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|  | (For official use only) |
| EIA File Reference Number: | DC/ |
| NEAS Reference Number: | KZN/EIA/ |
| Waste Management Licence Number:  (if applicable) |  |
| Date Received: |  |

**Basic Assessment Report**

**Submitted in terms of the Environmental Impact Assessment Regulations, 2010 promulgated in terms of the National Environmental Management Act, 1998(Act No. 107 of 1998)**

**This template may be used for the following applications**:

* **Environmental Authorization** subject to basic assessment for an activity that is listed in Listing Notices 1or 3, 2010 (Government Notices No. R 544 or No. R 546 dated 18 June 2010); or
* **Waste Management Licence** for an activity that is listed in terms of section 20(b) of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) for which a basic assessment process as stipulated in the EIA Regulations must be conducted as part of the application (refer to the schedule of waste management activities in Category A of Government Notice No. 718 dated 03 July 2009).

**Kindly note that:**

1. This **basic assessment report** meets the requirements of the EIA Regulations, 2010 and is meant to streamline applications. This report is the format prescribed by the KZN Department of Economic Development, Tourism & Environmental Affairs. Please make sure that this is the latest version.
2. The report must be typed within the spaces provided in the form. The size of the spaces provided is not indicative of the amount of information to be provided. The report is in the form of a table that can extend itself as each space is filled with text.
3. Where required, place a cross in the box you select.
4. An incomplete report will be returned to the applicant for revision.
5. The use of “not applicable” in the report must be done with circumspection because if it is used in respect of material information that is required by the competent authority for assessing the application, it will result in the rejection of the application as provided for in the regulations.
6. No faxed or e-mailed reports will be accepted.
7. The report must be compiled by an independent environmental assessment practitioner (“EAP”).
8. Unless protected by law, all information in the report will become public information on receipt by the competent authority. Any interested and affected party should be provided with the information contained in this report on request, during any stage of the application process.
9. The KZN Department of Economic Development, Tourism & Environmental Affairs may require that for specified types of activities in defined situations only parts of this report need to be completed.
10. The EAP must submit this basic assessment report for comment to all relevant State departments that administer a law relating to a matter affecting the environment. This provision is in accordance with Section 24 O (2) of the National Environmental Management Act 1998 (Act 107 of 1998) and such comments must be submitted within 40 days of such a request.
11. **Please note that this report must be handed in or posted to the District Office of the KZN Department of Economic Development, Tourism & Environmental Affairs to which the application has been allocated (please refer to the details provided in the letter of acknowledgement for this application).**

DEPARTMENTAL REFERENCE NUMBER(S)

|  |  |
| --- | --- |
| File reference number (EIA): | DC43/0018/2014; KZN/EIA/0001649/2014 |
| File reference number (Waste Management Licence): |  |

Section A: DETAILS OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER and specialists

1. **name and contact details of environmental assessment practitioner (EAP)**

Name and contact details of the EAP who prepared this report:

|  |  |  |  |
| --- | --- | --- | --- |
| Business name of EAP: | **Mondli Consulting Services CC** | | |
| Physical address: | **6 Joseph Avenue, New Era House, Suite 12, Durban North** | | |
| Postal address: | **P O Box 22536, Glenashley** | | |
| Postal code: | **4022** | **Cell:** | **0826799841** |
| Telephone: | **(031) 5725647** | **Fax:** | **(031) 5725647** |
| E-mail: | **mondlib@webmail.co.za** |  |  |

1. **NAMEs and expertise OF REpresentatives of the EAP**

Names and details of the expertise of each representative of the EAP involved in the preparation of this report:

|  |  |  |  |
| --- | --- | --- | --- |
| Name of representative of the EAP | Education qualifications | Professional affiliations | Experience at environmental assessments (yrs) |
| **M. Mthembu** | **Diploma in Nature Conservation**  **Masters Degree (Environmental Management Dissertation)** |  | **Has been involved in environmental and conservation field for over 20 yrs.**  **Conducted EIAs for over 12 years including Strategic Env. Assessment. Has been involved in the review and commenting on development projects impacting on the environment.** |
| **M.M. Mgobhozi** | **B.A. Honours (Geography)(UniZulu).** |  | **Have been involved in facilitation and EIAs for over 5 years.** |
|  |  |  |  |

1. **NAMEs and expertise OF specialists**

Names and details of the expertise of each specialist that has contributed to this report:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name of specialist | Education qualifications | Field of expertise | Section/ s contributed to in this basic assessment report | Title of specialist report/ s as attached in Appendix D |
| **Ground Africa Consulting Geotechnical Engineers (Frederick Volbrecht)** | **MIAustCPEng** | **Geotechnical Engineering** | **Geotechnical investigation** | **Geotechnical Fieldwork Results Shopping Complex (Mall), stalls, light industrial workshops and Umzimkhulu Sasol Service Station.** |
|  |  |  |  |  |
|  |  |  |  |  |

Section B: Activity information

1. **PROJECT TITLE**

Describe the project title as provided on the application form for environmental authorization:

|  |  |
| --- | --- |
| Proposed Construction of Umzimkhulu Shopping Complex (Mall), with stalls for traders (transido), light industrial workshops and Umzimkhulu Sasol Service Station and associated infrastructure on Erf 152 Umzimkhulu, Umzimkhulu Local Municipality, within Harry Gwala District Municipality in KwaZulu - Natal. |  |

1. **PROJECT DESCRIPTION**

Provide a detailed description of the project:

|  |  |
| --- | --- |
| Cconstruction of Construction of Umzimkhulu Shopping Complex (Mall), with trading units / stalls for tenant traders, light industrial workshops and Umzimkhulu Sasol Service Station including associated structures and infrastructure comprising fuel storage tanks [1 x 46 000 for ULP 95], 2 x 23 000 for ULS and 1 x 23 000 for LRP 95 all underground, four pump islands, concrete slabbing, car wash bay, building on site comprising office, convenience shop with internal fast food outlets, staffroom, kitchen and toilets at Umzimkhulu. |  |

1. **Activity DESCRIPTION**

Describe each listed activity in Listing Notice 1 (GNR 544, 18 June2010), Listing Notice 3 (GNR 546, 18June 2010) or Category A of GN 718, 3 July 2009 (Waste Management Activities) which is being applied for as per the project description:

|  |  |
| --- | --- |
| R 544 of 2010, Activity No 13, The construction of facilities or infrastructure for the storage, or for the storage and handling, of fuel, where such storage occurs in containers with a combined capacity of 115 000 litres.  R 544 of 2010, Activity No 23, The transformation of undeveloped , vacant or derelict land to - Retail and commercial, inside an urban area, and where the total area to be transformed is 5 hectares or more, but less than 20 hectares.  R 544 of 2010, Activity No 24, The transformation of land bigger than 1000 square metres in size to retail, commercial and industrial use, where, at the time of the coming into effect of this Schedule such land was zoned open space. |  |

1. **FEASIBLE AND REASONABLE ALTERNATIVES**

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

(a) the property on which or location where it is proposed to undertake the activity;

(b) the type of activity to be undertaken;

(c) the design or layout of the activity;

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

(e) the operational aspects of the activity; and

(f) the option of not implementing the activity.

Describe alternatives that are considered in this report. Alternatives should include a consideration of all possible means by which the purpose and need of the proposed activity could be accomplished in the specific instance taking account of the interest of the applicant in the activity. The no-go alternative must in all cases be included in the assessment phase as the baseline against which the impacts of the other alternatives are assessed. The determination of whether site or activity (including different processes etc.) or both is appropriate needs to be informed by the specific circumstances of the activity and its environment. After receipt of this report the competent authority may also request the applicant to assess additional alternatives that could possibly accomplish the purpose and need of the proposed activity if it is clear that realistic alternatives have not been considered to a reasonable extent.

**The issue of alternative sites has been limited by the fact that this site has been identified by the Municipality for development and has been leased to the developer. The site is under the town planning scheme.**

**Starting with the Service Station, Sasol requires that development sites of this nature comply with specific specifications. The service station has to be situated in a particular retail area that needs to be zoned as such. Sasol petroleum company requires a site potential of about 400 000 litres per month for consideration of a development of this nature. Most petroleum companies would require a traffic count of about 10 000 vehicles per day, depending on the actual trading area and competitors in the area including the trading density. Among other things the petroleum industry stipulates an area of about 3 000 square metres in extent, with good access, and the site must be highly visible to traffic. The choice of this specific site has also been informed by the land availability, specific specifications by petroleum industry with regard to the location of the site. These factors have guided the choice of the site. It must be the best site from the business perspective while taking the environment into account. The current site is 53 436 square metres in extent.**

**The site is also going to accommodate other three phases of the project i.e. stalls for traders that are already operating on site. It will also accommodate industrial sites and the shopping complex. The local authority is among other things mandated to guide development within its area of jurisdiction through the zoning process while taking environmental sustainability into consideration. Therefore these factors have made it difficult to get any other reasonable or feasible alternatives under the circumstances, as contemplated in sub regulation 22 (2) (h) with regard to the site and property.**

**The site is strategically located near the taxi rank and some retail shops in the vicinity within the town of Umzimkhulu. VHB & Associates Architects is responsible for the designs of the project, and they are fully involved in the planning and environmental processes. Sasol is also involved to also provide inputs from their perspective and practical experience regarding the construction of Service and Filling Stations in South Africa. Sasol has been involved in the design and layout of the site plan for the Service Station drawing from their years of experience in the petroleum industry in South Africa. Both designers are fully aware of the legal expectations with regard to environmental protection.**

**It must also be noted that the Municipality would have specific locations and development corridors preferred for particular retail activities. At times it becomes impractical to get several sites to access as alternatives unless if the site proves to be unsuitable from geological, environmental, social, hydrological and safety perspectives.**

**Local Municipality, developer and other business partners like Sasol after their preliminary business investigation are of the view that the site provides business opportunities and a potential for a sustainable business venture.**

**In terms of technology relating to the Service Station, the applicant is fully reliant on the industry and Companies that are supplying fuel. South Africa in generally reliant on oil producing countries for the supply of fuel. Although Sasol is a South African Company, but most of the technology used within the industry is produced offshore and is constantly being upgraded and enhanced. May be the additional advantage in this instance is that Sasol is the South African Company that may add a South African flair to technology employed. It is therefore critical for the applicant to be up to date with changes and latest developments within the industry to use the best available technology and products, with the assistance of his partner Sasol. This is critical during the operational phase of the Service Station component of the project.**

**Looking at the rate of unemployment and poverty in this rural area, it is apparent that the option of not implementing this activity will be devastating to this rural poverty stricken community. Furthermore, there is an opportunity for the project to contribute in stimulating the entire economy of Umzimkhulu. The no go option may therefore not be in the interest of the society in the total scheme of things looking at it from social, economic and environmental perspectives.**

**This development is in line with the strategic intent of the Municipality as reflected in the Municipal Spatial Development Framework and the municipal integrated development plan.**

***Therefore in terms of alternative sites there will be no further discussion in this regard as per the above mentioned reasons.***

Sections B 5 – 15 below should be completed for each alternative.

1. **Activity POSITION**

Indicate the position of the activity using the latitude and longitude of the centre point of the site for each alternative site. The co-ordinates should be in degrees, minutes and seconds. List alternative sites were applicable.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Alternative:** | **Latitude (S):** | | | **Longitude (E):** | | |
| Alternative S1[[1]](#footnote-2) (preferred or only site alternative) | 29o | 56‘ | 251“ | 30o | 15‘ | 562“ |
| Alternative S2 (if any) | o | ‘ | “ | o | ‘ | “ |
| Alternative S3 (if any) | o | ‘ | “ | o | ‘ | “ |

**In the case of linear activities:**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Alternative:** | **Latitude (S):** | | | **Longitude (E):** | | |
| Alternative S1 (preferred or only route alternative) |  |  |  |  |  |  |
| * Starting point of the activity | o | ‘ | “ | o | ‘ | “ |
| * Middle point of the activity | o | ‘ | “ | o | ‘ | “ |
| * End point of the activity | o | ‘ | “ | o | ‘ | “ |
| Alternative S2 (if any) |  |  | “ |  |  | “ |
| * Starting point of the activity | o | ‘ | “ | o | ‘ | “ |
| * Middle point of the activity | o | ‘ | “ | o | ‘ | “ |
| * End point of the activity | o | ‘ | “ | o | ‘ | “ |
| Alternative S3 (if any) |  |  | “ |  |  | “ |
| * Starting point of the activity | o | ‘ | “ | o | ‘ | “ |
| * Middle point of the activity | o | ‘ | “ | o | ‘ | “ |
| * End point of the activity | o | ‘ | “ | o | ‘ | “ |

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

1. **Physical size of the activity**

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

|  |  |  |
| --- | --- | --- |
| **Alternative:** |  | **Size of the activity:** |
| Alternative A1[[2]](#footnote-3) (preferred activity alternative) |  | 53 436 m2 |
| Alternative A2 (if any) |  | m2 |
| Alternative A3 (if any) |  | m2 |

or, for linear activities:

|  |  |  |
| --- | --- | --- |
| **Alternative:** |  | **Length of the activity:** |
| Alternative A1 (preferred activity alternative) |  | m |
| Alternative A2 (if any) |  | m |
| Alternative A3 (if any) |  | m |

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

|  |  |  |
| --- | --- | --- |
| **Alternative:** |  | **Size of the site/servitude:** |
| Alternative A1 (preferred activity alternative) |  | m2 |
| Alternative A2 (if any) |  | m2 |
| Alternative A3 (if any) |  | m2 |

1. **Site Access**

|  |  |  |  |
| --- | --- | --- | --- |
| Does ready access to the site exist? | YES | NO | |
| If NO, what is the distance over which a new access road will be built | m | | |
| Describe the type of access road planned: |  | |  |
| The entrance will be off Raymond Mhlaba Road, one of the main roads traversing through the town of Umzimkhulu. This report will also be sent to the Department of Transport for their input around issues pertaining to traffic and entrances. | | | |

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

**See attached map showing the shopping and related structures complex site with a road running adjacent to the site to be developed - Appendix A (1), A (2) and A (3).**

1. SITE OR ROUTE PLAN

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

The site or route plans must indicate the following:

* 1. the scale of the plan which must be at least a scale of 1:500;
  2. the property boundaries and numbers/ erf/ farm numbers of all adjoining properties of the site;
  3. the current land use as well as the land use zoning of each of the properties adjoining the site or sites; **The site is located in an area that is zoned as active open space adjacent to the retail shops and a taxi rank. The site has a small portion that was reportedly used as an airstrip previously. The site is also bordered by Umzimkhulu River at a distance of over 500 metres.**
  4. the exact position of each element of the application as well as any other structures on the site;
  5. the position of services, including electricity supply cables (indicates above or underground), water supply pipelines, boreholes, street lights, sewage pipelines, storm water infrastructure and telecommunication infrastructure;
  6. walls and fencing including details of the height and construction material; **The site is currently not fenced.**
  7. servitudes indicating the purpose of the servitude;
  8. sensitive environmental elements within 100metres of the site or sites including (but not limited thereto): Beyond 100 metres
  + rivers, streams, drainage lines or wetlands;
  + the 1:100 year flood line (where available or where it is required by DWA);
  + ridges;
  + cultural and historical features;
  + areas with indigenous vegetation including protected plant species (even if it is degraded or infested with alien species);
  1. for gentle slopes the 1metre contour intervals must be indicated on the plan and whenever the slope of the site exceeds 1:10, the 500mm contours must be indicated on the plan; and
  2. the positions from where photographs of the site were taken.

1. **Site PHOTOGRAPHS**

Colour photographs from the centre of the site must be taken in at least the eight major compass directions with a description of each photograph. Photographs must be attached under Appendix B to this report**.** It must be supplemented with additional photographs of relevant features on the site, if applicable.

**See attached photographs as Appendix B (1), B (2) and B (3).**

1. **FACILITY ILLUSTRATION**

A detailed illustration of the facility must be provided at a scale of 1:200 and attached to this report as Appendix C. The illustrations must be to scale and must represent a realistic image of the planned activity/ies.

**See attached conceptual layout plan and Illustration depicted as Appendix C (1), C (2), C (3), C (4A), C (4B), and C (5) respectively.**

1. **ACTIVITY MOTIVATION**
   1. **Socio-economic value of the activity**

|  |  |  |
| --- | --- | --- |
| What is the expected capital value of the activity on completion? | R25 million | |
| What is the expected yearly income that will be generated by or as a result of the activity? | R6 million | |
| Will the activity contribute to service infrastructure? | YES | NO |
| Is the activity a public amenity? | YES | NO |
| How many new employment opportunities will be created in the development phase of the activity? | 280 | |
| What is the expected value of the employment opportunities during the development phase? | R250 000 | |
| What percentage of this will accrue to previously disadvantaged individuals? | 100% | |
| How many permanent new employment opportunities will be created during the operational phase of the activity? | 400 | |
| What is the expected current value of the employment opportunities during the first 10 years? | R9 million | |
| What percentage of this will accrue to previously disadvantaged individuals? | 100% | |

* 1. **Need and desirability of the activity**

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

|  |
| --- |
| The facility will stimulate the local economy while providing job opportunities in a country where unemployment rate is above 25%. Approximately 46.6% of the population of Umzimkhulu is unemployed according to the Umzimkhulu Local Municipality IPD, 2013/2014. The article by Tavener-Smith on Umzimkhulu has estimated the unemployment rate even at a much higher rate of 68%. Whatever the discrepancies may be there; but the common denominator is that the unemployment rate is quite high above 40%. It is crucial to note that out of the 46.6% indentified by the Municipality, 56.8% are young people. The project will provide alternative employment opportunities to the local economy characterised mostly by agriculture, tourism, government administrative offices and to an extent retail sector.  The employment opportunities will also be within the vicinity of their homes as opposed to travelling all the way to big cities like Durban and Johannesburg in search of work.  Overall the facility will provide livelihoods to the local people and improve local economic development. The developer has indicated a strong commitment to the upliftment of the locals, as they have incorporated the stall traders currently on site onto the project as part of phase 1.  The whole project will benefit motorists travelling through the town of Umzimkhulu proceeding to towns like Kokstad. The facility will also assist in serving the people travelling to Eastern Cape Province. It is noted that the town of Umzimkhulu is expanding as witnessed by the Mall that has just been built. |

Indicate any benefits that the activity will have for society in general:

Provision of jobs to the people of Umzimkhulu and surroundings, including the stimulation of the area economy.

Indicate any benefits that the activity will have for the local communities where the activity will be located:

The activity will provide jobs within the walking distance, and shorter travelling as opposed to longer distances to big cities. The facility will prove to be a useful facility to the motorists travelling past the town of Umzimkhulu.

1. **Applicable legislation, policies and/or guidelines**

List all legislation, policies and/or guidelines of any sphere of government that are relevant to the application as contemplated in the EIA regulations, if applicable:

|  |  |  |
| --- | --- | --- |
| Title of legislation, policy or guideline: | Administering authority: | Date: |
| National Environmental Management Act  EIA Regulations  Guideline:5 Assessment of Alternatives and Impacts in support of EIA Regulations  The National Water Act  National Environmental Management: Waste Act  KwaZulu-Natal Heritage Act  National Heritage Resources Act  South African Constitution  Promotion of Administrative Justice Act  Occupational Health and Safety Act  The National Road Traffic Act  Petroleum Products Act as amended  Petroleum Products Site and Retail License Regulations | DEA  DEA  DEA  DWA  DEA  Amafa AkwaZulu-Natali  Amafa  RSA  Justice  Department of Labour  Provincial & Local Auth.  Department of Energy  Department of Energy | 1998  2010  2006  1998  2008  2008  1999  1996  2000  1993  1996  1977  2006 |

1. **Waste, effluent, emission and noise management** 
   1. **Solid waste management**

|  |  |  |
| --- | --- | --- |
| Will the activity produce solid construction waste during the construction/initiation phase? | YES | NO |
| If yes, what estimated quantity will be produced per month? | Building packaging papers & waste by employees working on the project. m3 | |
| How will the construction solid waste be disposed of? (describe) |  |  |
| It will be disposed of at the local municipal disposal site / nearest Landfill site, as and when necessary. | | |
| Where will the construction solid waste be disposed of? (provide details of landfill site) |  |  |
| It will be disposed of at the local municipal disposal site / nearest Landfill site, as and when necessary or at least once a week. | | |
| Will the activity produce solid waste during its operational phase? | YES | NO |
| If yes, what estimated quantity will be produced per month? | About 10 tons per monthm3 | |
| How will the solid waste be disposed of? (provide details of landfill site) |  | |
| At the local municipal disposal site collected by the Municipality once a week. | | |
| Where will the solid waste be disposed if it does not feed into a municipal waste stream (describe)? | | |
| At the municipal disposal site / nearest Landfill site, at least once a week. | | |
| If the solid waste (construction or operational phases) will not be disposed of in a registered landfill site or be taken up in a municipal waste stream, then the applicant should consult with the competent authority to determine the further requirements of the application. | | |
| Can any part of the solid waste be classified as hazardous in terms of the relevant legislation? | YES | NO |
| **If yes, contact the KZN Department of Economic Development, Tourism & Environmental Affairs to obtain clarity regarding the process requirements for your application**. | | |
| Is the activity that is being applied for a solid waste handling or treatment facility? | YES | NO |
| **If yes, contact the KZN Department of Economic Development, Tourism & Environmental Affairs to obtain clarity regarding the process requirements for your application.** | | |

* 1. **Liquid effluent**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Will the activity produce effluent, other than normal sewage, that will be disposed of in a municipal sewage system? | | | | YES | NO |
| If yes, what estimated quantity will be produced per month? | | | | m3 | |
| Will the activity produce any effluent that will be treated and/or disposed of on site? | | | | Yes | NO |
| **If yes, contact the KZN Department of Economic Development, Tourism & Environmental Affairs to obtain clarity regarding the process requirements for your application.** | | | | | |
| Will the activity produce effluent that will be treated and/or disposed of at another facility? | | | | YES | NO |
| If yes, provide the particulars of the facility: | | | |  |  |
| Facility name: |  | | | | |
| Contact person: |  | | | | |
| Postal address: |  | | | | |
| Postal code: |  | | | | |
| Telephone: |  | Cell: |  | | |
| E-mail: |  | Fax: |  | | |
| Describe the measures that will be taken to ensure the optimal reuse or recycling of waste water, if any: | | | | | |
| The developer indicated the project’s willingness to explore recycling in future. | | | | | |

**Liquid effluent = Water generated by the proposed car wash facility and that from the forecourt area will be channelled to an appropriately designed sump and separator, and will not enter any stormwater drains or water course as normally emphasised by the Department of Water Affairs. Furthermore the design of the sump will be approved by the Municipality, and will need to be maintained and cleaned in a programmed manner. This will accordingly be captured in the EMPr.**

* 1. **Emissions into the atmosphere**

|  |  |  |
| --- | --- | --- |
| Will the activity release emissions into the atmosphere? | YES | NO |
| If yes, is it controlled by any legislation of any sphere of government? | YES | NO |
| **If yes, contact the KZN Department of Economic Development, Tourism & Environmental Affairs to obtain clarity regarding the process requirements for your application.** |  |  |
| If no, describe the emissions in terms of type and concentration: |  |  |
| No emissions other than vapour from petrol and diesel pumps. Such emission is considered insignificant and negligible. | | |

* 1. **Generation of noise**

|  |  |  |
| --- | --- | --- |
| Will the activity generate noise? | YES | NO |
| If yes, is it controlled by any legislation of any sphere of government? | YES | NO |
| If yes, the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA. |  |  |
| If no, describe the noise in terms of type and level: |  |  |
| No noise will be generated other than the use of the standby generator in case of a power failure. Negligible noise may also come from the industrial workshop. | | |

1. **WATER USE**

Please indicate the source(s) of water that will be used for the activity by ticking the appropriate box(es):

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Municipal  X | water board | groundwater | river, stream, dam or lake | other | the activity will not use water | | |
|  | | | | | | | |
| If water is to be extracted from groundwater, river, stream, dam, lake or any other natural feature, please indicate the volume that will be extracted per month: | | | | | | N/A litres | |
| Does the activity require a water use permit from the Department of Water Affairs? | | | | | | YES | NO |
| If YES, please submit the necessary application to the Department of Water Affairs and attach proof thereof to this report. | | | | | | | |

1. **ENERGY EFFICIENCY**

|  |
| --- |
| Describe the design measures, if any, that have been taken to ensure that the activity is energy efficient: |
| The design for most phases is done by VHB and Associates Architects. The service station design will be provided by Sasol in line with their designs and specifications for the service stations. |
| Describe how alternative energy sources have been taken into account or been built into the design of the activity, if any: |
| The design will be a normal one complying to the set specifications. |

Section C: SITE/area/PROPERTY description

**Important notes:**

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

|  |  |
| --- | --- |
| Section C Copy No. (e.g. A): |  |

* Subsections 1 - 6 below must be completed for each alternative.

1. GRADIENT OF THE SITE

Indicate the general gradient of the site.

Alternative S1:

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

Alternative S2 (if any):

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

Alternative S3 (if any):

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

1. **location in landscape**

Indicate the landform(s) that best describes the site **(Please cross the appropriate box)**.

Alternative S1 (preferred site):

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Ridgeline | Plateau | Side slope of hill/mountain | Closed valley | Open valley | Plain  **X** | Undulating plain/low hills | Dune | Sea-front |

Alternative S2 (if any):

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Ridgeline | Plateau | Side slope of hill/mountain | Closed valley | Open valley | Plain | Undulating plain/low hills | Dune | Sea- front |

Alternative S3 (if any):

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Ridgeline | Plateau | Side slope of hill/mountain | Closed valley | Open valley | Plain | Undulating plain/low hills | Dune | Sea-front |

1. **GroundwateR, Soil and Geological stability of the site**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Has a specialist been consulted for the completion of this section? | | | | | | | | | | YES | | | NO |
| If YES, please complete the following: | | | | | | | | | | | | | |
| Name of the specialist: | | | | | Ground Africa Consulting Geotechnical Engineers – **Signed report attached as Appendix D (1).** | | | | | | | | |
| Qualification(s) of the specialist: | | | | | MIAustCPEng | | | | | | | | |
| Postal address: | | | | | P O Box 926, Eshowe | | | | | | | | |
| Postal code: | | | | | 3815 | | | | | | | | |
| Telephone: | | | (035) 474 7949 | | | Cell: | | | 0768272751 | | | | |
| E-mail: | | | fcvolbrecht@groundafrica.co.za | | | Fax: | | | 0866217160 | | | | |
| Are there any rare or endangered flora or fauna species (including red data species) present on any of the alternative sites? | | | | | | | | | | YES | | | NO |
| If YES, specify and explain: |  | | | | | | | | | | | | |
| Are their any special or sensitive habitats or other natural features present on any of the alternative sites? | | | | | | | | | | YES | | | NO |
| If YES, specify and explain: |  | | | | | | | | | | | | |
| Are any further specialist studies recommended by the specialist? | | | | | | | | | | | YES | NO | |
| If YES, specify: | |  | | | | | | | | | | | |
| If YES, is such a report(s) attached in Appendix D? | | | | | | | | | | | YES | | NO |
|  | | | |  | | |  |  | | | | | |
| Signature of specialist: | | | |  | | | Date: |  | | | | | |

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

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

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

1. **Groundcover**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Has a specialist been consulted for the completion of this section? | | | | | | | | | | YES | | | NO |
| If YES, please complete the following: | | | | | | | | | | | | | |
| Name of the specialist: | | | | |  | | | | | | | | |
| Qualification(s) of the specialist: | | | | |  | | | | | | | | |
| Postal address: | | | | |  | | | | | | | | |
| Postal code: | | | | |  | | | | | | | | |
| Telephone: | | |  | | | Cell: | | |  | | | | |
| E-mail: | | |  | | | Fax: | | |  | | | | |
| Are there any rare or endangered flora or fauna species (including red data species) present on any of the alternative sites? | | | | | | | | | | YES | | | NO |
| If YES, specify and explain: |  | | | | | | | | | | | | |
| Are their any special or sensitive habitats or other natural features present on any of the alternative sites? | | | | | | | | | | YES | | | NO |
| If YES, specify and explain: | There is a strip that was used as airstrip previously in the middle of the site with reeds, but it is not part of the proposed site footprint. | | | | | | | | | | | | |
| Are any further specialist studies recommended by the specialist? | | | | | | | | | | | YES | NO | |
| If YES, specify: | |  | | | | | | | | | | | |
| If YES, is such a report(s) attached in Appendix D? | | | | | | | | | | | YES | | NO |
|  | | | |  | | |  |  | | | | | |
| Signature of specialist: | | | |  | | | Date: |  | | | | | |

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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Natural veld - good conditionE | Natural veld with scattered aliensE | Natural veld with heavy alien infestationE | Veld dominated by alien speciesE | Gardens |
| Sport field | Cultivated land | Paved surface | Building or other structure  X | Bare soil |

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

Expertise available in-house.

1. **Land use character of surrounding area**

Cross the land uses and/or prominent features that currently occur within a 500m radius of the site and give a description of how this influences the application or may be impacted upon by the application:

|  |  |  |  |
| --- | --- | --- | --- |
| Land use character |  |  | Description |
| Natural area | YES | NO |  |
| Low density residential | YES | NO |  |
| Medium density residential | YES | NO |  |
| High density residential | YES | NO |  |
| Informal residential | YES | NO |  |
| Retail commercial & warehousing | YES | NO | No impact foreseen on the nearby shops. |
| Light industrial | YES | NO |  |
| Medium industrial | YES | NO |  |
| Heavy industrial | YES | NO |  |
| Power station | YES | NO |  |
| Office/consulting room | YES | NO |  |
| Military or police base/station/compound | YES | NO | There is a correctional service facility across the road, opposite the site. |
| Spoil heap or slimes dam | YES | NO |  |
| Quarry, sand or borrow pit | YES | NO |  |
| Dam or reservoir | YES | NO |  |
| Hospital/medical centre | YES | NO |  |
| School/ crèche | YES | NO |  |
| Tertiary education facility | YES | NO |  |
| Church | YES | NO |  |
| Old age home | YES | NO |  |
| Sewage treatment plant | YES | NO |  |
| Train station or shunting yard | YES | NO |  |
| Railway line | YES | NO |  |
| Major road (4 lanes or more) | YES | NO |  |
| Airport | YES | NO |  |
| Harbour | YES | NO |  |
| Sport facilities | YES | NO |  |
| Golf course | YES | NO |  |
| Polo fields | YES | NO |  |
| Filling station | YES | NO | There is a Shell filling station at a distance of just over 1000 metres, from where the proposed one will be located. |
| Landfill or waste treatment site | YES | NO |  |
| Plantation | YES | NO |  |
| Agriculture | YES | NO |  |
| River, stream or wetland | YES | NO | Umzimkhulu River is flowing at a distance of over 500 metres north of the site. |
| Nature conservation area | YES | NO |  |
| Mountain, hill or ridge | YES | NO |  |
| Museum | YES | NO |  |
| Historical building | YES | NO |  |
| Protected Area | YES | NO |  |
| Graveyard | YES | NO |  |
| Archaeological site | YES | NO |  |
| Other land uses (describe) | YES | NO | There is a portion of the site that has been reported to have been used as an air strip, but it does not form part of the footprint. |

1. Cultural/Historical Features

|  |  |  |  |
| --- | --- | --- | --- |
| Are there any signs of culturally or historically significant elements, as defined in section 2 of the National Heritage Resources Act, 1999, (Act No. 25 of 1999), including archaeological or palaeontological sites, on or within 20m of the site? | | YES | NO |
| If YES, contact a specialist recommended by AMAFA to conduct a heritage impact assessment. The heritage impact assessment must be attached as an appendix to this report. | | | |
| Briefly explain the recommendations of the specialist: | Amafa comments will be furnished in due course. | | |
| Will any building or structure older than 60 years be affected in any way? | | YES | NO |
| Is it necessary to apply for a permit in terms of the National Heritage Resources Act, 1999 (Act 25 of 1999)? | | YES | NO |
| If YES, please submit the necessary application to AMAFA and attach proof thereof to this report. | | | |

**A Needs & Desirability Application form has been sent to Amafa Kwazulu-Natal for their comments with regard to heritage related issues.**

Section D: public participation

1. ADVERTISEMENT

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

(a) fixing a notice board (of a size at least 60cm by 42cm; and must display the required information in lettering and in a format as may be determined by the competent authority) at a place conspicuous to the public at the boundary or on the fence of—

(i) the site where the activity to which the application relates is or is to be undertaken; and

(ii) any alternative site mentioned in the application;

(b) giving written notice to—

(i) the owner or person in control of that land if the applicant is not the owner or person in control of the land;

(ii) the occupiers of the site where the activity is or is to be undertaken or to any alternative site where the activity is to be undertaken;

(iii) owners and occupiers of land adjacent to the site where the activity is or is to be undertaken or to any alternative site where the activity is to be undertaken;

(iv) the municipal councillor of the ward in which the site or alternative site is situated and any organisation of ratepayers that represent the community in the area;

(v) the local and district municipality which has jurisdiction in the area;

(vi) any organ of state having jurisdiction in respect of any aspect of the activity (as identified in the application form for the environmental authorization of this project); and

(vii) any other party as required by the competent authority;

(c) placing an advertisement in—

(i) one local newspaper; or

(ii) any official *Gazette* that is published specifically for the purpose of providing public notice of applications or other submissions made in terms of these Regulations;

(d) placing an advertisement in at least one provincial newspaper or national newspaper, if the activity has or may have an impact that extends beyond the boundaries of the metropolitan or district municipality in which it is or will be undertaken: Provided that this paragraph need not be complied with if an advertisement has been placed in an official *Gazette* referred to in subregulation54(c)(ii); and

(e) using reasonable alternative methods, as agreed to by the competent authority, in those instances where a person is desiring of but unable to participate in the process due to—

(i) illiteracy;

(ii) disability; or

(iii) any other disadvantage.

**Site notice and newspaper adverts are attached as Appendixes - E (1A), E (1B) and E (2).**

1. **Content of advertisements and notices**

A notice board, advertisement or notices must:

(a) indicate the details of the application which is subjected to public participation; and

(b) state—

(i) that an application for environmental authorization has been submitted to theKZN Department of Economic Development, Tourism & Environmental Affairs in terms of the EIA Regulations, 2010;(ii)

(iii) a brief project description that includes the nature and location of the activity to which the application relates;

(iv) where further information on the application can be obtained; and

1. the manner in which and the person to whom representations in respect of the application may be made.

**Adverts and Notices as highlighted above.**

1. **Placement of advertisements and notices**

Where the proposed activity may have impacts that extend beyond the municipal area where it is located, a notice must be placed in at least one provincial newspaper or national newspaper, indicating that an application will be submitted to the competent authority in terms of these regulations, the nature and location of the activity, where further information on the proposed activity can be obtained and the manner in which representations in respect of the application can be made, unless a notice has been placed in any *Gazette* that is published specifically for the purpose of providing notice to the public of applications made in terms of the EIA regulations.

Advertisements and notices must make provision for all alternatives.

1. Determination of appropriate process

The EAP must ensure that the public participation process is according to that prescribed in regulation 54 of the EIA Regulations, 2010, but may deviate from the requirements of sub regulation 54(2) in the manner agreed by the KZN Department of Economic Development, Tourism & Environmental Affairs as appropriate for this application. Special attention should be given to the involvement of local community structures such as Ward Committees, ratepayers associations and traditional authorities where appropriate.

Please note that public concerns that emerge at a later stage that should have been addressed may cause the competent authority to withdraw any authorisation it may have issued if it becomes apparent that the public participation process was inadequate.

See attached public meeting minutes [Appendix E (3A)].

1. Comments and response report

The practitioner must record all comments and respond to each comment of the public before this application is submitted. The comments and responses must be captured in a comments and response report as prescribed in the EIA regulations (regulation 57 in the EIA Regulations, 2010) and be attached as Appendix E to this report.

Comments and responses report will be attached as Appendix E (14), once all the comments have been received.

1. PARTICIPATION BY DISTRICT, LOCAL AND TRADITIONAL AUTHORITIES

District, local and traditional authorities (where applicable) are all key interested and affected parties in each application and no decision on any application will be made before the relevant local authority is provided with the opportunity to give input. The planning and the environmental sections of the local authority must be informed of this application and provided with an opportunity to comment.

|  |  |  |
| --- | --- | --- |
| Has any comment been received from the district municipality? | YES | NO |
| If “YES”, briefly describe the feedback below (also attach any correspondence to and from this authority with regard to this application): | | |
| The report has been sent to Harry Gwala District Municipality for comments regarding the proposed development, and the provision of services like water, electricity and so forth - Appendix E (4).. | | |

|  |  |  |
| --- | --- | --- |
| Has any comment been received from the local municipality? | YES | NO |
| If “YES”, briefly describe the feedback below (also attach any correspondence to and from this authority with regard to this application): | | |
| No objection from the local municipality. See comments attached as Appendix E (5). | | |

|  |  |  |
| --- | --- | --- |
| Has any comment been received from a traditional authority? | YES | NO |
| If “YES”, briefly describe the feedback below (also attach any correspondence to and from this authority with regard to this application): | | |
| The traditional authority has no jurisdiction over the project site. | | |

1. **CONSULTATION WITH OTHER STAKEHOLDERS**

Any stakeholder that has a direct interest in the site or property, such as servitude holders and service providers, should be informed of the application and be provided with the opportunity to comment.

|  |  |  |
| --- | --- | --- |
| Has any comment been received from stakeholders? | YES | NO |
| If “YES”, briefly describe the feedback below (also attach copies of any correspondence to and from the stakeholders to this application): | | |
| The comments will be captured as they are received.  Department of Energy  The Department of Energy has indicated that they will process the application for retail and site licenses once the Environmental Authorisation has been issued.    Amafa  Amafa comments are still awaited - Appendix E (6).    Ezemvelo KZN Wildlife  Ezemvelo KZN Wildlife comments are still awaited - Appendix E (7).    Agriculture, Forestry & Fisheries  The Department of Agriculture, Forestry & Fisheries comments are still awaited - Appendix E (8).  Water Affairs  Water Affairs – comments are still awaited - Appendix E (9).  KZN Department of Transport  Comments are still awaited. - Appendix E (10)  Local Total and Shell Service Stations  The owner of Total Garage, Mr Malanda formally objected to the service station component of the project. Mr Malanda’s objection is based on economic factors and his belief that the proposed service station will pose an unhealthy completion to the filling stations within Umzimkhulu. He submitted a formal documentation in this regard. See attached a submission that includes a written objection, the article by Kieran Tavener-Smith and Environmental Conservation Act extracts (first pages attached) as Appendix E (11).  Mr Nondabula of Shell Service Station also registered his objection verbally to the EAP. This was followed by the e-mail (Appendix E 12). Mr Nondabula’s objection is also based on economic factors and competition deemed detrimental to his business; like that one of Mr Malanda. He is objecting to the service station component of the project.  Traders on site Erf 152  As indicated above the site is currently having traders who are using the building that is currently on site for trading. These traders will be moved to another better spot in line with phase 1 of the project (see Appendix C (2), in this regard). Most of their comments are captured under the minutes of the public meeting attached as Appendix E (13). They were in favour of the proposed development. | | |

Section E: Impact Assessment

The assessment of impacts must adhere to the requirements in the EIA Regulations, 2010, and should take applicable official guidelines into account. The issues raised by interested and affected parties should also be addressed in the assessment of impacts.

1. **Issues raised by interested and affected parties**

List the main issues raised by interested and affected parties.

|  |  |
| --- | --- |
| Comments from interested and affected stakeholders will be captured as they are received. No comments were received from the advert published in Fever Newspaper dated 20 February 2014. |  |

Response from the practitioner to the issues raised by the interested and affected parties (A full response must be given in the Comments and Response Report that must be attached as Appendix E to this report):

|  |  |
| --- | --- |
| A comments and response report will be attached to this main report as - Appendix E (14).  **See attached register of affected and interested parties as Appendix E (15).** |  |

1. **Impacts that may result fRom the planning and design, CONSTRUCTION, OPERATIONAL, DECOMMISSIONING AND CLOSURE phaseS AS WELL AS PROPOSED MANAGEMENT OF identifiedIMPACTS AND PROPOSED mitigation measures**
   1. **Impacts that may result fRom the planning and design phase**
2. **Site alternatives**

List the potential impacts associated with site alternatives that are likely to occur during the planning and design phase:

|  |
| --- |
| **Alternative S1 (preferred alternative)** |
| ***Direct impacts: Increased traffic flow in the vicinity of the site, as technicians descend on the site for various technical assessments e.g. geotechnicians, environmentalists and other technicians / specialists.***  ***Indirect impacts: None***  ***Cumulative impacts: None*** |
| **Alternative S2 (if any)** |
| ***Direct impacts: No alternative site 2***  ***Indirect impacts:***  ***Cumulative impacts:*** |
| **No-go alternative (compulsory)**  The no-go option is defined as an option of not undertaking the proposed activity and its inherent alternatives. This option is not considered appropriate because of its social negative impacts in this instance. The unemployed will lose out in terms of potential job opportunities that are likely to be created by this development. |
| ***Direct impacts: Loss of job opportunities***  ***Indirect impacts: Unemployment***  ***Cumulative impacts: Poverty*** |

Indicate mitigation measures to manage the potential impacts listed above:

|  |  |
| --- | --- |
| **Alternative S1** | **Alternative S2** |
| The technicians working on sites must be sensitized about possible environmental impacts in order to be considerate when working on site. Technicians can arrange their visits to coincide with off peak weekday flows as opposed to peak hour flows (morning & afternoon).  The project must ensure sustainable development in balancing social and environmental aspects. |  |

1. **Process, technology, layout or other alternatives**

List the impacts associated with any process, technology, layout or other alternatives that are likely to occur during the planning and design phase (please list impacts associated with each alternative separately):

|  |
| --- |
| **Alternative A1 (preferred alternative)** |
| ***Direct impacts:***Use of surveying equipment which includes continuous walking over the site. Surveying marks e.g. danger tapes on the landscape. Trial holes dug by geotechnicians when assessing geology and hydrology of the site which may cause erosion or injury if not back filled immediately. This includes the general trenching, and cordoning off with danger tape.  ***Indirect impacts: None***  ***Cumulative impacts: None*** |
| **Alternative A2 (if any)** |
| ***Direct impacts:***  ***Indirect impacts:***  ***Cumulative impacts:*** |

|  |
| --- |
| **No-go alternative (compulsory)** |
| ***Direct impacts: Deprivation of the local people of potential job opportunities.***  ***Indirect impacts: Unemployment***  ***Cumulative impacts: Poverty*** |

Indicate mitigation measures to manage the potential impacts listed above:

|  |  |
| --- | --- |
| **Alternative A1:** | **Alternative A2:** |
| Create environmental awareness to the technicians.  The project must stick to the principles of sustainable development. |  |

* 1. **Impacts that may result fRom the CONSTRUCTION phase**
  2. **Site alternatives**

List the potential impacts associated with site alternatives that are likely to occur during the construction phase:

|  |
| --- |
| **Alternative S1 (preferred site)** |
| ***Direct impacts: Safeguard against soil erosion & contamination by materials [cement, oils, paint, fuels], dust, solid waste (e.g. few papers & waste by employees), human excrement.***  ***Indirect impacts: Noise by [machinery, employees, cars] due to construction activities.***  ***Cumulative impacts: Traffic (movement of construction vehicles – short term).*** |
| **Alternative S2 (if any) No alternative site.** |
| ***Direct impacts:***  ***Indirect impacts:***  ***Cumulative impacts:*** |
| **No-go alternative (compulsory)** |
| ***Direct impacts: Loss of jobs***  ***Indirect impacts: Unemployment***  ***Cumulative impacts: Poverty*** |

Indicate mitigation measures to manage the potential impacts listed above:

|  |  |
| --- | --- |
| **Alternative S1** | **Alternative S2** |
| ***The project must safeguard against soil erosion by controlling earthworks and backfilling as soon as possible where appropriate, and all materials must be under the roofed structure, and no machinery must be repaired on site. Paving and grass planting on site is crucial to reduce water velocity. The construction site must be sprayed with water to reduce the impact of dust. Refuse bags, drums, and 240 bins must be provided on site to put solid waste to be disposed at the nearest landfill site at least once per week. Hired toilets must be provided on site for human waste.***  ***Environmental awareness. Construction to take place during the day and not at night and on Sundays. General environmental awareness must be created to all people working on the project to ensure proper appreciation of environmental sensitivity.***  ***Movement of construction vehicles must be restricted to 40 km per hour, and must operate during the day. The vehicles must be marked accordingly, and points people deployed accordingly on site.***  ***The access roads will be from Raymond Mhlaba street.***  ***The project will stick to the principles of sustainable development.*** |  |

* 1. **Process, technology, layout or other alternatives**

List the impacts associated with process, technology, layout or other alternatives that are likely to occur during the construction phase (please list impacts associated with each alternative separately):

|  |
| --- |
| **Alternative A1 (preferred alternative)** |
| ***Direct impacts: Soil disturbance due to the use of earth moving heavy machinery during construction.***  ***Indirect impacts: Noise and nuisance to the passersby and neighbouring properties.***  ***Cumulative impacts: None*** |

|  |
| --- |
| **Alternative A2No alternative site.** |
| ***Direct impacts:***  ***Indirect impacts:***  ***Cumulative impacts:*** |
| **No-go alternative (compulsory)** |
| ***Direct impacts: Loss of job opportunities***  ***Indirect impacts: Unemployment***  ***Cumulative impacts: Poverty*** |

Indicate mitigation measures to manage the potential impacts listed above:

|  |  |
| --- | --- |
| **Alternative A1:** | **Alternative A2:** |
| Proper compaction of the soil to stabilize it. The operators must be sensitized about the importance of the environment. It is important that backfilling must be done as soon as possible where appropriate to avoid erosion, bare soil and accidents.  The neighbouring properties need to be informed about the construction in advance to gear themselves for the inconvenience associated with construction and heavy machinery. The project will adopt the principles of sustainable development. |  |

* 1. **Impacts that may result fRom the operational phase**

1. **Site alternatives**

List the potential impacts associated with site alternatives that are likely to occur during the operational phase:

|  |
| --- |
| **Alternative S1 (preferred alternative)** |
| ***Direct impacts: Solid waste that will be generated during the operational phase. Possible soil contamination by spillage. Accidental spillage from bouwsers. Soil erosion due to water flow on site. Wash water. Invader species due to earthworks during construction. Noise from light industrial workshops.***  ***Indirect impacts: Traffic and pedestrians congestion (delivery vehicles & customers).***  ***Cumulative impacts: Minimal increase in traffic volume*** |
| **Alternative S2 (if any) No alternative site.** |
| ***Direct impacts:***  ***Indirect impacts:***  ***Cumulative impacts:*** |
| **No-go alternative (compulsory)** |
| ***Direct impacts: Loss of job opportunities***  ***Indirect impacts: Unemployment***  ***Cumulative impacts: Poverty*** |

Indicate mitigation measures to manage the potential impacts listed above:

|  |  |
| --- | --- |
| **Alternative S1** | **Alternative S2** |
| The facility has to provide 240 litre bins on site to be emptied and collected by the municipality at least once a week to be disposed at the municipal disposal site.  Safety measures and EMPr will clearly spell out steps to be followed in case of a spillage that may stem from either the tanks or bowsers. The complex will ensure proper storm water linkages to the existing ones. The water flow from the site will be accordingly directed to storm water channel in line with the Municipality’s advice. The washwater will be channelled appropriately to the sump as detailed in the EMPr.  The project has to try and use less noisy equipment for the light industrial workshops.  All invader species that were on site prior to construction or caused by earthworks will be removed from the site, and proper site landscaping done comprising of plants and grass as ground cover.  The project will adopt the principles of sustainable development in that it will always consider social and environmental aspects. |  |

1. **Process, technology, layout or other alternatives**

List the impacts associated with process, technology, layout or other alternatives that are likely to occur during the operational phase (please list impacts associated with each alternative separately):

|  |
| --- |
| **Alternative A1 (preferred alternative)** |
| ***Direct impacts: The envisaged technology used for the washing of cars. The channelling of wastewater and water from the forecourt. Noise for equipment used in the workshops.***  ***Indirect impacts: None***  ***Cumulative impacts: Wastewater*** |
| **Alternative A2No alternative site.** |
| ***Direct impacts:***  ***Indirect impacts:***  ***Cumulative impacts:*** |
| **No-go alternative (compulsory)** |
| ***Direct impacts: Deprive people of economic spin offs***  ***Indirect impacts: Unemployment***  ***Cumulative impacts: Poverty*** |

Indicate mitigation measures to manage the potential impacts listed above:

|  |  |
| --- | --- |
| **Alternative A1** | **Alternative A2** |
| The technology to be used for car washing will ensure the proper channelling of grey water. The facility will be roofed and paved, with water directed to a suitably designed and constructed concrete oil separation sump. The sump will be cleaned regularly and serviced accordingly. |  |

* 1. **Impacts that may result from the decomissioning or closure phase**

1. **Site alternatives**

List the potential impacts associated with site alternatives that are likely to occur during the decommissioning or closure phase:

|  |
| --- |
| **Alternative S1 (preferred alternative)** |
| ***Direct impacts: The removal of underground tanks can result in soil disturbance. Possibility of abandoned materials lying around, as well as dilapidated structures.***  ***Indirect impacts: Soil erosion, and eye sore.***  ***Cumulative impacts: Possibility of contaminated soil.*** |
| **Alternative S2No alternative site** |
| ***Direct impacts:***  ***Indirect impacts:***  ***Cumulative impacts:*** |

|  |
| --- |
| **No-go alternative (compulsory)** |
| ***Direct impacts: Deprivation of job opportunities***  ***Indirect impacts: Unemployment***  ***Cumulative impacts: Poverty*** |

Indicate mitigation measures to manage the potential impacts listed above:

|  |  |
| --- | --- |
| **Alternative S1** | **Alternative S2** |
| The removal of underground storage tanks need to be done under the supervision of the environmentalist following a legal framework if the service station is decommissioned. The site has to be cordoned off.  Soil will have to be backfilled immediately after the removal of storage tanks. The soil must not be left bare hence the need to plant vegetation. The premises need to be cleaned and the site fully rehabilitated under the supervision of an environmentalist.  Samples to be taken to the laboratory for analysis, and any contaminated soil need to be taken to the landfill site for disposal. The project must adopt the principles of sustainable development in all its facets. |  |

* + 1. **Process, technology, layout or other alternatives**

List the impacts associated with process, technology, layout or other alternatives that are likely to occur during the decommissioning or closure phase (please list impacts associated with each alternative separately):

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| --- |
| **Alternative A1 (preferred alternative)** |
| ***Direct impacts:***  ***Indirect impacts:***  ***Cumulative impacts:*** |
| **Alternative A2No alternative site.** |
| ***Direct impacts: Soil disturbance during storage tanks removal. Pollution and contamination.***  ***Indirect impacts: Soil erosion, and pollution from tanks.***  ***Cumulative impacts: Noise*** |
| **No-go alternative (compulsory) No alternative site.** |
| ***Direct impacts: Deprive the community of the economic spin offs from the facility.***  ***Indirect impacts: Unemployment***  ***Cumulative impacts: Poverty*** |

Indicate mitigation measures to manage the potential impacts listed above:

|  |  |
| --- | --- |
| **Alternative A1** | **Alternative A2** |
| Decommissioning must be done within the legal framework, under the supervision of an environmentalist.  Any signs of soil erosion must be addressed during and after the decommissioning phase. The process must be carried out ensuring minimum noise.  The tanks must have no fuel during removal and must be degassed.  The project will adopt a cradle to grave approach in terms of environmental responsibilities. |  |

* 1. **Proposed MONITORING and auditing**

For each phase of the project and for each alternative, please indicate how identified impacts and mitigation will be monitored and/or audited.

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| --- | --- |
| **Alternative S1 (preferred site)** | **Alternative S2** |
| Planning and design – Technicians need to be sensitized about the environment. Environment must form part of all planning. This must be done by the project environmentalist.  Construction - prior to construction the environmental control officer must take all the workers through a crash course on the importance of the environment, and explain the conditions of the environmental authorization. EMPr must also be explained to all project workers. Project monitoring must be done by the environmental control officer during construction.  Operational phase – Feza Family Trust has an obligation to monitor the project during its operational phase as per the conditions of environmental authorisation. The authorisation would normally state that monitoring by the applicant is a lifetime obligation.  Closure / decommissioning – If the project especially the service station is decommissioned the developer will have to apply to the Department of Economic Development, Tourism and Environmental Affairs to ensure that the process is done within the legal framework. |  |

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| --- | --- |
| **Alternative A1 (preferred alternative)** | **Alternative A2** |
| No alternative site. |  |

1. **Environmental impact statement**

Taking the assessment of potential impacts into account, please provide an environmental impact statement that summarises the impact that the proposed activity and its alternatives may have on the environment after the management and mitigation of impacts have been taken into account, with specific reference to types of impact, duration of impacts, likelihood of potential impacts actually occurring and the significance of impacts.

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| **Alternative S1 (preferred site)** |
| |  |  |  |  | | --- | --- | --- | --- | | **Type** | **Likelihood** | **Duration** | **Significance** | | Overcrowding and congestion (technicians during planning phase) | Probable | Short-term | Insignificant and localised | | Visual impact on the landscape (danger tapes & survey markers, digging and assessments by technicians during planning phase) | Probable | Short-term | Insignificant (localised) | | Soil erosion & contamination by materials like cement, oils, paint and fuels (construction phase) | Probable | Short- term | Of no significance, EMPr addresses this. | | Dust (construction phase) | Probable | Short- term | Insignificant, can be mitigated by wet suppression (watering) during the construction phase. | | Solid waste (construction phase) | Probable | short -term | Low and insignificant but need to be taken to the municipal disposal site / nearest landfill site at least once a week. | | Spillage / concrete and incidents (construction phase) | Probable | Short -term | Low and significant, any accidental spillage and contamination has to be corrected as outlined in the EMPr. | | Human excrement (construction phase) | Probable | Short- term | Significant for the site in relation to hygiene. Hired toilets need to be provided on site and maintained properly. | | Noise (construction phase) | Probable | Short term | Insignificant and localised. | | Traffic (construction phase) | Probable | Short term | Controlled in line with the EMPr. | | Soil and groundcover disturbance due to heavy machinery during earthworks (construction phase) | Probable | Short-term | Significant, landscaping crucial after construction. | | Solid Waste (Operational phase) | Probable | Long--term | Low significance, municipal weekly service to the nearest landfill site. | | Soil contamination by spillage (Operational phase) | Probable | Long- term | Low significance, covered by EMPr. | | Soil contamination from bowsers (Operational phase) | Probable | Long-term | Low significance, covered by EMPr, and Regulatory measures. | | Soil erosion due to water flow (Operational phase) | Probable | Long- term | Significant, but will be covered by landscaping, link to the existing stormwater channel and EMPr. | | Washwater (Operational phase) | Probable | Long- term | Significant, but covered by the EMPr. | | Invader species (Operational phase) | Probable | Short-term | Low significance, all invader plants on site will be eradicated and replaced with indigenous species where appropriate. | | Traffic [vehicles & pedestrians](Operational phase) | Probable | Permanent | The Department of Transport will advise, and this will be incorporated into the EMPr. | | Spillage and incidents (Operational phase) | Probable | Long- term | Significant, but the impact is highly regulated by the industry and government as reflected in the EMPr. | | Dust and pollution (Operational phase) | Probable | Long- term | Insignificant, always check leakages, supervise fuel delivery and ensure paving / landscaping as per EMPr | | Noise from light industrial workshops | Probable | Long-term | Low to significant depending on the equipment used. Environmental Health to measure the noise level acceptable under the circumstances. | | Visual impact (Operational phase) | Probable | Permanent | Low significance as the structure is within the urban area. | | Removal of underground tanks (decommissioning) | Improbable | Short-term | Significant, and need close monitoring | | Soil disturbance during tanks removal (decommissioning) | Improbable | Short-term | Insignificant, immediate backfilling and the necessary degassing to avoid pollution and contamination. | | Abandoned materials, stock and residual impacts, including dilapidated structures | Probable | Short-term | Insignificant. Everything must be removed on site, and site fully rehabilitated. | |
| **Alternative S2** |
| **No alternative site.** |
| **Alternative A1 (preferred alternative)** |
|  |
| **Alternative A2** |
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| --- |
| **No-go alternative (compulsory)** |
| **The no-go option is not recommended for this project if viewed against the identified environmental impacts. The no-go option will deprive the community of economic and social benefits, and perpetuate the unemployment that is already rife in the area. The environmental concerns on site can be mitigated.** |

SECTION F. Recommendation of EAP

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| --- | --- | --- |
| Is the information contained in this report and the documentation attached hereto in the view of the EAP sufficient to make a decision in respect of this report? | YES | NO |
| If “NO”, please contact the KZN Department of Economic Development, Tourism & Environmental Affairs regarding the further requirements for your report. |  |  |

If “YES”, please attach the draft EMPr as Appendix F to this report and list any recommended conditions, including mitigation measures that should be considered for inclusion in any authorisation that may be granted by the competent authority in respect of the application:

|  |  |
| --- | --- |
| **Description of any assumptions, uncertainties and gaps in knowledge**  The issue of safeguarding underground water resources and soil contamination is well documented and taken care of in legislation and relevant Codes of Practice by both government and the petroleum industry. Any accidental spillage has to be reported and properly investigated to avoid the recurrence. The result of investigation informs the future improvement in terms of knowledge base.  The light industrial workshop will have to safeguard against high noise levels. The Municipality has to measure and determine acceptable noise levels.  **Reasoned opinion as to whether the activity should or should not be authorised, and if the opinion is that it should be authorised, any conditions that should be made in respect of that authorisation**  The Geotechnical report concluded that the site where the service station is going to be located and some retail structures is geotecnically favourable, while the other portion that will accommodate the workshop and main shopping centre is geotechnically challenging. The latter will require heightened structural and civil design inputs to ensure long term integrity of the planned buildings.  The proposed development has to safeguard against the ground water contamination and soil contamination. The fact that no groundwater was intersected in all trial holes excavated on site provides evidence of slim chances of water table contamination.Groundcover and landscaping will be important on site to ensure that there is no soil erosion and water velocity is reduced.  It is therefore our view that the outcome of the development will outweigh the impacts imparted by it. The development as such is important within the context of improving the socio economic situation of the local communities nearby, and also that of the Umzimkhulu area, by providing and creating sustainable employment to a larger group of people.  It is our opinion that the overall development is likely to pass a sustainability test, providing economic and employment opportunities. The implementation of the mitigation measures outlined in this report and the EMPr are likely to provide a setting for the development to take place in a sustainable manner. Our overall analysis is that this activity must be authorized.  ***(i) A summary of the key findings of the environmental impact assessment***  Geotechnically the area is favourable with some sections that may need engineering / structural and civil design inputs. The site seems to offer sufficient sight lines in either direction to permit safe ingress and egress.  ***(ii) A comparative assessment of the positive and negative implications of the proposed activity and identified alternatives***  *Positive implications of the activity*  The positive implications evolve around jobs and business opportunities for the local people and the community. The geotechnical report has not declared the site problematic from the geological perspective. The project will uplift the lives of several poor people who are unemployed within the Umzimkhulu area.  *Negative implications of the activity*  Projects of this nature always pose a threat to our groundwater, and danger of soil contamination in case of an uncontrolled spillage. There is a possibility of a slight traffic increase in the vicinity of the project site, compared to the current conditions. The local filling stations perceive the proposed development; the service station component in particular as a threat to their businesses.  The noise levels from the light industrial workshops has to be monitored so that it does not become excessive, ultimately becoming a nuisance.  *Comparative analysis*  The area of Umzimkhulu in particular is characterized by high unemployment rate as evidenced by both Kieran Tevener-Smith article and Umzimkhulu Local Municipality’s 2013/2014 IDP. The high unemployment rate is normally associated with crime. This is one of the main concerns of the South African government, and that of Umzimkhulu Local Municipality as articulated in its strategic documents. This development will go a long away in alleviating poverty in the area.  On the other hand the environmental impacts that have been identified can be mitigated. The soil contamination and groundwater in case of an accidental spillage can be mitigated by following both the safety plan and EMPr to the last detail. The monitoring of noise levels will have to be done on an ongoing basis. The proper landscaping will assist in ensuring groundcover, and the reduction of water flow.  In the final analysis, social, economic and environmental factors must be weighed against the mitigatory mechanisms available in terms of legislation, and take everything together for a balanced and well thought decision. Overall the identified impacts are controllable and can be mitigated as long as the monitoring function is ongoing and effective. The recommendations of the geotechnical study and the EMPr will be very crucial during all phases of the project. The Basic Assessment therefore concludes with a recommendation for approval with strong adherence to the EMPr and specialists reports. The EMPr will guide all environment related issues during all phases of the project from planning, construction and operational phase.  The draft Environmental Management Programme is attached as Appendix F. |  |

Section G: Appendixes

The following appendixes must be attached as appropriate:

Appendix A: Site plan(s)

Appendix B: Photographs

Appendix C: Facility illustration(s)

Appendix D: Specialist reports

Appendix E: Comments and responses report

Appendix F: Draft Environmental Management Programme (EMPr)

Appendix G: Other information

1. “Alternative S..” refer to site alternatives. [↑](#footnote-ref-2)
2. “Alternative A..” refer to activity, process, technology or other alternatives. [↑](#footnote-ref-3)