

# BACKGROUND INFORMATION DOCUMENT

APPLICATION FOR A MINING RIGHT AND ENVIRONMENTAL AUTHORISATION WITHIN A PORTION OF  
REMAINDER OF PORTION 17 WITHIN RESERVE NO. 18 NO. 15838 NEAR NQUTHU, KWAZULU-NATAL  
PROVINCE (DMR Reference Number: KZN 30/5/1/2/2/10088MR)

The purpose of the Background Information Document (BID) is to provide information to assist stakeholders participating in the Environmental Impact Assessment process for the proposed project. This BID has been developed to:

- Share information about the proposed project;
- Present the Environmental Impact Assessment (EIA) process that will be followed to obtain an Environmental Authorisation (EA) according to the NEMA and MPRDA
- Provide more details about the Public Participation Process (PPP) which will be followed.

## Project Description

Active Blue Trading 226 (Pty) Ltd currently holds a Prospecting Right (KZN 30/5/1/3/2/10224PR) and a Mining Permit (KZN 30/5/13/2/10019MP) within Reserve No. 18 No. 15838.

It must be noted that "Nquthu Quarry" commenced operation in June 2016 under the Mining Permit 10019 MP. Extraction of aggregates at the Nquthu Quarry is currently being carried out by drill and blast methods. Holes are drilled within the intact rock boulders and charged with explosives. Once blasted, the unconsolidated material is transported to the crusher via the haul roads.

Further assessment of the geological data available has determined that within the mine site, a prominent dolerite ridge is found extending beyond the current Mining Permit area. The company wishes to extend the mine and increase production, hence the application for a mining right in a ±38 hectare area. The proposed project is located approximately 10km north of the town of Nquthu in northern KwaZulu-Natal. The closest village, Mkhonjane, is approximately 2,1km south-west of the project. The site is accessible just off the Road P54. The project is located within the Umzinyathi District Municipality and Nquthu Local Municipality. See Figure 1 and Figure 3. The minerals Aggregate and Granite/Syenite are being applied for under the Mining Right Application.

The mining activities include quarrying for aggregates and dimension stone.

The environmental authorisation application was lodged with the Department of Mineral Resources ("DMR") on 24 May 2018 and a reference number KZN 30/5/1/2/2/10088MR has been allocated to the application.

## Basic Overview of Mining Activities & the Mining Method

Mining will proceed first east from the current mining area, then northwards as the opencastable resources are depleted in the current mining area. The plan is to drill and blast the material for gravel in the first 25m, and as the hard rock is encountered, build benches to extract dimension stone to a level of approximately 75m.

The aggregates and dimension stone will be produced via drill, blast (and/or sawing in the case of dimension stone), load and haul methods (see Figure 2). The aggregates in particular will be crushed to the suitable size, shape and quality to produce the required material. Once blasted, the derived rocks are loaded, by either an excavator or front-end loader from the muck piles to the crusher via haul roads. Material that is too large to go through the primary crusher is further broken down to ±300 mm with a mechanised Pecker.

The typical primary mining fleet for this mining method consists of excavators, front-end loaders and articulated dump trucks. The typical ancillary fleet assisting the mining fleet for this mining method include: graders, water trucks and diesel bowsers.

**High Level Description of the Processing Plant**

Processing of aggregate is by means of a three-step crushing and screening circuit including:

- » Stage 1: Primary Jaw Crusher (for breaking down rocks to  $\pm 150\text{mm}$ )
- » Stage 2: Secondary Crusher and screening (for breaking down rocks to fragments of less than  $\pm 19\text{mm}$ )
- » Stage 3: Tertiary Crusher and screening (for shaping and producing small diameter stone of  $\pm 4\text{mm}$ )

**High Level Description for extraction of Dimension Stone**

- » Dimension stone is extracted in blocks of various sizes according to the client's specific requirement.
- » The mining methods utilised in the extraction of dimension stone range from relatively simple and low technology methods. Granite tends to utilise more low-tech drilling and splitting technologies. The splitting techniques are generally the oldest of techniques used in dimension stone extraction. Today, all of the splitting techniques involve drilling of a series of small diameter co-planar holes in the stone in order to introduce a splitting agent. In many cases, holes are notched using a special tungsten carbide drilling bit in order to enhance the direction of split. Splitting can be achieved by using either plugs and feathers, expansive mortar or light explosives. While the latter is very costly, it remains the most effective way, especially for large rock splits.

**Infrastructure Requirements**

A 132kV Eskom line supplies power to the Nquthu Quarry switchyard situated adjacent to the plant. These overhead supply lines originate from existing switches and provide a reliable power supply to the project area. Supply lines leading from these switches to the Nquthu Quarry switchyard are the sole property of Eskom.

The water consumption for mining operations is approximately 400L/hr, while domestic consumption amounts to about 25L per day. Watering down of haul roads will require an estimated 2 rounds daily to suppress dust from hauling operations. Water is also used during the three stages of crushing. The daily water consumption is equivalent to approximately 3,200l.

Water supplies are drawn from a borehole. The water pumped from here and stored in tanks. The plant uses this recycled water as a means of dust suppression.

The site is accessible via the P54 road. Various other smaller gravel roads service the surrounding rural area.

The surface infrastructure of the mine includes the following:

- » Haul roads, mine and access road of the main road;
- » Stockpiles located in the plant area
- » Stores located in the plant area
- » Crushing Plant
- » Administration Offices
- » Truck and Light vehicle parking bay

**Needs and Desirability for the Proposed expansion of the Mine from a Mining Permit to a Mining Right**

Dolerite has been used both for dimension stone and aggregate for centuries, primarily due to its physical properties that renders the material hard and resistant to the elements.

The leading uses for dimension stone and aggregate is in the building and construction industry.

Dimension stone has been used for its aesthetic quality which gives it its value. The demand thereof is thus determined by market trends and popularity within the construction industry. It is for this reason that quarries have to stay dormant for a period of time while demand remains low, this sometimes can stretch to five years or more.

Aggregate by its nature, can only be produced on a small scale. The fact that demand dictates production, means that small operations, by largely local companies are in existence. It also follows that these quarries stay in production for the duration of the demand and is kept under care and maintenance until such time that a new customer comes.

The demand for aggregate and dimension stone can be directly correlated to activity within the construction industry. It is industry norm to only produce the quantity and quality dictated by offtake agreements, therefore there is never a case when there's a surplus or shortage of production. It therefore follows that the production is identical to the demand.

In the aggregate business, the demand has shown positive growth from 1999 to 2007 culminating in a year-on-year increase of 8.5% due to the reasons provided in the previous section. We are now seeing an increase in the demand again, fuelled by major road network upgrades, rapid rail infrastructure construction in Durban, the rapid bus system in Pretoria (Areyeng), expansion of the N14 Highway road network and expansion of the Gautrain to the West Rand, just to name a few.

Dimension stone is essential a luxury item whose demand is dictated by the wealthy, especially in Europe and USA. Product range is vast and the only varieties of stone that have

kept relative consistent demand in the last two decades are:-

- » the dark types, namely Rustenburg Grey, Belfast Black, Impala Black and Zimbabwe black
- » the red/pink varieties, mainly Capricorn or African Red; and
- » the green varieties, Verde Bitterfontein and Natal Green

As is the case in aggregate, demand is equivalent to production and mining occurs only with pre-orders from customers.

### **Potential Environmental Impacts Associated with the Proposed Project**

Potential impacts relate to:

- » Air quality - fugitive dust may occur due to drilling, blasting, excavation, crushing, movement of vehicles and operation equipment on site. Limited gaseous or particulate emissions are also anticipated from exhaust emissions from operation vehicles and equipment.
- » Traffic - movement of haulage trucks transporting the product from site into the market (off-takers).
- » Noise – Drilling and blasting, as well as crushing, are expected to be the main source of noise. Noise associated with the movement of vehicles within the mining area is also anticipated.
- » Soil and groundwater pollution - soil and groundwater pollution may occur due to leaks from site operation equipment (e.g. crushers) and from heavy duty vehicles that will access the site.
- » Socio and economic impacts - mining may result in positive socio-economic opportunities in terms of local employment opportunities as well sourcing supplies required from local/ surrounding suppliers/ contractors (where possible).

### **Environmental Impact Assessment Process**

Listed activities identified in GNR.326 EIA Regulations, 2014 (amended 2017) apply to

the proposed mining project. The MRA itself falls within the ambit of Listed Activity No. 17 of GNR. 325 Listing Notice 2 of the EIA Regulations, 2014 (amended 2017). In terms of the applicable legislation, a Scoping and Environmental Impact Assessment ("S&EIA") process is required (see Figure 4 for the S&EIA process diagram).

ZN Geo Services (Pty) Ltd, an independent environmental consultant, has been appointed to undertake the above authorisation process on behalf of Active Blue Trading 226 (Pty) Ltd.

For this proposed project, the competent authority is the Department of Mineral Resources ("DMR"). Active Blue Trading 226 (Pty) Ltd can only commence with activities once an EA and Mining Right has been granted by the DMR.

### **Public Participation Process**

The aim of the Public Participation Process ("PPP") is to allow interested and affected parties ("I&APs") the opportunity to gain an understanding of the project and consider all facets of the proposed mining activities. The PPP will:

- » Provide I&APs with information about the proposed mining activities and associated potential impacts;
- » Allow I&APs the opportunity to provide input, such as concerns or queries, on the proposed project; and
- » Incorporate the input raised by I&APs in the study and ultimate decision-making process.

The following activities will take place during the public participation process:

- » Advertising the EIA Process (in local press): (i) Advertisements will be placed in the local newspaper (Northern KwaZulu-Natal Courier) and (ii) site notices will be placed at the project site and public venues;
- » Registering I&APs and key stakeholders on the database. A call for stakeholders to

register on the project database will be made through the advertisement and site notices, as well as through letters of notification.

- » This Background Information Document ("BID") will be distributed to I&APs (by-hand and via e-mail, or post/fax where necessary) informing stakeholders of the EA and Mining Right Application being applied for by Blue Active and other pertinent information as detailed herewith.
- » The Draft Scoping Report ("DSR") will be made available for a 30-day public and authority review period. Stakeholders will be informed of the availability of the DSR through the advertisements, site notices and letters of notification. The DSR will be made available at a public venue in close proximity to the site and online (Dropbox link).
- » Recording all comments, issues and concerns raised by I&APs and preparation of a PPP report and Comments & Responses Report ("CRR").
- » Updating of the Scoping Report taking into consideration all comments received; and
- » Submission of the Final Scoping Report ("FSR") to the DMR for acceptance so that the project can proceed to the Impact Assessment Phase.

During the Impact Assessment phase, a similar process will be followed (i.e. an advertisement will be placed in the local newspaper, letters of notification will be sent out, the draft Environmental Impact Report (EIR) and Environmental Management Programme (EMPr), inclusive of specialist studies, will be made available for a 30-day public and authority review period, all written comments will be addressed and a PPP Report inclusive of a CRR will be prepared, the EIR & EMPr will be updated following the closure of the comment period and a Final EIR & EMPr (inclusive of specialist studies) will be submitted to the DMR for consideration of granting an EA and a Mining Right.

### **Getting Involved**

Surrounding communities, government and other stakeholders such as traditional authorities, community leaders, Non-Governmental Organisations (NGOs) and others are invited to register as I&APs.

Stakeholders are encouraged to provide written comment on the draft reports as it is made available, and these comments will be incorporated into the final reports submitted to the DMR. Attached herewith is a Comments and Registration form, and you as a stakeholder is welcome to complete the form and return it to ZN Geo Services. Registration on the project database also mean that your details may be shared in the public domain as our reports will contain a project I&AP database and the CRR which records written comments received from stakeholders.

As a registered stakeholder, you will also be notified as the project progress (i.e. from the Scoping Phase into the Impact Assessment Phase up to and including when a decision has been by the DMR on the EA and Mining Right applications.

### **How to get involved?**

All persons who wish to take part in the Public Participation Process by commenting on or raising any concerns regarding the development are invited to do so through the following means:

1. Registering as an Interested and Affected Party (in writing at the details provided below);
2. Submit any comments in writing on the response sheet attached to this document if you have any (and return to us within timeframes provided; and
3. Review the Draft Scoping Report, when it becomes available, and raise any concerns or comments in writing within the timeframes provided.
4. Review the Draft EIR & EMPR, when it becomes available, and raise any concerns/ objections or comments in writing within the timeframes provided.

### **Contact Details for Registering as an I&AP and commenting on the proposed project**

Contact: Zama Sithole (Environmental Assessment Practitioner)  
E-mail: [zama.ndumo@gmail.com](mailto:zama.ndumo@gmail.com)  
Cell/ Mobile: +27 83 467 3532  
Fax: +2786 620 3833

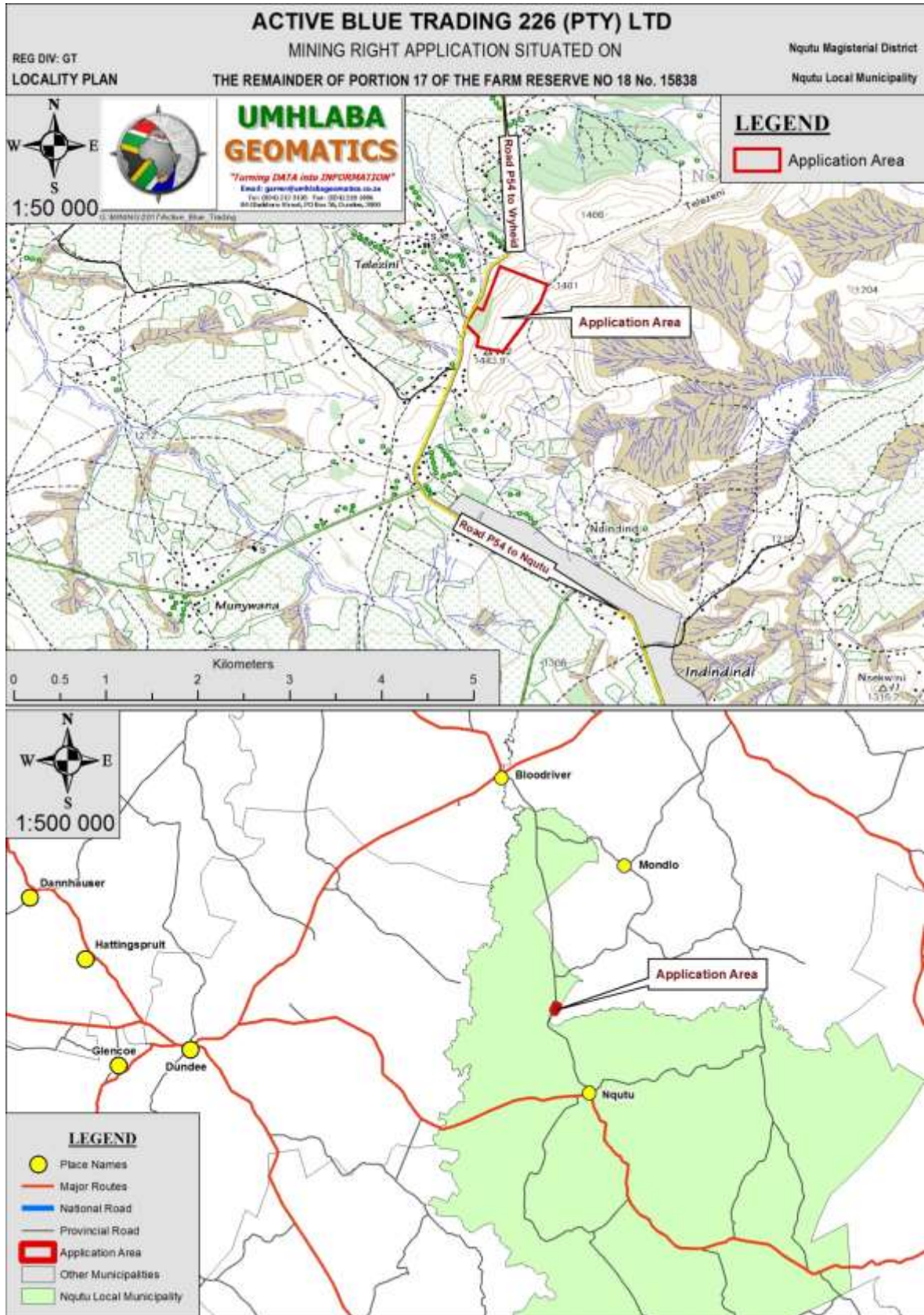


Figure 1: Locality Map

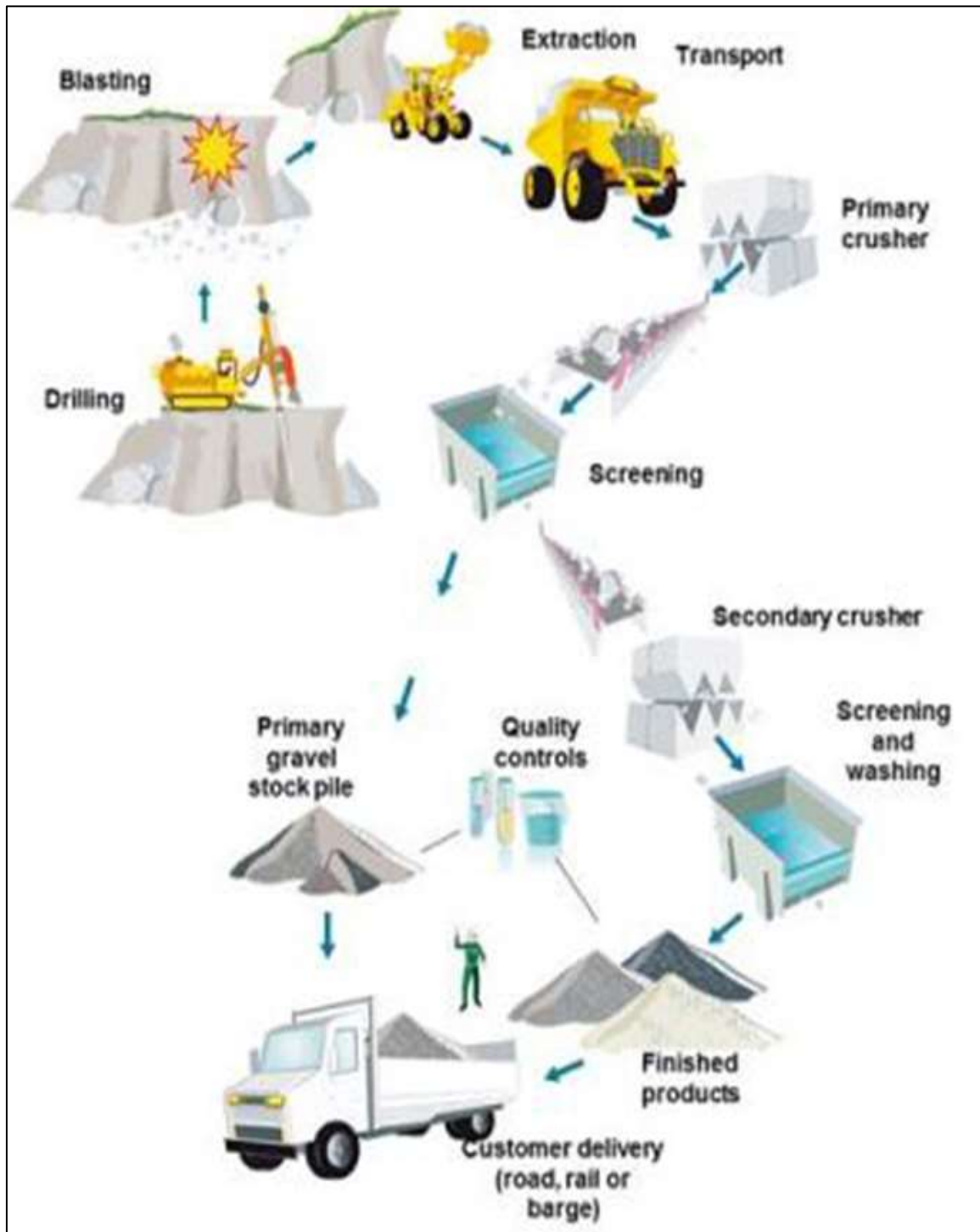


Figure 2: Mining Method



Figure 3: Site Layout Plan



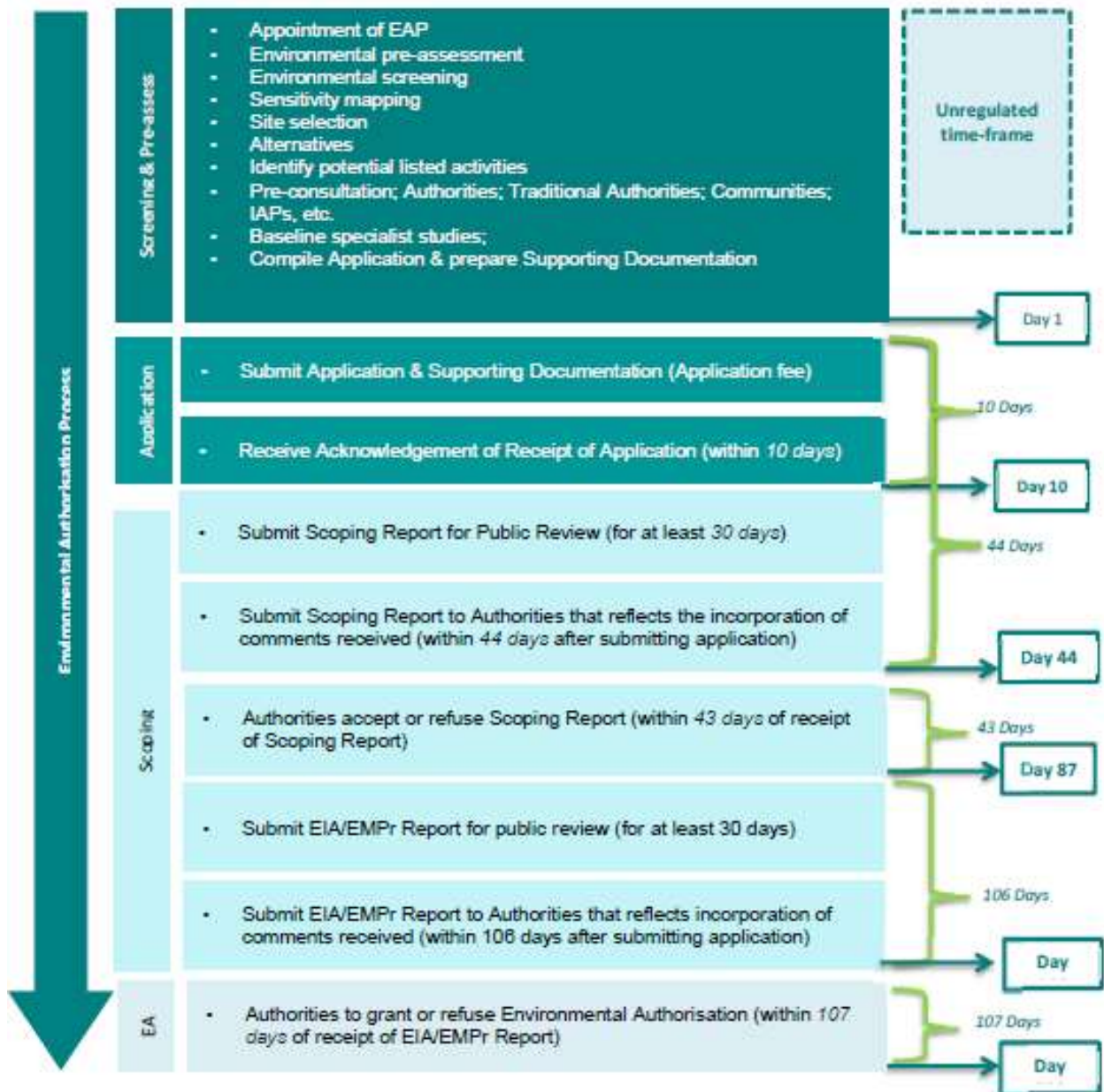


Figure 4: Scoping and EIA Process

**COMMENTS AND REGISTRATION FORM**  
**REFERENCE NUMBER: KZN 30/5/1/2/2/10088MR**

Please provide your complete contact details:

Name and Surname:	
Organisation and Designation:	
Physical Address:	
Postal Address (if differ to the Physical Address):	
Contact Number (Landline and/or Mobile/Cell):	
E-mail Address:	

Would you like to register as an interested and affected party (I&AP)?

**YES**

**NO**

*Please Note: Once registered on the project database, your details may be included in public documentation.*

Please state your interest in the Proposed Project (insert additional pages if necessary):

Please list your questions, views or concerns regarding the Proposed Project (insert additional pages if necessary):

Please provide contact details of other persons who you may regard as a potential I&AP:

*(Include Name & surname, contact number, email, etc.)*

**Contact Details for Registering as an I&AP and commenting on the proposed project**

Zama Sithole (Environmental Assessment Practitioner)

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