



edtea

Department :
Economic Development, Tourism and
Environmental Affairs
PROVINCE OF KWAZULU-NATAL

Enquiries: Kim van Heerden
Reference: DC22/0017/2017
Date: *11 September* 2017
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Tel: (033) 347 1820, Fax: (033) 347 1826
Postal Address: Private Bag X07, Pietermaritzburg, 3202
www.kznded.gov.za

Directorate: Environmental Services: uMgungundlovu District

uMgungundlovu District Municipality
P. O. Box 3235
Pietermaritzburg
3200

ATTENTION: TLS Khuzwayo
Telephone Number: (033) 897 6763 **Cell Number:** None provided **Fax Number:** None provided
E-mail: Mchunus@umdm.gov.za

cc. ATTENTION: Iain Jourdan/ Josette Oberholzer/ Stephanie Denison
EnviroPro
Telephone Number: (031) 765 2942 **Cell Number:** (082) 929 4662 **Fax Number:** (086) 549 0342
E-mail: steph@enviropro.co.za

Dear Sir/s/Madam

RE: DC22/0017/2017: EKHAMANZI SECONDARY BULK WATER PIPELINE AND RESERVOIR LOCATED ON PORTION 1 OF FARM BERLIN 6353, FARM GLEN ROY 3166, AND PORTIONS 3, 4, 5, 6, 7, 9 AND 11 OF FARM BOCKENHOUD FONTEIN 1289, IN THE UMSHWATHI LOCAL MUNICIPALITY, WITHIN THE UMGUNGUNDLOVU DISTRICT MUNICIPALITY.

The KwaZulu-Natal Department of Economic Development, Tourism and Environmental Affairs has authorised the above-mentioned project. The Environmental Authorisation and reasons for the decision are attached herewith.

ENQUIRIES


Please note that:

- All queries regarding this Environmental Authorisation (including the Department's decision) must be directed to the official of this Department with contact details provided on the letterhead above.
- **Only** queries regarding appeals must be submitted to the Office of the MEC (details provided below).

NOTIFICATION OF DECISION ON APPLICATION

In accordance with regulation 4(2) of the EIA Regulations 2014 (as amended), the applicant must in writing **within 14 days** of the date of this decision ensure that:

- a. All registered interested and affected parties are provided with access to this decision and the reasons for the decision; and

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- b. The attention of all registered interested and affected parties is drawn to the fact that an appeal may be lodged against the decision in terms of the National Appeal Regulations 2014, if such appeal is available in the circumstances of the decision.

APPEALS

In accordance with regulation 4(1) of the National Appeal Regulations, 2014 an appellant must submit an appeal to the appeal administrator and a copy of the appeal to the applicant, any registered interested and affected party and organ of state with interest in the matter **within 20 days** from the date of notification of this decision.

An appellant must comply with regulation 4(2) and submit the appeal in writing and in the form obtainable from the appeal administrator by post, fax, and e-mail or hand delivery to the following address:

**The Appeal Administrator,
Office of the KwaZulu-Natal MEC for Economic Development, Tourism and Environmental Affairs**

POSTAL/ FAX/ E-MAIL:	PHYSICAL:
Private Bag X001 Bishopsgate 4008, Durban Tel: 031 310 5306 Mobile: 082 570 1966 Fax: 031 310 5416 E-Mail: haresh.inderlall@kznedtea.gov.za (Haresh Inderlall)	9 th Floor, The Marine Building, 22 Dorothy Nyembe Street, Durban 4001

Yours sincerely




for: **Head of Department:**

Department of Economic Development, Tourism and Environmental Affairs

Signed by : Mrs. Kim van Heerden

Designation : uMgungundlovu District Manager

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Department :

**Economic Development, Tourism and
Environmental Affairs**

PROVINCE OF KWAZULU-NATAL

Environmental Authorisation

**In terms of Regulation 20 of the
Environmental Impact Assessment Regulations, 2014**

Project Title: Ekhamanzi Secondary Bulk Water Pipeline and Reservoir.

Local Municipality: uMshwathi Local Municipality

Application number: DC22/0017/2017

NEAS number: KZN/EIA/0000508/2017

Date of issue: ...11... September...2017

Authorisation holder: uMgungundlovu District Municipality

Location: Portion 1 of Farm Berlin 6353, Farm Glen Roy 3166,
and Portions 3, 4, 5, 6, 7, 9 and 11 of Farm
Bockenhou Fontein 1289,
Ward 3
uMshwathi Local Municipality
uMgungundlovu District Municipality
DC22

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1. Project proposal

The eKhamanzi Secondary Bulk Water Pipeline and Reservoir comprises of a new 160mm bulk pipeline which will start at the existing Nadi Reservoir and feed the proposed new eKhamanzi Reservoir, located in the adjacent valley. The pipeline will be 11.4km in length and the concrete reservoir will have a capacity of 350KI. The bulk pipeline will be placed in trenches approximately 1m wide and less than 1m deep. The pipeline will be encased with steel to prevent leaks and theft of the pipes during operation. As far as possible, the new pipeline has been aligned alongside existing roads and footpaths. A large section of the preferred pipeline route runs within the alignment of the eKhamanzi Road. Some sections of the pipeline will cross undisturbed land resulting in the clearance of indigenous vegetation. The pipeline crosses the Khamanzi River at River Crossing 14 (RC14) and the Mtizane River at River Crossing 15 (RC15) and the remaining 13 watercourses are all drainage lines and tributaries associated with the Khamanzi River. Where the pipeline crosses a watercourse, it will be placed underground in a concrete pipe encasement. The pipeline will cross through wetland area associated with three of the watercourse crossings.

The construction of the eKhamanzi Secondary Bulk Water Pipeline and Reservoir is located on Portion 1 of the Farm Berlin 6353, Farm Glen Roy 3166, and Portions 3, 4, 5, 6, 7, 9 and 11 of the Farm Bockenhouid Fontein 1289 and the Reservoir being situated on Portion 1 of the Farm Berlin 6353 which is within Ward 3 of the uMshwathi Local Municipality of the uMgungundlovu District Municipality. The location of the structures in respect of the project is reflected in the **Locality Map** and **Layout Plan** attached as **Annexure 2** and **Annexure 3** to this Environmental Authorisation respectively. The relevant **Site Facility Illustration** is provided as **Annexure 4** to this Environmental Authorisation.

The project proposal is detailed in the final Basic Assessment Report (BAR) prepared by EnviroPro dated May 2017.

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2. Decision

By virtue of the powers conferred on it by the National Environmental Management Act, 1998 (Act No. 107 of 1998) and the Environmental Impact Assessment Regulations, 2014 (as amended), the **KwaZulu-Natal Department of Economic Development, Tourism and Environmental Affairs** (hereafter referred to as “this Department”)

grants Environmental Authorisation

to –


uMgungundlovu District Municipality

(herein after referred to as “the authorisation holder”)

Details of the contact person: TLS Khumalo
P. O. Box 3235
Pietermaritzburg
3200

Telephone Number: (033) 897 6763
Fax Number: None provided
Cellphone Number: None provided
Email: Mchunus@umdm.gov.za

to undertake the following activities (hereafter referred to as “the activities”) as described in Section 3 below.

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3. Activities authorised and location of activity/activities

The activities in Government Notice No. R. 983 (Listing Notice 1 of 04 December 2014 of the Environmental Impact Assessment (EIA) Regulations as amended) were applied for and are similarly listed in terms of the EIA Regulations, 2014 (as amended) as detailed below:

3.1 Description of activities and location

Component of the proposal:	Activity No. and Listing Notice:	21 Digit Surveyor General Code
	Activity 12(ii) of GNR 327 of 07 April 2017.	
<p>It is the intention of the authorisation holder to construct pipeline infrastructure or structures with a physical footprint of 100m² or more within a watercourse or within 32m of the watercourse in a rural area.</p>	<p>“The development of: (i) dams or weirs, where the dam or weir, including infrastructure and water surface area, exceeds 100 square metres; or (ii) infrastructure or structures with a physical footprint of 100 square metres or more; where such development occurs – (a) within a watercourse; (b) in front of a development setback; or (c) if no development setback exists, within 32 metres of a watercourse, measured from the edge of a watercourse; - excluding – (aa) the development of infrastructure or structures within existing ports or harbours that will not increase the development footprint of the port or harbour;</p>	<p>NOFT00000000635300001 NOFT00000000316600000 NOFT00000000128900003 NOFT00000000128900004 NOFT00000000128900005 NOFT00000000128900006 NOFT00000000128900007 NOFT00000000128900009 NOFT00000000128900011</p>

	<p>(bb) where such development activities are related to the development of a port or harbour, in which case activity 26 in Listing Notice 2 of 2014 applies;</p> <p>(cc) activities listed in activity 14 in Listing Notice 2 of 2014 or activity 14 in Listing Notice 3 of 2014, in which case that activity applies;</p> <p>(dd) where such development occurs within an urban area;</p> <p>(ee) where such development occurs within existing roads, road reserves or railway line reserves;</p> <p>or,</p> <p>(ff) the development of temporary infrastructure or structures where such infrastructure or structures will be removed within 6 weeks of the commencement of development and where indigenous vegetation will not be cleared."</p>	
Component of the proposal:	Activity 19 of GNR 327 of 07 April 2017.	21 Digit Surveyor General Code
It is the intention of the authorisation holder to construct pipeline infrastructure spanning 11.4km in length that will cross 15 watercourses in total. These activities will result in the removal or moving of soil of more than 10 cubic metres from the watercourses.	<p>"The infilling or depositing of any material of more than 10 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 10 cubic metres from a watercourse;</p> <p>but excluding where such infilling, depositing, dredging, excavation, removal or moving –</p> <p>(a) will occur behind a development setback;</p>	<p>NOFT00000000635300001</p> <p>NOFT00000000316600000</p> <p>NOFT00000000128900003</p> <p>NOFT00000000128900004</p> <p>NOFT00000000128900005</p> <p>NOFT00000000128900006</p> <p>NOFT00000000128900007</p> <p>NOFT00000000128900009</p> <p>NOFT00000000128900011</p>

	<p>(b) is for maintenance purposes undertaken in accordance with a maintenance management plan; or</p> <p>(c) falls within the ambit of activity 21 in this Notice, in which case that activity applies the seashore;</p> <p>(d) occurs within existing ports or harbours that will not increase the development footprint of the port or harbour; or</p> <p>(e) where such development is related to the development of a port or harbour, in which case activity 26 in Listing Notice 2 of 2014 applies."</p>	
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3.2 Location of Authorised Activity:

Authorised activity	Latitude	Longitude
Starting Point of Pipeline:	29°15'48.59"S	30°44'57.31"E
End Point of Pipeline:	29°14' 59.50" S	30°41' 38.05" E
Reservoir:	29°14' 59.50" S	30°41' 38.05" E
River Crossing 1 (RC1):	29°15'11.25"S	30°42'13.35"E
River Crossing 2 (RC2):	29°15'11.69"S	30°42'12.15"E
River Crossing 3 (RC3):	29°15'12.52"S	30°42'10.13"E
River Crossing 4 (RC4):	29°15'13.80"S	30°42'7.54"E
River Crossing 5 (RC5):	29°15'15.11"S	30°42'4.87"E
River Crossing 6 (RC6):	29°15'27.00"S	30°42'11.93"E
River Crossing 7 (RC7):	29°15'29.39"S	30°42'12.84"E
River Crossing 8 (RC8):	29°15'32.82"S	30°42'14.28"E
River Crossing 9 (RC9):	29°15'36.97"S	30°42'15.97"E
River Crossing 10 (RC10):	29°15'39.09"S	30°42'16.63"E
River Crossing 11 (RC11):	29°15'42.64"S	30°42'17.62"E
River Crossing 12 (RC12):	29°15'45.14"S	30°42'17.53"E
River Crossing 13 (RC13):	29°15'49.07"S	30°42'18.97"E
River Crossing 14 (RC14):	29°16'17.57"S	30°44'7.82"E
River Crossing 15 (RC15):	29°15'59.52"S	30°42'35.17"E

uMshwathi Municipality,

Ward 3,

Portion 1 of Farm Berlin 6353, Farm Glen Roy 3166, and Portions 3, 4, 5, 6, 7, 9 and 11 of Bockenhouid
Fontein 1289

4. Conditions of authorisation

This Environmental Authorisation is subject to the conditions set out below:

4.1. Period of Validity


- 4.1.1. One or more of the listed activities authorised must commence within **10 (ten) years** from the date of issue. If commencement of the authorised activity does not occur within that period, the authorisation lapses and the holder of the Environmental Authorisation must reapply for an Environmental Authorisation should he or she wish to carry out the activity; unless, an application for amendment is received on the prescribed application form prior to the expiry date.
- 4.1.2. This Department must be notified in writing on the prescribed form within **thirty (30) calendar days** of any change in ownership and/or project developer. The rights and conditions as stipulated in this Environmental Authorisation must be known to the new owner and/or developer and are binding on the new owner/and or developer. As such the authorisation holder must apply for an amendment to the Environmental Authorisation on the prescribed application form to change the ownership details.

4.2. Notification to interested and affected parties

- 4.2.1. The authorisation holder must ensure notification of every registered interested and affected party, in writing and within **fourteen (14) calendar days** from date of this Department's decision to authorise the activity and proof of the notification must be submitted to this Department at the address specified in condition 5.4.

- 4.2.2. The notification referred to in condition 5.2.1 must –

4.2.2.1. Specify the date on which the Environmental Authorisation was issued;

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4.2.2.2. Inform the interested and affected party of the appeal procedure provided for in the National Appeals Regulations, 2014; and,

4.2.2.3. Advise the interested and affected party that a copy of the Environmental Authorisation will be furnished on request from the Environmental Assessment Practitioner.

4.2.3. The availability of this Environmental Authorisation must be advertised in the iLanga Langesonto newspaper within **fourteen (14) calendar days** from date of this Department's decision to authorise the activity and proof of the advertisement must be provided to this Department at the address specified in condition 5.4.

4.3. Environmental Management Programme


4.3.1 The Environmental Management Programme (EMPr) (prepared by EnviroPro, dated April 2017) for the construction, post construction, rehabilitation and operational phases of this project as submitted for the Environmental Authorisation of this project complies with section 24N of NEMA and Appendix 4 of the EIA regulations, 2014 (as amended). This EMPr is hereby **approved** and must be implemented.

4.3.2 The EMPr must be kept on site during all phases of the development.


4.4. Written notice of commencement of the construction phase

4.4.1. **Not less than seven (7) calendar days** written notice must be given to this Department, at the address specified in condition 5.4 indicating when the construction phase will commence. Commencement for the purposes of this condition includes site preparation. The notice must include a date on which it is anticipated that the construction will commence and the EIA reference number of this Environmental Authorisation viz. DC22/0017/2017.

4.4.2. The activities authorised may only be undertaken on Portion 1 of the Farm Berlin 6353, Farm Glen Roy 3166, and Portions 3, 4, 5, 6, 7, 9 and 11 of the Farm Bockenhouid Fontein 1289 in Ward 3 of the uMshwathi Local Municipality, within the uMgungundlovu District Municipality with the geographical coordinates of the site being Start point of activity: 29° 15' 48.59" S; 30° 44' 57.31" E and End point of activity: 29° 14' 59.50" S; 30° 41' 38.05" E; River Crossing 1 (RC1) to River Crossing 15 (RC15) and the Reservoir at 29° 14' 59.50" S; 30° 41' 38.05" E as described in **Section**

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- 3; and, as indicated on the **Locality Map** attached as **Annexure 2** to this Environmental Authorisation.
- 4.4.3. The construction of the Ekhamanzi Secondary Bulk Water Pipeline and Reservoir must substantially adhere to the **Layout Plan** (prepared by EnviroPro, undated), attached as **Annexure 3** to this Environmental Authorisation.
- 4.4.4. The construction of the Ekhamanzi Secondary Bulk Water Pipeline and Reservoir must substantially adhere to the **Site Facility Illustration** (prepared by the Makhaotse, Narasimulu & Associates (Pty) Ltd and dated 23 February 2017, Drawing number: WPXXXX-MNA-XX-ST-XXX), attached as **Annexure 4** to this Environmental Authorisation.
- 4.4.5. Access must be gained from the existing road and no ad hoc road/s may be created. The relevant crossing point and minimum construction area at the temporary crossing point must be marked and vehicle access must be restricted to this area only. No additional crossing points are permitted and no haulage roads are permitted within 32 metres of the watercourse and its riparian zone except where the crossing points for construction vehicles has been demarcated. A minimum buffer of 32 metres around each watercourse crossing construction site must be demarcated with danger tape by the ECO prior to construction as a 'no-go' zone and avoided as such for the duration of the construction phase.
- 4.4.6. Construction areas must be clearly demarcated with danger tape and the authorisation holder must ensure that construction vehicles are to remain within the boundaries of the demarcated working area/s.
- 4.4.7. The use of any watercourse for the washing of any vehicle or equipment associated with the road upgrade is prohibited.
- 4.4.8. Stormwater may not be directly channelled into a watercourse unless the flow has been slowed and diffused. This only refers to uncontaminated (clean) stormwater. Additionally, stormwater outlets must be fitted with erosion protection features to diffuse flow.
- 4.4.9. The recommendation of the Wetland Assessment (prepared by the Biodiversity Company and dated November 2016) with regard to the pipeline construction within the delineated wetland areas must be adhered to.
- 4.4.10. The recommendations of the Baseline Aquatic Assessment (prepared by the Biodiversity Company and dated November 2016) with regard to the construction of the Ekhamanzi Secondary Bulk Water Pipeline and Reservoir Assessment in respect of the pipeline construction (type and method of

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- excavation), erosion and sediment control, alien invasive management and rehabilitation must be adhered to.
- 4.4.11. The recommendations of Eskom (correspondence dated 14 February 2017) with regard to construction activities for the Ekhamanzi Secondary Bulk Water Pipeline and Reservoir in proximity to Eskom infrastructure (viz. the Dalton NB14 11kV and Grunneck NB3 11kV power line) and servitudes must be adhered to.
- 4.4.12. The recommendations of the Environmental Assessment Practitioner as indicated in Section 6 (pages 27-29) of the BAR (prepared by EnviroPro and dated May 2017) for the Ekhamanzi Secondary Bulk Water Pipeline and Reservoir must be adhered to. In the event of any conflicting mitigation measures and conditions of the Environmental Authorisation, the specific condition of this Environmental Authorisation will take precedence.
- 4.4.13. All sand, stone and other building materials must be sourced from sites that have appropriate environmental authorisation and mining licences. A copy of proof of the source of sand, stone and other building materials must be kept by the authorisation holder and made available to any authorised official of this Department on request.
- 4.4.14. All waste generated on site that has not been re-used or recycled must be removed from the site and disposed of at an appropriate and licenced waste disposal site. The contractor responsible for the removal of the waste must supply the authorisation holder with a certificate, indicating disposal of waste at a licensed waste disposal site.
- 4.4.15. Should any heritage objects or sites of archaeological and cultural significance be discovered during the course of development, construction must cease immediately and the discovery must be reported to Amafa-aKwaZulu-Natali on the contact telephone number 033 – 394 6543 for investigation. Work on the site may only re-commence following written approval from Amafa-aKwaZulu-Natali. No structures older than sixty (60) years or parts thereof are allowed to be demolished, altered or extended without a permit from Amafa. No activities are allowed within 50m (fifty metres) of a site which contains rock art.

4.5. Site closure and decommissioning

- 4.5.1. The basis for the Ekhamanzi Secondary Bulk Water Pipeline and Reservoir is to improve communal access to potable water, therefore it is unlikely that decommissioning will occur. However, should

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the activity cease to become redundant, the authorisation holder must contact this Department to determine the required actions for the rehabilitation and closure of the site.

- 4.5.2. **Fourteen (14) calendar days** written notice must be given to this Department, at the address specified in condition 5.4, that construction has been completed. The notice must include a date on which construction ceased and the EIA reference number of this Environmental Authorisation viz. DC22/0017/2017.

4.6. Monitoring and Reporting to this Department

- 4.6.1. The authorisation holder must appoint a suitably experienced Environmental Control Officer (ECO) for the construction and rehabilitation phases of the development to ensure that the mitigation/rehabilitation measures and recommendations referred to in this authorisation are implemented and to ensure compliance with the provisions of the EMPr.
- 4.6.2. Details of the appointed ECO must be forwarded to this Department at the address specified in condition 5.4.
- 4.6.3. Details of the appointed ECO must be forwarded to the uMshwathi Municipality.
- 4.6.4. The ECO must be appointed before commencement of any land clearing or construction activities.
- 4.6.5. The ECO must perform all tasks as stipulated in the EMPr including keeping records of all activities on site, problems identified and transgressions noted.
- 4.6.6. The ECO must be employed until all rehabilitation measures required for the construction phase are completed and the site is ready for operation.
- 4.6.7. Records relating to monitoring and auditing must be kept on site and made available for inspection by this Department and other relevant authorities.
- 4.6.8. The ECO must visit the site **monthly** during the construction and installation phases and **annually** during the operational phase unless otherwise agreed with this Department in writing.

4.7. Environmental Audit Report

- 4.7.1. The holder of the Environmental Authorisation must submit an environmental audit report to this Department within **thirty (30) calendar days** of completion of construction. The environmental audit report must –
- 4.7.2. Be undertaken by the independent ECO appointed in terms of condition 4.6.1;

- 4.7.3. Indicate the date of the audit, the name of the author and the outcome of the audit in terms of compliance with the Environmental Authorisation conditions and the requirements of the EMPr;
- 4.7.4. Provide copies of records relating to monitoring and auditing undertaken during the construction phase;
- 4.7.5. Be submitted to this Department at the address specified in condition 5.4; and,
- 4.7.6. Be submitted to the uMshwathi Municipality.

4.8. Availability of this Environmental Authorisation

- 4.8.1. A copy of this Environmental Authorisation must be kept by the authorisation holder and made available to any official of this Department on request.

5. General Conditions


5.1. Compliance with the conditions of this authorisation

In terms of section 49(A)(1)(c) of the National Environmental Management Act, 1998 (Act No. 107 of 1998), failure to comply with the conditions of this Environmental Authorisation constitutes an offence for which a convicted person may be liable to a fine not exceeding R10 million or imprisonment for a period not exceeding ten years or both such fine and such imprisonment.

In terms of section 24F of the NEMA, 1998 (Act No. 107 of 1998), no person may commence with an activity listed in terms of section 24 (2) (a) or (b) of the Act, unless the competent authority has granted an Environmental Authorisation.

5.2. Understanding the conditions of this authorisation

It is the responsibility of the authorisation holder to understand the conditions of this Environmental Authorisation. Any queries regarding this Environmental Authorisation must be submitted in writing to this Department at the address provided in condition 5.4.

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5.3. Amendments to the Project/Environmental Management Programme

- 5.3.1. Any changes to, or deviations from, the project description set out in this Environmental Authorisation must be approved, in writing, by this Department before such changes or deviations may be effected.
- 5.3.2. Any subsequent amendments to the approved Environmental Management Programme (EMPr) must also be submitted to this Department for review. The amendments may only be implemented after being approved by this Department.

5.4. Contact Details for this Department

The following contact details for this Department must be used for all reports and notices which must be submitted to this Department:

KZN Department of Economic Development, Tourism and Environmental Affairs

Private Bag X07

Cascades

3202

Fax Number: (033) 347 1826

Telephone Number: (033) 347 1820

Attention: Compliance Monitoring and Enforcement Component, uMgungundlovu District Office.

Please note that it is the responsibility of the authorisation holder to ensure the above details are correct at the time of submitting any documentation, and that the documentation reaches the relevant official.

Date of Environmental Authorisation: 11 September 2017




for: Head of Department

KwaZulu-Natal Department of Economic Development, Tourism and Environmental Affairs

Signed by : Mrs. Kim van Heerden

Designation : uMgungundlovu District Manager

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Annexure 1: Reasons for Decision

1. Background

The applicant appointed the following Environmental Assessment Practitioner (EAP) to undertake a basic assessment process:


EnviroPro

Contact Person: Josette Oberholzer or Iain Jourdan or Stephanie Denison
Postal Address: P. O. Box 1391
Kloof
3640
Telephone Number: (031) 765 2942
Fax Number: (086) 549 0342
Cellphone Number: (082) 929 4662
E-mail Address: steph@enviropro.co.za

2. Information considered in making the decision

In reaching its decision, this Department took, *inter alia*, the following into consideration –

- a) EnviroPro submitted an application for Environmental Authorisation subject to a Basic Assessment process for the above-mentioned activity to this Department on 09 March 2017. This Department acknowledged receipt of the application on 19 March 2017;
- b) This Department received the Basic Assessment Report for the proposed activity on 25 May 2017 and acknowledged receipt of the Basic Assessment Report on 05 June 2017;
- c) The findings of the site inspection undertaken by Departmental official Mr. Kraigen Govindasamy, in the company of Mrs. Stephanie Denison (EnviroPro) on 23 June 2017;
- d) The comments received from the organs of state and interested and affected parties as included in the BAR dated May 2017 and received separately including comments from:

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Document	Compiled by	Date
Baseline Aquatic Assessment for the Ekhamanzi Secondary Bulk Water Pipeline and Reservoir	The Biodiversity Company	November 2016
Wetland Assessment for the Ekhamanzi Secondary Bulk Water Pipeline and Reservoir	The Biodiversity Company	November 2016
Cultural Heritage Assessment	Active Heritage cc	28 March 2017
Correspondence	Eskom	14 February 2017
Correspondence	Telkom	02 February 2017
Correspondence	uMgungundlovu District Municipality	22 May 2017

- e) Mitigation measures as proposed in the BAR and as incorporated in the EMP, both prepared by EnviroPro and dated May 2017 and April 2017 respectively;
- f) The comments raised by various stakeholders and other Departments; and,
- g) The objectives and requirements of relevant legislation, policies and guidelines, including Section 2 of the National Environmental Management Act, 1998 (Act No. 107 of 1998).

3. Key factors considered in making the decision

All information presented to this Department was taken into account in this Department's consideration of the application. A summary of the issues which, in this Department's view, were of the most significance is set out below.

3.1 Basic Assessment Report

- 3.1.1 The Basic Assessment Report (BAR) (prepared by EnviroPro, dated May 2017) complies with the requirements of the EIA Regulations, 2014 (as amended).
- 3.1.2 The BAR (prepared by EnviroPro, dated May 2017) included a description of the environment that may be affected by the activity and the manner in which the physical, biological, social, economic and cultural aspects of the environment may be affected by the proposed activity.
- 3.1.3 The proposed development will adhere to an Environmental Management Programme (prepared by EnviroPro, dated April 2017) and site specific mitigation measures that will ensure that the environmental impacts are managed throughout all phases of the development.
- 3.1.4 The methodology used in assessing the potential impacts identified in the BAR (prepared by EnviroPro, dated May 2017) and the specialist studies have been adequately indicated.
- 3.1.5 All requirements of the EIA Regulations, 2014 and other relevant legislation and guidelines have been considered in the BAR (prepared by EnviroPro, dated May 2017).

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3.2 Public Participation

Public participation involved the placement of a site notice board in English and isiZulu on 31 January 2017; a meeting was held on site with the Ward Councillor on 31 January 2017; the e-mailing of written notices to Interested and Affected Parties and various identified and potential stakeholders on 30 January 2017; the placing of a newspaper advertisement in the iLanga Langesonto newspaper on 05 February 2017; and, the provision of reports and information to Interested and Affected Parties to satisfy the requirements of Chapter 6 of the NEMA EIA Regulations, 2014 (as amended).

All issues/comments raised have been sufficiently addressed within the Basic Assessment Report and the Environmental Management Programme both prepared by EnviroPro and dated May 2017 and April 2017 respectively. This Department is satisfied that the public participation process undertaken, adhered to the minimum requirements of Chapter 6 of the NEMA EIA Regulations, 2014 (as amended).

3.3 Need and Desirability

The Ekhamanzi Secondary Bulk Water Pipeline and Reservoir is part of the Umshwathi Bulk Water Scheme (Phase 2). The bulk pipeline will supply the proposed eKhamanzi reservoir with potable water, for distribution to the eKhamanzi Community. The project will provide the community with adequate, safe, reliable and sustainable water service resulting in an improved quality of life; and is likely to create local job opportunities during the implementation phase and during the operation and maintenance phase.

3.4 Alternatives

The preferred site alternative considered for the Ekhamanzi Secondary Bulk Water Pipeline and Reservoir is located within the Ekhamanzi community. The aim of the project is to increase the reliable, potable water supply to the eKhamanzi Community and therefore there are no site alternatives. No additional sites were considered as the preferred pipeline route is the most direct and has already been transformed from its original state and the relocation of the pipeline would result in transformation of previously undisturbed areas. Various pipe materials were initially investigated however there is only one technology alternative as the pipe specifications and reservoir need to fall within the appropriate design standards. Two layout alternatives have been considered in the BAR and are discussed below.

Original Layout alternative

The original pipeline route was a desktop engineering drawing that has the same amount of watercourse crossings as the preferred alternative but was not selected as it did not take into account the location of

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previously disturbed areas (such as an existing footpath used by the eKhamanzi Community to access the river) or areas proposed for future development (such as the proposed new eKhamanzi Road) which would minimise the amount of disturbance to vegetation in the project area.

Preferred Layout alternative


Sections of the pipeline route near the eKhamanzi River were re-aligned to reduce the amount of disturbance to vegetation in the project area. The section of pipeline from the proposed eKhamanzi Reservoir site to the eKhamanzi River was re-aligned to follow an existing footpath, which is used by the local community to access the eKhamanzi River. Approximately 1.3km of pipeline between the eKhamanzi River and the Mtizane River were re-aligned so that the pipeline lies within the existing and proposed new eKhamanzi Road reserve. The re-alignment of the pipeline will reduce the amount of disturbance to the vegetation in this area as construction of the new road will also follow this alignment.

3.5 No-go Alternative

The construction of the eKhamanzi bulk pipeline and 350KI reservoir will not occur and there will continue to be no municipal water supply to this area. Accordingly, the community will continue to carry water from the rivers in the valley up to their houses. The basic human right for every person to have access to clean water will not be fulfilled and as such, a new bulk supply and reservoir will still be required to meet current and future potable water demand.


3.6 Potential Environmental Impacts/ Socio Economic Impacts

The key potential environmental impacts associated with the proposed development are: damage to watercourse banks, wetland areas and riparian zones from construction activity; pipeline impeding or altering flow of the watercourses; loss of riparian vegetation during excavation across watercourses; encroachment of alien vegetation into areas disturbed during construction; damage to surrounding properties and services; and, the positive impacts include improved access to services. These environmental aspects have been adequately addressed in the BAR (prepared by EnviroPro, dated May 2017; the Environmental Management Programme (prepared by EnviroPro, dated April 2017); and, through conditions of this Environmental Authorisation.

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3.7 General

- 3.7.1 The Baseline Aquatic Assessment for the Ekhamanzi Secondary Bulk Water Pipeline and Reservoir (prepared by the Biodiversity Company and dated November 2016) indicated that the aquatic systems in the vicinity of the project site range between a moderate to largely modified state due to extensive erosion and exotic vegetation encroachment. The study found that the Ekhamanzi Secondary Bulk Water Scheme and Reservoir has the potential to increase erosion and sedimentation of aquatic habitats and further influence the encroachment of exotic vegetation. However, the study indicates that the development is likely to have a far less impact on the aquatic system with the implementation of mitigation measures for the pipeline watercourse crossings to adequately mitigate the impacts to downstream habitat and improve the management of erosion and alien invasive species encroachment. Adherence to the recommendations of the Baseline Aquatic Assessment in respect of the pipeline construction (type and method of excavation), erosion and sediment control, alien invasive management and rehabilitation has been included as a condition of this Environmental Authorisation.
- 3.7.2 The Wetland Assessment for the Ekhamanzi Secondary Bulk Water Pipeline and Reservoir (prepared by the Biodiversity Company and dated November 2016) identified three wetland areas in the vicinity of the project. A channelled valley-bottom wetland was found to be associated with three watercourse crossings and a hillslope seepage wetland was delineated in the north-western section of the study area but is located above the pipeline and will therefore not be impacted on. The wetlands are in a largely natural state and a small loss of natural habitats and biota may have taken place, however the study indicated that the construction of the pipeline is unlikely to change the Present Ecological Status of the wetlands. It was recommended that the pipeline should span the delineated wetland areas and that the size and placement of piers must ensure the smallest footprint and the least number of supports required. The adherence to the above recommendations of the Wetland Assessment has been included as a condition of this Environmental Authorisation.
- 3.7.3 The Heritage Impact Assessment (prepared by Active Heritage and dated 28 March 2017) stated that the proposed pipeline development may proceed as no heritage sites or archaeological features are in danger of being destroyed or altered and recommended that operations exposing any archaeological or historical residues should cease immediately pending an evaluation by the heritage authorities. Additionally, construction workers should be cautioned to operate with care on site and in the event that a culturally sensitive aspect be discovered on site, construction activities must stop temporarily with the site being assessed and the authorities (AMAF) being notified if need be. This has been included as a condition of this Environmental Authorisation.

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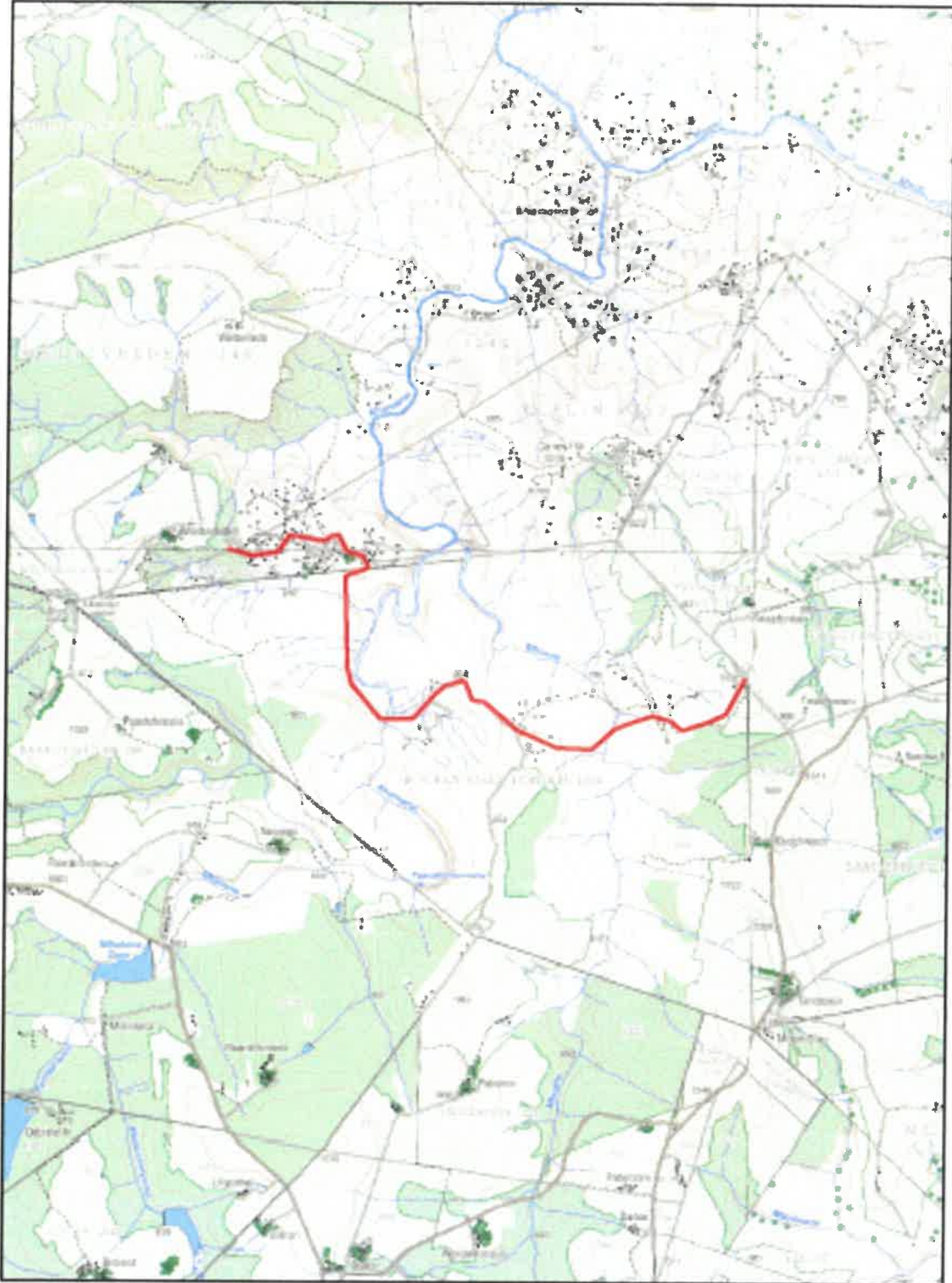
- 3.7.4 Eskom (letter dated 14 February 2017) indicated that the Dalton NB14 11 kV and Grunneck NB3 11kV power line will be impacted on by the development and provided several servitude conditions for adherence. Adherence to the requirements of Eskom (letter dated 14 February 2017) in respect of construction activities in proximity to Eskom infrastructure and servitudes has been made a condition of this Environmental Authorisation.
- 3.7.5 Telkom (letter dated 02 February 2017) confirmed that no infrastructure will be affected and has no objection to the proposed development.
- 3.7.6 The uMgungundlovu District Municipality is the applicant and has no objection to the development from an environmental perspective (letter dated 22 May 2017).
- 3.7.7 The Department of Water and Sanitation and Ezemvelo KZN Wildlife (EKZNW) were provided with the opportunity to comment on the proposed development. To date no comments have been received from the respective authorities with regard to the proposed development. It is noted that the development requires an application for an Integrated Water Use License application prior to construction commencing due to the activities being undertaken within and in proximity to watercourses. This Department is satisfied in its review that all significant biodiversity related concerns have been identified and appropriately assessed to safeguard the ecological integrity of the development area within this Environmental Authorisation and the EMPr.
- 3.7.8 The development and implementation of associated infrastructure is a public amenity and will enable ease of access of safe and reliable potable water for the residents and broader local communities, thereby improving service delivery of an essential service in the area. There will also be temporary employment opportunities during the construction period.


In view of the above, this Department is satisfied that subject to compliance with the conditions contained in the Environmental Authorisation and upon adherence to the mitigation measures contained in the Environmental Management Programme that the proposed activity will not conflict with the general objectives of Integrated Environmental Management as laid down in Chapter 5 of the National Environmental Management Act, 1998; and, that any potentially detrimental environmental impacts resulting from the proposed activity can be mitigated to acceptable levels. **The application is accordingly granted.**

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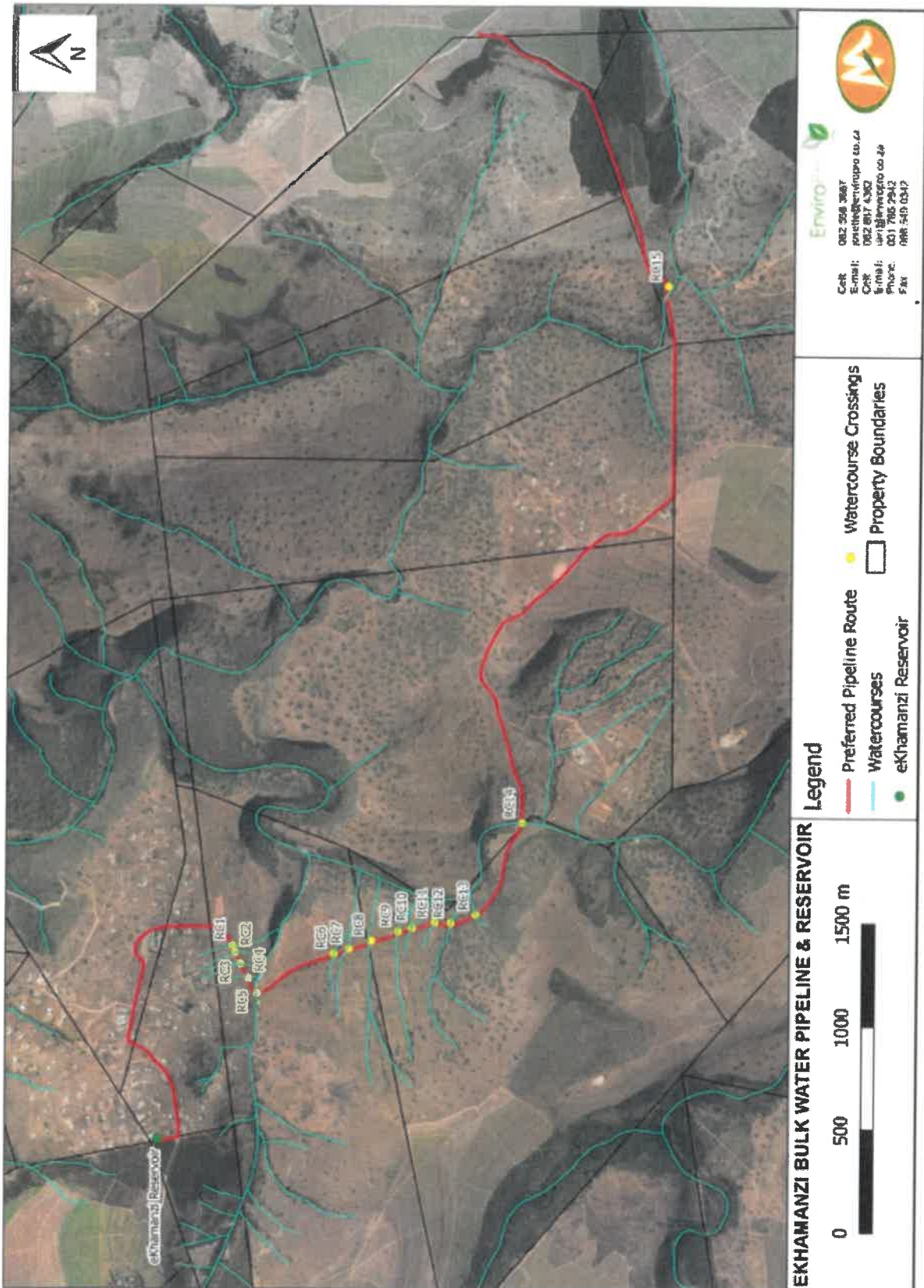
Annexure 2: Locality Map

**Ekhamanzi Bulk Water Pipeline in the uMshwathi Local Municipality
uMgungundlovu District Municipality**
1 in 50 000 map (2930BC); Position of the pipeline outlined in red (centre of site: 29°15'52.29"S;
30°43'11.02"E)



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Annexure 3: Layout Plan



Annexure 4: Site Facility Illustration

