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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 Agriculture & 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 Agriculture & 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 Agriculture & 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): | DC29/0038/2012 |
| 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: | **Siyazama Consulting** |
| Physical address: | **15 Acacia Avenue, Westville** |
| Postal address: | **P.O.Box 400** |
| Postal code: | **3630** | **Cell:** | **084 2067882** |
| Telephone: | **031 9401208** | **Fax:** | **031 2667005** |
| E-mail: | **mikew@siyaconsulting.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) |
| **Mike Webster** | **M. Sc (UCT)** |  | **8 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  |
| **Frans Prins** |  | **Heritage Impact Assessments** | **Heritage Impact Assessment Report** |  |
| **Alex Whitehead** | **B Sc (HONS)** | **Wetlands and Ecological Assessments** | **Wetland Delineation and Functionality Report** |  |
|  |  |  |  |  |

Section B: Activity information

1. **PROJECT TITLE**

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

|  |
| --- |
| The Proposed Sewer Line for Groutville “D” – Phase 1A Njekane to Kwadukuza STW |

1. **PROJECT DESCRIPTION**

Provide a detailed description of the project:

|  |
| --- |
| The proposed development will provide areas within the iLembe District Municipality with water born sewage disposal. Various pipelines and pump stations will be constructed across the region. It is estimated that once fully operational this infrastructure will serve 129 000 people that are urgently in need of formal sanitationPhase 1 A is the main sewer line from Njekane to the Kwadukuza STW. Stage 1 is the southern section which includes the pump station at Njekane, the siphon under the Nonoti river and the sewer line to a pump station at Gledhow  Stage 2 is the sewer line from Gledhow to the Kwadukuza STW to the northThe pipeline will start at the Njekane pump station (290 30’ 05” S  310 16’ 52” E) and end at the Kwadukusa STW (290 20’ 17” S   310 18’ 25” E)It will cross the mVoti river via the piers of the old railway bridge (290 22’ 50” S 310 17’ 00” E), and cross a number of minor perennial streams (no name) enroute to the STW by means of a trench that will excavated, the pipe laid and backfilled. |

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:

|  |  |  |
| --- | --- | --- |
| GNR 544 of June 2010 | 9 | The construction of infrastructure approximately 7 kilometres in length for the bulk transportation of sewage with an internal diameter varying between 400 and 675mm outside an urban area. |
|  | 11 | The construction of infrastructure or structures covering 50m2 or more where such construction occurs within a watercourse or within 32 metres of a watercourse (crossing the mVoti river and tributaries of the mBozamo stream). |
|  | 18 | The infilling or depositing of any material of more than 5m3 into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock from watercourse (the mVoti river and tributaries of the mBozamo stream). |

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.

EAP note : Engineering considerations dictate the route of the pipeline and for practical reasons the route also tends to follow cadastral property boundaries. It is only in exceptional circumstances where for example the route can accommodate the existence of an important natural or cultural asset that this would be taken into account – this is the case with this route where the pipeline deviates from the preferred route to accommodate a buffer around the Luthuli monument and Indian graveyard that are the subject of a specialist report, refer to Section 5.

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-1) (preferred or only site alternative) | o | ‘ | “ | o | ‘ | “ |
| 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
 | 29o | 30‘ | 05“ | 31o | 16‘ | 52“ |
| * Middle point of the activity
 | 29o | 21‘ | 40“ | 31o | 17‘ | 50“ |
| * End point of the activity
 | 29o | 20‘ | 17“ | 31o | 18‘ | 25“ |
| 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.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Start 29o | 30‘ | 05“ | 31o | 16‘ | 52“ |
| 29o | 22‘ | 50“ | 31o | 17‘ | 00“ |
| 29o | 22‘ | 29“ | 31o | 17‘ | 02“ |
| 29o | 22‘ | 14“ | 31o | 17‘ | 29“ |
| 29o | 21‘ | 44“ | 31o | 17‘ | 52“ |
| 29o | 21‘ | 14“ | 31o | 18‘ | 05“ |
| 29o | 20‘ | 49“ | 31o | 18‘ | 27“ |
| 29o | 20‘ | 28“ | 31o | 18‘ | 40“ |
| End (STW) 29o | 20‘ | 17“ | 31o | 18‘ | 25“ |

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-2) (preferred activity alternative) |  | 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) | Pipeline route | 7000m |
| 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 |  |
| If NO, what is the distance over which a new access road will be built  | m |
| Describe the type of access road planned: |  |  |
| Existing roads and sugar cane tracks will be utilized |

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.

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;
	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 (indicate 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;
	7. servitudes indicating the purpose of the servitude;
	8. sensitive environmental elements within 100 metres of the site or sites including (but not limited thereto):
	+ 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 1 metre contour intervals must be indicated on the plan and whenever the slope of the site exceeds 1:10, the 500mm contours must be indicated on the plan; 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.

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.

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

|  |  |
| --- | --- |
| What is the expected capital value of the activity on completion? | R41 million |
| What is the expected yearly income that will be generated by or as a result of the activity? | R n/a |
| Will the activity contribute to service infrastructure? | YES |  |
| Is the activity a public amenity? |  | NO |
| How many new employment opportunities will be created in the development phase of the activity? |  |
| What is the expected value of the employment opportunities during the development phase? | R |
| What percentage of this will accrue to previously disadvantaged individuals? | % |
| How many permanent new employment opportunities will be created during the operational phase of the activity? | 2 |
| What is the expected current value of the employment opportunities during the first 10 years? | R |
| What percentage of this will accrue to previously disadvantaged individuals? | % |

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

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

|  |
| --- |
| The proposed development is part of a larger project to provide areas within the iLembe District Municipality with a water born sewage system, more specifically houses built in Groutville “D” will be connected to this system and can thus be occupied. |

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

The proposed development is part of a larger project to provide areas within the iLembe District Municipality with a water born sewage system, more specifically houses built in Groutville “D” will be connected to this system and can thus be occupied.

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

The proposed development is part of a larger project to provide areas within the iLembe District Municipality with a water born sewage system, more specifically houses built in Groutville “D” will be connected to this system and can thus be occupied.

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: |
| Environmental Conservation ActNational Environmental Management Act and Regulations The Cultural Heritage ActThe National Water ActIlembe IDP | KZN DAEAKZN DAEAAMAFADWAIlembe municipality | 19891998, 2006 and 201019981998latest |

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

|  |  |  |
| --- | --- | --- |
| Will the activity produce solid construction waste during the construction/initiation phase? | YES |  |
| If yes, what estimated quantity will be produced per month? | 10m3 |
| How will the construction solid waste be disposed of? (describe) |  |  |
| All solid waste to be removed to the closest registered landfill site |
| Where will the construction solid waste be disposed of? (provide details of landfill site) |  |  |
| Kwadakusa |
| Will the activity produce solid waste during its operational phase? |  | NO |
| If yes, what estimated quantity will be produced per month? | m3 |
| How will the solid waste be disposed of? (provide details of landfill site) |  |
|  |
| Where will the solid waste be disposed if it does not feed into a municipal waste stream (describe)? |
|  |
| 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? |  | NO |
| **If yes, contact the KZN Department of Agriculture & 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 Agriculture & 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? |  | 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? |  | NO |
| **If yes, contact the KZN Department of Agriculture & 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? |  | 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: |
|  |

* 1. **Emissions into the atmosphere**

|  |  |  |
| --- | --- | --- |
| Will the activity release emissions into the atmosphere? |  | NO |
| If yes, is it controlled by any legislation of any sphere of government? |  | NO |
| **If yes, contact the KZN Department of Agriculture & Environmental Affairs to obtain clarity regarding the process requirements for your application.** |  |  |
| If no, describe the emissions in terms of type and concentration: |  |  |
|  |

* 1. **Generation of noise**

|  |  |  |
| --- | --- | --- |
| Will the activity generate noise? |  | NO |
| If yes, is it controlled by any legislation of any sphere of government? |  | 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: |  |  |
|  |

1. **WATER USE**

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

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Municipal\* | water board | groundwater | river, stream, dam or lake | other | the activity will not use water |
|  |
| If water is to be extracted from groundwater, river, stream, dam, lake or any other natural feature, please indicate the volume that will be extracted per month: | litres |
| Does the activity require a water use permit from the Department of Water Affairs? |  | 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: |
| n/a |
| Describe how alternative energy sources have been taken into account or been built into the design of the activity, if any: |
| n/a |

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 | 1:50 – 1:20 | 1:20 – 1:15 \* | 1:15 – 1:10 | 1:10 – 1:7, | 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 | 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? |  | 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? |  | 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 |  |
| If YES, specify and explain: | The route crosses a number of perennial drainage lines and wetlands but it is highly infested with aliens and surrounded by sugar cane fields |
| Are any further specialist studies recommended by the specialist? |  | 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) |  | NO |  | YES | NO |  | YES | NO |
| Dolomite, sinkhole or doline areas |  | NO |  | YES | NO |  | YES | NO |
| Seasonally wet soils (often close to water bodies) | YES |  |  | YES | NO |  | YES | NO |
| Unstable rocky slopes or steep slopes with loose soil |  | NO |  | YES | NO |  | YES | NO |
| Dispersive soils (soils that dissolve in water) |  | NO |  | YES | NO |  | YES | NO |
| Soils with high clay content (clay fraction more than 40%) |  | NO |  | YES | NO |  | YES | NO |
| Any other unstable soil or geological feature |  | NO |  | YES | NO |  | YES | NO |
| An area sensitive to erosion |  | 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? |  | 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? |  | 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 |  |
| If YES, specify and explain: | The route crosses a number of perennial drainage lines and wetlands but it is highly infested with aliens and surrounded by sugar cane fields |
| Are any further specialist studies recommended by the specialist? |  | 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 | 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.

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 |  | Riverine and wetland environments |
| Low density residential |  | NO |  |
| Medium density residential | YES |  | Settlement to the north of the mVoti river (portions 0 of 77,78,79,80,81 Charlottedale) |
| High density residential |  | NO |  |
| Informal residential |  | NO |  |
| Retail commercial & warehousing |  | NO |  |
| Light industrial |  | NO |  |
| Medium industrial |  | NO |  |
| Heavy industrial | YES |  | Gledhow Sugar Mill  |
| Power station |  | NO |  |
| Office/consulting room |  | NO |  |
| Military or police base/station/compound |  | NO |  |
| Spoil heap or slimes dam |  | NO |  |
| Quarry, sand or borrow pit |  | NO |  |
| Dam or reservoir | YES |  | Dam on the Mbozama stream |
| Hospital/medical centre |  | NO |  |
| School/ creche |  | NO |  |
| Tertiary education facility |  | NO |  |
| Church |  | NO |  |
| Old age home |  | NO |  |
| Sewage treatment plant | YES |  | Pipeline ends at Kwadukuza STW |
| Train station or shunting yard |  | NO |  |
| Railway line | YES |  | Route passes close to railway line |
| Major road (4 lanes or more) |  | NO |  |
| Airport |  | NO |  |
| Harbour |  | NO |  |
| Sport facilities |  | NO |  |
| Golf course |  | NO |  |
| Polo fields  |  | NO |  |
| Filling station |  | NO |  |
| Landfill or waste treatment site |  | NO |  |
| Plantation |  | NO |  |
| Agriculture | YES |  | Extensive sugar cane fields |
| River, stream or wetland | YES |  | Route passes through riverine and wetland environments |
| Nature conservation area |  | NO |  |
| Mountain, hill or ridge |  | NO |  |
| Museum |  | NO |  |
| Historical building |  | NO |  |
| Protected Area |  | NO |  |
| Graveyard | YES |  | A 20m buffer has been proposed between the graveyard and the buried pipeline. An HIA practitioner has been appointed to determine any possible detrimental impacts and to recommend any possible mitigation required |
| Archaeological site |  | YES | Albert Luthuli memorial on old railway bridge pier – the pipeline has been diverted around the memorial to prevent any disturbance during construction (20m). An HIA practitioner has been appointed to determine any possible detrimental impacts and to recommend any possible mitigation required |
| Other land uses (describe) |  | NO |  |

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? |  | 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: |  |
| Will any building or structure older than 60 years be affected in any way? |  | NO |
| Is it necessary to apply for a permit in terms of the National Heritage Resources Act, 1999 (Act 25 of 1999)? |  | NO |
| If YES, please submit the necessary application to AMAFA and attach proof thereof to this report. |

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 subregulation 54(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.

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 the KZN Department of Agriculture & 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.
2. **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 subregulation 54(2) in the manner agreed by the KZN Department of Agriculture & 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.

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.

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? |  | NO |
| If “YES”, briefly describe the feedback below (also attach any correspondence to and from this authority with regard to this application): |
| The District Municipality is the client and are thus proposing this development |

|  |  |  |
| --- | --- | --- |
| Has any comment been received from the local municipality? |  | NO |
| If “YES”, briefly describe the feedback below (also attach any correspondence to and from this authority with regard to this application): |
|  |

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

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 |  |
| If “YES”, briefly describe the feedback below (also attach copies of any correspondence to and from the stakeholders to this application): |
| KZN DAEA undertook a site visit with EAP and determined that a basic assessment process be followed. DWA want management of all waste, storm water, erosion, spills etc controlled via the EMP, they request sensitive areas to be identified, floodlines and wetlands to be identified and a geotechnical investigationEzemvelo requested the draft BA report are forwarded to them for comment Amafa requested that a HIA is undertaken and a specialist has been appointed |

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.

|  |
| --- |
| KZN DAEA noted that the route traverses water course and that this should be taken into account during constructionDWA want management of all waste, storm water, erosion, spills etc controlled via the EMP, they request sensitive areas to be identified, floodlines and wetlands to be identified and a geotechnical investigation |

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):

|  |
| --- |
| Construction methods, mitigations measures etc are covered in the EMPr attachedSimilarly all waste management issues are covered in the EMPrStreams were noted on the route (hence the need for this basic assessment) and the protection measures associated with this feature are included in the EMPrGeotechnical investigation –??If required more detailed geotechnical investigations will be undertaken during the design phase, but no fatal flaws are anticipatedFloodlines – no floodline exists for the minor drainage line alone the stream route, the floodline for the mVoti river has been calculated and is included on the diagram of the river crossing in Appendix A??) |

1. **Impacts that may result fRom the planning and design, CONSTRUCTION, OPERATIONAL, DECOMMISSIONING AND CLOSURE phaseS AS WELL AS PROPOSED MANAGEMENT OF identified IMPACTS AND PROPOSED mitigation measures**
	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: survey of the route will disturb a limited amount of vegetation******Indirect impacts: n/a******Cumulative impacts: n/a*** |
| **Alternative S2 (if any)** |
| ***Direct impacts:******Indirect impacts:******Cumulative impacts:*** |
| **No-go alternative (compulsory)** |
| ***Direct impacts: n/a******Indirect impacts: n/a******Cumulative impacts: n/a*** |

Indicate mitigation measures to manage the potential impacts listed above:

|  |  |
| --- | --- |
| **Alternative S1** | **Alternative S2** |
|  |  |

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: n/a******Indirect impacts: n/a******Cumulative impacts: n/a*** |
| **Alternative A2 (if any)** |
| ***Direct impacts:******Indirect impacts:******Cumulative impacts:*** |

|  |
| --- |
| **No-go alternative (compulsory)** |
| ***Direct impacts: n/a******Indirect impacts: n/a******Cumulative impacts: n/a*** |

Indicate mitigation measures to manage the potential impacts listed above:

|  |  |
| --- | --- |
| **Alternative A1:** | **Alternative A2:** |
|  |  |

* 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: Increased vehicles, dust and noise, disruption of agricultural activities in a narrow corridor along the route. Siltation and disruption of flow to the streams******Possible disturbance of important heritage sites – In the EMP it will be stated that under no circumstances must they be disturbed, they must be cordoned off and construction staff must be specifically informed that no entrance to these sites by persons, vehicles or material is permitted******Indirect impacts: some potential local employment and customers to local businesses******Cumulative impacts: As this is part of a larger water born sewage disposal project, the cumulative effect of all the components will be a better regional sewage disposal network*** |
| **Alternative S2 (if any)** |
| ***Direct impacts:******Indirect impacts:******Cumulative impacts:*** |
| **No-go alternative (compulsory)** |
| ***Direct impacts: no disturbance******Indirect impacts: n/a******Cumulative impacts: n/a*** |

Indicate mitigation measures to manage the potential impacts listed above:

|  |  |
| --- | --- |
| **Alternative S1** | **Alternative S2** |
| The EMPr should manage the above impacts |  |

* 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: n/a******Indirect impacts: n/a******Cumulative impacts: n/a*** |

|  |
| --- |
| **Alternative A2** |
| ***Direct impacts:******Indirect impacts:******Cumulative impacts:*** |
| **No-go alternative (compulsory)** |
| ***Direct impacts: n/a******Indirect impacts: n/a******Cumulative impacts: n/a*** |

Indicate mitigation measures to manage the potential impacts listed above:

|  |  |
| --- | --- |
| **Alternative A1:** | **Alternative A2:** |
|  |  |

* 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: better sewage disposal to the local area******Indirect impacts: better quality of life for inhabitants, increased potential for development******Cumulative impacts: n/a*** |
| **Alternative S2 (if any)** |
| ***Direct impacts:******Indirect impacts:******Cumulative impacts:*** |
| **No-go alternative (compulsory)** |
| ***Direct impacts: no improvement to sewage disposal to the local area******Indirect impacts: no increase in potential for development, new build houses cannot be occupied******Cumulative impacts:*** |

Indicate mitigation measures to manage the potential impacts listed above:

|  |  |
| --- | --- |
| **Alternative S1** | **Alternative S2** |
|  |  |

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: n/a******Indirect impacts: n/a******Cumulative impacts: n/a*** |
| **Alternative A2** |
| ***Direct impacts:******Indirect impacts:******Cumulative impacts:*** |
| **No-go alternative (compulsory)** |
| ***Direct impacts: n/a******Indirect impacts: n/a******Cumulative impacts: n/a*** |

Indicate mitigation measures to manage the potential impacts listed above:

|  |  |
| --- | --- |
| **Alternative A1** | **Alternative A2** |
|  |  |

* 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: n/a******Indirect impacts: n/a******Cumulative impacts: n/a*** |
| **Alternative S2** |
| ***Direct impacts:******Indirect impacts:******Cumulative impacts:*** |

|  |
| --- |
| **No-go alternative (compulsory)** |
| ***Direct impacts: n/a******Indirect impacts: n/a******Cumulative impacts: n/a*** |

Indicate mitigation measures to manage the potential impacts listed above:

|  |  |
| --- | --- |
| **Alternative S1** | **Alternative S2** |
|  |  |

* + 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):

|  |
| --- |
| **Alternative A1 (preferred alternative)** |
| ***Direct impacts: n/a******Indirect impacts: n/a******Cumulative impacts: n/a*** |
| **Alternative A2** |
| ***Direct impacts:******Indirect impacts:******Cumulative impacts:*** |
| **No-go alternative (compulsory)** |
| ***Direct impacts: n/a******Indirect impacts: n/a******Cumulative impacts: n/a*** |

Indicate mitigation measures to manage the potential impacts listed above:

|  |  |
| --- | --- |
| **Alternative A1** | **Alternative A2** |
|  |  |

* 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.

|  |  |
| --- | --- |
| **Alternative S1 (preferred site)** | **Alternative S2** |
| An ECO should be appointed to monitor compliance with the EMPr during construction |  |

|  |  |
| --- | --- |
| **Alternative A1 (preferred alternative)** | **Alternative A2** |
|  |  |

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.

|  |
| --- |
| **Alternative S1 (preferred site)** |
| **The proposed project will have a positive impact on the lives of the local inhabitants by providing an upgraded sewage disposal system, any negative impacts (which will only be present during construction) can be mitigated against if properly managed****Note : there will be no lost to agricultural production as once the pipe is buried the farmers can re-establish their crops****The possibility of a sewage spill exists if the pipe gets damaged or the pumps fail but this can be mitigated against and is still preferable to the existing onsite sewage disposal method with is unsustainable and preventing newly built houses from being occupied**  |
| **Alternative S2** |
|  |
| **Alternative A1 (preferred alternative)** |
|  |
| **Alternative A2** |
|  |

|  |
| --- |
| **No-go alternative (compulsory)** |
| ***If the proposed project is not approved it will not be possible to upgrade the sewage disposal system for the local inhabitants*** |

SECTION F. Recommendation of EAP

|  |  |  |
| --- | --- | --- |
| 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 |  |
| If “NO”, please contact the KZN Department of Agriculture & 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:

|  |
| --- |
| It is recommended by the EAP that the attached EMPr is make a condition of the environmental authorization granted by DAEA and that a ECO be appointed to monitor the construction phaseIt is further recommended that the heritage sites close to the route are clearly demarcated and classed as out of bounds to the contractors during the construction phase  |

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

Appendix A: Site plans

Appendix A1 :General Route Plan

Appendix A2 – Detailed mVoti river crossing

Appendix A3 – Detailed Section at Luthuli Monument

Appendix A3 – Detailed Section at Graveyard Showing Pump Station

Appendix B: Photographs

Appendix C: Facility illustration(s)

Engineering Sketch of Scour Protection of Pipe under the mVoti river

Appendix D: Specialist reports

Appendix D1: Heritage Impact Assessment Report

Appendix D2 : Wetland Delineation and Functionality Report

Appendix E: Comments and responses report

Appendix E1 : Summary of comments received

|  |  |  |
| --- | --- | --- |
| **Organisation** | **Comment** | **EAP Response** |
| KZN DAEA (refer to Appendix E1.1) | Site visit confirmed the need to undertake a basic assessment process | BA process initiated, EIA ref DC29/0019/2012  |
| DWA (refer to Appendix E1.2) – response to BID  | 1. Management of waste | Only an issue during construction, dealt with in the EMPr |
| Dated 28 January 2013 | 2. ID of sensitive areas | Noted, the route crosses mVoti river and environs and a number of drainage lines |
|  | 3. Storm water management | Only an issue during construction, dealt with in the EMPr |
|  | 4. Sewage and waste water management – type of toilets for construction workeds | Only an issue during construction, dealt with in the EMPr – portable chemical toilets will be used during construction |
|  | 5. Floodlines | No floodline exists for the minor drainage line alone the stream route, but the floodline for the mVoti has been calculated and included ont eh river crossing diagram in Appendix A |
|  | 6. Spill contingency plan | Only an issue during construction, dealt with in the EMPr |
|  | 7. Erosion control measures | Only an issue during construction, dealt with in the EMPr |
|  | 8. Management and location of storage areas | Only an issue during construction, dealt with in the EMPr |
|  | 9. Geotechnical investigation | If required more detailed geotechnical investigations will be undertaken during the design phase, but no fatal flaws are anticipated |
|  | 10. Environmental Management Plan (sic) | Draft EMPr attached, refer to Appendix F |
|  | 11. Removal of indigenous trees needs to be authorised by DAFF | Noted |
| Ezemvelo KZN Wildlife (refer to Appendix E1.3) | Acknoledged receipt of BID | EAP to forward draft BA report for comment |

Appendix E1.1 – KZN DAEA

Appendix E1.2 - DWA

Appendix E1.3 – Ezemvelo KZN Wildlife

Appendix E2: List of IAPS sent registered notices

Appendix E3: Background Information Document

Appendix E4: Table of Affected landowners and Landowner consent forms

Appendix E5 : Adverts and Site Notices

Appendix F: Draft Environmental Management Programme (EMPr)

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