

# BACKGROUND INFORMATION DOCUMENT

DMR REFERENCE: Pending

## Purpose of the BID

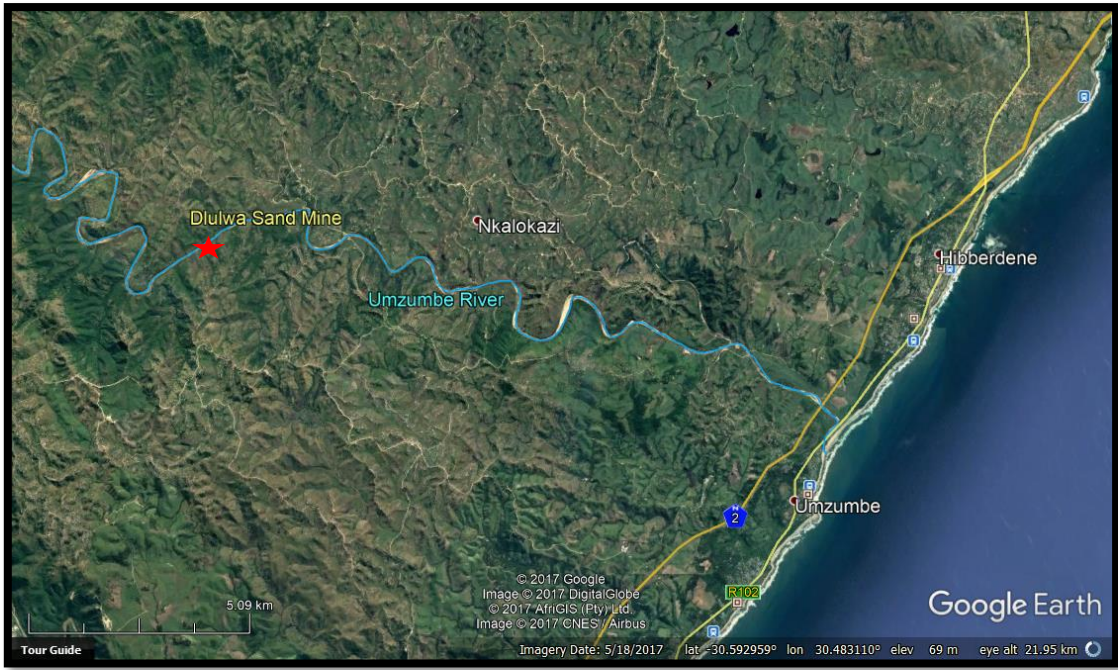
A Basic Assessment (BA) and Water Use License (WUL) process has commenced for the Dlulwa Silica Sand Mine on behalf of Dlulwa Trading (Pty) Ltd, for a Permit to mine Silica sand over Erf 9231 Golden Gate, situated within Umzumbe Local Municipality on the KwaZulu-Natal south coast.

The purpose of this Background Information Document (BID) is to provide Interested and Affected Parties (I&APs) with background information on the proposed project and the associated environmental processes to be followed. It also outlines the manner in which I&APs can become involved in the Project, receive information and raise any issues that may be of interest and/ or concern to them during the public participation process. Comments and Responses received from the I&APs will be incorporated into the Final BA and WUL Report to be submitted to the Competent Authority (The Department of Mineral Resources and The Department of Water and Sanitation) for review.

All comments relating to the BA must be in by the **15<sup>th</sup> of January 2018** and for the WUL application by the **14<sup>th</sup> February 2018**. Please see stakeholders form at the end of the document for information on how to submit comments.

## LOCATION

The proposed mine site is situated in and around the Mzumbe River on the KwaZulu-Natal south coast, approximately 16 km west of the town of Hibberdene off the road R102 (**Figure 1**). The application area is 2.67 ha and is located within the Umzumbe Local and the Ugu District Municipality respectively. The locality plan and detailed sketch plan are enclosed below as **Figure 1** and **Figure 2**, respectively.



**Figure 1:** Regional location of the mine site



**Figure 2:** The permit area (red) and access road (yellow)

## Legal Framework

### Basic Assessment Process

In terms of the National Environmental Management Act, 1998 (No.107 of 1998) and associated Environmental Impact Assessment (EIA) Regulations published in December 2014 (as amended), an Environmental Authorisation must be obtained from the relevant decision-making authority (KZN DMR), prior to the commencement of certain listed activities that may result in potential negative impacts on the environment. Activity 21 of R 983 requiring a Basic Assessment process is triggered as the proposed activity will result in mining of silica sand from the Mzumbe River.

### Water Use License Process

In terms of Section 21 of the National Water Act, 1998 (Act No. 36 of 1998), the proposed Dlulwa silica sand mine will require a Full WUL for the following water uses:

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

## PROJECT DESCRIPTION

The Project involves the winning of silica sand from the sandbars and river bed of a 2.67 ha section of the Mzumbe River, the adjacent land area of which (permit application area) is owned solely by the applicant). The operation will require the use of an excavator to extract the resource.

The mechanical mining method involves the use of earth moving equipment in the form of a crawler excavator. The excavator will remove sand in a systematic sequence from the river, in a west-east direction. Furthermore, the excavator will be positioned into the sand bar that is exposed and lift the loose material and place it into an articulated dump truck (ADT). The ADT will traverse a fixed pathway along the sand bar and exit the river along an established route that joins the deposited sand bar to the river bank so as to ensure maximum possible traction angle when exiting and minimal disturbance to the riparian area and established natural river course boundaries.

The ADT will directly deposit the sand onto the area demarcated for stockpiling of the sand at the east end of the permit area. The sand will subsequently be loaded onto tip trucks for transport off the site and for sale to the local market. The sand will therefore not be processed on site.

Due to the fact that the site gradient is flat, storm water damage e.g. Erosion, siltation, pollution and any detrimental influence on any surrounding vegetation is deemed to be low.

The mine will operate for a two year permit period and will be renewable for a further three consecutive one year periods thereafter.

## MOTIVATION FOR THE PROJECT

The sand in the Mzumbe River is a quartz-rich silica sand (of granitic origin) that will provide good quality sand to the local building industry for cement and concrete work.

The broader socio-economic benefits of the project include employment, job creation, local economic development through the availability and affordability of the sand, and increased business development for the area generally.

## ENVIRONMENTAL FACTORS

- **Background**

The Mzumbe River in and around the proposed permit site is mostly denuded and silted, and no longer resembles its former state from years gone by. In addition, the river banks are infested with alien vegetation, with limited indigenous flora remaining.

The proposed impacts (general and specific) of the proposed sand mining operation, in an area less than 5 ha (which includes the stockpiling area), have so far been assessed as having virtually no potential negative impact on either the surrounding vegetation or the river itself. It is proposed that sand mining operations in denuded river systems such as that of the Mzumbe River can be construed as having some environmental benefit, particularly as once appropriately rehabilitated, they serve to:

- Improve stream-flow regulation
- Reduce runoff, sedimentation, and erosion
- Re-establish and improve diversity
- Remove alien plants and restore the agricultural potential of the area.

- **Assessment**

The applicant is in the process of preparing an Environmental Basic Assessment Report (BAR), coupled to an Environmental Management Plan (EMP), and Rehabilitation and Closure Plan as prescribed by the applicable legislation, which documentation and information will be included in, and form an integral part of the Mining Permit application, and decision-making processes to be followed by the relevant authorities.

Importantly, the BAR, EMP and Closure Plan will be required to contain all relevant information which can demonstrate that the mining operations will be conducted in a way which will:

- Minimise the potential for ground and surface water pollution
- Maintain the hydrology of the landscape level

- Minimise soil erosion
- Limit the disturbance and destruction of vegetation and habitat
- Prevent the creation of hazards for fauna and barriers to movement
- Reduce atmospheric emissions
- Minimise dust generation
- Control noise
- Reduce visual impact

- Mitigation

In addition, the BAR and EMP will be required to demonstrate the extent of the environmental impact mitigation measures to be imposed by the applicant throughout the duration of the mining operations, to be included in the Rehabilitation and Closure Plan and managed, monitored and endorsed by an ECO.

Apart from the mitigation recommendations contained in the specialist Aquatic assessment which will be endorsed in the EMP and Closure Plan, these will also include inter alia the following:

- Mining volume is based on measured annual replenishment
- Establish an absolute elevation below which no extraction may occur
- Limit in-stream mining methods to bar skimming
- Extract sand and gravel from the downstream 2/3rds portion of the bar
- Concentrate in-stream extraction activities to minimise area of disturbance
- Review cumulative effects of sand and gravel extraction
- Maintain river channel flood discharge capacity
- Establish a long-term monitoring program
- Minimise activities that release fine sediment to the river
- Retain riparian buffer at edge of water and against river bank
- Limit in-stream operation to the period between April and November and during dry season only
- An annual basic assessment report will establish the status and effect of the mining operation
- A copy of the EMP will be retained in the mine manager's possession at all times.
- The manager will be responsible for ensuring that all mitigation measures are duly enforced.
- Mining operators shall be educated in the contents of the EMP in relation to all mitigation measures required.
- The water course will not be diverted or altered
- Regular environmental monitoring and management of the mine will take place in accordance with the MPRDA

- An Environmental Control Officer (ECO) shall be appointed by the applicant to manage and monitor all
- operational impacts, and associated processes and procedures
- On-going inspection by the Mine Manager and monthly Inspections by the ECO shall take place

- Public Participation

The sharing and dissemination of all relevant information associated with the mining permit application process forms an important component of the Public Participation Process (PPP). The PPP provides I&APs with the opportunity to participate in the application process from the outset. The information provided by the I&APs is of crucial importance in the gathering of information, identification of issues and concerns, and acquiring local knowledge that will contribute towards the design and implementation of the project in a manner that will promote minimisation of negative impacts and optimisation of benefits.

The Background Information Document (BID) and draft Basic Assessment Report (BAR) are available for inspection at the Qwabe P Traditional Council, and on our company website home page at [www.idmconsultants.co.za](http://www.idmconsultants.co.za). A public meeting will be held at the Qwabe P Traditional Council at 10h00 on 1<sup>st</sup> December 2017.

All comments relating to the BA must be in by the 15<sup>th</sup> of January 2018 and for the WUL application by the 14<sup>th</sup> February 2018.

- Rehabilitation

The rehabilitation process remains the responsibility of the permit holder and involves the ripping of the stockpile/loading area, replacement of topsoil, and planting and re-establishment of vegetation. The Applicant will be responsible for compiling a rehabilitation plan as part of the BAR and EMP process.

The applicant is required to pay to the DMR a significant amount of money, relative to the perceived sensitivity of the applicable permit environment, in advance by way of cash or a bank guarantee to provide the DMR with the necessary security to ensure that the applicant in fact attends to the rehabilitation of the site upon the closure of the mine, and as per the undertakings contained in the rehabilitation plan.

- Closure

The permit holder is required to compile and submit a Closure Plan at the end of the mining permit period, which Plan is required to incorporate a Performance Assessment Report and Environmental Risk Report. The rehabilitation guarantee amount will only be refunded to the permit holder once the DMR is satisfied that the permit holder has complied with all terms and conditions relating to:

- The BAR
- The EMP
- The Rehabilitation Plan
- The Closure Plan

## CONCLUSION

I&APs are hereby invited to register and/or comment on the proposed Ddulwa Silica Sand Mine. Kindly complete the registration form below and forward the form either via email, post or fax to the Application Officer by the **15<sup>th</sup> of January 2018** for the BA and the **14<sup>th</sup> February 2018** for the WUL application. Your comments will ensure that all relevant issues are incorporated into the final BA and WUL Report, to be reviewed by the Competent Authorities.

