

**BASIC ASSESSMENT ENVIRONMENTAL AUTHORISATION AND WATER USE
LICENSE APPLICATION PROCESS FOR THE PROPOSED INFRASTRUCTURE IN
SUPPORT OF THE MECCANO TAILINGS RETREATMENT PROJECT, NEAR
RUSTENBURG, NORTH WEST PROVINCE
BACKGROUND INFORMATION DOCUMENT**

INTRODUCTION AND BACKGROUND

Sibanye-Stillwater owns the Kroondal Operations (Pty) Ltd, Marikana Mine located near Rustenburg, North West Province. Sibanye-Stillwater produces Platinum Group metals (PGMs) such as platinum (Pt), palladium (Pd), rhodium (Rh), iridium (Ir), ruthenium (Ru), osmium (Os) and gold (Au). Other refined by-products that are produced include silver, copper, nickel, chromite, and cobalt sulphate, as well as sulphuric acid and sodium sulphate. It is the intention of Sibanye-Stillwater to roll-out the Meccano Tailings Retreatment project through the Meccano Processing Plant (old Marikana plant) which includes the recovery of fine chrome and PGMs from various tailings streams and deposits from Sibanye-Stillwater sites within the region. This project forms part of the long-term strategic planning for Sibanye-Stillwater's tailings management.

To ensure that the mine is ready to accommodate the proposed retreatment and reclamation process as well as to optimise the existing processes, Sibanye-Stillwater intends to construct various pipelines for the conveyance of tailings and return water, associated booster pump station, access road, as well as the storage and handling of material that contain components listed as dangerous goods in terms of South African National Standards (SANS) 10234.

The proposed project will require a Basic Assessment environmental authorisation process in terms of National Environmental Management Act (Act 107 of 1998) (NEMA) and a Water Use License Application (WULA) in terms of the National Water Act (Act 36 of 1998) (NWA). Certain pipelines have already been authorised under existing Environmental Authorisations and have been excluded from the Basic Assessment application but included in the WULA application.

LOCALITY

The proposed project is situated approximately 5km west of the Marikana Town within Wards 32 and 45 of the Rustenburg Local Municipality. A project locality map is provided in **Figure 1**. The project will be located on the following Farms as provided in **Table 1**.

Table 1: Potentially Affected Farm Portions

Farm Name	Farm Portions
Farm Rooikoppies 297	Portions 1, 221, 122, 248, 249, 250, 278, 279, 280,283, RE/281, RE/282, RE/329, & RE/328
Farm 342	Portions 89, 42, 52, 57, 59, 71, 325, 272, 300, 43, 55, 95, 61, 63, 73, 340, 121, 17, 271, 273, 94, 115)
Farm Spruitfontein 341	(Portions 6, 101, RE/5)

The surface ownership of the potentially affected properties vests with Sibanye Stillwater.

PURPOSE OF THE BACKGROUND INFORMATION DOCUMENT

The Public Participation Process (PPP) forms an integral part of any environmental authorisation process. This Background Information Document provides basic information regarding the proposed project and offers the reader an opportunity to obtain further information on the project so as to make informed comments, raise issues of concern and generally contribute positively towards the realisation of the project. The distribution of this document is a crucial step in advising the reader on how to become involved in the PPP. This document details the following:

- Project background and description.
- An overview of the environmental regulatory processes which will be undertaken in accordance with the South African legislation; and
- Provide details of the PPP and how Interested and Affected Parties (I&APs) can become involved.

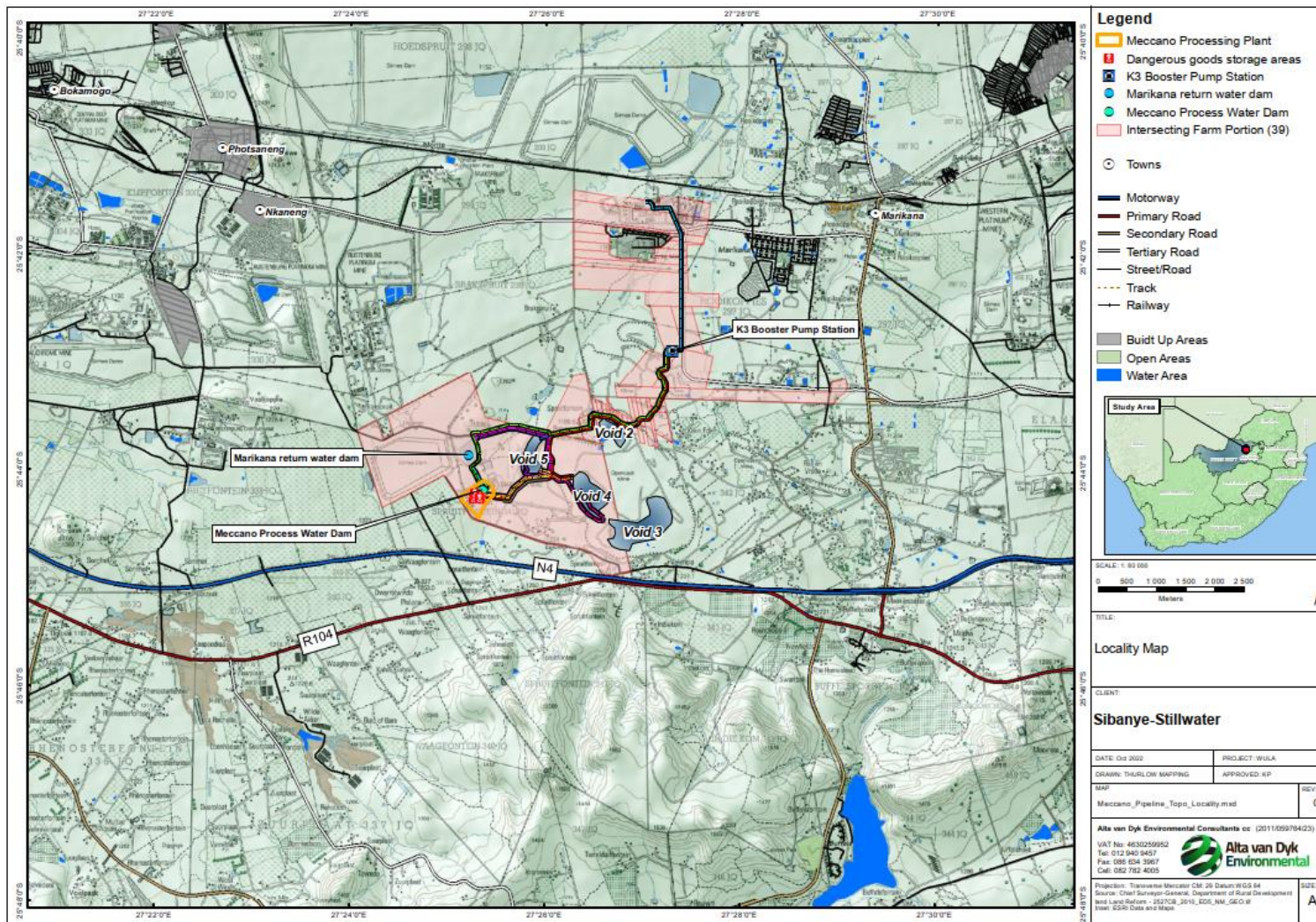


Figure 1: Project Locality Map

PROJECT DESCRIPTION

The tailings that will be conveyed in the pipelines consist of process effluents that are generated in a mine processing plant. The unrecoverable and uneconomic minerals, organics and process water are discharged, normally as tailings. The tailings retirement project includes the reprocessing of such process effluent at the Meccano plant.

The Meccano processing plant aims to extract chrome and PGM concentrate via a floatation metallurgical process. The final tailings material from the Meccano plant is conveyed to Voids 4 & 5 for final deposition.

In order to optimise process water management and distribution, a network of return water pipelines is proposed for reuse in the operations (Karee Operations and Meccano processing plant).

The Meccano Tailings Retreatment project includes the following infrastructure (**Figure 2**):

Tailings Pipelines

- K3 Concentrator to the booster pump station (≈3.12km)
- K3 booster pump station to the Meccano processing plant (≈5.75km)
- K3 bypass line to Void 5 (≈0.21km)
- K2 tie in from the previously approved pipeline to the Meccano processing plant (≈1.7km) *(only applicable to the WULA)*
- Meccano processing plant to Voids 4 & 5(line 1) (≈2.19 km) *(only applicable to the WULA)*
- Meccano processing plant to Voids 4& 5 (line 2) (≈2.19 km) *(only applicable to the WULA)*

Return Water Pipelines

- Void 4 to Marikana Return Water Dam (≈3.44km)
- Void 5 to Marikana Return Water Dam (≈2.45km)
- Return Water Dam to the Pandora tank (≈5.24km)
- Return Water Dam to the Meccano Process water tank (≈0.98km)
- Meccano process water dam to the Meccano Return Water dam (≈0.54km)

Associated Infrastructure

- Access road (1,2 km)
- Booster pump station
- Storage of dangerous goods

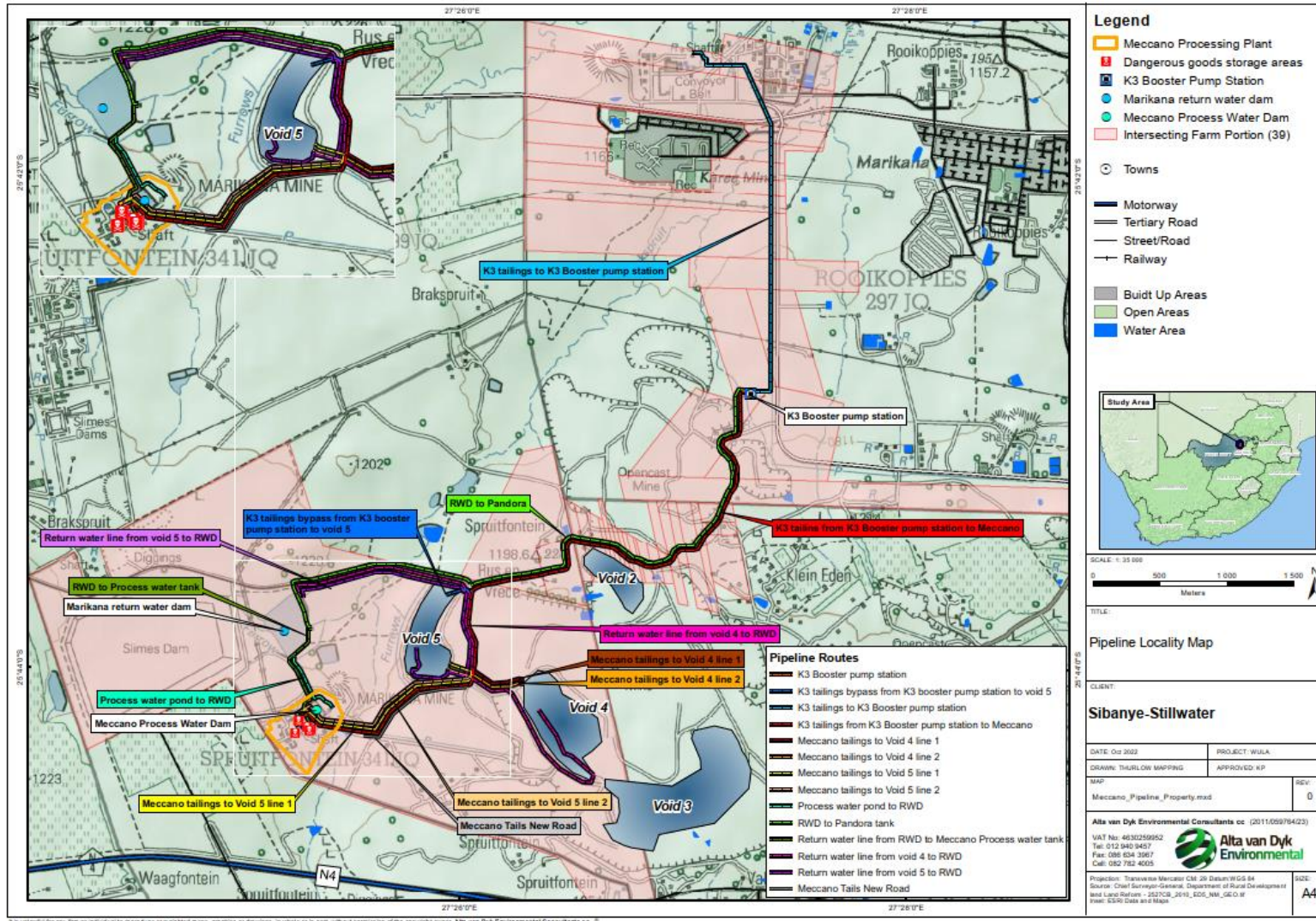


Figure 2: Proposed Infrastructure

APPLICABLE ENVIRONMENTAL LEGISLATION

National Environmental Management Act, 1998 (Act 107 of 1998) (NEMA): Environmental Impact Assessment (EIA) Regulations 2014 (as amended)

The NEMA EIA Regulations, 2014 (as amended) identifies three separate administrative processes for environmental authorisations, depending on the nature of the activity. A Basic Assessment process (Listing Notice 1) is identified for those activities that have less of a possible detrimental impact to the environment. A Scoping and Environmental Impact Reporting (S&EIR) process (Listing Notice 2) is necessary for those activities, which are identified as having more of a possible detrimental impact on the environment, whereas Listing Notice 3 relates to identified activities that would require a Basic Assessment prior to the commencement of those activities in specific identified geographical areas only.

In accordance with the 2014 EIA Regulations, as amended, a specific list of activities which could potentially have a detrimental impact on the receiving environment have been identified, for which an Environmental Authorisation is required. The list of activities as provided in **Table 2**. For the proposed project, a Basic Assessment process is required. **Figure 3** provides details of the Basic Assessment Process.

Table 2: Listed Activities Triggered

Notice No	Activity	Applicability
GN983	<p>Listing Notice 1: Activity 12</p> <p>The development of infrastructure or structures with a physical footprint of 100 square metres or more:</p> <p>Where such development occurs:</p> <ul style="list-style-type: none"> (a) Within a watercourse (b) In front of a development setback (c) If no development setback exists, within 32 metres of a watercourse, measured from the edge of the watercourse. 	In some instances, pipelines will traverse the watercourses.
GN983	<p>Listing Notice 1: Activity 14</p> <p>The development and related operation of facilities or infrastructure, for the storage, or for the storage and handling, of a dangerous good, where such storage occurs in containers with a combined capacity of 80 cubic metres or more but not exceeding 500 cubic metres.</p>	A combined volume of 281 cubic meters of dangerous goods will be stored at the existing Meccano processing plant.
GN983	<p>Listing Notice 1: Activity 19</p> <p>The infilling or depositing of any material of more than 10 cubic metres into, or dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 10 cubic metres from a watercourse.</p>	Earthworks in the watercourse will be undertaken for the placement of plinths in support of the pipelines.
GN985	<p>Listing Notice 3: Activity 12</p> <p>The clearance of an area of more than 300m² or more of indigenous vegetation except where</p>	Clearance of indigenous vegetation will be undertaken where required for the

Notice No	Activity	Applicability
	such clearance of indigenous vegetation is required for maintenance purposes undertaken in accordance with a maintenance management plan	construction of the pipelines, pump station and access road.
GN985	<p>Listing Notice 3: Activity 14</p> <p>The development of-</p> <p>(ii) infrastructure or structures with a physical footprint of 10 square metres or more; where such development occurs-</p> <p>(a) within a watercourse;</p> <p>(c) if no development setback has been adopted, within 32 metres of a watercourse, measured from the edge of a watercourse;</p>	In some instances, sections of the pipelines will traverse the watercourses.

The competent authority for this process is the North West Department of Mineral Resources and energy (DMRE).

Mineral and Petroleum Resources Development Act, 2002 (Act 28 of 2002) (MPRDA)

The DMRE has issued Sibanye-Stillwater Kroondal Operations (Pty) Ltd, Marikana Mine with a Mining Right in terms of Section 23 of the MRPDA. Since a mining right is in place, the proposed project will make use of the existing mining right as the reference number, which is MR113.

National Water Act, 1998 (Act 36 of 1998)

Sections of the proposed pipelines, access roads, pump station, and dangerous goods storage areas (*where applicable*), will traverse a delineated watercourse, or constructed within 500m of a delineated wetland, hence a Water Use Licence Application (WULA) in terms of the National Water Act (Act 36 of 1998) (NWA) will be undertaken. The project triggers the following water uses defined in Section 21 of the NWA:

- **21 (c)** Impeding or diverting the flow of water in a watercourse; and
- **21 (i)** Altering the bed, banks, course, or characteristics of a watercourse.

The competent authority for this process is the Department of Water and Sanitation (DWS). **Figure 4** provides details of the Water Use License Process.

PUBLIC PARTICIPATION

Your comments and suggestions on any aspect of the proposed project, including the technical and stakeholder engagement processes, will ultimately assist the authorities in their decision-making process. If you wish to receive further notifications and documentation regarding the proposed project, kindly complete the attached registration form, and send to Kirthi Peramul of Alta van Dyk Environmental Consultants. Contact details are overleaf.

During the Basic Assessment process, potential impacts are identified, and management measures are proposed to mitigate negative impacts and enhance positive impacts. A Draft Basic Assessment Report will be compiled and made available for public comment for a period of 30 days. Once the public

comment period is concluded, the Final Basic Assessment Report will be compiled and updated with the comments received from stakeholders and will be submitted to DMRE for decision making.

Kirthi Peramaul

Alta van Dyk Environmental Consultants cc

Tel number: 012 940 9457

Fax number: 086 634 3967

Postal Address: Postnet Suite #745, Private Bag X 1007, Lyttelton, 0140

Email: kirthi@avde.co.za

In terms of Section 11 of the Protection of Personal Information Act (POPIA), all personal information collected will be processed lawfully and explicitly for the Environmental approval process.

ENVIRONMENTAL AUTHORISATION PROCESS

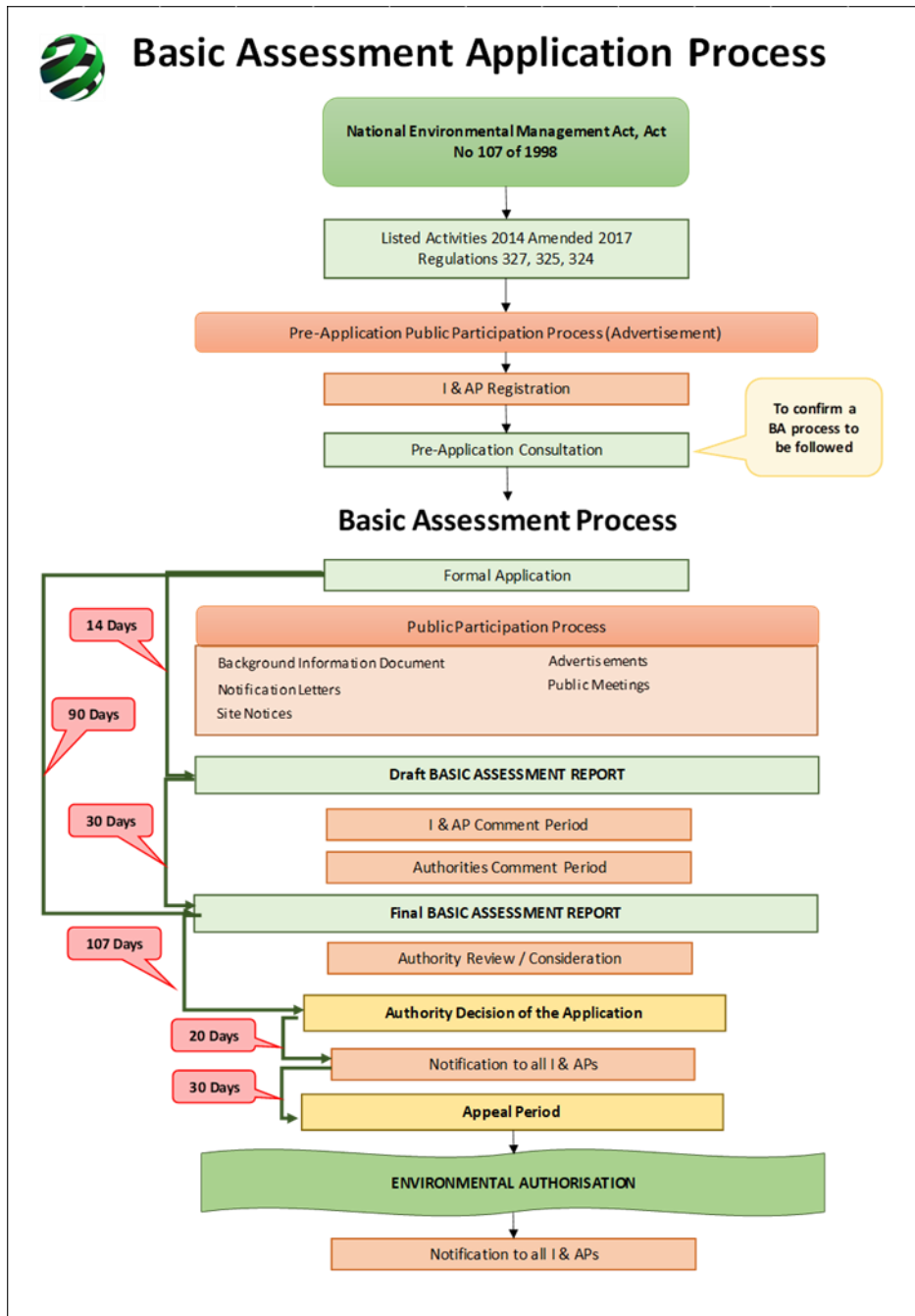


Figure 3: Basic Assessment Process

WATER USE LICENCE APPLICATION PROCESS

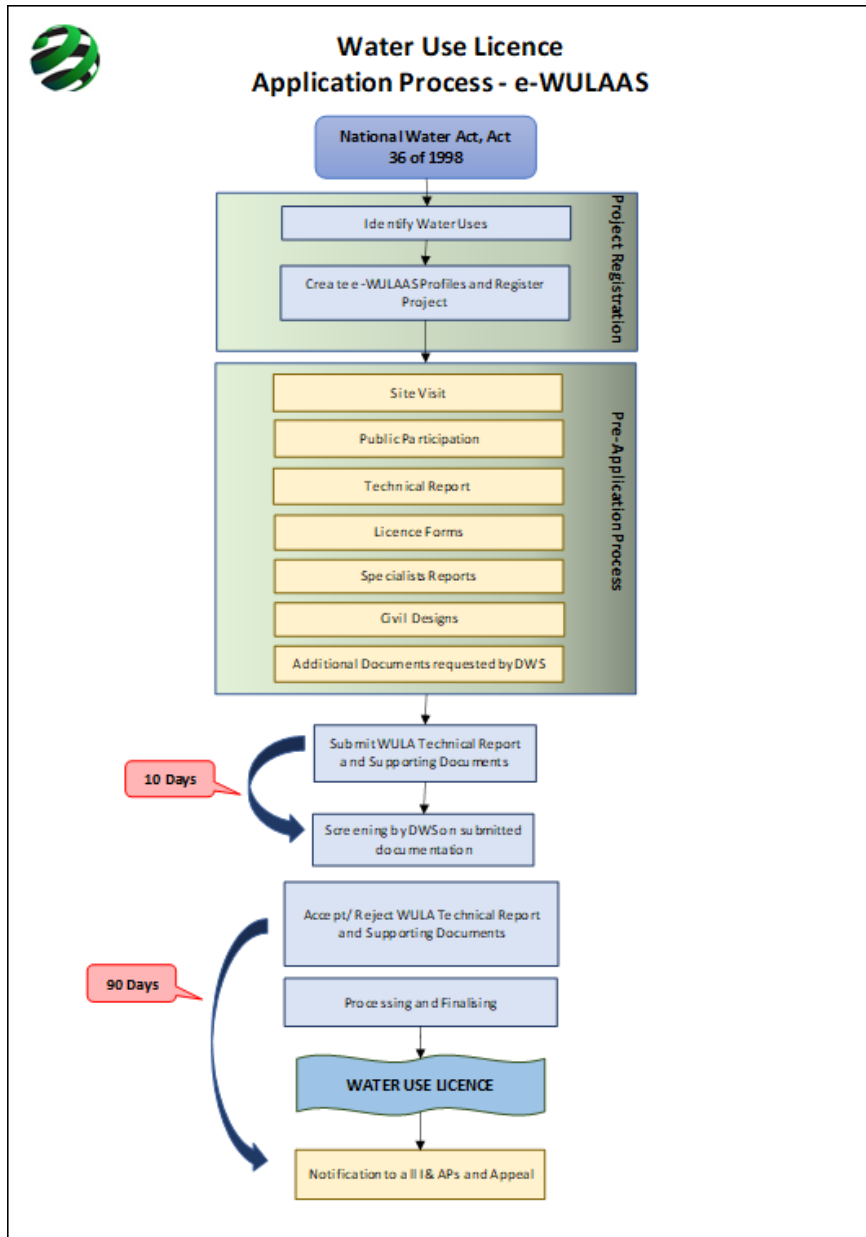


Figure 4: Water Use Licence Process

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REGISTRATION AND COMMENT FORM

To register as an I&AP, kindly complete this form and return it to:

Kirthi Peramaul
Alta van Dyk Environmental Consultants cc
Postnet Suite 745, Private bag X1007, Lyttelton, 0140
Fax: 086 634 3967
Email: kirthi@avde.co.za

Personal Details

Title		First Name	
Surname		E-mail	
Telephone		Fax	
Organisation (If Applicable)		Capacity	
Physical Address		Postal Address	

Comments:

Are there any additional stakeholders who you should feel should be consulted with regards to the proposed project? Please provide their details.