



Proposed Expansion of Transnet's existing Manganese Ore Export Railway Line and associated infrastructure, Northern and Eastern Cape

Transnet (SOC) Limited (hereafter referred to as Transnet) is proposing to expand the existing manganese ore railway line from Hotazel in the Northern Cape to the Port of Ngqura in the Eastern Cape.

The growing demand for manganese ore has resulted in the need to expand the capacity of the export corridor to 16 million tons per annum (Mtpa). The proposed expansion includes the following:

- Extension of several existing rail loops in the Northern and Eastern Cape;
- The installation of two new rail loops in the Northern Cape; and
- The construction of a new compilation yard near Hotazel in the Northern Cape.

Before the proposed project may proceed, an amendment process, a basic assessment process and an environmental impact assessment process need to be undertaken in terms of the National Environmental Management Act (NEMA) (Act 107 of 1998), as amended. The National Department of Environmental Affairs (DEA) is the competent authority for the proposed project.

ERM Southern Africa (Pty) Ltd (ERM) has been appointed as the Independent Environmental Assessment Practitioner (EAP) to undertake the aforementioned processes.

The aim of this document is to provide:

- Background information about the proposed project;
- A description of the required environmental authorisation processes;
- A description of the required public participation processes.

Background
Information
Document

Background

In South Africa the main concentration of manganese mines producing predominantly higher grade ores is in the Kalahari Manganese basin, around Hotazel in the Northern Cape. It is anticipated that the manganese industry will experience strong export demand in the coming years. Given the quality of the manganese ore reserves, South Africa is in a position to benefit from the projected growth in the manganese industry if constraints on the current transport logistics are addressed.



In 2008 Transnet, in association with the manganese ore mining industry identified the need to increase the capacity of the export corridor to beyond the current

capacity of 5.5 Million tons per annum (Mtpa). An environmental authorisation process commenced in this regard and the project was authorised to proceed with construction in 2009. The project proposal on which this authorisation was issued was based on achieving an export capacity of 12 Mtpa. Subsequently Transnet, in conjunction with the manganese mining industry, has identified an export requirement of more than 12 Mtpa for long term growth. This growth will be primarily driven by increasing global steel manufacturing and a changing steel product mix to produce a greater percentage of higher grade steels, which in turn use higher grades of manganese ore. In addition, global supply of lower grade manganese ore by marginal producers, who are high on the cost curve, cannot profitably sustain the exports of their low grade ore. Based on the increased demand of manganese ore the mining industry has indicated the need for an increased export capacity of 16 Mtpa. As such, changes to the original development proposal necessitate additional environmental authorisation processes.

Please note: The existing authorisation is valid for the area between Kimberley and De Aar and the upgrading of this section may start in 2013.

Proposed Project and Process Description

The proposed expansion of the existing manganese ore export railway line to 16 Mtpa requires three processes and these are summarised below.



Amendment process

An amendment process is required for proposed changes to loop extensions that were already authorised in 2009 (DEA Ref no. 12/12/20/1240). This includes two loops in the Northern Cape and four in the Eastern Cape (see Figure 1).

The previous authorisation allowed for an extension to these loops. However, these six loop extensions need to be larger than previously anticipated to accommodate the 16 Mtpa capacity. The amendment process will involve the submission of an application to the DEA followed by a report describing the changes to design, the associated impacts and the required public participation and stakeholder engagement processes.

The environmental authorisation for the following loops will require amendment:

Northern Cape

- Burgervilleweg
- Linde

Eastern Cape

- Rosmead
- Tafelberg
- Knutsford
- Verby

Basic Assessment process

A BA process is required for the extension of existing rail loops / installation of new rail loops that were not part of the original authorisation completed in 2009. This includes 10 rail loops in the Northern Cape and four in the Eastern Cape (see Table 2 and Figure 1).

Table 2: Summary of the loops to be extended / new loops to be installed (see Figure 1)

| Northern Cape | |
|---------------|----------------|
| Witloop | New loop |
| Wincanton | Loop extension |
| Sishen | New Loop |
| Glosam | Loop extension |
| Postmasburg | Loop extension |
| Tsantsabane | Loop extension |
| Trewil | Loop extension |
| Ulco | Loop extension |
| Gong Gong | Loop extension |
| Fieldsview | Loop extension |

| Eastern Cape | |
|-------------------------|----------------|
| Drennan | Loop extension |
| Thorngrove | Loop extension |
| Cookhouse-Golden Valley | Line doubling |
| Ripon-Kommadagga | Line doubling |

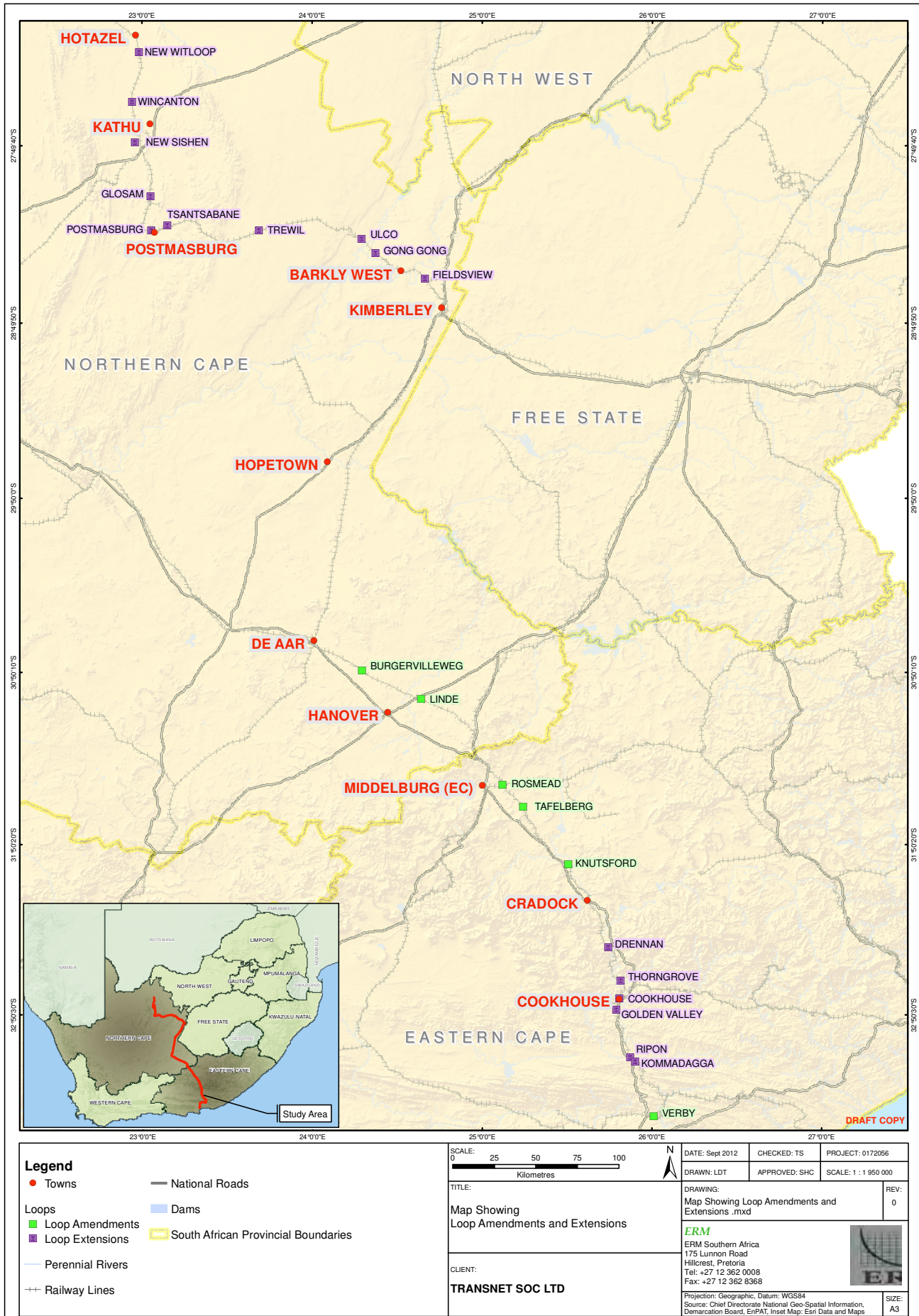
Scoping and EIA process

A Scoping/EIA process is required for the construction of a new compilation yard (see Figure 2) at Mamathwane approximately 22km south of Hotazel in the Northern Cape. This compilation yard will cover an area of 120 ha and will be constructed adjacent to the main line. It will comprise five yard lines which can receive 200 wagon trains each as well as operations buildings and associated infrastructure. The yard will also have a common user facility to cater for small mining operations.

In addition to requiring authorisation under NEMA, the compilation yard will also require a Waste Management Licence (WML) and could possibly require an Atmospheric Emissions License (AEL). The requirement for an AEL will be confirmed when the required technical information is available.



Figure 1: Loop Amendment and Extensions



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GN 544:

Activity 2: The construction of facilities or infrastructure for the storage of ore or coal that requires an atmospheric emissions license in terms of the National Environmental Management: Air Quality Act (Act No. 39 of 2004).

Activity 11: The construction of infrastructure or structures covering 50 square metres or more within 32 metres of a watercourse.

Activity 13: The construction 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 but not exceeding 500 cubic metres.

Activity 22: The construction of a road, outside urban areas,

- i. with a reserve wider than 13,5 meters or,
- ii. where no reserve exists where the road is wider than 8 metres, or
- iii. for which an environmental authorisation was obtained for the route determination in terms of activity 5 in Government Notice 387 of 2006 or activity 18 in Notice 545 of 2010.

Activity 23ii: The transformation of undeveloped land to industrial use, outside an urban area bigger than 1 hectare.

Activity 24: The transformation of land bigger than 1000 square metres in size to industrial land where such land was zoned open space or conservation.

Activity 53: The expansion of railway lines, stations or shunting yards where there will be an increased development footprint excluding:

- i. railway lines, shunting yards and railway stations in industrial complexes or zones;
- ii. underground railway lines in mines; and
- iii. additional railway lines within the reserve of an existing railway line.

GN 545

Activity 11: The construction of railway lines, stations or shunting yards, excluding

- i. railway lines, shunting yards and railway stations in industrial complexes or
- ii. underground railway lines in a mining area; and additional railway lines within the reserve of an existing railway line;

Activity 15: Physical alteration of undeveloped, vacant or derelict to commercial, recreational, industrial or institutional use where transformation is 20 hectares or more:

Except where such physical alteration takes place for:

- i. linear development activities: or
- ii. agriculture or afforestation where activity 16 in this Schedule will apply.

GN 546

Activity 12: The clearance of an area of 300 square metres or more of vegetation where 75% or more vegetative cover constitutes indigenous vegetation.

Legislation

The NEMA, as amended, lists activities which require an environmental authorisation before commencement.

The proposed extensions to existing rail loops / installation of new loops that were not authorised in 2009 trigger several activities listed in GN R544 and R546 and therefore require a Basic Assessment process (see Box 1).

The proposed construction of the compilation yard triggers activities listed in GNR 544, R545 and R546 and therefore requires an EIA process (see Box 1) and GN 718 of the Waste Management Act (59 of 2008) a Waste Management Licence.

These processes are proposed to run concurrently (see Figure 3).

Box 1: Listed activities associated with the proposed railway line expansion and construction of the compilation yard

Figure 3: Process Flow Diagram

Project Announcement

- Formal announcement of project to all stakeholders (30 days);
 - Announcement letter and BID distribution
 - Placement of site notices
 - Placement of adverts in newspapers; and
 - Registration of stakeholders

Scoping and Basic Assessments

- Announce availability of Draft Basic Assessment Report, EMP and Scoping Report for public review (40 days)
- Hold public meetings and focus group meetings with stakeholders
- Update Draft Scoping Report and Comment and Response Report
- Submission of Final Scoping Report to authorities and make available for public review period (21 days)

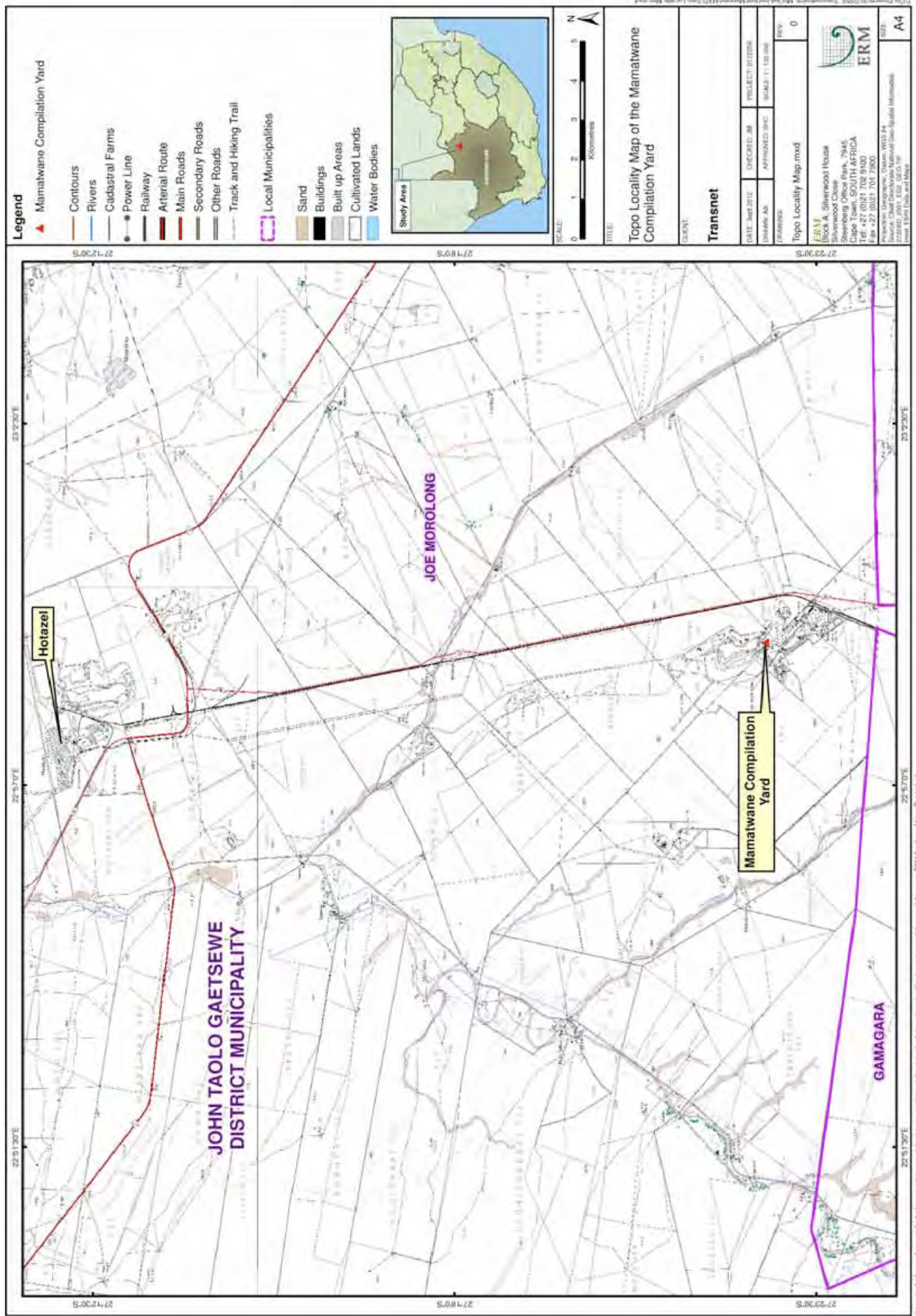
Impact Assessment

- Announce availability of Draft EIA and EMP Reports for public review (40 days)
- Update of Draft EIA and EMP Reports and Response Report
- Submission of Final Report to authorities and make available for public review period (21 days)

Communication of the Decision

- Announce decision from competent authorities to stakeholders
- Provide the needed information for appeals process in announcement

Figure 2: Mamathwane Compilation Yard.



Possible Issues and Specialist Studies

The project team has identified environmental issues that could arise during the Amendment, Basic Assessment and Scoping/EIA process. These include:



- Soil and land disturbance from construction of the loops;
- Noise and vibration both from construction activities and from subsequent increased train activity;
- Traffic safety concerns both because of heavy construction vehicles and road crossings;
- Concerns about dust created during construction;
- The visual effect of construction on the landscape and the possible effect on the sense of place at each loop;
- Cultural, heritage or archaeological issues;
- Economic consequences and employment-related issues; and
- Ecological issues.

The project team will refine this list after the initial public participation and stakeholder engagement processes.

Specialist studies are being undertaken to assess and address the potential issues that have been identified and these include:

- Cultural heritage, archaeological and palaeontology;
- Social;
- Noise and vibration;
- Air quality; and
- Ecology.



Public Participation and Stakeholder Engagement Processes

Public participation and stakeholder engagement processes will be conducted and will include the placement of adverts in local / regional newspapers, placement of site notices and distribution of this background information document.


Public meetings are proposed in order to provide stakeholders an opportunity to be involved in the process. Focus group meetings are also proposed to facilitate information transfer for specifically identified stakeholders. These meetings will be facilitated by ERM in English and Afrikaans and will be translated into Tswana/Xhosa.

Hardcopy draft and final reports will be made available to the public and specific stakeholders at publicly accessible places; distributed to commenting authorities such as Department of Water Affairs (DWA), Provincial Agriculture Departments, Provincial Environmental Departments, Local Municipalities, District Municipalities, DEA: Waste Management, Pollution and Waste Management Departments, South African National Roads Agency and submitted to DEA as the competent authority. Details of the public meetings will be announced to all registered stakeholders and the general public through newspaper adverts and written notification.

Should you wish to register as a stakeholder, provide comment on the proposed project, raise queries, or request further information please complete the attached Comment and Registration Form and send to Paul Monare of ERM:



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Please visit www.erm.com/transnet-expansion for regular updates and project information.