

***BACKGROUND INFORMATION DOCUMENT
AND INVITATION TO REGISTER***

A component of the Environmental Impact Assessment (EIA) and Water Use License
Application (WULA) process for the
**PROPOSED PROVISION OF SEWER CONNECTIONS FROM CONTAINERISED
ABLUTION BLOCKS (CABS) TO DEWAT SEWAGE TREATMENT PLANTS IN
INFORMAL SETTLEMENTS IN THE HAZELMERE AREA OF ETHEKWINI**

JULY 2014

EDTEA EIA REF.: DM/0057/2014

INTRODUCTION

BACKGROUND INFORMATION

Bosch Semele Consulting Engineers (Pty) Ltd were appointed as implementing agents to design, obtain consent for and supervise construction of these sewer lines and treatment works by the Ethekewini Municipality.

Siyazama Consulting has been appointed by Bosch Semele to undertake an Environmental Basic Assessment, in terms of the Environmental Impact Assessment Regulations (GN R544 and R545) promulgated in terms of Chapter 5 of the National Environmental Management Act 1998 (No. 107 of 1998), as amended, and

Obtain the necessary Water Use License from the Department of Water and Sanitation, under the Water Act of 1998.

PURPOSE OF THIS DOCUMENT

The purpose of this document is to provide background information on the proposed project and both the Environmental Impact Assessment (EIA) and Water Use License Application (WULA) process being undertaken. Furthermore this document serves to enable interested and/or affected parties (I&AP) an opportunity to register as stakeholders in the public participation process and provide comment on the proposed development.

PROJECT SITE DESCRIPTION

LOCATION

The proposed site for these lines is within the existing informal settlements of Hazelmere, to the south of Hazelmere dam in the north of the Ethekewini municipal area (refer to figure 1).

This area falls into the catchment of the Mdloti river.

The central coordinates of the area is:
29 36 18.6 S and 31 02 21.5 E

TOPOGRAPHY

The area is an undulating landscape with moderate slopes. The drainage lines flow down into the Mdloti river just below the dam. All three sites for the proposed onsite sewage treatment works (DEWATS) are outside of the 1:100 floodline of the river

VEGETATION

Most of the original vegetation in the area has been transformed as the result of the informal settlement. The original vegetation would have been KwaZulu Natal Coastal belt according to Mucina and Rutherford

EXISTING LAND USE AND INFRASTRUCTURE

The existing land use in the area is informal settlement. It is located close to the industrial node of Canelands.

GEOLOGY

The proposed sewer lines and treatment plants appear to be exclusively in an area of Dwyka Tillite

DEVELOPMENT PROPOSAL

COMPONENTS OF THE PROPOSED DEVELOPMENT

Certain priority informal settlements were identified within the eThekewini Municipality that urgently need ablution blocks (these will be containerized ablution blocks or CABS), as well as water and sewer connections to serve the communities immediate needs. The proposed sewer pipes (internal diameter 160mm) will gravity feed to 3 small self contained domestic waste water treatment plants (i.e. DEWATS- Decentralised Sewage Treatment Works). Capacity: 26-78m³/d. The length of the sewer lines is estimated

at 3.5 kilometres

DEWAT Technology – this is an alternative option that fills the gap between inappropriate pit latrines and large scale expensive treatment works. The DEWAT system planned here will comprise a septic tank, anaerobic baffled reactor and filter, and constructed artificial wetlands.

DEWATS can be constructed and operated successfully almost anywhere because they rely on natural waste-water treatment processes without special equipment, chemicals and electricity supply.

DEWATS applications are based on low maintenance principles as the most important parts of the system work without technical energy inputs and cannot be switched off intentionally.

Sewerage: no bulk sewerage infrastructure is available hence the proposal to pilot an on site sewage option

Roads and Stormwater: these already exist in the area

EXISTING SERVICES

Water: potable water is available to the site

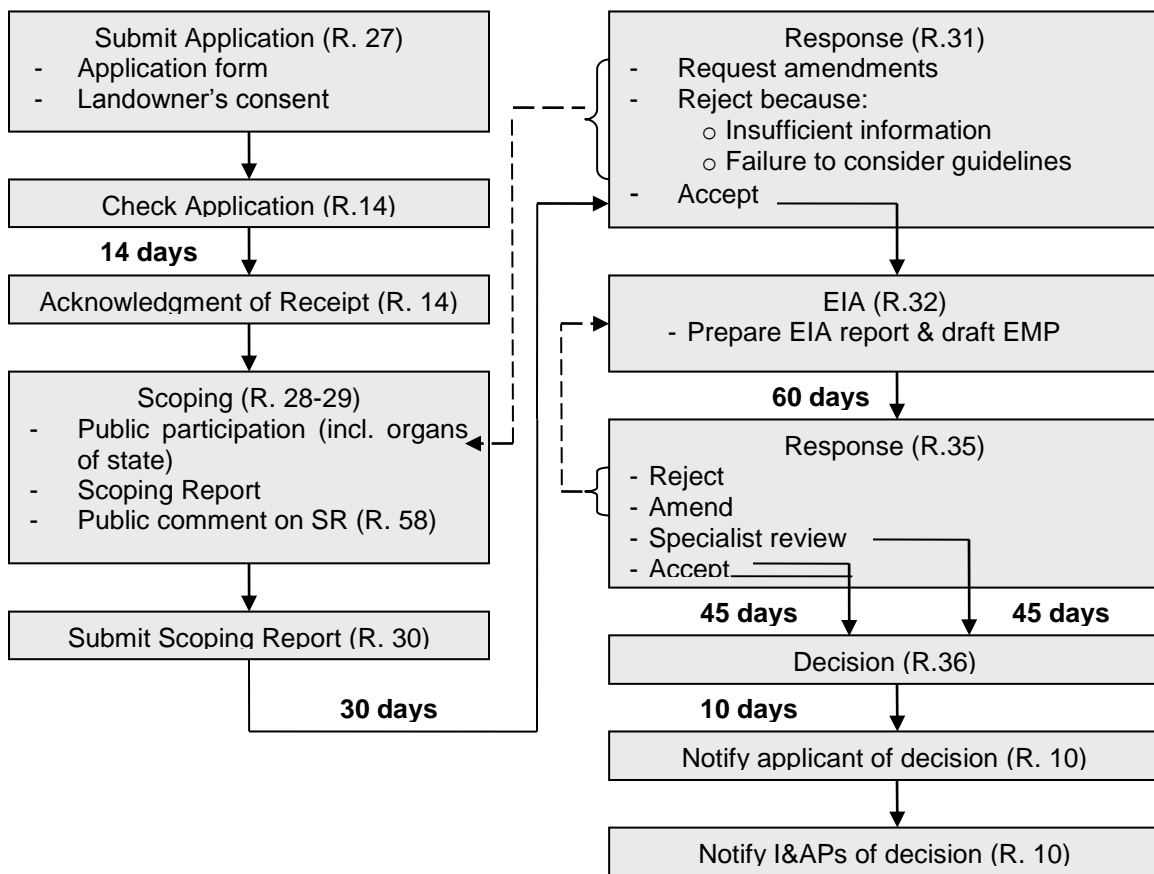
Electricity is available to the area

ENVIRONMENTAL AUTHORISATION PROCESS

The proposed development triggers several activities in need of a Basic Assessment process (BA) as detailed in the EIA Regulations (Government Notices R544, R545 and R546 as amended on 10 December 2010) promulgated in terms of Chapter 5 of the National Environmental Management Act 1998 (No. 107 of 1998) (NEMA), and requiring authorisation from the KZN Department of Economic Development, Tourism and Environmental Affairs (EDTEA).

An EIA is a public process, which is used to identify, predict and assess the potential environmental impacts of a proposed project on the environment (i.e. biophysical, social and economic environments) during the construction and operational phases. The EIA is used to inform the decision-making process undertaken by the EDTEA.

An overview of the environmental impact assessment process is provided in the flow diagram below.



WATER USE LICENSING APPLICATION PROCESS

The proposed development triggers several activities which require a Water Use License to be applied for from the Department of Water and Sanitation (DWS) including a development within 500 metres of a wetland as well as the treatment and disposal of sewage (in terms of the National Water Act of 1998 and GN number 1199 of 2009)

In this regard an application must be made to the Department of Water and Sanitation, together with a public participation process. This process can be undertaken in conjunction with the Environmental Authorisation process discussed above

The WULA process does not have legislated timeframes as the EIA process above, but the DWS office in Durban has agreed to acknowledge the application within 30 days and comment within a further 30 days. Once they are happy with the submission, they forward it to the national office in Pretoria for approval (this can take anything up to 6 months).

PUBLIC PARTICIPATION PROCESS

STEPS TAKEN TO INFORM I&AP

Interested and affected parties (I&AP) are being notified of the proposed development by means of written correspondence, newspaper advertisements and notices placed on site.

A public meeting may be held if and when required to discuss the proposed development with identified I&AP and obtain any comments or issues that need to be addressed in the Impact Assessment process

Siyazama will prepare a draft Scoping Report incorporating input received from I&AP and specialists, where necessary. This report will be made available to all registered I&AP for comment. All comments will be

recorded in the Comments and Responses Report to be addressed in the Environmental Impact Report to be submitted to the EDTEA for authorisation.

All registered I&AP will be notified of the Environmental Authorisation once it has been issued.

I&AP REGISTRATION

Should you wish to register as an interested and Affected Party, or simply to receive any future reports and correspondence, please complete the attached form and forward it to the Environmental Consultants, Siyazama Consulting, at the contact details hereunder.

Applicant: Water and Sanitation Department

Ethekwini Municipality

Contact: Mr. Alan Kee

Postal Address: 3 Prior Road, Durban 4000

Tel: 031 3118911

Fax: 031 3024066

Environmental Assessment Practitioner:

Siyazama Consulting (Pty) Ltd

Contact: Mike Webster

Postal Address: PO Box 400, Westville 3630

Tel: 031 9401208 Fax: 031 2667005

E-mail: mikew@siyaconsulting.co.za



KEY ISSUES IDENTIFIED

The development could have a number of impacts on the area both positive and negative. These significant impacts can be effectively mitigated through the methods and specifications that will be outlined in the Environmental Management Programme.

The following have been identified through preliminary assessment:

Geophysical and biophysical

- Potential water pollution from sewage either via a spill or improper functioning of the WWTW could affect the ecology of the adjacent stream, the Mdloti river.
- However the current water quality in the streams is poor and the provision of a water born sewage system should improve this
- Erosion and sedimentation of the stream during construction.
- Potential water pollution from seepage of pollution out of damaged pipes

Socio-economic

- Provision of water born sewage disposal to informal housing. Social hindrances to this development are unlikely as there is community support for the project.
- Additional employment opportunities will be created in the construction phase, the operation phase and through spin off activities.
- Improved health of the local inhabitants via access to water born sewage

