testing of surround soil and removal of any contaminated material. • Backfill excavations with clean material to ground level. <p><u>Emergency Preparedness: Construction and Operational Phases:</u></p> <ul style="list-style-type: none"> • Ensure that SANS Code 1089-3:2010: The Petroleum Industry: The installation, modification, and decommissioning of underground storage tanks, pumps/dispensers and pipework at service stations and consumer installations is implemented. • Implements an approved emergency preparedness and response plan as per industry standard. • Improved an approved health and safety plan as per industry standard. <p><u>Traffic Impacts – Design & Construction Phases:</u></p> <ul style="list-style-type: none"> • Include in the detailed design: <ul style="list-style-type: none"> ◦ A 2m wide surfaced sidewalk to be provided to the west and east (optional) of the convenience store; ◦ A 2m wide sidewalk to be provided to the convenience store, along at least the outer edge of the internal roads. • Time deliveries of construction material to the site during non-peak times. • Site manager to monitor all deliveries and ensure that no stacking of vehicles takes place in the surrounding road network. • Ensure that underground tank filling takes place during non-peak use times to avoid internal traffic flow problems. • Train workers to work efficiently to avoid stacking of vehicles waiting for fuel. 	
List the specialist investigations and the impact management measures that will not be implemented and provide an explanation as to why these measures will not be implemented.	

	None.
4.	Explain how the proposed development will impact the surrounding communities.
	Other than employment opportunities and possible dust and noise impacts during construction (which would be adequately managed through the implementation of the EMPr (see Appendix H), the proposed development will not have an impact on the surrounding communities.
5.	Explain how the risk of climate change may influence the proposed activity or development and how has the potential impacts of climate change been considered and addressed.
	It is not envisaged that climate change may influence the proposed development.
6.	Explain whether there are any conflicting recommendations between the specialists. If so, explain how these have been addressed and resolved.
	Not applicable.
7.	Explain how the findings and recommendations of the different specialist studies have been integrated to inform the most appropriate mitigation measures that should be implemented to manage the potential impacts of the proposed activity or development.
	The site was identified as suitable for underground fuel storage tanks initially based on the findings of the geotechnical report. Once the site was identified a layout was proposed, and thereafter input from the traffic engineer guided the current preferred layout.
8.	Explain how the mitigation hierarchy has been applied to arrive at the best practicable environmental option.
	<p>Avoided: greenfield sites have been avoided in identification of the site located within an existing approved development.</p> <p>Minimised: The implementation of the EMPr will result in the minimisation of potential, noise impacts, visual impacts, soil and groundwater contamination, health and safety risks, socio-economic impacts and traffic impacts. .</p> <p>Rectified: The layout has been adjusted based on the specialist input of a traffic engineer.</p> <p>Reduced: Development phase impacts such as visual impacts, dust and noise will be reduced via the implementation of the EMPr. Operational phase impacts and risks will be reduced by complying with the standard fuel industry regulations (SANS codes and requirements for emergency preparedness plans etc).</p> <p>Offset: It was not necessary to offset any potential impacts.</p>

SECTION J: GENERAL

1. Environmental Impact Statement

1.1.	Provide a summary of the key findings of the EIA.
<p>As the proposed filling station will be situated in the existing, authorised Atlantic Hills development, and the proposed erf has been completely transformed in preparation for development, no biodiversity or freshwater impacts exist. Potential impacts related to visual, noise, stormwater and groundwater contamination, health and safety risks, socio-economic and traffic can be significantly minimised (low negative) with the implementation of the proposed mitigation measures (as contained in the EMPr). Traffic impacts are minimised with the adoption of the Preferred Alternative. Socio-economic benefits are expected with regards to short- and long-term employment opportunities.</p> <p>In addition, a filling station at the proposed site contributes to the overall economic productivity of the Atlantic Hills development as the filling station is centrally located and easily accessible, with the alternative being an existing filling station several kilometres away.</p> <p>The No-Go may not be associated with the environmental and health and safety risks that a filling station may be associated with (adding that with the implementation of the industry imposed regulations or SANS codes of practise these risks are minor) but would not generate the socio-economic benefits associated with a well-located accessible filling station would and compliment the surrounding development to the same extent. As such the applicant's preferred alternative is considered a practical environmental option for the site.</p>	
1.2.	Provide a map that that superimposes the preferred activity and its associated structures and infrastructure on the environmental sensitivities of the preferred site indicating any areas that should be avoided, including buffers. (Attach map to this BAR as Appendix B2)
	There are no sensitivities on the site. Sensitive areas in the near vicinity have therefore been included in the map. Refer to Appendix B.
1.3.	Provide a summary of the positive and negative impacts and risks that the proposed activity or development and alternatives will have on the environment and community.

A summary of the impacts and risks for both alternatives is presented in the table below:

Alternative 1 – Preferred Alternative & Alternative 2 – Layout Alternative			
Impact	Phase	Prior to mitigation	After mitigation
Visual impacts during the construction phase as a result of the presence of site camp, scaffolding, construction works, and construction machinery and materials.	Development	Low (-ive)	Very low (-ive)
Visual impacts related to litter, erosion, and dust	Development	Low (-ive)	Very low (-ive)
Visual impacts associated with operational phase.	Operational	Low (-ive)	Very low (-ive)
Noise impacts associated with the construction phase.	Development	Low (-ive)	Very low (-ive)
Noise impacts associated with the operational phase.	Operational	Low (-ive)	Low (-ive)
Soil and groundwater contamination associated with surface spillages and construction material.	Development	Medium (-ive)	Low (-ive)
Soil and groundwater contamination associated with surface spillages and subsurface leaks.	Operational	Medium (-ive)	Low (-ive)
Soil and groundwater contamination associated with the removal of storage tanks.	Decommission	Medium (-ive)	Low (-ive)
Health and safety risks (fire and lack of adequate health and safety): potential loss of life, property, and infrastructure	Development	High (-ive)	Low (-ive)
Health and safety risks (fire and lack of adequate health and safety): potential loss of life, property, and infrastructure	Operational	High (-ive)	Very low (-ive)
Socio-economic: Short term socio-economic impacts related to the construction of the proposed filling station	Development	Medium (+ive)	Medium (+ive)
Socio-economic: Short term socio-economic impacts related to the construction of the proposed filling station.	Operational	Medium (+ive)	Medium (+ive)
Traffic impacts associated with the delivery of construction materials.	Development	Low (-ive)	Very low (-ive)

Traffic impacts associated with the operation of a filling station.	Operational	Medium (-ive)	Low (-ive) (preferred alt) Medium (-ive) (layout alt)
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The 'No-Go' option entails the development of the site in line with the existing Atlantic Hills development, the following impacts of which have already been assessed and mitigation measures included in the approved EMP:

- Botanical
- Stormwater / wetlands
- Soil potential
- Visual
- Traffic
- Socio-economic
- Archaeological
- Service infrastructure

The impacts associated with the likely development of either an industrial or retail site would therefore have identical or similar impacts as the development of a filling station, with the exception of no contamination risk or health and safety risk associated with the operational phase. However, the convenience of having a filling station in Atlantic Hills would be negated, along with the associated socio-economic benefits of reduced drive time to refuel (and thus better profitability for the surrounding landusers).

2. Recommendation of the Environmental Assessment Practitioner ("EAP")

2.1.	Provide Impact management outcomes (based on the assessment and where applicable, specialist assessments) for the proposed activity or development for inclusion in the EMPr
	<ul style="list-style-type: none"> • Minimise noise impacts • Minimise visual impacts • Minimise surface and groundwater impacts • Minimise negative impacts associated with poor emergency preparedness • Minimise traffic impacts
2.2.	Provide a description of any aspects that were conditional to the findings of the assessment either by the EAP or specialist that must be included as conditions of the authorisation.
	All requirements are included in the EMPr.
2.3.	Provide a reasoned opinion as to whether the proposed activity or development should or should not be authorised, and if the opinion is that it should be authorised, any conditions that should be included in the authorisation.
	Considering that the proposed erf is situated within the existing, authorised Atlantic Hills development, is completely transformed, and has been prepared for development, with inclusion of the proposed mitigation measures outlined in this BAR, potential negative impacts are entirely minimised. With this in mind, and with the potential positive impacts associated with both the construction and operational phases in terms of employment opportunities and the convenience factor (with associated socio-economic benefits), it is the opinion of this EAP that Alternative 1 (the Preferred Alternative) be authorised.
2.4.	Provide a description of any assumptions, uncertainties and gaps in knowledge that relate to the assessment and mitigation measures proposed.
	None
2.5.	The period for which the EA is required, the date the activity will be concluded and when the post construction monitoring requirements should be finalised.
	It is requested that the EA be valid for a period of five years (construction phase) from the date of authorisation.

3. Water

Since the Western Cape is a water scarce area explain what measures will be implemented to avoid the use of potable water during the development and operational phase and what measures will be implemented to reduce your water demand, save water and measures to reuse or recycle water.
Potable water will not be allowed to be used for dust suppression. The developer will be responsible for sourcing an alternative supply and preferably utilise treated effluent for this purpose. In addition, rainwater tanks must be installed as receptacles for rainwater harvested from the various buildings.
This requirement has been included in the EMPr.

4. Waste

Explain what measures have been taken to reduce, reuse or recycle waste.
Waste will be recycled as stated in the EMPr.

5. Energy Efficiency

8.1.	Explain what design measures have been taken to ensure that the development proposal will be energy efficient.
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It is proposed that generators be used to augment the existing Eskom power supply during construction. Energy-efficient appliances and lightbulbs will be used where practicably possible.	
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SECTION K: DECLARATIONS

DECLARATION OF THE APPLICANT

Note: Duplicate this section where there is more than one Applicant.

I....., ID numberin my personal capacity or duly authorised thereto hereby declare/affirm that all the information submitted or submitted as part of this application form is true and correct, and that:

- I am fully aware of my responsibilities in terms of the National Environmental Management Act (Act No. 107 of 1998) ("NEMA"), the Environmental Impact Assessment ("EIA") Regulations and any relevant Specific Environmental Management Act and that failure to comply with these requirements may constitute an offence in terms of relevant environmental legislation;
- I am aware of my general duty of care in terms of Section 28 of the Constitution;
- I am aware that it is an offence in terms of Section 24F of the Constitution should I commence with a listed activity prior to obtaining an Environmental Authorisation;
- I appointed the Environmental Assessment Practitioner ("EAP") (if not exempted from this requirement) which:
 - meets all the requirements in terms of Part 4 of the NEMA EIA Regulations; or
 - meets all the requirements other than the requirement to be independent in terms of Regulation 13 of the NEMA EIA Regulations and a new EAP has been appointed who does meet all the requirements of Regulation 13 of the NEMA EIA Regulations;
- I will provide the EAP with a specialist, where applicable, and the Competent Authority with access to all information and any disposal that is relevant to the application;
- I will be responsible for the costs incurred in complying with the NEMA EIA Regulations and other environmental legislation including but not limited to –
 - costs incurred for the appointment of the EAP or any legitimately person contracted by the EAP;
 - costs in respect of any fee prescribed by the Minister or MEC in respect of the NEMA EIA Regulations;
 - Legitimate costs in respect of specialist(s) reviews; and
 - the provision of security to ensure compliance with applicable management and mitigation measures;
- I am responsible for complying with conditions that may be attached to any decision(s) issued by the Competent Authority, hereby indemnify, the government of the Republic, the Competent Authority and all its officers, agents and employees, from any liability arising out of the content of any report, any procedure or any action for which I or the EAP is responsible in terms of the NEMA EIA Regulations and any Specific Environmental Management Act.

Note: If acting in a representative capacity, a certified copy of the resolution or power of attorney must be attached.

Signature of the Applicant:

Date:

Name of company (if applicable):

DECLARATION OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER (“EAP”)

I, EAPASA Registration number as the appointed EAP hereby declare/affirm the correctness of the:

- Information provided in this BAR and any other documents/reports submitted in support of this BAR;
- The inclusion of comments and inputs from stakeholders and I&APs;
- The inclusion of inputs and recommendations from the specialist reports where relevant; and
- Any information provided by the EAP to interested and affected parties and any responses by the EAP to comments or inputs made by interested and affected parties, and that:
- In terms of the general requirement to be independent:
 - other than fair remuneration for work performed in terms of this application, I have no business, financial, personal or other interest in the activity or application, and there are no circumstances that may compromise my objectivity; or
 - am not independent, but another EAP that meets the requirements set out in Regulation 13 of NEMA EIA Regulations has been appointed to review my work (Note: a declaration by the review EAP must be submitted);
- In terms of the remainder of the general requirements of an EAP, I am fully aware of and meet all of the requirements and that failure to meet any the requirements may result in disqualification;
- I have disclosed, to the Applicant, the Competent Authority and registered interested and affected parties (if any), the Competent Authority and registered interested and affected parties, all information that have or may have the potential to influence the decision of the Competent Authority or the objectivity of any report, plan or document prepared or to be prepared as part of this application;
- I have ensured that information containing all relevant facts in respect of the application was distributed and made available to registered interested and affected parties and that participation was facilitated in such a manner that all interested and affected parties were provided with a reasonable opportunity to participate and to provide comments;
- I have ensured that the comments of all interested and affected parties were considered, responded to and submitted to the Competent Authority in respect of this application;
- I have ensured the inclusion of inputs and recommendations from the specialist reports in respect of the application, where relevant;
- I have kept a register of all interested and affected parties that participated in the public participation process; and
- I am aware that a false declaration is an offence in terms of Regulation 48 of the NEMA EIA Regulations;

Signature of the EAP:

Date:

Name of company (if applicable):

DECLARATION OF THE SPECIALIST

Note: Duplicate this section where there is more than one specialist.

I, as the appointed Specialist hereby declare/affirm the correctness of the information provided or to be provided as part of the application, and that:

- In terms of the general requirement to be independent:
 - other than fair remuneration for work performed in terms of this application, have no business, financial, personal or other interest in the development proposal or application and that there are no circumstances that may compromise my objectivity; or
 - am not independent, but another specialist (the "Review Specialist") that meets the requirements set out in Regulation 13 of the NEMA EIA Regulations has been appointed to review my work (Note: a declaration by the review specialist must be submitted with the application)
- In terms of the remainder of the general requirements for a specialist throughout this EIA process met all of the requirements;
- I have disclosed to the applicant, the EAP, the Review EAP (if applicable), the Department and I&APs all material information that has or may have the potential to influence the decision of the Department or the objectivity of any Report, plan or programme prepared or to be prepared as part of the application; and
- I am aware that a false declaration is an offence in terms of Regulation 48 of the EIA Regulations.

Signature of the EAP: Date:

Name of (if applicable):

