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Department:
**Rural, Environment and Agricultural
Development**
North West Provincial Government
REPUBLIC OF SOUTH AFRICA



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(For official use only)

File Reference Number:

Application Number:

Date Received:

Basic assessment report in terms of the Environmental Impact Assessment Regulations, 2010, promulgated in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended.

Kindly note that:

1. This **basic assessment report** is a standard report that may be required by a competent authority in terms of the EIA Regulations, 2010 and is meant to streamline applications. Please make sure that it is the report used by the particular competent authority for the activity that is being applied for.
2. This report format is current as of **1 July 2014**. It is the responsibility of the applicant to ascertain whether subsequent versions of the form have been published or produced by the competent authority
3. The report must be typed within the spaces provided in the form. The size of the spaces provided is not necessarily indicative of the amount of information to be provided. The report is in the form of a table that can extend itself as each space is filled with typing.
4. Where applicable **tick** the boxes that are applicable in the report.
5. An incomplete report may be returned to the applicant for revision.
6. The use of "not applicable" in the report must be done with circumspection because if it is used in respect of material information that is required by the competent authority for assessing the application, it may result in the rejection of the application as provided for in the regulations.
7. This report must be handed in at offices of the relevant competent authority as determined by each authority.
8. No faxed or e-mailed reports will be accepted.
9. The signature of the EAP on the report must be an original signature.
10. The report must be compiled by an independent environmental assessment practitioner.
11. Unless protected by law, all information in the report will become public information on receipt by the competent authority. Any interested and affected party should be provided with the information contained in this report on request, during any stage of the application process.
12. A competent authority may require that for specified types of activities in defined situations only parts of this report need to be completed.
13. Should a specialist report or report on a specialised process be submitted at any stage for any part of this application, the terms of reference for such report must also be submitted.
14. Two (2) colour hard copies and one (1) electronic copy of the report must be submitted to the competent authority.

15. Shape files (.shp) for maps must be included on the electronic copy of the report submitted to the competent authority.

SECTION A: ACTIVITY INFORMATION

Has a specialist been consulted to assist with the completion of this section?

YES	NO X
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If YES, please complete the form entitled "Details of specialist and declaration of interest" for the specialist appointed and attach in Appendix I.

1. PROJECT DESCRIPTION

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

The existing Boitekong Waste Water Treatment Works (WWTW) is an 8Mℓ/d Biological Nutrient Removing (BNR) plant. It needs to be upgraded by 10Mℓ/d to an 18Mℓ/d BNR plant. The upgrades will consist of the following:

- Improved inlet works;
- The addition of a new biological reactor;
- Two secondary sedimentation tanks;
- Enlarged chlorination facility with chlorine contact tanks;
- Debottlenecking of the existing plant by the addition of a satellite reactor;
- All associated pipework and pumps as well as mechanical and electrical equipment;
- Mechanical sludge dewatering equipment and drying slab.

The total extension of the plant will occur within the perimeter fence of the existing facility and no additional or new land will be required to implement this project. The motivation for the project is the fact that the design capacity of 8Mℓ/d of the plant is regularly exceeded by up to 40Mℓ/d resulting in substandard effluent being released into the Hex River and consequently the Bospoort Dam from where water is abstracted for treatment and domestic use.

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

Listed activity as described in GN R.544, 545 and 546	Description of project activity
Example: GN R.544 Item 11(3): The construction of a bridge where such construction occurs within a watercourse or within 32 metres of a watercourse, measured from the edge of a watercourse, excluding where such construction will occur behind the development setback line.	A bridge measuring 5 m in height and 10m in length, no wider than 8 meters will be built over the Crocodile river
GN R.544 Item 28: <i>The expansion of existing facilities for any process or activity where such expansion will result in the need for a new, or amendment of, an existing permit or license in terms of national or provisional legislation governing the release of emissions or pollution, excluding where the facility, process or activity is included in the list of waste management activities published in terms of section 19 of the National Environmental Management: Waste Act, 2008, in which case that</i>	The existing Boitekong Waste Water Treatment Works is an 8Mℓ/d biological nutrient removing plant that needs to be upgraded by 10Mℓ/d to an 18Mℓ/d BNR plant. The upgrade will also necessitate a new application for a Waster Use License as the current license has since expired.

2. FEASIBLE AND REASONABLE ALTERNATIVES

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

- (a) the property on which or location where it is proposed to undertake the activity;
- (b) the type of activity to be undertaken;
- (c) the design or layout of the activity;
- (d) the technology to be used in the activity;
- (e) the operational aspects of the activity; and
- (f) the option of not implementing the activity.

Describe alternatives that are considered in this application as required by Regulation 22(2)(h) of GN R.543. Alternatives should include a consideration of all possible means by which the purpose and need of the proposed activity (NOT PROJECT) could be accomplished in the specific instance taking account of the interest of the applicant in the activity. The no-go alternative must in all cases be included in the assessment phase as the baseline against which the impacts of the other alternatives are assessed.

The determination of whether site or activity (including different processes, etc.) or both is appropriate needs to be informed by the specific circumstances of the activity and its environment. After receipt of this report the, competent authority may also request the applicant to assess additional alternatives that could possibly accomplish the purpose and need of the proposed activity if it is clear that realistic alternatives have not been considered to a reasonable extent.

The identification of alternatives should be in line with the Integrated Environmental Assessment Guideline Series 11, published by the DEA in 2004. Should the alternatives include different locations and lay-outs, the co-ordinates of the different alternatives must be provided. The co-ordinates should be in degrees, minutes and seconds. The projection that must be used in all cases is the WGS84 spheroid in a national or local projection.

See Appendix J1 for a) – e).

a) Site alternatives

Alternative 1 (preferred alternative)		
Description	Lat (DDMMSS)	Long (DDMMSS)
Remaining Portion 170 of Paardekraal 279 JQ, Portion 23 of Paardekraal 279 JQ zoned as Agricultural.	25°35'53.88"	27°17'51.78"
Alternative 2		
Description	Lat (DDMMSS)	Long (DDMMSS)
None.		
Alternative 3		
Description	Lat (DDMMSS)	Long (DDMMSS)
None.		

In the case of linear activities:

Alternative:

Latitude (S):

Longitude (E):

Alternative S1 (preferred)

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

Alternative S2 (if any)

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

Alternative S3 (if any)

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

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

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

b) Lay-out alternatives

Alternative 1 (preferred alternative)		
Description	Lat (DDMMSS)	Long (DDMMSS)
See attached Appendix J1		
Alternative 2		
Description	Lat (DDMMSS)	Long (DDMMSS)
Alternative 3		
Description	Lat (DDMMSS)	Long (DDMMSS)

c) Technology alternatives

Alternative 1 (preferred alternative)
See attached Appendix J1
Alternative 2

Alternative 3

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

Alternative 1 (preferred alternative)		
See attached Appendix J1		
Alternative 2		
Alternative 3		

e) No-go alternative

See attached Appendix J1

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

3. PHYSICAL SIZE OF THE ACTIVITY

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

Alternative:

Size of the activity:

Alternative A1¹ (preferred activity alternative)

The internal fence will be moved to include an additional 4,100m ² which remains within the larger footprint of the works.
m ²
m ²

Alternative A2 (if any)

Alternative A3 (if any)

or, for linear activities:

Alternative:

Length of the activity:

Alternative A1 (preferred activity alternative)

	m
	m
	m

Alternative A2 (if any)

Alternative A3 (if any)

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

b) 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)

	m ²
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Alternative A2 (if any)

	m ²
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Alternative A3 (if any)

	m ²
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4. SITE ACCESS

Does ready access to the site exist?

YES	NO
x	

If NO, what is the distance over which a new access road will be built

	m
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Describe the type of access road planned:

N/A

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

5. LOCALITY MAP

An A3 locality map must be attached to the back of this document, as Appendix A. The scale of the locality map must be relevant to the size of the development (at least 1:50 000. For linear activities of more than 25 kilometres, a smaller scale e.g. 1:250 000 can be used. The scale must be indicated on the map.). The map must indicate the following:

- an accurate indication of the project site position as well as the positions of the alternative sites, if any;
- indication of all the alternatives identified;
- closest town(s);
- the accurate indication of the site in relation to closest protected environments or national parks (i.e. within 2.5 km)

- road access from all major roads in the area;
- road names or numbers of all major roads as well as the roads that provide access to the site(s);
- all roads within a 1km radius of the site or alternative sites; and
- a north arrow;
- a legend; and
- locality GPS co-ordinates (Indicate the position of the activity using the latitude and longitude of the centre point of the site for each alternative site. The co-ordinates should be in degrees and decimal minutes. The minutes should have at least three decimals to ensure adequate accuracy. The projection that must be used in all cases is the WGS84 spheroid in a national or local projection).

6. LAYOUT/ROUTE PLAN

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

The site or route plans must indicate the following:

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

7. SENSITIVITY MAP

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

- watercourses;
- the 1:100 year flood line (where available or where it is required by DWA);
- ridges;
- 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
- cultural and historical features;
- areas with indigenous vegetation (even if it is degraded or infested with alien species); and
- critical biodiversity areas and ecological support area.
- protected areas (e.g Magaliesberg Protected Environment, Pilanesberg National Park etc.)

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

8. SITE PHOTOGRAPHS

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

9. FACILITY ILLUSTRATION

A detailed illustration of the activity must be provided at a scale of at least 1:200 as Appendix C for activities that include structures. The illustrations must be to scale and must represent a realistic image of the planned activity. The illustration must give a representative view of the activity.

10. ACTIVITY MOTIVATION

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

1. Is the activity permitted in terms of the property's existing land use rights?	YES X	NO	Please explain
This activity is an upgrade and/or expansion of an existing facility or infrastructure in order to increase its capacity.			
2. Will the activity be in line with the following?			
(a) Provincial Spatial Development Framework (PSDF)	YES X	NO	Please explain
The largest backlog when it comes to water services, including sanitation remains in the Rustenburg municipality (approximately 10 000 households), amongst other municipalities. (Bojanala Platinum District Municipality (IDP) - 2012-2017 Final Version). The upgrade of the Boitekong Waste Water Treatment falls within the district's wide objectives relating to sustainable water services to provide basic water and sanitation infrastructure to all communities in order to eradicate the backlog.			
(b) Urban edge / Edge of Built environment for the area	YES X	NO	Please explain
This activity is an upgrade and/or expansion of an existing facility or infrastructure, therefore the Urban edge or edge of built environment of the area will remain the same.			
(c) Integrated Development Plan (IDP) and Spatial Development Framework (SDF) of the Local Municipality (e.g. would the approval of this application compromise the integrity of the existing approved and credible municipal IDP and SDF?).	YES	NO X	Please explain
Most of the wards within the Rustenburg Local Municipality raised concerns regarding the sewer systems that are leaking / blocked during the Mayoral Imbizos (IDP review 2014-15). The motivation for the project is the fact that the design capacity of 8Mℓ/d of the plant is regularly exceeded by up to 40Mℓ/d resulting in substandard effluent being released into the Hex River and consequently the Bospoort Dam from where water is abstracted for treatment and domestic use.			

(d) Approved Structure Plan of the Municipality	YES X	NO	Please explain
The Rustenburg Water Services Trust is a municipal entity that was established to assist with water services in the Rustenburg Local Municipality's area (RUSTENBURG LOCAL MUNICIPALITY City Development Strategy (July 2006)). The Rustenburg Water Services Trust is the main applicant for this project, so the expansion and upgrade is within the approved structure plan of the municipality.			
(e) An Environmental Management Framework (EMF) adopted by the Department (e.g. Would the approval of this application compromise the integrity of the existing environmental management priorities for the area and if so, can it be justified in terms of sustainability considerations?)	YES X	NO	Please explain
The upgrade of the Boitekong Waste Water Treatment falls within the district's wide objectives relating to sustainable water services to provide basic water and sanitation infrastructure to all communities in order to eradicate the backlog.			
(f) Any other Plans (e.g. Guide Plan)	YES X	NO	Please explain
The Rustenburg Water Services Trust is a municipal entity that was established to assist with water services in the Rustenburg Local Municipality's area. The trust will also, in addition, reduce the whole area's dependency on Rand Water supplies by providing 28Mℓ/day of purified sewage effluent to the mines for use in industrial processes which currently obtain their supplies from Rand Water. The wastewater system, similar to the water system, consists of a bulk system and an internal system both of these systems are the property of Rustenburg Local Municipality. (RUSTENBURG LOCAL MUNICIPALITY City Development Strategy (July 2006)). The IMPLEMENTATION OF THE NATIONAL STRATEGY FOR RAPIDLY GROWING AREAS IN RUSTENBURG, 2013 assigns budgeted items for the upgrade of the WWTW within its jurisdiction. A development principle of the BOITEKONG PRECINCT PLAN, 2012 is to facilitate efficient service provision and land utilization.			
3. Is the land use (associated with the activity being applied for) considered within the timeframe intended by the existing approved SDF agreed to by the relevant environmental authority (i.e. is the proposed development in line with the projects and programmes identified as priorities within the credible IDP)?	YES X	NO	Please explain
The SDF states that "The potential daily requirements and potential wastewater effluents (M_/day) is summarized in Table 10.4. This information indicates that should all land earmarked for the different purposes on the local Spatial Development Framework should be fully developed, and applying the assumptions outlined above, the total additional water requirement per day would be approximately 242 M_ and the estimated wastewater effluent an additional 166 M_ per day. The vast majority of these requirements would emanate from Rustenburg, Boitekong and Phokeng cluster, accounting for more than 70% of the additional daily demand and effluent. The other most notable inputs would emanate from the Tlaseng cluster, the Chaneng/Robega cluster and the Marikana/Rooskopies cluster. Although it is highly unlikely that all areas earmarked for the respective land uses in the local Spatial Development Frameworks would be fully developed, it is necessary to quantify and contextualize the natural resource requirements in terms of water use and wastewater effluent. Hence, the functionality of the WWTW's is seen as a key component of achieving the development goals of the current SDF.			

4. Does the community/area need the activity and the associated land use concerned (is it a societal priority)? (This refers to the strategic as well as local level (e.g. development is a national priority, but within a specific local context it could be inappropriate.)	YES X	NO	Please explain
The upgrading of the Boitekong WWTW will ensure effective effluent treatment which is released into the Hex River. Compliant effluent will help maintain the ecological function & integrity of this system and reduce treatment costs of raw water supply from Bospoort Water Treatment Works, into which the Hex River flows.			
5. Are the necessary services with adequate capacity currently available (at the time of application), or must additional capacity be created to cater for the development? (Confirmation by the relevant Municipality in this regard must be attached to the final Basic Assessment Report as Appendix I.)	YES	NO X	Please explain
This application is for the approval to add the capacity of the Boitekong Waste Water Treatment Works, which is currently under-capacity and is struggling to cope with episodic spikes.			
6. Is this development provided for in the infrastructure planning of the municipality, and if not what will the implication be on the infrastructure planning of the municipality (priority and placement of services and opportunity costs)? (Comment by the relevant Municipality in this regard must be attached to the final Basic Assessment Report as Appendix I.)	YES X	NO	Please explain
This application is for the approval to add to the capacity of the Boitekong Waste Water Treatment Works, which is a key infrastructural requirement for the area for the municipality to be able to deliver effective services to the area.			
7. Is this project part of a national programme to address an issue of national concern or importance?	YES X	NO	Please explain
The Rustenburg City Development Strategy (CDS) describes and meets the objectives of The South African Cities Network (SACN). The Rustenburg area is generally recognized as one of the fastest growing cities in South Africa, both from a population and economic growth perspective. Economic and population growth rates of Rustenburg has been well in excess of the National and North West Provincial average rates over the last decade. The Rustenburg LM has thus identified the need to prepare a City Development Strategy (CDS) which aims to integrate and streamline these plans to complement each other towards a common long term development vision. The envisioned Rustenburg City Development Strategy is thus seen by the Rustenburg LM as an instrument to present a platform of equal and competitive economic growth opportunities; address the spatial inefficiencies such as urban sprawl, low density and uneven distribution of infrastructure, and the development of roads, railways and other engineering infrastructure to create livable residential and working environments. The CDS must thus instill confidence that RLM has a clear long term road map for the development of the city and identify a collaborative development framework for this long term development vision. The upgrading of the Boitekong WWTW will be providing the municipality with additional sanitation infrastructure capacity.			
8. Do location factors favour this land use (associated with the activity applied for) at this place? (This relates to the contextualisation of the proposed land use on this site within its broader context.)	YES X	NO	Please explain
This activity is an upgrade and/or expansion of an existing facility or infrastructure, the location of which has proved favourable to the purpose.			

9. Is the development the best practicable environmental option for this land/site?	YES X	NO	Please explain
Several other options have been considered for the upgrading and increased capacity of the WWTW, and the current option was deemed most suitable following a due diligence by the appointed consulting engineers. The details of the comparative options are included under the Alternatives Assessment in Appendix J1.			
10. Will the benefits of the proposed land use/development outweigh the negative impacts of it?	YES X	NO	Please explain
The upgrading of the Boitekong WWTW will ensure effective effluent treatment which is released into the Hex River. Compliant effluent will help maintain the ecological function & integrity of this system and reduce treatment costs of raw water supply from Bospoort Water Treatment Works, into which the Hex River flows.			
11. Will the proposed land use/development set a precedent for similar activities in the area (local municipality)?	YES	NO X	Please explain
Waste Water Treatment is an ongoing and essential aspect of municipal management and this activity is simply an upgrade and/or expansion of an existing facility or infrastructure. It does however encourage forward planning of municipal infrastructure to ensure that they can effectively service growing communities.			
12. Will any person's rights be negatively affected by the proposed activity/ies?	YES	NO X	Please explain
The upgrading of the Boitekong WWTW will ensure effective effluent treatment which is released into the Hex River, further increasing the broader community's access to safe water resources.			
13. Will the proposed activity/ies compromise the "urban edge" as defined by the local municipality?	YES	NO X	Please explain
The WWTW is currently located outside the delineated Urban Edge according to the SDF. The purpose of defining an urban edge is to prevent uncontrolled urban development which may lead to urban sprawl and increases pressure on limited resources. As this activity is an upgrade and/or expansion of an existing facility or infrastructure, the Urban edge will remain the same and will not be compromised.			
14. Will the proposed activity/ies contribute to any of the 17 Strategic Integrated Projects (SIPS)?	YES X	NO	Please explain
Specifically, SIP 6 (Integrated municipal infrastructure project), which aims to develop national capacity to assist the 23 districts with the fewest resources (19 million people) to address all the maintenance backlogs and upgrades required in water, electricity and sanitation bulk infrastructure. (National Infrastructure Plan, 2012)			
15. What will the benefits be to society in general and to the local communities?			Please explain
The upgrading of the Boitekong WWTW will ensure effective effluent treatment which is released into the Hex River. Compliant effluent will help maintain the ecological function & integrity of this system and reduce treatment costs of raw water supply from Bospoort Water Treatment Works, into which the Hex River flows. Temporary employment opportunities (100 people) will be provided during the construction process. The community will benefit from safe and functional water resources flowing through their community.			

16. Any other need and desirability considerations related to the proposed activity?	Please explain
No, the upgrading of the Boitekong WWTW will ensure the capacity of the works keeps track of population growth and development needs of the community into the near future. Thereby providing effective effluent treatment which is released into the Hex River. Compliant effluent will help maintain the ecological function & integrity of this system and reduce treatment costs of raw water supply from Bospoort Water Treatment Works, into which the Hex River flows.	
17. How does the project fit into the National Development Plan for 2030?	Please explain
The largest backlog when it comes to water services, including sanitation remains in the Rustenburg municipality (approximately 10 000 households), amongst other municipalities. (Bojanala Platinum District Municipality (IDP) - 2012-2017 Final Version). The upgrade of the Boitekong Waste Water Treatment falls within the district's wide objectives relating to sustainable water services to provide basic water and sanitation infrastructure to all communities in order to eradicate the backlog.	
18. Please describe how the general objectives of Integrated Environmental Management as set out in section 23 of NEMA have been taken into account.	
An EAP with the necessary expertise was appointed to carry out the assessment. A site inspection was undertaken in order to assess the surroundings and environment of the site, in lieu of the proposed upgrade. Stakeholders were given a Background Information Document to provide a brief description of the project. A public meeting was held in order to allow the community and all stakeholders involved to voice their concerns regarding the proposed upgrade. Environmental Planning tools, i.e IDP, SDF & EMF were consulted in order to help provide a more meaningful report.	
19. Please describe how the principles of environmental management as set out in section 2 of NEMA have been taken into account.	
All applicable legislation has been consulted and it is not expected that any additional specialist inputs are required.	

11. APPLICABLE LEGISLATION, POLICIES AND/OR GUIDELINES

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

Title of legislation, policy or guideline	Applicability to the project	Administering authority	Date
EIA Regulations, Government Notice No. R. 543, R. 544, R. 545, R. 546 and R. 547 in Government Gazette No. 33306 of 18 June 2010.	The upgrade constitutes Activity 28 of Government Notice No. R. 544.	DREAD	18 June 2010 (promulgated on 02 August 2010)
National Water Act	A water use licence is required & is in process.	DWS	1998
National Environmental Management: Waste Act	Co-processing of sewage sludge to be licensed & undertaken by outside service provider (see Appendix J5).	DEA	2008
National Environmental Management Act	The upgrade constitutes Activity 28 of Government Notice No. R. 544.	DEA/DREAD	1998
Rustenburg Local Municipality	Ensure the upgrade falls within	Municipal Council	2010

SDF	the Municipality's strategic plans.		
Rustenburg Local Municipality EMF	Ensure the upgrade aligns with the Municipality's Environmental Framework.	Municipal Council	2010
DEA (2010), Public Participation 2010, Integrated Environmental Management Guideline Series 7	To ensure best practice is applied with regards to Public Participation on the project.	Department of Environmental Affairs, Pretoria, South Africa	2010
DEAT (2006) Guideline 5: Assessment of Alternatives and Impacts in support of the Environmental Impact Assessment Regulations, 2006. Integrated Environmental Management Guideline Series,	Provide guidance on assessing alternatives on the project.	Department of Environmental Affairs and Tourism (DEAT), Pretoria	2006
DEAT (2004) Criteria for determining Alternatives in EIA, Integrated Environmental Management, Information Series 11,	Provide guidance on assessing alternatives on the project.	Department of Environmental Affairs and Tourism (DEAT), Pretoria.	2004
DEAT (2002) Specialist Studies, Information Series 4.	Review guideline to assess whether or not specialist studies are required.	Department of Environmental Affairs and Tourism (DEAT), Pretoria.	2002
DEA&DP Guideline on Alternatives, EIA Guideline and Information Document Series.	Provide guidance on assessing alternatives on the project.	Western Cape Department of Environmental Affairs & Development Planning (DEA&DP).	2010
National Heritage Resources Act, Act No.	To ensure correct procedures are followed to remain compliant with the Act.	SAHRA Council	1999
Conservation of Agricultural Resources Act.	For reference, as the area surrounding is zoned as Agricultural.	Department of Agriculture	1983, as amended
Bojanala Platinum District Municipality (IDP)	Ensure that the project aligns with the District Municipality's IDP.	Municipal Council	2012-2017 Final Version
Rustenburg Local Municipality Intergrated Development Plan (Review)	Ensure that the project aligns with the Local Municipality's IDP under review.	Municipal Council	2014-2015
Rustenburg Local Municipality Intergrated Development Plan	Ensure that the project aligns with the current Local Municipal IDP.	Municipal Council	2012-2017
Rustenburg Spatial Development Framework (Review)	Ensure that the project aligns with the Local Municipality's IDP under review.	K2M Technologies (Pty)Ltd	2010

12. WASTE, EFFLUENT, EMISSION AND NOISE MANAGEMENT

a) Solid waste management

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

YES X	NO
10m ³	

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

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

The municipality is responsible for the collection of all domestic waste generated through door-to-door collection. However, in certain areas waste is collected by a private waste contractor (Millennium Waste, C&D Plastics), which was contracted by the municipality to help fulfill part of its service (Rustenburg IDP, 2012-17). Should none of these service providers operate at or near Boitekong, the construction contractor will be mandated to remove all solid waste to the registered landfill.

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

The RLM owns and utilises the townlands, Monnakato, Hartbeesfontein and the Phatsima landfill sites. Tribal lands make use of informal dump or landfill sites. These sites lack initial planning and development, and the standards at which they operate are very low. These sites are not licensed and are a health hazard as they are easily accessible to the public. In areas that do not receive municipal service in terms of waste management, waste cannot reach the disposal sites (Rustenburg Environmental Management Framework, 2011) (Rustenburg IDP, 2012-17). *However, a new licensed landfill site has recently been completed and will be ready to receive construction waste from the project (See Appendix J2).*

Will the activity produce solid waste during its operational phase?

YES X	NO
10m ³	

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

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

Solid waste collected at the inlet works is dewatered and placed in SKIPs for removal and disposal by a service provider. Sludge emanating from the plant will be greatly reduced by the construction of new sludge digesters and the remaining sludge placed on new concrete drying beds. The current sludge lagoons will be decommissioned. Agriman currently has an agreement in place with the municipality to remove sludge from the Rustenburg WWTW for agricultural purposes which may be extended to the Boitekong facility too. The AGRIMAN process increases the speed of processing; returns more usable water to the authorities; reduces aerial pollutants; uses less land space both for storage and processing and contributes positively to the environment.

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

Waterval Waste Disposal Site.

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

The AGRIMAN technology fully utilises the end product of its sludge processing (which is currently stored in vast land fill areas) by converting it to organic fertilizers which is then sold to the agricultural industry. These fertilizers are also used to replace inert substances (used in chemical fertilizers for adding bulk) by replacing those fillers with organic material thereby returning a myriad of micro nutrients to the soils which results in improved crop yields and crop quality. Once the final product leaves the WWTW, it complies with not only the standards of a Class A1a Sludge as set in the WRC's Sludge Disposal Guidelines, but it is a registered fertiliser product – safe for use on any crops (See Appendix J3).

If the solid waste (construction or operational phases) will not be disposed of in a registered landfill site or be taken up in a municipal waste stream, then the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.

Can any part of the solid waste be classified as hazardous in terms of the NEM:WA?

YES	NO X
-----	----------------

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

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

YES	NO X
-----	-----------------------

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

b) Liquid effluent

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

YES	NO X
-----	-----------------------

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 X
-----	-----------------------

If YES, describe the type of effluent and the disposal mechanism/method

--

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

YES	NO X
-----	-----------------------

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:

- | |
|---|
| <ul style="list-style-type: none"> • Dewatering of solid waste on the inlet works; • Making use of the AGRIMAN process as it returns more usable water to the authorities; • Implementation of Water Conservation and Water Demand Management (WC/WDM) initiatives to ensure a sustainable supply of water for the future and result in significant long-term financial savings for the municipality and the public; • To manage impacts on the utilization and quality of both surface and ground water resources; • To reduce the level of unaccounted for water in the district through appropriate demand management strategies; • To contribute towards the financial sustainability of Water Services Authorities through appropriate cost recovery mechanisms; • To introduce appropriate water use conservation and protection strategies. (Rustenburg & Bojanala IDP, 2012-17). • Possibility of recycling sludge for brick making and other industry. |
|---|

c) Emissions into the atmosphere

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

YES	NO X
-----	-----------------------

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

YES	NO
-----	----

If YES, the applicant must consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.

If NO, describe the emissions in terms of type and concentration:

There will only be sewage smell during the operational phase which does not trigger listed activities under the Air Quality Act, 2004 (Act No. 39 of 2004) and will be regulated under listed activity 55 of the EIA Regulations listing notice 1 of 2010.

d) Waste Licence/Registration

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

YES	NO X
-----	-----------------------

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

e) Generation of noise

Will the activity generate noise?

YES X	NO X
------------------------	---------

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

YES	NO X
-----	-----------------------

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:

Noise will be generated during construction by the contractors and their machines and equipment. Low-level noise, consistent with normal residential activities will be generated during operation.

13. 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:

litres	
YES X	NO

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

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

See Appendix J4.

14. ENERGY EFFICIENCY

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

- The more energy efficient process of diffused aeration was specified rather than surface aeration to elevate the oxygen concentrate;
- Anaerobic digestion for solids handling was used.

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

Generators will be used in the case of a power cut.

SECTION B: SITE/AREA/PROPERTY DESCRIPTION

Important notes:

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

Section B Copy No. (e.g. A):

2. Paragraphs 1 - 6 below must be completed for each alternative.
3. Has a specialist been consulted to assist with the completion of this section?

YES	NO X
-----	-----------------------

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

Property description/physical address:

Province	North West
District Municipality	Bojanala Platinun
Local Municipality	Rustenburg
Ward Number(s)	19
Farm name and number	Farm Paardekraal Remainder 279 JQ portion 23, Rustenburg Local Municipality, North West.
Portion number	170 & 23
SG Code	T0JQ000000000170 T0JQ000000000023

Where a large number of properties are involved (e.g. linear activities), please attach a full list to this application including the same information as indicated above.

Current land-use zoning as per local municipality IDP/records:

Agriculture.

In instances where there is more than one current land-use zoning, please attach a list of current land use zonings that also indicate which portions each use pertains to, to this application.

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

YES	NO X
-----	-----------------------

Locality map:

An A3 locality map must be attached to the back of this document, as Appendix A. The scale of the locality map must be relevant to the size of the development (at least 1:50 000. For linear activities of more than 25 kilometres, a smaller scale e.g. 1:250 000 can be used. The scale must be indicated on the map.) The map must indicate the following:

- an indication of the project site position as well as the positions of the alternative sites, if any;
- road access from all major roads in the area;
- road names or numbers of all major roads as well as the roads that provide access to the site(s);
- all roads within a 1km radius of the site or alternative sites; and
- a north arrow;
- a legend; and
- locality GPS co-ordinates (Indicate the position of the activity using the latitude and longitude of the centre point of the site for each alternative site. The co-ordinates should be in degrees and decimal minutes. The minutes should have at least three decimals to ensure adequate accuracy. The projection that must be used in all cases is the WGS84 spheroid in a national or local projection)

1. GRADIENT OF THE SITE

Indicate the general gradient of the site.

Alternative S1:

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

Alternative S2 (if any):

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
------	-------------	-------------	-------------	--------------	-------------	------------------

2. LOCATION IN LANDSCAPE

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

2.1 Ridgeline	<input type="checkbox"/>	2.4 Closed valley	<input type="checkbox"/>	2.7 Undulating plain / low hills	<input checked="" type="checkbox"/>
2.2 Plateau	<input type="checkbox"/>	2.5 Open valley	<input type="checkbox"/>	2.8 Dune	<input type="checkbox"/>
2.3 Side slope of hill/mountain	<input type="checkbox"/>	2.6 Plain	<input type="checkbox"/>	2.9 Seafront	<input type="checkbox"/>

3. GROUNDWATER, SOIL AND GEOLOGICAL STABILITY OF THE SITE

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

	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.

4. GROUNDCOVER

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

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

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

5. SURFACE WATER

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

Perennial River	YES X	NO	UNSURE
Non-Perennial River	YES	NO X	UNSURE
Permanent Wetland	YES X	NO	UNSURE
Seasonal Wetland	YES	NO X	UNSURE
Artificial Wetland	YES	NO X	UNSURE

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

There is a permanent river within a walking distance from the WWTW which is however more than
100m away from the site.

6. LAND USE CHARACTER OF SURROUNDING AREA

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

Natural area	Dam or reservoir	Polo fields
Low density residential	Hospital/medical centre	Filling station ^H
Medium density residential	School	Landfill or waste treatment site
High density residential	Tertiary education facility	Plantation
Informal residential ^A ✓	Church	Agriculture

Retail commercial & warehousing	Old age home	River, stream or wetland ✓
Light industrial	Sewage treatment plant ^A ✓	Nature conservation area
Medium industrial ^{AN}	Train station or shunting yard ^N	Mountain, koppie or ridge
Heavy industrial ^{AN}	Railway line ^N	Museum
Power station	Major road (4 lanes or more) ^N	Historical building
Office/consulting room	Airport ^N	Protected Area
Military or police base/station/compound	Harbour	Graveyard
Spoil heap or slimes dam ^A	Sport facilities	Archaeological site
Quarry, sand or borrow pit	Golf course	Other land uses (describe)

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

N/A

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

N/A

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

N/A

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

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

		X
--	--	----------

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

7. CULTURAL/HISTORICAL FEATURES

Are there any signs of culturally or historically significant elements, as defined in section 2 of the National Heritage Resources Act, 1999, (Act No. 25 of 1999), including Archaeological or paleontological sites, on or close (within 20m) to the site? If YES, explain:	YES	NO X
	Uncertain	

--

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

--

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

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

8. SOCIO-ECONOMIC CHARACTER

a) Local Municipality

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

Level of unemployment:

There has been a steady increase in the labour force participation rate between 1996 and 2010. This has been in line with the national labour force participation rate which has also indicated a steady increase. It is positive to see that the RLM unemployment rate has steadily decreased over the period from 1996 to 2010. In comparison with the national unemployment rate the RLM has done very good. (IDP Review 2014/15)
--

Economic profile of local municipality:

The Gross Value Added of the Rustenburg Local Municipality as measured in constant prices indicates that the total value of all products and services produced within the boundaries of the Rustenburg
--

Local Municipality increased from approximately R6.3 billion in 1996 to nearly R12 billion in 2003. It is also clearly evident from these figures is that the Rustenburg Local Municipality has been the strongest growing local economy within the Bojanala Platinum District Municipality. The Rustenburg local economy is one of the few local economies in the country which is able to achieve the overall national target of obtaining a 6% per annum growth rate (RUSTENBURG LOCAL MUNICIPALITY City Development Strategy (July 2006)).

Level of education:

The level of education between the various racial groups for 2001 and 2010 has increased, with less individuals that have no schooling to Grade 6. (IDP Review 2014/15)

b) Socio-economic value of the activity

What is the expected capital value of the activity on completion?	R100m	
What is the expected yearly income that will be generated by or as a result of the activity?	R0.00	
Will the activity contribute to service infrastructure?	YES X	NO
Is the activity a public amenity?	YES X	NO
How many new employment opportunities will be created in the development and construction phase of the activity/ies?	100	
What is the expected value of the employment opportunities during the development and construction phase?	R35m	
What percentage of this will accrue to previously disadvantaged individuals?	50%	
How many permanent new employment opportunities will be created during the operational phase of the activity?	10	
What is the expected current value of the employment opportunities during the first 10 years?	R10m	
What percentage of this will accrue to previously disadvantaged individuals?	100%	

9. BIODIVERSITY

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

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

Systematic Biodiversity Planning Category				If CBA or ESA, indicate the reason(s) for its selection in biodiversity plan
Critical	Ecological	Other	No Natural	A CBA surrounds the WWTW, but the treatment

Biodiversity Area (CBA)	Support Area (ESA)	Natural Area (ONA)	Area Remaining (NNR)	works itself is classified as "Other Natural Area".

b) Indicate and describe the habitat condition on site

Habitat Condition	Percentage of habitat condition class (adding up to 100%)	Description and additional Comments and Observations (including additional insight into condition, e.g. poor land management practises, presence of quarries, grazing, harvesting regimes etc).
Natural	%	20
Near Natural (includes areas with low to moderate level of alien invasive plants)	%	50
Degraded (includes areas heavily invaded by alien plants)	%	10
Transformed (includes cultivation, dams, urban, plantation, roads, etc)	%	20

c) Complete the table to indicate:

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

Terrestrial Ecosystems		Aquatic Ecosystems		
Ecosystem threat status as per the National Environmental Management: Biodiversity Act (Act No. 10 of 2004)	Critical	Wetland (including rivers, depressions, channelled and unchannelled wetlands, flats, seeps pans, and artificial wetlands)		
	Endangered			
	Vulnerable			
	Least Threatened			
		YES	NO	UNSURE

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

General information

The WWTW upgrade takes place within the existing footprint which is already largely transformed to open degraded grassland on swelling clay soils, interspersed with occasional trees & shrubs, especially along the edge of the footprint. No plants of conservation concern were located within the treatment works. The information below provides context against the larger landscape within which the WWTW is located. The WWTW site located nearby to a perennial wetland system associated with the Hex River, which is however more than a 100m away from the site.

Vegetation & landscape features

The footprint falls within the Savanna Biome and the Marikana Thornveld vegetation type according to Mucina & Rutherford (2006). The vegetation is characterised by Open *Acacia karroo* woodland on the valleys, undulating plains and hills. Shrubs dominate the drainage lines, termitaria and rocky outcrops. Important taxa found in this veld type include:

Conservation

The veld type is classified as “Vulnerable” due to irreversible loss of natural habitat, with the remaining natural habitat amounting to only 60% of original area of the original ecosystem (Rutherford et al. 2006). Less than 1% of the vegetation type is under some form of formal protection.

Aquatic Ecosystem

The WWTW falls within the Crocodile (West) and Marico Water Management Area (WMA), within the Elands sub-water management area, and is not classified as a fresh water priority area within the quarternary subcatchment. No listed National Freshwater Ecosystem Priority Area (NFEPA) wetlands are affected by the development.

SECTION C: PUBLIC PARTICIPATION

1. ADVERTISEMENT AND NOTICE

Publication name	Platinum Weekly	
Date published	03 October 2014	
Site notice position	Latitude	Longitude
	25°35'58"	27°17'50"
Date placed	07 October 2014	

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

2. DETERMINATION OF APPROPRIATE MEASURES

Provide details of the measures taken to include all potential I&APs as required by Regulation 54(2)(e) and 54(7) of GN R.543.

Key stakeholders (other than organs of state) identified in terms of Regulation 54(2)(b) of GN R.543:

Title, Name and Surname	Affiliation/ key stakeholder status	Contact details (tel number or e-mail address)
Lebogang Mashumu	Magalies Water Board	0145974636 lebogangma@magalieswater.co.za
Kate Nkoe & Calvin Mohlowa	Rustenburg Tourism Information & Development Centre	0145903320 vicrust@tourismnorthwest.co.za
Hardus Van Der Linde	Telkom	0123113636 vdlindh@telkom.co.za
Lungile Motsisi & David Tunnicliff	Eskom	motsisL@eskom.co.za tunnickDA@eskom.co.za
Mauritz Muller	RUSTENBURG AIRSTRIP	0835560073 rtbflyingclub@gmail.com
Chris Miny	Ward 15 Rustenburg Local Municipality Councilor	082 878 5964 chrisminy1@gmail.com
Ala Malan	Ward 17 Rustenburg Local Municipality Councilor	082 950 3395 alamalan@telkomsa.net
B Mtyotywa	Ward 19 Rustenburg Local Municipality Councilor	083 549 9101 bmtotywa@gmail.com

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

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

3. ISSUES RAISED BY INTERESTED AND AFFECTED PARTIES

Summary of main issues raised by I&APs	Summary of response from EAP
None	None

4. COMMENTS AND RESPONSE REPORT

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

Please see Appendix E3

5. AUTHORITY PARTICIPATION

Authorities and organs of state identified as key stakeholders:

Authority/Organ of State	Contact person (Title, Name and Surname)	Tel No	Fax No	e-mail	Postal address
Rustenburg	Marks Rapoo (MM)	0145903531		munman@rustenburg.gov.za	

Local Municipality				
	Onkgopoleng Nkele (PA to MM)	0145903531		munman@rustenburg.gov.za
	Cindy Mosiane (Office Admin)	01459035351		cmosiane@rustenburg.gov.za
	Amos Mahlulo (Town Planner)	0721899111 014 590 3081		amahlulo@rustenburg.gov.za
	Kenneth Nkadimeng (Water & Sanitation)	014 590 3521		knkadimeng@rustenburg.gov.za
	Wonder Simelane (Water & Sanitation)	014 590 3521		wsimelane@rustenburg.gov.za
	Lillian Sefike (ENVIRONMENTAL OFFICER)	0145903075		lsefike@rustenburg.gov.za
Bojanala District Municipality	Innocent Sirovha (MM)	0145904502		innocents@bojanala.gov.za
	Tsholofelo Dikgobe (Secretary to MM)	0145904502		tsholofelod@bojanala.gov.za
	Johanna Mosete (Community Deve't)	0145235000		johannam@bojanala.gov.za
	Selby Boitseng (Director-LED)	0145903528		selbyb@bojanala.gov.za
	Lerato Mongologe (Health inspector)	0145235068		leratom@bojanala.gov.za
	Nozi Masekwane (Environmental Health Manager)	0145235000		nozim@bojanala.gov.za
DREAD	Ouma Skosana (EIA Admin)	0183895156		oskosana@nwpg.gov.za
	Steven Mukhola	0183895959		smukhola@nwpg.gov.za
	Thembekile Makuwa (Case Officer)	018 299 6583		tmakuwa@nwpg.gov.za
DWS	Mr S Matsheka (Strategic Support)	082 806 8856 018 387 9511		matshekas@dwa.gov.za
	Mr L Bogopa (Water Sector Support)	082 802 4759 018 387 9564		bogopal@dwa.gov.za
	Ms W Ralekoa (Institutional Establishment)	0828754158 018 387 9517		ralekoaw@dwa.gov.za
	Lethabo Ramashala	0829083177		ramashalal@dwa.gov.za
	Sebenzile Ntshangase	0828968228 0727694018		ntshangases@dwa.gov.za
DEPARTMENT OF ROADS & TRANSPORT	George Madoda	0183881428		geomadoda@gmail.com

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

Please see appendix E4.

6. CONSULTATION WITH OTHER STAKEHOLDERS

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

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

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

Please see Appendix E5.

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

Please see Appendix E6.

SECTION D: IMPACT ASSESSMENT

The assessment of impacts must adhere to the minimum 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. IMPACTS THAT MAY RESULT FROM THE PLANNING AND DESIGN, CONSTRUCTION, OPERATIONAL, DECOMMISSIONING AND CLOSURE PHASES AS WELL AS PROPOSED MANAGEMENT OF IDENTIFIED IMPACTS AND PROPOSED MITIGATION MEASURES

Provide a summary and anticipated significance of the potential direct, indirect and cumulative impacts that are likely to occur as a result of the planning and design phase, construction phase, operational phase, decommissioning and closure phase, including impacts relating to the choice of site/activity/technology alternatives as well as the mitigation measures that may eliminate or reduce the potential impacts listed. This impact assessment must be applied to all the identified alternatives to the activities identified in Section A(2) of this report.

Please see Appendix F for full Impact Assessment.

Activity	Impact summary	Significance	Proposed mitigation
Alternative 1 (preferred alternative)			
	<i>Direct impacts:</i>		
	<i>Indirect impacts:</i>		
	<i>Cumulative impacts:</i>		
	<i>Direct impacts:</i>		
	<i>Indirect impacts:</i>		
	<i>Cumulative impacts:</i>		
Alternative 2			
	<i>Direct impacts:</i>		
	<i>Indirect impacts:</i>		
	<i>Cumulative impacts:</i>		
	<i>Direct impacts:</i>		
	<i>Indirect impacts:</i>		
	<i>Cumulative impacts:</i>		
Alternative 3			
	<i>Direct impacts:</i>		

Activity	Impact summary	Significance	Proposed mitigation
	<i>Indirect impacts:</i>		
	<i>Cumulative impacts:</i>		
	<i>Direct impacts:</i>		
	<i>Indirect impacts:</i>		
	<i>Cumulative impacts:</i>		
	<i>Direct impacts:</i>		
No-go option			
	<i>Direct impacts:</i>		
	<i>Indirect impacts:</i>		
	<i>Cumulative impacts:</i>		

A complete impact assessment in terms of Regulation 22(2)(i) of GN R.543 must be included as Appendix F.

2. ENVIRONMENTAL IMPACT STATEMENT

Taking the assessment of potential impacts into account, please provide an environmental impact statement that summarises the impact that the proposed activity and its alternatives may have on the environment 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 A (preferred alternative)

The upgrade poses an insignificant risk to the environment because the site already exists and will not exacerbate any risk that the current system poses.

Alternative B

Alternative C

No-go alternative (compulsory)

The No-Go option is not to be considered as the plant is rapidly reaching its capacity as it is and will continue to result in poor quality effluent.

SECTION E. RECOMMENDATION OF PRACTITIONER

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

YES X	NO
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If "NO", indicate the aspects that should be assessed further as part of a Scoping and EIA process before a decision can be made (list the aspects that require further assessment).

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If "YES", please list any recommended conditions, including mitigation measures that should be considered for inclusion in any authorisation that may be granted by the competent authority in respect of the application.

See **Appendix G.**

Is an EMPr attached?

YES X	NO
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The EMPr must be attached as Appendix G.

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

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

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

NAME OF EAP

SIGNATURE OF EAP

DATE

SECTION F: APPENDIXES

The following appendixes must be attached:

Appendix A: Maps

Appendix B: Photographs

Appendix C: Facility illustration(s)

Appendix D: Specialist reports (including terms of reference)

Appendix E: Public Participation

Appendix F: Impact Assessment

Appendix G: Environmental Management Programme (EMPr)

Appendix H: Details of EAP and expertise

Appendix I: Specialist's declaration of interest

Appendix J: Additional Information