

## BACKGROUND INFORMATION DOCUMENT (BID)

### ENVIRONMENTAL IMPACT ASSESSMENT (EIA), WATER USE LICENSE APPLICATION AND BORROW PIT APPLICATION FOR THE PROPOSED NEW LEPHALALE RAILWAY YARD, STEENBOKPAN, LEPHALALE LOCAL MUNICIPALITY, WATERBERG DISTRICT, LIMPOPO PROVINCE

#### INVITATION TO REGISTER AND COMMENT

#### PURPOSE OF DOCUMENT

This Background Information Document (BID) briefs Interested and Affected Parties (I&APs) about the Environmental Impact Assessment (EIA), Water Use License Application (WULA) and Borrow Pit Application processes that are being undertaken for the proposed development of the Lephalale Railway Yard. The authorisation processes are subject to a public participation process.

The BID supplies project information and indicates how you can become actively involved in the project, and raise issues that may concern and / or interest you. You can achieve this by:

- Registering as an I&AP by completing the attached Comment & Registration Form, contacting us / by sending us an email;
- Reviewing of the BID
- Giving comments, raising concerns and / or issues about the project

The EIA decision making authority is National Department of Environmental Affairs. The WULA decision making authority is Department of Water & Sanitation. The Borrow Pit Application decision making authority is Department of Mineral Resources.

**Register, complete a response form, write a letter, call or email our office if you wish to register on or before 28 August 2018.**

#### INTRODUCTION

Naledzi Environmental Consultants CC (NEC) have been appointed by Transnet SOC Limited (herein after Transnet) to undertake the Environmental Impact Assessment (EIA) Process in an effort to obtain environmental authorisation for to development of the new Lephalale Railway Yard and its associated infrastructure at Steenbokpan in Limpopo Province.

The development triggers listed activities under the National Environmental Management Act (107 of 1998) (NEMA) EIA Regulations of 2014 (as amended in April 2017). As a result Transnet requires Environmental Authorisation from the National Department of Environmental Affairs (DEA) and is required to undertake a Scoping and EIA Study before it can commission the project. Triggered listed activities forming part of the application include Activity 4 under GNR 325, Activities 24 & 64 under GNR 327 and Activities 4&12 under GNR 324.

The project further triggers Section 21 (b), (c), (i) and (g) water uses under the National Water Act 36 of 1998 and requires a Water Use License from the Department of Water & Sanitation (DWS). The application for the license is subject to a Water Use License Application (WULA) Procedure as per the NWA WULA Regulations of 2017.

Due to the need to achieve a level railway yard, Transnet would be required to undertake extensive cutting and filling of the site and would need to establish two borrow pits for its fill material requirements. A Mining Permit and Environmental Authorisation is required from the Department of Mineral Resources (DMR) for establishment of borrow pits in line with the MPRDA and NEMA EIA Regulations of 2014 and is subject to a Basic Assessment Process. Application will be made in terms of the NEMA EIA Regulations for listed Activities 21 & 27 under GNR 327 to the DMR.

The authorisation processes would be managed through an integrated approach.

#### ENVIRONMENTAL CONSULTANT CONTACT DETAILS

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## 1. BACKGROUND

Transnet is a state owned company and the custodian of rail, ports and pipelines in South Africa thereby responsible for delivering reliable freight transport and handling services that satisfy customer demand.

Transnet’s Waterberg coal line is the rail line that stretches from Lephalale through Thabazimbi, Rustenburg and Pyramid South and joins the existing coal line which extends from Ermelo to Richards Bay. The Waterberg complex is regarded as a strategic growth node for various activities within the Mining and Industrial sectors. Adequate rail infrastructure capacity is deemed critical to unlock the potential of this economic hub which necessitates a review of the required capacity to support the forecast growth of various commodities, of which coal potentially is dominant. Some sections of the current rail infrastructure are not long enough to accommodate a 200 wagon train. Current crossing logic gives priority to full/loaded trains which results in the empty trains entering the crossing loop and the full trains staying on the mainline. The railway line is a key corridor to Transnet for the transportation of various commodities, including Coal, Chrome, Ferrochrome, Cement, Lime, Granite, Iron Ore, Containers and General Freight.

The development of the Lephalale Railway Yard forms part of the endeavour to increase capacity and to allow more trains to enter and exit Lephalale. The purpose of the yard is to allow compilation of 100 wagon strains from the surrounding mines, to refuel diesel locomotives, sanding, crew switch and on track inspections of rolling stock.

## 2. PROJECT LOCATION

The new railway yard will be developed at starting point along the existing single track Lephalale-Thabazimbi railway line on Portion 1 (remaining extent) of the farm Geelhoutkloof 359LQ, Remainder of the farm Geelhoutkloof 359LQ, Enkeldraai 314 LQ and Kringgatspruit 318LQ (now Pontes Estates 712LQ - see Table 1 below. The study site is situated approximately 30km west of Lephalale town (Ellisras) in the game farming area of Steenbokpan. It falls within the jurisdiction of Lephalale Local Municipality in the Waterberg District of Limpopo Province.



**Table 1: Lephalale railway yard coordinates**

		Latitude	Longitude
<b>PHASE 1</b>	<b>Start</b>	23°46'34.23"S	27°25'55.86"E
	<b>End</b>	23°45'0.97"S	27°28'11.61"E
<b>PHASE 2</b>	<b>Start</b>	23°46'11.67"S	27°26'16.54"E
	<b>End</b>	23°45'4.54" S	27°28'5.76" E

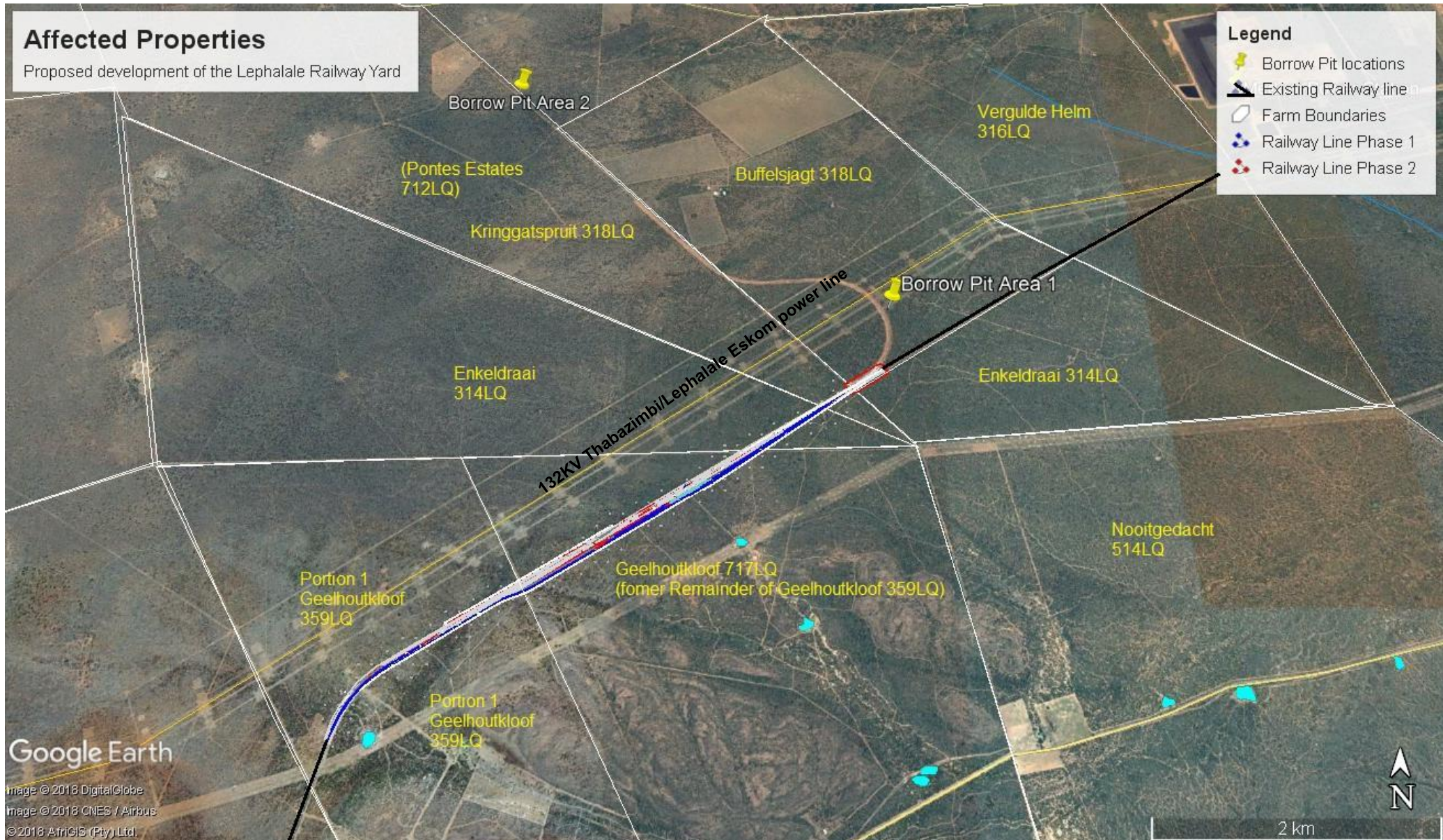
The proposed project will require approximately 22 hectares of private land to develop the railway yard. The project site comprises game farms adjacent to the existing single Thabazimbi-Lephalale railway line. Refer to Table 1 for the Lephalale Railway yard coordinates. Two borrow pits will also be required for the proposal. Borrow Area 1 will be located on farm Buffelsjagt 317LQ and Borrow Area 2 will be located the farm Kringgatspruit 318LQ. Refer to Figure 1 for the Regional locality of the project and Figure 2 for an Aerial Location Map indicating the affected properties.





**Figure 1: Aerial Locality Map indicating the regional locality of the project site**





**Figure 2: Aerial Locality map indicating position of Lephale Railway Yard, Borrow Area 1 and Borrow Area 2 as well as the affected properties**

### 3. PROJECT DESCRIPTION

The development involves constructing a new railway yard with an extent of approximately 22 hectares. As stated the railway yard would serve to increase rail capacity, service and maintain diesel locomotives, refuel diesel locomotives, sanding, crew switch and on track inspections of rolling stock. Shunting would also be undertaken as part of the railway yard operations. The development of the yard would be implemented in two phases:

- **Phase 1:** Build a bypass line, decanting arrival and departure line south of the existing track to enable an alternative route for trains to enter and exist Lephalale whilst Transnet is building the new tracks;
- **Phase 2:** Build the additional arrival-, run around- and spare tracks, conduct bulk of the earthworks and building of the yard facilities. On completion of the project the yard would have four service tracks.

The construction time frame for Phase 1 is estimated at 6 months and the follow up Phase 2 construction time frame is estimated 1 year 6 months. The total construction timeframe for the project would be approximately 2 years.

The facilities to be developed as part of the railway yard include:

- The construction of four new railway lines;
- Construction and extension of culverts
- Construction of a 7 m wide tarred access road to the railway yard facilities, south of the existing railway line, which would end at the locomotive service area and the end of yard;
- Construction of a gravel service road north of the existing railway line;
- Infra Crew Building (Office and Administration Building)
- Guard Houses, Staff amenities
- Provisional facilities
- Fire suppression systems which require a foam storage tank, water storage tank and foam pipelines;
- Roads and carports
- Sanding Facilities (for sandbox container on locomotives-traction improvement);
- Effluent management (water/oil separator)
- (X2) 300 000 litres diesel tanks and decanting slabs – There shall be four (4) rail decanting points and one road decanting point provided all at one location. The fuel storage volume is 600 000 litres. The pump rooms for decanting and refuelling shall be ventilated and contain fire protection as per the SANS requirements;
  - 12 x 12 500 litre conservancy tanks will be used at various facilities
  - 1 x 500 litre diesel tanker in the fire pump room, and
- 6720 litres of oil storage (32 drums of oil)
- Water Reservoir
- Lights would be fitted along the railway yard and tracks.

It is anticipated that the water management for the Lephalale yard will be implemented in the following manner:

- **Water requirements:** Water will be delivered to the site via truck to the reservoir on site and distributed to the facilities via a pressurised network.
- **Sewer and Wastewater:** Some facilities will have wash basins, toilets and showers. Wastewater will be collected in a conservancy tank which will be serviced regularly.
- **Stormwater:** Drainage around the site will comprise table drains in cuttings, pipes, manholes and culverts. Stormwater is directed away from the tracks and buildings and drained to stormwater channels and low-lying areas.
- **Effluent:** The provisional facilities and oil storage area could potentially have oil/fuel spilled/leaked. To cater for this, the facilities have an oil separator to deal with the contaminated liquids onsite. Once the water has passed through the oil separator and tested, it will then be drained to the sewer network.

The construction of the yard will require extensive cutting of the existing topography and the management of spoil material. The project would further require fill material from two borrow pits to be established in proximity to the new yard.



#### 4. LEGAL REQUIREMENTS

The project is subject to compliance with the following pieces of legislation:

- A. National Environmental Management Act, 1998 (1071998) and its promulgated EIA Regulations of 2014 as amended by GNR 324, 325, 326 & 327 of 7 April 2017);
- B. National Water Act, 1998 (Act 36 of 1998) and its promulgated WULA Regulations of 2017
- C. Mineral and Petroleum Resources Development Act 28 of 2002 (as amended)
- D. National Environmental Management: Waste Act 2008 (Act 58 of 2008)
- E. National Heritage Resources Act, 1999 (Act 25 of 1999)
- F. National Forest Act, 1998 (Act 84 of 1998)

Although separate applications and license are required from different authorising authorities, one comprehensive Public Participation Process will be conducted.

<b>ENVIRONMENTLA IMPACT ASSESSMENT PROCESS - NEMA EIA Regulations of 2014 (as amended in April 2017)</b>
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In terms of the NEMA EIA Regulations of 2014 (as amended in April 2017), the project requires an Environmental Authorisation (EA). GN 327, 325 and 324 of the regulations schedules listed activities which require EA. The project triggers activities under all the relevant notices and is subject to a full Scoping and EIA Process. Triggered listed activities include:

- **GNR 325 - Activity 4:** development and operation of facilities or infrastructure for the storage, or storage and handling of a dangerous good, where such storage occurs in containers with a combined capacity of more than 500 cubic metres.
- **GNR 327 – Activity 24:** which relates to the development of a road where no reserve exists where the road is wider than 8 metres;
- **GNR 327 – Activity 64:** which relates to the expansion of railway lines, stations or shunting yards where there will be an increased development footprint, excluding-
  - (i) railway line, shunting yards and railway stations in industrial complexes or zones;
  - (ii) underground railway lines in mines; or
  - (iii) additional railway lines within the railway line reserve
- **GNR 324 – Activity 4:** relating to the development of a road wider than 4 metres with a reserve less than 13.5 metres (e) Limpopo; (i) outside urban areas: (aa) A protected area identified in terms of NEMPAA, excluding disturbed areas; (ee) Critical Biodiversity Areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans. (gg) Areas within 5 kilometres from any other protected area identified in terms of NEMPAA or from the core areas of a biosphere reserve, excluding disturbed areas;
- **GNR 324 – Activity 12:** which relates to the clearance of an area of 300 square metres or more of indigenous vegetation except where such clearance of indigenous vegetation is required for maintenance purposes undertaken in accordance with a maintenance management plan in: (e) Limpopo: (ii) within critical biodiversity areas identified in bioregional plans

Transnet is required to submit an application for environmental authorisation for the above listed activities to DEA and undertake an EIA Process and Public Participation Process. The application is subject to submission of a Scoping Report, Environmental Impact Report and Environmental Management Programme to DEA. The reports are to scope the potential impacts indicate where specialist investigations are required; describe the potential environmental impacts of the development, how such impacts will be managed and detail the public participation process undertaken. The process is ultimately a planning and decision making tool for the competent authority and is regulated at 300 days.

## **WATER USE LICENSE - NATIONAL WATER ACT 36 OF 1998 AND WULA Regulations of 2017**

A Water Use License Application (WULA) under the provision of the National Water Act 36 of 1998 (NWA) is required for the project. The development will include storing of water, discharging of wastewater into conservancy tanks and potentially crossing of drainage lines by the rail tracks and access roads. The latter is yet to be confirmed by a Wetland & Riparian Delineation. A WULA needs to be submitted to DWS in this regard to obtain a Water Use License. Water uses defined in Section 21 of the NWA relevant to the development include:

- Section 21 (b) Storing of water
- Section 21 (c) and (i) Impeding or diverting the flow of water in a watercourse & altering the bed, banks, course or characteristics of a watercourse;
- Section 21 (g) Disposing of waste in a manner which may detrimentally impact on a water resource

Transnet is required to submit a WULA forms Report to the DWS and undertake a WULA Procedure followed by submission of a Water Use Technical Report to the DWS for decision making.

## **BORROW PIT APPLICATION - MINERAL AND PETROLEUM RESOURCES DEVELOPMENT ACT 28 OF 2002 (as amended) (MPRDA)**

The project requires a Mining Permit in terms of Section 27 of the MPRDA and an environmental authorisation in terms of the NEMA EIA Regulations of 2014 for the establishment of borrows pits. The applications for mining related activities need to be lodged with the Department of Mineral Resource. The project is subject to a Basic Assessment Process. The following listed activities are triggered in terms of the NEMA EIA Regulations of 2014:

- GNR 327 – Activity 21: Any activity including the operation of that activity which requires a mining permit in terms of Section 27 of the MPRDA, including: Associated infrastructure, structures and earthworks directly related to the extraction of a mineral resource.
- GNR 327 – Activity 27: The clearance of an area of 1 hectare or more, but less than 20 hectares of indigenous vegetation, except where such clearance of indigenous vegetation is required for – Undertaking a linear activity; or Maintenance purposes undertaken in accordance with maintenance management plan.

Transnet is required to submit a Basic Assessment Report and Environmental Management Programme, which describe the potential environmental impacts of the proposed borrowing activities how such impacts will be managed and how the disturbed areas will be managed. The process is ultimately a planning and decision making tool for the competent authority and is regulated at 197 days.

## **NATIONAL HERITAGE RESOURCES ACT 25 OF 1999**

NHRA protects all structures and features older than 60 years (Section 24), archaeological sites and material (Section 35) and graves and burial sites (Section 36). Section 38 indicates that any person intending on undertaking any form of development which involves the activities listed below must, at the earliest stage of initiation, notify the South African Heritage Resources Association (SAHRA):

- Construction of road, wall, power line, pipeline, canal/similar form of linear development / barrier exceeding 300m in length;

- Any development or other activity which will change the character of the site-
  - Exceeding 5000m<sup>2</sup> in extent or
  - Involving 3 or more existing erven / subdivision thereof or;
  - The re-zoning of a site exceeding 10 000m<sup>2</sup> in extent; or
  - Any other category of development provided for in regulations by SAHRA / provincial heritage resources agency.

Transnet will conduct a Heritage Impact Assessment (HIA) Study for proposed Lephalale Railway Yard.

<b>NATIONAL ENVIRONMENTAL MANAGEMENT: WASTE ACT 58 OF 2008</b>
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Section 28 of the National Environmental Management: Waste Act (NEM:WA), 2008 (Act no.59 of 2008) requires entities or industries to develop waste management plans for their industry. It is therefore assumed the waste management plan/s should be conducted in line with the regulations. A Waste Management Plan will be prepared for the proposed Lephalale Railway Yard.

<b>PROTECTED TREE PERMITS - NATIONAL FOREST ACT 84 OF 1998</b>
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There are several protected tree species identified within the project site namely Hardekool, Marula, Boscia Albitrunca (Shephards Tree) to mention a few. Section 15(1) of the National Forest Act states no person may cut, disturb, damage or destroy any protected tree or possess, collect, remove, transport, export, purchase, sell, donate or in any other manner acquire or dispose of any protected tree or any forest product derived from a protected tree, except under a licence or exemption granted by the Minister to an applicant and subject to such period and conditions as may be stipulated.

Protected Tree Permits will be obtained from the Department of Forestry and Fisheries (DAFF) prior to removal of such within the footprint areas of the yard.

## **5. EIA PROCESS, WULA AND BORROW PIT APPLICATION PROCEDURE**

Firstly a Scoping Phase would be conducted to gain an understanding of the potential environmental issues relevant to the project and to determine whether further information is required in the form of specialist investigations. Information would also be gathered from the public and I&APs. A Scoping Report would be prepared which include the nature of the activity, description of the receiving environment, identification of any feasible alternatives, potential positive and negative impacts, initial public comments, concerns, identified specialist investigations and any identified knowledge gaps. The Scoping Report will be distributed to all I&APs, stakeholders for a comment for a period of 30 calendar days.

The project will be announced to I&APs during the Scoping Phase by means of:

- Advertisement in the local newspaper (Mogol Post, Daily Sun)
- Placing site notices on site
- Identify and notify in writing any I&AP's, stakeholders, organs of state of the project;
- Distribution of the BID and invitation letters to participate in the EIA Process to I&APs and allow a 30 day registration period on the BID;
- Capture all issues raised whether telephonically, by e-mail, post, in a Issues and Response Report (IRR)
- Prepare a Draft Scoping Report which records all comments and concerns raised by I&APs and make it available for 30 days public review;
- The availability of the DSR will be announced through notification letters and advertisements in the local newspapers to I&APs and would be placed at public venues in the local area;



- A public meeting/stakeholders workshop would be conducted to discuss the project with I&APs and to facilitated comments on the DSR
- Next the Scoping Report would be finalised, to incorporate public inputs and submitted to DEA for review and to approve the proposed EIA approach for the detailed investigation required in the next/EIA Phase.

The EIA Phase will follow in which various specialist studies would be undertaken and the Environmental Impact Report (EIR) and Environmental Management Programme (EMPR) will be developed. The EIR & EMPR would ensure that all relevant aspects of the environment are addressed. The significance of identified impacts will be ranked and quantified. The report will provide an overview of the potential impacts expected and prescribe mitigation measures that can be implemented to minimise such impacts to acceptable levels. I&APs will be provided a 30 calendar day public review and comment period on the EIR & EMPR. A public meeting would be held, wherein the results of the EIA investigations will be presented and to facilitate comments on the EIR & EMPR.

Public inputs received during the public review period would be incorporated in the final EIR & EMPR and submitted to the DEA for decision making. DEA will have 107 days to reach a decision on the proposed project. I&APs will be notified of the outcome of the decision and would be afforded a 20 day appeal period on the decision. **Refer to Page 10 for a diagrammatic presentation of the EIA Process to be followed.**

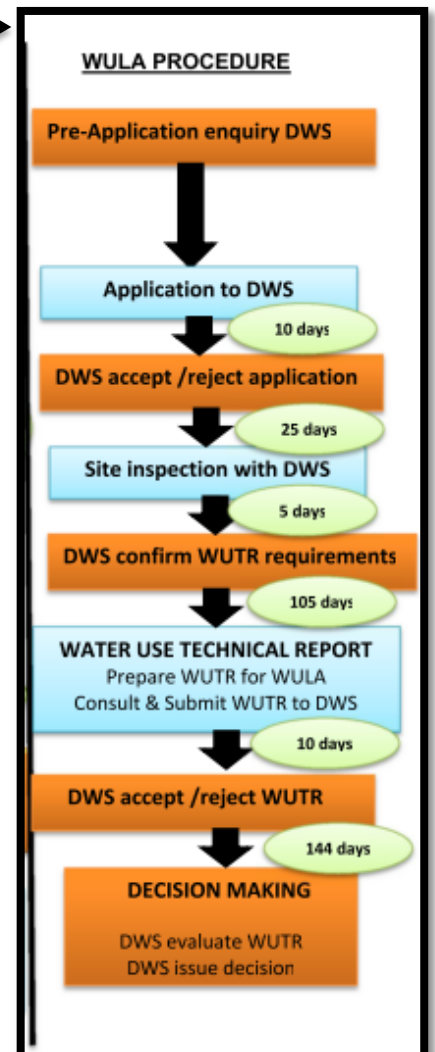
**THE WULA PROCEDURE INVOLVES 5 STEPS:** →

This procedure is integrated with the EIA process. It comprises 5 steps:

- Step 1:** Pre-Application Meeting with DWS on site
- Step 2:** WULA submission to DWS
- Step 3:** Site Inspection by DWS
- Step 4:** Water Use Technical Report & Pre submission consultation with DWS
- Step 5:** Submit Water Use Technical Report to DWS & Decision Making

**The tasks for the WULA include:**

- A pre-application meeting with DWS prior to application submission;
- Submission of an application for water use license as contemplated in regulation 6 to the DWS;
- A site visit with DWS to confirm information requirements to be included in the water use technical report within 30 days from application submission
- Submission of a water use technical report (WUTR) within a period of 105 days from being informed of information requirements to DWS;
- DWS will evaluate the WULA and WUTR within 139 days;
- The WULA will be finalised within 144 days from acceptance of the WUTR, after which DWS will issue a Water Use License.

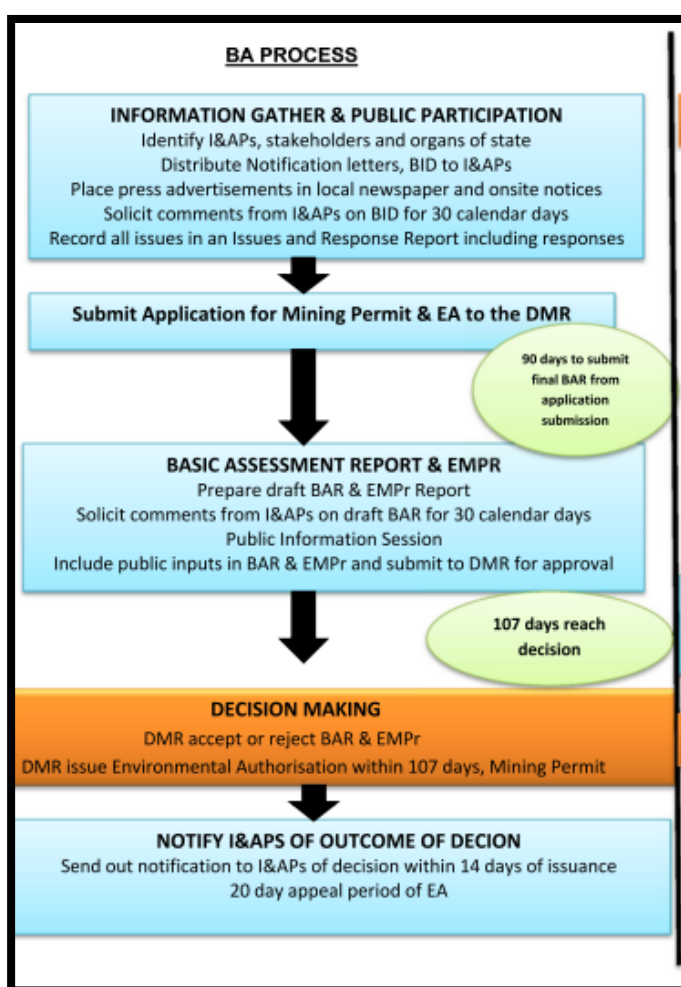


The WULA and EIA Process is integrated and public consultation results for the EIA Process will be used for the WULA and will be made available to both DEA and DWS.

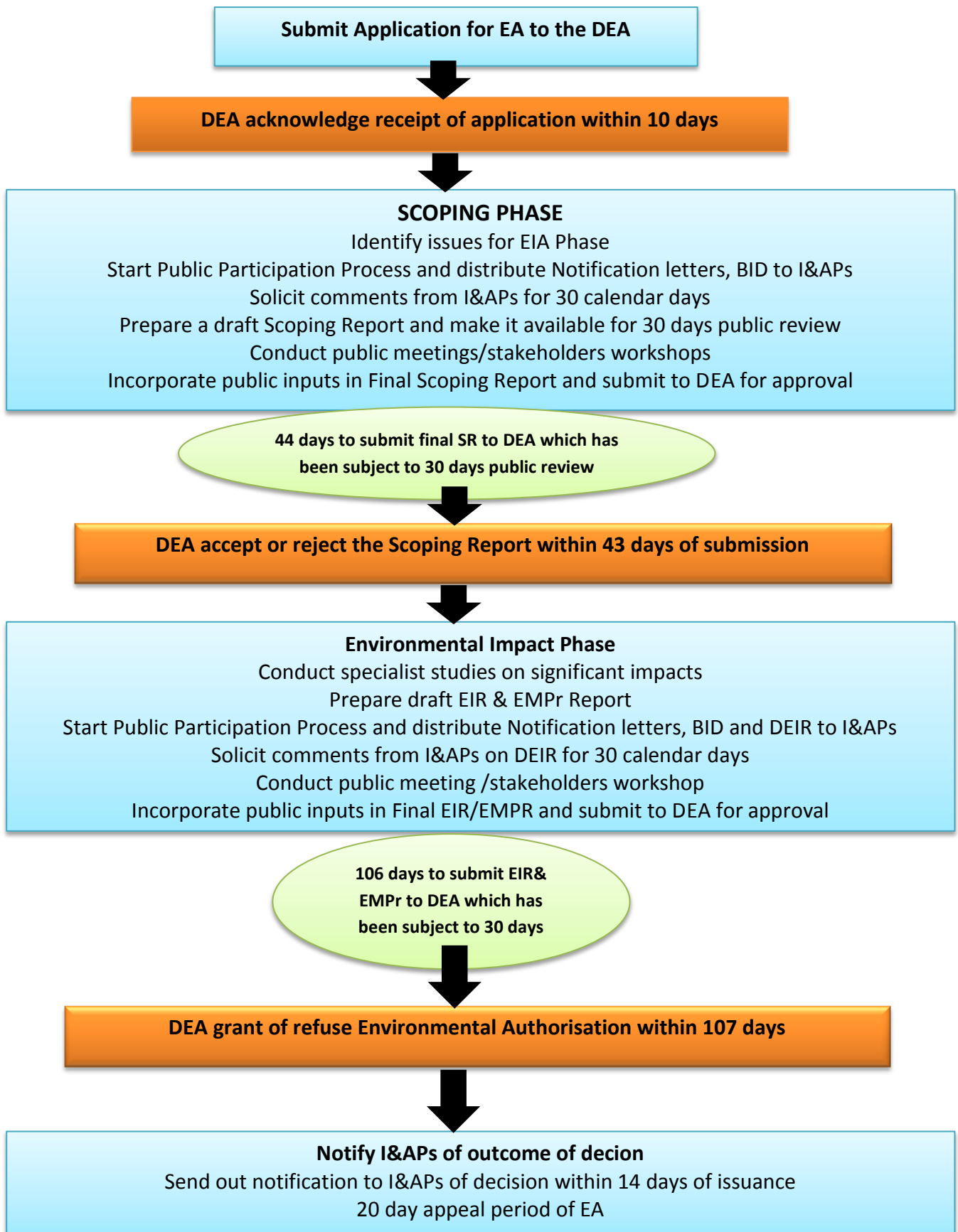
## **BORROW PIT APPLICATION (BA PROCEDURE/PROCESS)**

An Application for a Mining Permit and Environmental Authorisation will be submitted to the DMR. All details of the Borrow Pit application would be included as part of the greater EIA Process public consultation documents.

A Basic Assessment Report & Environmental Management Programme would be prepared for the application and would be available for 30 day's public review to the public with the draft EIR & EMPR. The availability of BAR & EMPR would be announced with the draft EIR & EMPR availability as part of the key EIA Process for the project. All comments and issues raised in regard to the establishment of borrow pits would be incorporated thereafter in a finalised BAR & EMPR and would be submitted to the DMR within 90 days of application submission of the DMR. DMR would review the reports for 107 days and reach a decision on the application. I & APs would be notified of the decision within 14 days of issuance.



## Diagramme of Environmental Impact Assessment Procedure





## **6. PRELIMINARY ENVIRONMENTAL IMPACTS IDENTIFIED**

One of the key drivers to a successful EIA is to ensure that potential impacts (both positive and negative) are identified and investigated. Additional impacts may be identified during the Scoping phase and relevant specialists will be included into the EIA team in order to accurately and objectively assess these potential impacts. Management and mitigation measures will be recommended in the EIR to attempt to alleviate, reduce or compensate for identified impacts, while enhancing the positive aspects. Preliminary identified potential impacts to be assessed in the EIA include amongst others:

- Noise and Vibration
- Impact on Fauna and Flora
- Dust from construction activities, vehicle entrained dust from travelling on unsurfaced roads
- Traffic Impacts
- Social issues
- Storm water management
- Potential spillage of hazardous substances
- Generation/storage/ disposal of waste
- Impact on surrounding land uses

## **7. SPECIALIST STUDIES**

The EIR and EMPr are informed by specialist investigations undertaken for the proposed development. Based on the site characteristics and preliminary identified impacts the following specialist investigations will be undertaken to further assess the environmental features onsite:

- Ecological Impact Assessment (Fauna, Flora, Avi-Fauna, input on Wetland Assessment that may become independent study);
- Hydrological Impact Assessment (Surface and Groundwater)
- Heritage Impact Assessment
- Social Impact Assessment
- Noise and Vibration Impact Assessment
- Waste Specialist Study

## **8. REFRESHER AS TO HOW YOU CAN PARTICIPATE**

It is important that relevant I&APs are identified and involved in the public participation process from the beginning of the project. Issues, impacts and alternatives raised by you (I&APs) will help focus the EIA process and enhance the quality of the decision taken by the authorities. As an I&AP you need to ensure that you are registered for the project and that you forward your comments within the stipulated timeframes to Naledzi Environmental consultants cc at the detail provided in this document. You can become involved by:

- Registering yourself by e-mail, fax, letter or phone as an I&AP
- Submitting the Registration Form and mailing or faxing it to the contact person provided
- Attending the open days/public meetings (as applicable). As a registered I&AP you will automatically be invited to these events
- Reviewing and commenting on the draft Scoping, EIA Reports, Basic Assessment Report (Borrow Pits) within the allowed review periods
- Contacting the contact persons below with your comments, queries, suggestions, or request for further project information.

In order to ensure your continued involvement in this EIA process you must register with NEC. Complete the Comment and Registration Form enclosed with the BID, this allows I&APs to comment on the project. Send the form back to us **on or before 28 August 2018**. Contact either Marissa Botha or Aluwani Nembahe, Tel: 015 296 3988 / Cell: 084 226 5584 or send us your comments by email to [botham@naledzi.co.za](mailto:botham@naledzi.co.za) / [aluwani@naledzi.co.za](mailto:aluwani@naledzi.co.za) or either by fax number to 015 296 4021.

## 9. Whats next?

All comments and issues received during the public registration and comment period on the BID will be incorporated into an IRR, and responded to. We will prepare a draft Scoping Report for the project which will be made available for public review for 30 calendar days. A Public Information Session will be scheduled to facilitate comments on the draft Scoping Report. The details of these tasks will be communicated to I&APs post the public registration and comment period.

### **Naledzi Environmental Consultants**

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