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### **BACKGROUND INFORMATION**

Kwahlokohloko SSA1 Phase 1H: Upgrading of Raw Water Supply Pipeline to Phobane WTW and Upgrading of Phobane WTW, Within Ward 27 of Umlalazi Municipality, King Cetshwayo District, KwaZulu Natal.

### **AUGUST 2022**

Prepared By:

Emvelo Quality and Environmental Consultant (PTY) Ltd

**Prepared For:** 

**Eyethu Engineers (PTY) Ltd** 



On Behalf Of:

**King Cetshwayo District Municipality** 



### INTRODUCTION/BACKGROUND

Emvelo Quality and Environmental Consultant has been appointed by Eyethu Engineers (Pty) Ltd, on behalf of King Cetshwayo District Municipality for the Kwahlokohloko SSA1 Phase 1H: Upgrading of Raw Water Supply Pipeline to Phobane WTW and Upgrading of Phobane WTW, within Ward 27 of uMlalazi Municipality, King Cetshwayo District, KwaZulu Natal.

The King Cetshwayo District Municipality is the delegated Water Service Authority (WSA) for all rural municipalities within the district, with the exception of uMhlathuze Local Municipality.

In response to the growing urgency to secure adequate and sustainable bulk water supplies required to address the current water shortages and long-term demands, King Cetshwayo Municipality intend to upgrade the Phobane Water Treatment Works (WTW). The proposed upgrades focuses on Phase 1H of the overall project, the upgrade of the existing 20M \( \ell \) /day Phobane WTW, which will allow for increased vlqque into the Greater Mthonjaneni, Kwahlokohloko and Eshowe supply areas in line with the projected demands with adequate water supply designed for 20-year plan projection, at least up to 2043.

The existing Phobane Water Treatment Works (WTW) comprise of a 600 diameter 300m water supply pipeline, a 40Ml inlet works, 2 x 15ML/d Clarifiers, 5 module Filter building 1ML clearwater reservoir, 3 x Pump stations and 3 x Sludge ponds.

The implementation of phase 1H, will increase the capacity of the Phobane WTW from 20Ml /day to 35Ml /day in order to meet the increased demand for network extensions.

Consequently, an environmental impact assessment (EIA) has commenced, assisting the King Cetshwayo District Municipality (applicant) in identifying all potential adverse environmental consequences of the project, their extent, significance and to ensure that the environmental management requirements are adequately implemented.

The purpose of this Background Information Document (BID) is to provide you, as an Interested or Affected Party (I&AP), with a brief description of the EIA process to be undertaken and to obtain comments and contributions from I&AP's with regards to the potential impacts to the environment by the proposed project.

### PROJECT DESCRIPTION

The construction activities entails:

- Construction of new 895m (1000Ø) Raw Water Supply pipeline to convey 760ℓ /s (35Mℓ /day) Raw water supply from Goedertrouw dam outlet works to Phobane WTW. This will involve a duplicate pipeline for redundancy (existing pipeline to thereafter be abandoned);
- Tie-in to the Goedertrouw Dam outlet works;
- New 80MI/day inlet works;
- Construction of New 4x flocculation channels (approximately 50M ℓ /day);
- Construction of two (2) New clarifier of 15Ml /day each;
- New 32M ℓ /day 8 module filter bank including backwash system;
- Upgraded sludge treatment including sludge thickening, storage and disposal;
- Upgrading pre and post chemical storage and dosing.

Implementation of Kwahlokohloko SSA1 Phase 1H will increase the overall production capacity of the treatment works to 50M  $\ell$  /day, some parts will be constructed to serve

the eventual 80M  $\ell$  /day, initially the actual production will be limited to 38M  $\ell$  /day on the current water use license until the application for increased abstraction is made.

### **PROJECT LOCATION**

The proposed development will take place within Normanhurst Farm No. 13023, Portion 0 at Kwahlokohloko next to Goedertrouw Dam, Ward 27 of uMlalazi Local Municipality.

The project area is within Quaternary Catchment W12D of Pongola-Mtamvuma Catchment Management Area.

The site co-ordinates are as follows:

Raw Water Main Option 2		
Start (Abstraction)	28°46'14.60"S,	
,	31°28'14.67"E	
First Bend	28°46'22.68"S,	
	31°28'16.61"E	
Second Bend	28°46'28.33"S,	
(Middle)	31°28'23.22"E	
Watercourse	28°46'28.01"S,	
Crossing	31°28'22.72"E	
Third bend	28°46'22.70"S,	
	31°28'27.89"E	
End (WTW)	28°46'21.09"S,	
	31°28'33.12"E	
Raw Water Main Option	on 1	
Start (Abstraction)	28°46'14.60"S,	
	31°28'14.67"E	
First Bend	28°46'17.91"S,	
	31°28'15.40"E	
Watercourse	28°46'19.33"S,	
Crossing	31°28'22.76"E	
End (WTW)	28°46'21.09"S,	
	31°28'33.12"E	

### WHAT IS AN ENVIRONMENTAL IMPACT ASSESSMENT?

An EIA is an effective planning and decisionmaking tool, which allows for the identification of potential adverse environmental consequences of a proposed project, and its management through the planning process.

In terms of the National Environmental Management Act, 1998 (Act No.107 of 1998), as read with the Environmental Impact Assessment (EIA) Regulations of 2014 as amended in 2017, an Environmental Authorization must be obtained from the relevant decision-making authority, the Department Economic Development, Tourism and Environmental Affairs (DEDTEA) prior to the commencement of any of the listed activities that may result in potential negative impacts on the environment. Thus, an environmental impact assessment is required. A Basic assessment that includes the public participation process will be performed.

### ENVIRONMENTAL IMPACT ASSESSMENT PROCESS

#### **EIA PROCESS**

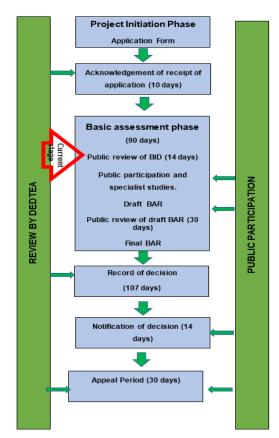


Figure 1: EIA process

In terms of the Environmental Impact Assessment (EIA) regulations, an independent Environmental Assessment Practitioner must be appointed to conduct the EIA. Therefore, Emvelo Consultant has been appointed by Eyethu Engineers (Pty) Ltd, on behalf of King Cetshwayo District Municipality to conduct the EIA.

Emvelo Consultant will identify and assess the potential environmental impacts associated with the proposed activity by conducting an objective and independent EIA in which all the relevant information and opinions of Interested and Affected Parties (I&APs) will be collected and passed on to the Department of Economic Development, Tourism and Environmental Affairs (EDTEA) In this way, an informed decision-making process can take place.

### LISTED ACTIVITIES TRIGGERED BY THIS PROJECT

The proposed project triggers the following listed activities of the EIA Listing Notices;

**Table 1: Listed Activities** 

LISTING	ACTIVITY	DESCRIPTION OF		
NOTICE		ACTIVITY		
1	19	The infilling or		
		depositing of any		
		material of more than 5		
		cubic metres into, or		
		the dredging,		
		excavation, removal or		
		moving of soil, sand,		
		shells, shell grit,		
		pebbles, or rock of		
		more than 5 cubic		
		metres from-		
		(i)A watercourse,		
		(ii)the seashore; (iii)the		
		littoral active zone, an		
		estuary, or a distance		
		of 100 metres inland of		

LISTING	ACTIVITY	DESCRIPTION OF
NOTICE		ACTIVITY
		the bigh water moule of
		the high-water mark of
		the sea or an estuary-
		but excluding where
		such infilling,
		depositing, dredging,
		excavation, removal or
		moving—
		(a) will occur behind a
		development setback;
		(b) is for maintenance
		purposes undertaken
		in accordance with a
		maintenance
		management plan; [or]
		(c) falls within the
		ambit of activity 21 in
		this Notice, in which
		case that activity
		applies;
		(d) occurs within
		existing ports or
		harbours that will not
		increase the
		development footprint
		of the port or harbour;
		<u>or</u>
		(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.

LISTING	ACTIVITY	DESCRIPTION OF
NOTICE		ACTIVITY
		Applicability: The new
		895m (1000Ø) Raw
		Water Supply pipeline
		will traverse the
		NFEPA Wetlands.
		There are two points of
		NFEPA interception:
		Within Goedertrouw
		Dam outlet works at
		28°46′14.60″S,
		31°28'14.67"E, and
		midway at
		28°46′28.01″S,
		31°28'22.72"E.
		Therefore, there will be
		excavation, infilling
		within watercourses, as
		a result of Goedertrouw
		spillway stream
		crossings, and
		wetlands, as well as
		raw mains from
		abstraction works.

The NEMA, and the Environmental Impact Assessment (EIA) Regulations (2014) as amended in 2017, govern the process of applying for environmental authorization for certain developments. A provision in the EIA Regulations is made for two forms of assessment: Basic Assessment and Scoping & EIA, depending on the scope of the activity. The EIA regulations specify that: Activities identified in Listing Notice 1 and 3 (GNR 327 and 324 of 2017) requires a Basic Assessment while activities identified in Listing Notice 2 (GNR 325 of 2017) are subject to a Scoping and EIA.

The listed activity associated with the proposed development is: Listing Notice 1, Activity 19. Therefore, this application will follow a **Basic Assessment Process**, as a result mentioned Listing Notice 1 trigger.

### WHAT IS PUBLIC PARTICIPATION?

Public participation is the process that promotes information sharing, consultation and active involvement amongst stakeholders, and all interested and affected parties.

During the Public Participation Process, input from the proponent, technical experts, government authorities and the general public will be gathered to result in a better understanding of the project for all involved

thus ensuring an informed decision-making throughout the process.

# REGISTRATION OF INTERESTED AND AFFECTED PARTIES.

Any person, company, authority or other entity that might be directly or indirectly affected by the proposed activity is invited to register as an I&AP, in order to assist the EAP in identifying possible environmental, economic and social impacts of the proposed development and to make suggestions for mitigations. These comments will be included as part of the Basic assessment report which will be submitted to the Department of Economic Development, Tourism and Environmental Affair for consideration.

Interested and affected parties (I&APs) may forward their written comments along with their contact details within 14 days from receiving the document to; **Phumzile Lembede**.

Postal address: P. O. Box 101672, Meerensee, 3901;

**Tel:** 035 789 0632; **Fax:** 086 577 5220,

Email: Info@emveloconsultants.co.za.

### **APPENDIX A: (LOCALITY MAP)**

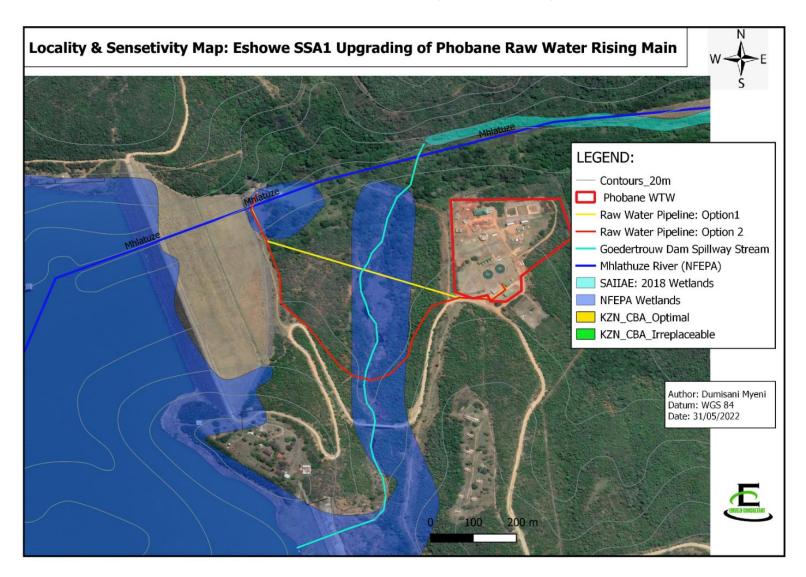


Figure 2: Map Showing Locality of proposed development

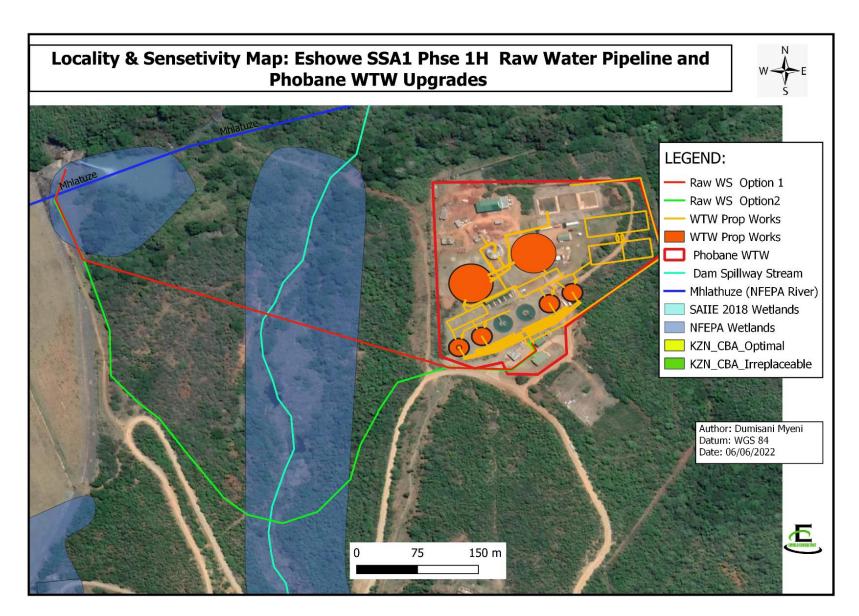


Figure 3: Map Showing Locality of proposed development



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### REGISTRATION AND COMMENT FORM

## KWAHLOKOHLOKO SSA1 PHASE 1H: UPGRADING OF RAW WATER SUPPLY PIPELINE TO PHOBANE WTW AND UPGRADING OF PHOBANE WTW, WITHIN WARD 27 OF UMLALAZI MUNICIPALITY, KING CETSHWAYO DISTRICT, KWAZULU NATAL.

I wish to register as an interested and affected party and / or bring to the attention of Emvelo Consultant the following information.

Personal Information		
Name and Surname		
Company /organization		
Physical Address		
Postal address		
Telephone:	Cell:	
Email:		
Due to Covid-19 Pandemic	c, we would like you to inform us on a preferred and effective means o	of
receiving documents and c	communication from us.	
<u>Method:</u>	Address:	
<u>Comments</u>		
Signature	Date	