Final Scoping Report

Proposed Mamathwane Compilation Yard, Northern Cape

Transnet SOC Limited

DEA Ref: 14/12/16/3/3/2/405

February 2013

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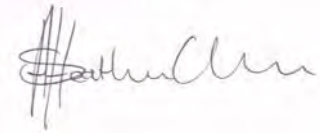
ERM Reference: 0172056

Prepared by: Tania Swanepoel and Dean Alborough

For and on behalf of
Environmental Resources Management

Approved by: Stuart Heather-Clark

Signed: 

Position: Partner

Date: February 2013

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CONTENTS

ACRONYMS

BID	Background Information Document
BIF	Banded Ironstone Formation
DC	Direct Current
DEA	Department of Environmental Affairs
DENC	Department of Environment and Nature Conservation (Northern Cape)
DSR	Draft Scoping Report
DWA	Department of Water Affairs
EHS	Environmental, Health and Safety
EIA	Environmental Impact Assessment
EIR	Environmental Impact Assessment Report
EMP	Environmental Management Programme
ERM	Environmental Resources Management
FSR	Final Scoping Report
GDP	Gross Domestic Product
GN	Government Notice
I&APs	Interested & Affected Parties
IDP	Integrated Development Plan
IFC	International Finance Corporation
LED	Local Economic Development
NEMA	National Environmental Management Act
PoS	Plan of Study
SAHRA	South African Heritage Resources Agency
SANBI	South African National Biodiversity Institute
SARDB	South African Red Data Book
SDP	Spatial Development Plan
SIBIS	Integrated Biodiversity Information System
SOC	State-owned Company
TFR	Transnet Freight Rail
TNPA	Transnet National Ports Authority
ToR	Terms of Reference
TPL	Transnet Pipelines
TPT	Transnet Port Terminals
TRE	Transnet Rail Engineering
WML	Waste Management Licence

ABBREVIATIONS

%	Percent
cm	Centimetres
CO_2	Carbon Dioxide
ha	Hectares
kg	Kilograms
km	Kilometres
km^2	Square kilometres
kV	kilovolts
m	Metres
m^2	Square meters
R	South African Rand

Administrative Framework: The compendium of requirements with which the project is required to, and/or has chosen to, comply with. This will typically include the following:

- Legal requirements (laws, regulations, decrees, etc);
- International treaties or conventions, including those ratified by the country in which the project will occur and potentially those non ratified;
- Internal corporate standards (e.g., company specific environmental performance standards, company specific impact assessment standards);
- Programme requirements (e.g. IFC Performance Standards, EHS Guidelines); and
- Jurisdictional policies.

Affected Community: Any community that is subject to actual or potential project -related positive or negative impacts on its social, physical, economic, cultural or natural environment. Such communities often include those located in the project's near geographical proximity, particularly those contiguous to the proposed project facilities. However, more distant communities may also be affected by project impacts, for example those communities where construction workers are housed.

Community in general terms refers to a group of people or families who live in a particular locality, sometimes share a common interest (e.g., water users, fishers, herders, grazers, etc), often have common cultural and historical heritage and exhibit varying degrees of cohesiveness.

Alternative: A possible course of action, in place of another, that would meet the same purpose and need (of the proposal). Alternatives can refer to any of the following but are not limited to: alternative sites for development, alternative projects for a particular site, alternative site layouts, alternative designs, alternative processes and alternative materials.

Area of Influence: Under International Finance Corporation (IFC) Performance Standard 1, "Area of Influence" is defined to encompass:

- *The area likely to be affected by:*
  - *The project and the client's activities and facilities that are directly owned, operated or managed (including by contractors) and that are a component of the project;*
  - *Impacts from unplanned but predictable developments caused by the project that may occur later or at a different location;*
  - *Indirect project impacts on biodiversity or on ecosystem services upon which Affected Communities' livelihoods are dependent;*

- *Associated facilities, which are facilities that are not funded as part of the project and that would not have been constructed or expanded if the project did not exist and without which the project would not be viable.*
- *Cumulative impacts that result from the incremental impact, on areas or resources used or directly impacted by the project, from other existing, planned or reasonably defined developments at the time the risks and impacts identification process is conducted.*

Following on from this definition, the Area of Influence includes the following:

- The primary project site(s) and related facilities that the Project Proponent develops or controls (e.g., power transmission corridors, pipelines, canals, tunnels, access roads, borrow and disposal areas, construction camps) and the additional areas in which aspects of the environment could conceivably experience significant impacts;
- Associated facilities that are not developed and funded as part of the project but are essential for the project and without which the project cannot proceed, and the associated additional areas in which aspects of the environment could conceivably experience significant impacts;
- Areas potentially affected by cumulative impacts resulting from other developments known at the time of the IA, further planned phases of the project or any other existing circumstances; and
- Areas potentially affected by impacts from predictable (but unplanned) developments as a result of the project (i.e., induced activities), occurring at a later stage or at a different location.

Note that the Area of Influence for a particular resource/receptor may vary depending on the nature of the change caused by the project activities and the type of effect being considered. The Area of Influence thus takes into account:

- The physical extent of the proposed project activities; and
- The nature of the affected resource, the source of impact and the manner in which the resultant impact is likely to be propagated beyond the physical extent of the project activities.

Ballast: Coarse, crushed stone laid to form a bed for the sleepers and rails.

Bulk Material: This material is used for earthworks within the rail prism before the construction of the structural sub-ballast layers (see *sub-ballast* below). The bulk material is comprised of material found in-situ and some fill material from elsewhere, if required.

Competent Authority: The environmental authority at the national, provincial or local level entrusted in terms of legislation, with the responsibility for granting approval to a proposal or allocating resources and for directing or coordinating the assessment of a proposal that affects a number of authorities.

Culvert: A metal or concrete pipe/structure placed below a road or railway to allow drainage systems to function as naturally as possible.

Cutting: To keep a road or railway line straight and/or flat, and where the comparative cost or practicality of alternate solutions (e.g. diversion) is prohibitive, a section of a hill or mountain is cut away to make way for the development.

Embankment: To keep a road or railway line straight and/or flat, and where the comparative cost or practicality of alternate solutions (e.g. diversion) is prohibitive, the land over which the road or rail line will travel is built up to form a large mound or embankment. Embankments are often constructed using material obtained from a cutting.

Environment: The surroundings within which humans exist and that are made up of:

i. the land, water and atmosphere of the earth;
ii. micro-organisms, plant and animal life;
iii. any part or combination of (i) and (ii) and the interrelationships among and between them; and
iv. the physical, chemical, aesthetic and cultural properties and conditions of the foregoing that influence human health and well-being. This includes the economic, social, cultural, historical and political circumstances, conditions and objects that affect the existence and development of an individual, organism or group.

Environmental Assessment: The generic term for all forms of environmental assessment for projects, plans, programmes or policies. This includes methods/tools such as environmental impact assessment, strategic environmental assessment, sustainability assessment and risk assessment.

Impact: The positive or negative effects on human well-being and / or on the environment.

Interested and Affected Parties: Individuals, communities or groups, other than the proponent or the authorities, whose interests may be positively or negatively affected by the proposal or activity and/ or who are concerned with a proposal or activity and its consequences.

Level Crossing: A level crossing is an at-grade crossing (without recourse to a bridge or tunnel) of a railway line by a road or path.

Loop: A passing loop or crossing loop is a place on a single line railway where trains in opposing directions can pass each other. A passing loop is usually double ended and connected to the main track at both ends of the station.

Mitigate: The implementation of practical measures to reduce adverse impacts or enhance beneficial impacts of an action.

Project Footprint: The area that may reasonably be expected to be physically touched by project activities, across all phases. The Project Footprint includes land used on a temporary basis such as construction lay down areas or construction haul roads, as well as disturbed areas in transport corridors, both public and private.

Project Site: The (future) primary operational area for the project activities. Private transport corridors (i.e. those dedicated for use solely by project operational activities) are included as part of the project site.

Scoping: The process of identifying the spatial and temporal boundaries (i.e. extent) and key issues to be addresses in an environmental assessment. The main purpose of scoping is to focus the environmental assessment on a manageable number of important questions. Scoping should also ensure that only significant issues and reasonable alternatives are examined.

Significance: Significance can be differentiated into impact magnitude and impact significance. Impact magnitude is the measurable change (i.e. intensity, duration and likelihood). Impact significance is the value placed on the change by different affected parties (i.e. level of significance and acceptability). It is an anthropocentric concept, which makes use of value judgements and science-based criteria (i.e. biophysical, social and economic).

Stakeholder Engagement: The process of engagement between stakeholders (the proponent, authorities and I&APs) during the planning, assessment, implementation and/or management of proposals or activities.

Study area: The area that needs to be studied in order to adequately understand and describe the baseline likely to be affected by the project (i.e. for the ecological baseline assessment, 500m from the development is included in the study area).

Sub-base Material: This material is used to construct the top layers of the rail prism onto which the ballast is then placed.

Turnouts: A turnout is a structure along the railway line where a single track divides into two tracks and is used to divert trains from one track to another.

1 INTRODUCTION

1.1 PURPOSE OF THIS REPORT

Transnet SOC (State-owned Company) Limited (Transnet) intends to construct a new compilation yard at Mamathwane, Northern Cape, as part of a broader project to expand the capacity of the existing manganese ore railway line from Hotazel in the Northern Cape to the Port of Ngqura in the Eastern Cape from 12 Million tons per annum (Mtpa) to 16 Mtpa.

Transnet has appointed Hatch Africa (Pty) Ltd (Hatch) to project manage the planning and engineering aspects as well as the associated studies for the railway upgrade. Hatch has subsequently appointed Environmental Resources Management Southern Africa (Pty) Ltd (ERM), as independent environmental consultants to undertake the Environmental Impact Assessment (EIA) process for the construction of the new compilation yard at Mamathwane. It is intended that the compilation yard will be used to consolidate and deconsolidate up to 200 wagon trains in order to facilitate an increase in the carrying capacity of the existing railway line.

This Final Scoping Report has been compiled as part of the EIA process in accordance with the regulatory requirements stipulated in the EIA Regulations (Government Notice R543) promulgated in terms of Section 24(5) of the National Environmental Management Act (NEMA) (Act No. 107 of 1998), as amended and the National Environmental Management: Waste Act (NEMWA) (Act No. 59 of 2008). The objectives of this report are to provide information to stakeholders, including the public and authorities, about the project and the EIA process followed to date.

The Final Scoping Report provides a description of the project activities, alternatives considered, the EIA methodology, and issues and concerns identified by the project team and/or raised by Interested and Affected Parties (I&APs). A Plan of Study for the EIA, which includes the terms of reference for specialist studies, is also included.

Please note, the proposed expansion of the manganese ore railway line also includes the extension of several existing rail loops in the Northern and Eastern Cape as well as the installation of new rail loops in the Northern Cape. These proposed activities require authorisation through an amendment process and a basic assessment process which are being undertaken concurrently with this Scoping/EIA process.

1.2 PROJECT RATIONALE

In 2008 Transnet, in association with the manganese ore mining industry identified the need to increase the capacity of the existing manganese ore

export railway line 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 driven by increased demand for manganese ore to supply the increasing steel manufacturing industry (manganese forms part of the product mix during steel manufacturing). 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. As part of this, a new compilation yard for the consolidation and deconsolidation of wagon trains is required in the northern section of the existing line in order to increase the capacity of the line, hence the proposal to construct the Mamathwane Compilation Yard. The motivation for the project is touched on again in *Section 4*.

1.3 PROJECT OVERVIEW

The project site for the proposed compilation yard, located south of the Mamathwane Mine is located on the following land parcels (see *Figure 1.1* and *Figure 1.2* below):

- Portion 3 of Remainder of the farm Moab No. 700, Administrative District Kuruman, (9.36 ha);
- Portion of Remainder of Portion 1 of the farm Shirley No. 367, Administrative District Kuruman, (103.40 ha); and
- Portion of Remainder of Portion 2 of the farm Walton No. 390, Administrative District Kuruman, (18.65 ha).

The new compilation yard will be constructed adjacent to the existing manganese ore railway line and will comprise five yard lines with mid-yard crossings. As mentioned above, the compilation yard will allow the consolidation and deconsolidation of up to six 200 wagon trains per day. The yard will be electrified to three kilovolts (kV) Direct Current (DC) with tangential turnouts. The main compilation yard will be fully signalled with the rolling stock maintenance area of the yard being provided with automated yard signalling. In addition, the yard will also have a Common User Facility to cater for small mining operations. This facility will consist of a stockpile area where ore (manganese and iron ore) can be stored temporarily prior to loading onto trains.

A more detailed project description is given in *Section* 4.

22°45'0"E 22°48'0"E 22°51'0"E 22°54'0"E 22°57'0"E 23°0'0"E 23°3'0"E 23°6'0"E 23°9'0"E 23°12'0"E

27°15'0"S 27°18'0"S 27°21'0"S 27°24'0"S 27°27'0"S 27°30'0"S 27°33'0"S 27°36'0"S 27°39'0"S 27°42'0"S 27°45'0"S 27°48'0"S

To Hotazel

Mamathwane Mine

Proposed Compilation Yard

R380

To Kuruman

N14

Kathu

Sishen Mine

To Olifantshoek

Legend

- Mamathwane Mine
- Sishen Mine
- Towns
- Proposed Compilation Yard
- Existing Railway
- Contours (20m)
- River
- National Freeway Route
- Arterial Route
- Main Road
- Secondary Road

SCALE: 0 2 4 6 8 10 Kilometres

N

DATE: Oct 2012	CHECKED: NB	PROJECT: 0172056
DRAWN: AT	APPROVED: SHC	SCALE: 1 : 200 000

TITLE:

Figure 1.1: Locality Map of the Transnet Mamathwane Compilation Yard

DRAWING: Transnet_Locality_Map1A3_Portrait.mxd.mxd

REV: X

CLIENT:

Transnet SOC Ltd

ERM
ERM Southern Africa
175 Lunnon Road
Hillcrest, Pretoria
Tel: +27 12 362 0008
Fax: +27 12 362 8368

Projection:Geographic, Datum: WGS 84
Source: NGI
Inset Map: ESRI Data and Maps

SIZE: A3

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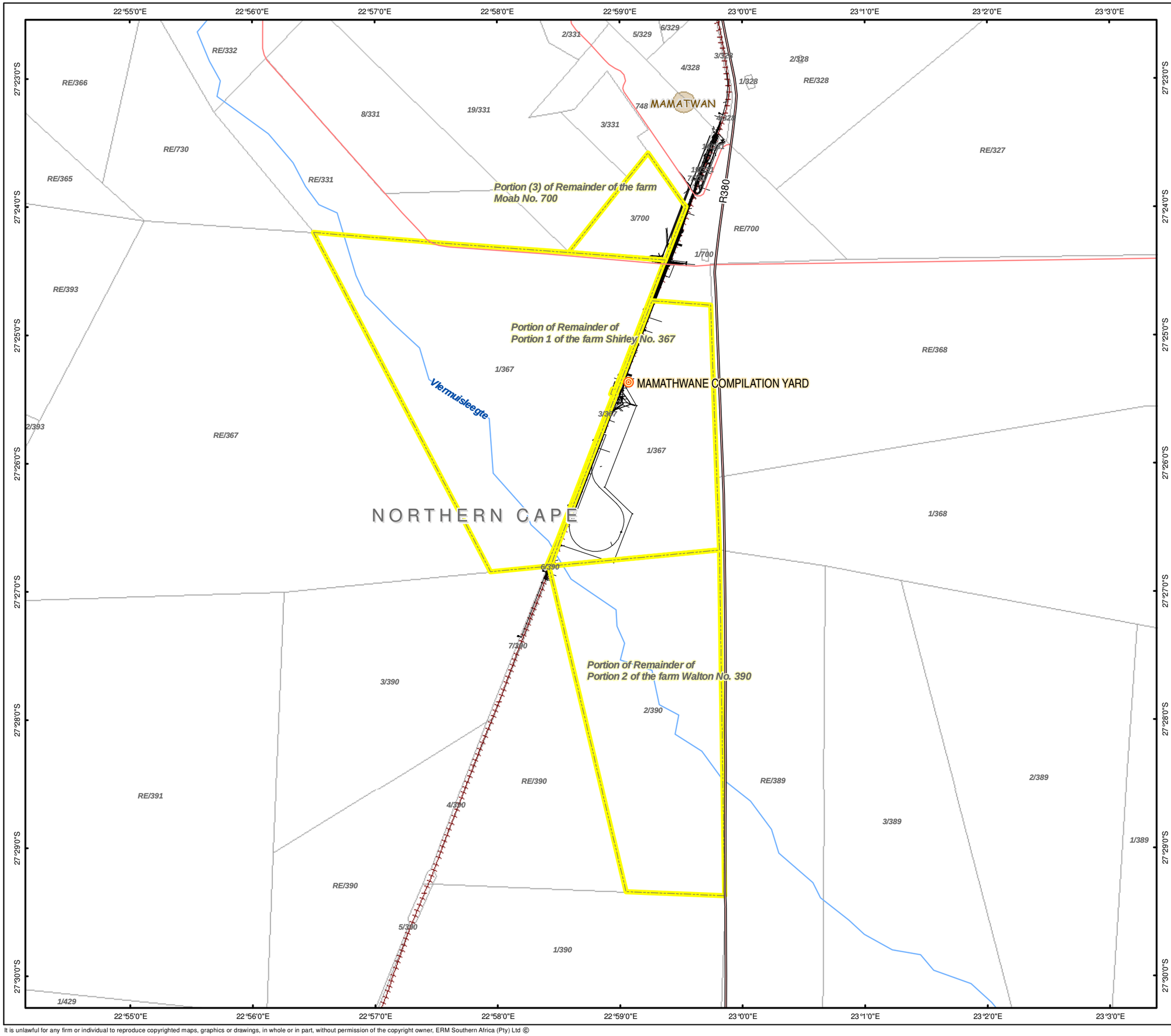

Legend

- Mamathwane Compilation Yard
- National Roads
- Main Roads
- Secondary Roads
- Proposed Railway Extension
- Railway Lines
- Dams
- Mine
- Cadastral Farm Portions
- Directly Affected Landowners

SCALE:
0 500 1 000 1 500 2 000 2 500
Meters

N

TITLE:

Figure 1.2:
Map showing Directly Affected Land Parcels

CLIENT:

Transnet SOC Ltd

DATE: Oct 2012	CHECKED: NB	PROJECT: 0172056
DRAWN: LDT	APPROVED: SHC	SCALE: 1 : 60 000

DRAWING: Fig 1.2_Map showing Directly Affected Land Parcels.mxd

REV: 0

ERM
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175 Lunnon Road
Hillcrest, Pretoria
South Africa
Tel: +27 12 362 0008
Fax: +27 12 362 8368

Projection: Geographic , Datum: Wgs84
Source: ENPAT (2001)
Inset Map: Esri Data and Maps

SIZE: A3

C:\0172056_Transnet Hatch Mn Ore Line Upgrade\Mapping\MXD\2012\Fig 1.2_Map showing Directly Affected Land Parcels.mxd

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1.4 PROJECT APPLICANT

Transnet is a wholly state owned company in South Africa, which strives to enable competitiveness, growth and development of the South African economy by delivering reliable freight transport and handling services that satisfy customer demand. Transnet's mandate is to assist in lowering the cost of doing business in South Africa, enabling economic growth and ensuring security of supply through providing appropriate port, rail and pipeline infrastructure in a cost-effective and efficient manner, within acceptable benchmarks (Transnet Sustainability Report, 2012).

Transnet, operating as an integrated freight transport company, contains five divisions as follows:

- Transnet Freight Rail (TFR),
- Transnet Rail Engineering (TRE),
- Transnet National Ports Authority (TNPA),
- Transnet Port Terminals (TPT), and
- Transnet Pipelines (TPL).

The above divisions focus on the operational aspects of Transnet's business and the above is supplemented by specialist units including: Transnet Property; Transnet Foundation and Transnet Capital Projects.

1.5 DETAILS OF ENVIRONMENTAL ASSESSMENT PRACTITIONER

1.5.1 ERM Southern Africa

ERM has been appointed by Hatch to undertake the EIA for the new compilation yard at Mamathwane. ERM and specialists appointed by ERM during the course of this EIA have no financial ties to, nor are they a subsidiary, legally or financially of Hatch or Transnet. Remuneration for the services by the Applicant (Transnet) in relation to this EIA is not linked to approval by any decision-making authority and ERM has no secondary or downstream interest in the development.

ERM is a global environmental consulting organisation employing over 3,500 specialists in over 145 offices in more than 41 countries. Founded in 1971, ERM has built an organisation based on the supply of a full range of environmental and social policy, scientific, technical, and regulatory expertise. ERM's primary focus is to provide quality work and service to our clients in these areas.

From a regional perspective ERM has been involved in numerous projects in Africa over the past 30 years and in 2003 established a permanent presence in Southern Africa to meet the growing needs of our clients. The Southern African ERM offices are based in Cape Town, Johannesburg, Pretoria and Durban. ERM Southern Africa has a staff complement of over 120 dedicated environmental professionals offering expert skills in EIA, EMPs, EMS, risk

assessment, EHS management and auditing, corporate social responsibility and socio-economic impact assessment, climate change services, specialist groundwater services as well as contaminated site management. ERM Southern Africa has undertaken a number of EIAs for Transnet facilities across South Africa.

1.5.2 Project Team

The project team includes ERM consultants, support staff and external specialists. Details of the external specialists that form part of the team are provided in *Section 7.3*. Details of ERM's core project team are provided below.

Table 1.1 Expertise of EA

Stuart Heather Clark	Partner in Charge:	• BSc Civil Engineering – Univ. of Cape Town (1992) • MPhil. Environ Science – Univ. of Cape Town (1996). EAPSA Certified	Stuart Heather-Clark is a Partner in the Impact Assessment and Planning Team within ERM Southern Africa based in Cape Town, South Africa. Mr Heather-Clark's has over 17 years of experience in industrial, oil & gas and infrastructure related ESIA and Strategic Environmental Assessments (SEA) throughout Africa. His experience has afforded him a sound understanding of the sustainability issues facing development in Africa. He has been involved in a number of internationally funded projects in Cameroon, Ethiopia, Zambia, Tanzania, Angola, Botswana, Namibia, Uganda and Mozambique. All of these projects involved interaction with lenders, developers, local stakeholders, including NGO's, government officials and local communities. Mr Heather-Clark has an in-depth understanding of the Equator Principles and IFC performance Standards.
Tania Swanepoel	Project Manager:	• BSc Hons (Engineering & Environmental Geology), University of Pretoria, 2000. • BSc Hons (Geology and Geohydrology), University of the Western Cape, 1997. • BSc (Geology, Mathematics), University of the Western Cape, 1996. Registered Natural Scientist (Pr Sci Nat).	Tania Swanepoel is a Principal Consultant in the Impact Assessment and Planning team based in Cape Town, South Africa. Tania has over thirteen years of broad based environmental experience. Her experience includes environmental impact assessments, management plans, public participation, environmental site investigations, pollution risk assessments, remedial system monitoring, geotechnical investigations, groundwater monitoring and rural water supply & sanitation studies.
Dean Alborough	Project Consultant:	• Bsc Hons (Zoology and Environmental	Dean Alborough is a Consultant in the Impact Assessment and Planning team based in Cape Town, South Africa.

	Science), University of Cape Town, 2004. • MSc Environmental Science, University of Cape Town, 2007.	Dean has more than 5 years of relevant experience in Integrated Environmental Management, and more than 6 years in environmental science. Dean's experience includes larger environmental and social impact assessments (ESIAs), management plans, public participation, environmental site investigations, monitoring, auditing and risk assessments.

1.6 OPPORTUNITY TO COMMENT ON THE SCOPING REPORT

Interested and Affected Parties (I&APs) and authorities are provided with an opportunity to comment on any aspect of the project. The Final Scoping Report will be made available on the project website www.erm.com/transnet-expansion. A notification letter with the comment and responses report attached will be sent to registered and identified I&APs to inform them of the release of the Final Scoping Report and where the report can be reviewed. Comments on the Final can be forwarded to ERM at the address, tel. /fax numbers or e-mail address shown below or sent directly to DEA.

Attention: Tougheeda Aspeling
Transnet Mamathwane Compilation Yard
DEA Ref: 14/12/16/3/3/2/405
ERM Ref: 0172056
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Tokai, Cape Town,
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E-mail: transnet@erm.com

1.7 STRUCTURE OF THIS REPORT

The remainder of this Final Scoping Report is structured as follows:

Table 1.2 Final Scoping Report Structure

Section	Contents
Section 2 Administrative Framework	Overview of applicable legislation, international conventions and standards and policy.
Section 3 EIA Process	Outlines the approach to the EIA study and summarises the process undertaken for the project to date.
Section 4 Project Description	Includes the project justification, a detailed description of the project activities and the consideration of project alternatives.
Section 5 Environmental and Socio-economic Baseline	Describes the receiving environment, including biophysical and socio-economic aspects.
Section 6 Preliminary Identification of Issues and Impacts	Provides a summary of key issues raised and the identified potential impacts associated with the project.
Section 7 Plan of Study for EIA	Provides concluding comments about the project and outlines the terms of reference for specialist studies to address identified key issues and impacts.
Section 8 Next Steps	Describes the next steps in the EIA process.
Section 9 References	Provides all references used in the Final Scoping Report.

In addition, the report includes the following annexes:

- *Annex A:* Administrative Framework
- *Annex B:* Site Photolog
- *Annex C:* Public Participation Documentation
- *Annex D:* Communication with the DEA

2 ADMINISTRATIVE FRAMEWORK

This Chapter outlines the legislative, policy and administrative requirements relevant to this project. A detailed review of the relevant Administrative Framework is contained in *Annex A*.

2.1 LEGISLATIVE FRAMEWORK

The proposed project is subject to legislative and policy requirements at a national and provincial level. A detailed description of relevant legislation pertaining to the Scoping/EIA process for the proposed project and the permitting thereof, is contained in *Annex A*. Relevant legislation/guidelines that are applicable to the project include, *inter alia*, the following:

National:

- National Environmental Management Act (NEMA) (Act No. 107 of 1998), as amended;
- NEMA EIA Regulations (2010);
- National Water Act (Act No. 36 of 1998);
- National Environmental Management: Biodiversity Act (Act No. 10 of 2004);
- National Environmental Management: Waste Act (Act No. 59 of 2008);
- National Environmental Management: Air Quality Act (Act No. 39 of 2004);
- National Forest Act (Act No. 84 of 1998);
- National Heritage Resources Act (Act No. 25 of 1999);
- Occupational Health and Safety Act (Act No. 85 of 1993);
- Subdivision of Agricultural Land Act (Act No. 70 of 1970);
- Department of Environmental Affairs and Tourism (DEAT) Integrated Environmental Management Information Series No.2, Scoping, 2002;
- Noise Control Regulations, Environment Conservation Act (Act No. 73 of 1989) and SANS Code 10328, Methods for Environmental Noise Impact Assessments in Terms of NEMA; and
- Conservation of Agricultural Resources Act (Act No. 43 of 1983).

Provincial – Northern Cape:

- Northern Cape Planning and Development Act (Act No. 7 of 1998); and
- Northern Cape Nature Conservation (Act No. 9 of 2009).

A more detailed description of the applicability of NEMA, the EIA Regulations and the Waste Act, to the project is given below with additional regulatory aspects addressed in *Annex A*. The competent authority in terms of decision-making for this application is the National Department of Environmental Affairs (DEA). The provincial environmental authority, the

Northern Cape Department of Environment and Nature Conservation (DENC), is a key commenting authority.

2.1.1 National Environmental Management Act (Act No. 107 of 1998)

Section 24 (b) of NEMA gives effect to the South African Constitution, which states that all South African citizens have a right to an environment that is not harmful to their health or well being.

Key principles of NEMA related to the EIA process and public participation specifically are described in Part 2 of the Act and include the following:

- Development must be socially, environmentally and economically sustainable;
- Environmental management must be integrated;
- Decisions concerning the environment must take into account the needs, interests and values of all I&APs;
- Community well-being and empowerment must be promoted through environmental education and awareness, and the sharing of knowledge and experience; and
- Decisions must be taken in an open and transparent manner, and access to information must be provided in accordance with law, etc.

The planning and implementation of the project must, therefore, take these principles into account at all stages.

2.1.2 NEMA EIA Regulations, 2010 (Government Notice No R543)

On 18 June 2010 revised EIA Regulations (Government Notice No R. 543, 544, 545 and 546) were promulgated in terms of Section 24(5) of NEMA. These regulations came into effect on 01 August 2010, replacing the regulations of 21 April 2006.

The EIA Regulations, June 2010 (Government Notice R544, R545 and R546) identify activities which may have a detrimental effect on the environment and the listed activities which may be triggered by the project are included in *Table 2.1* below.

Table 2.1 Relevant Listed Activities (EIA Regulations, 2010)

Relevant Notice	Activity Numbers (in terms of Relevant Notice)	Description of Listed Activity
GN545, 2010	11	*The construction of railway lines, stations or shunting yards, excluding:* *(ii) 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;* The proposed activity comprises the construction of a new compilation yard with associated infrastructure including railway lines and shunting areas at Mamatwane in the Northern Cape.
GN545, 2010	15	*Physical alteration of undeveloped, vacant or derelict land to commercial, recreational, industrial or institutional use where transformation is 20 hectares or more:* *Except where such physical alteration takes place for:* *linear development activities: or agriculture or afforestation where activity 16 in this Schedule will apply.* The compilation yard will involve the transformation of undeveloped land over an extent of 20 hectares or more; the dimensions of which is being confirmed during the Scoping Phase.
GN544, 2010	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).* The Common User Facility at the compilation yard will require the storage of manganese and iron ore.
GN544, 2010	11	*The construction of infrastructure or structures covering 50 square metres or more within 32 metres of a watercourse.* Certain components of the proposed activity may be located with 32 metres of a watercourse; this is being confirmed during the Scoping Phase.

Relevant Notice	Activity Numbers (in terms of Relevant Notice)	Description of Listed Activity
GN544, 2010	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.* Diesel storage with a combined capacity in excess of 80 cubic meters but not exceeding 500 cubic metres will be required.
GN544, 2010	18	*The infilling or depositing of any material of more than 5 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock from* *(i) a watercourse;* *(ii) the sea;* *(iii) the seashore;* *(iv) the littoral active zone, an estuary or a distance of 100 metres inland of the high-water mark of the sea or an estuary, whichever distance is the greater.* Construction related activities in the vicinity of the river (Vlermuislaagte River) south of the compilation yard may trigger this listed activity. This is being confirmed during the Scoping Phase.
GN544, 2010	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.* It is anticipated that the construction of the compilation yard may include road construction, the layout and dimensions is being confirmed during the Scoping Phase.
GN544, 2010	23 (ii)	*The transformation of undeveloped land to industrial use, outside an urban area bigger than 1 hectare.* The compilation yard is proposed to be located outside of an urban area over an area of more than one hectare; the dimensions of the affected areas are being confirmed during the Scoping Phase.

Relevant Notice	Activity Numbers (in terms of Relevant Notice)	Description of Listed Activity
GN544, 2010	24	*The transformation of land bigger than 1000 square metres in size to industrial land where such land was zoned open space or conservation.* The proposed compilation yard may encroach on areas zoned as open space however; this is being confirmed during the Scoping Phase.
GN546, 2010	12	*The clearance of an area of 300 square metres or more of vegetation where 75% or more of the vegetation cover constitutes indigenous vegetation.* *a. Within any critically endangered or endangered ecosystem listed in terms of section 52 of the NEMBA or prior to the publication of such a list, within an area that has been identified as critically endangered in the National Spatial Biodiversity Assessment 2004;* *b. Within critical biodiversity areas identified in bioregional plans.* The presence of endangered ecosystems/critical biodiversity areas and the potential effect clearing may have on these areas, will be confirmed by the ecologist.

2.1.3 National Environmental Management: Waste Act (Act No. 59 of 2008)

The temporary storage of general and hazardous wastes requires a Waste Management Licence (WML) from the DEA in accordance with Section 20(b) of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008). The relevant activities applicable to the project are listed in Category A of the Schedule of Waste Management Activities published in terms of section 19(1) of the National Environmental Management: Waste Act, 2008 (GN 718).

Activities listed in Category A require a Basic Assessment (BA), as stipulated in the EIA Regulations made under Section 24(5) of the NEMA (No. 107 of 1998), as part of the WML Application. However, a full Scoping/EIA process is being undertaken for the Mamathwane Compilation Yard and therefore the WML application process will be incorporated into the Scoping/EIA process. The aim is to ensure that all aspects of the project are considered in an integrated manner and to facilitate informed decision-making.

The WML activities which may be triggered by the project are included in *Table 2.3* below.

Table 2.2 Currently Applied For Listed Activities (NEMWA, 2008)

Relevant Notice	Activity Numbers (in terms of Relevant Notice)	Description of Listed Activity
No. 718, 3 July 2009	Category A: Activity 1	*The storage, including the temporary storage, of general waste at a facility that has the capacity to store in excess of 100 cubic meters of general waste at any one time, excluding the storage of waste in lagoons.* A storage area for general waste will be established on site; general waste could include rubble, plastics, etc. It is anticipated that the storage area would have the capacity to store more than 100 cubic meters.
	Category A: Activity 2	*The storage excluding the temporary storage of hazardous waste at a facility that has the capacity to store in excess of 80m³ of hazardous waste at any one time.* A storage area for hazardous waste will be established on site; hazardous waste could include used oil, oily rags etc. It is anticipated that the storage area would have the capacity to store more than 80 cubic meters.
	Category A: Activity 11	*The treatment of effluent, wastewater or sewerage with an annual throughput capacity of more than 2000 cubic meters but less than 15 000 cubic meters.* An oil/water separator is to be installed at the site to treat contaminated water emanating from the fuel storage area. It is anticipated that the annual throughput would be more than 2000 cubic meters.
	Category A: Activity 18	The construction of facilities for activities listed in Category A of this Schedule (not in isolation to associated activity).

2.2 REGIONAL PLANNING CONTEXT

Certain activities related to the project may, in addition to national legislation, be subject to control by municipal by-laws for aspects such as planning, dust control, noise control and roads. Certain aspects of the John Taolo Gaetsewe District Municipality[1]'s Integrated Development Plan (IDP) may apply as well. Relevant legislation, policies and plans will be identified as part of the various specialist studies during the EIA Phase.

[1] The project site falls within the John Taolo Gaetsewe District Municipality which forms part of the greater Gamagara District Municipality.

2.2.1 *Gamagara Local Municipality Integrated Development Plan (IDP)*

The IDP is a legal requirement under Section 5 of the Municipal Systems Act No. 32 of 2000. The aim of the IDP process is to align the vision and objectives of the local municipality's management to the strategic objectives of the council in order to optimise service delivery. The IDP guides and informs the local municipality in all planning, budgeting, management and decision making (Gamagara Local Municipality, 2011).

The IDP stipulates the following development goals for the Gamagara Local Municipality (Gamagara Local Municipality, 2011):

- Infrastructure and Basic Service Delivery;
- Local Economic Development;
- Financial Viability and Financial Management;
- Good Governance and Community Public Participation; and
- Municipal Transformation and Institutional Development.

The IDP report also stipulates the vision, mission and values of the Gamagara Local Municipality. The Gamagara Local Municipality vision is '*To be a prosperous and harmonious Gamagara municipality with a safe and healthy environment and to provide equal facilities for all*' (Gamagara Local Municipality, 2011). The Gamagara Local Municipality mission is stated to (Gamagara Local Municipality, 2011):

- '*Render quality, effective and sufficient services*
- *Promote the general well being through a safe and healthy environment amongst all residents*
- *Promote equality and fairness in the allocation of resources, and*
- *Promote sound and sustainable economic growth in the municipal area*'

2.2.2 *Gamagara Local Municipality Spatial Development Framework (SDF)*

One of the main objectives of an IDP is to formulate a clear understanding and indication of development aspects and projects that need to be undertaken over time, within the jurisdictional area of the local municipality. Projects, future developments and other forms of investment are influenced by not just financial costs and time, but also in space. It is this spatial aspect that the SDF seeks to manage and set the spatial goals of the municipality (Gamagara Local Municipality, 2010).

The SDF is seen as a core component of a municipality's economic, sectoral, spatial, social, institutional and environmental vision. Essentially, the SDF is viewed as a tool to achieve the desired spatial form of the municipality (Gamagara Local Municipality, 2010).

The Gamagara Local Municipality SDF outlines the following aims of the SDF (Gamagara Local Municipality, 2010):

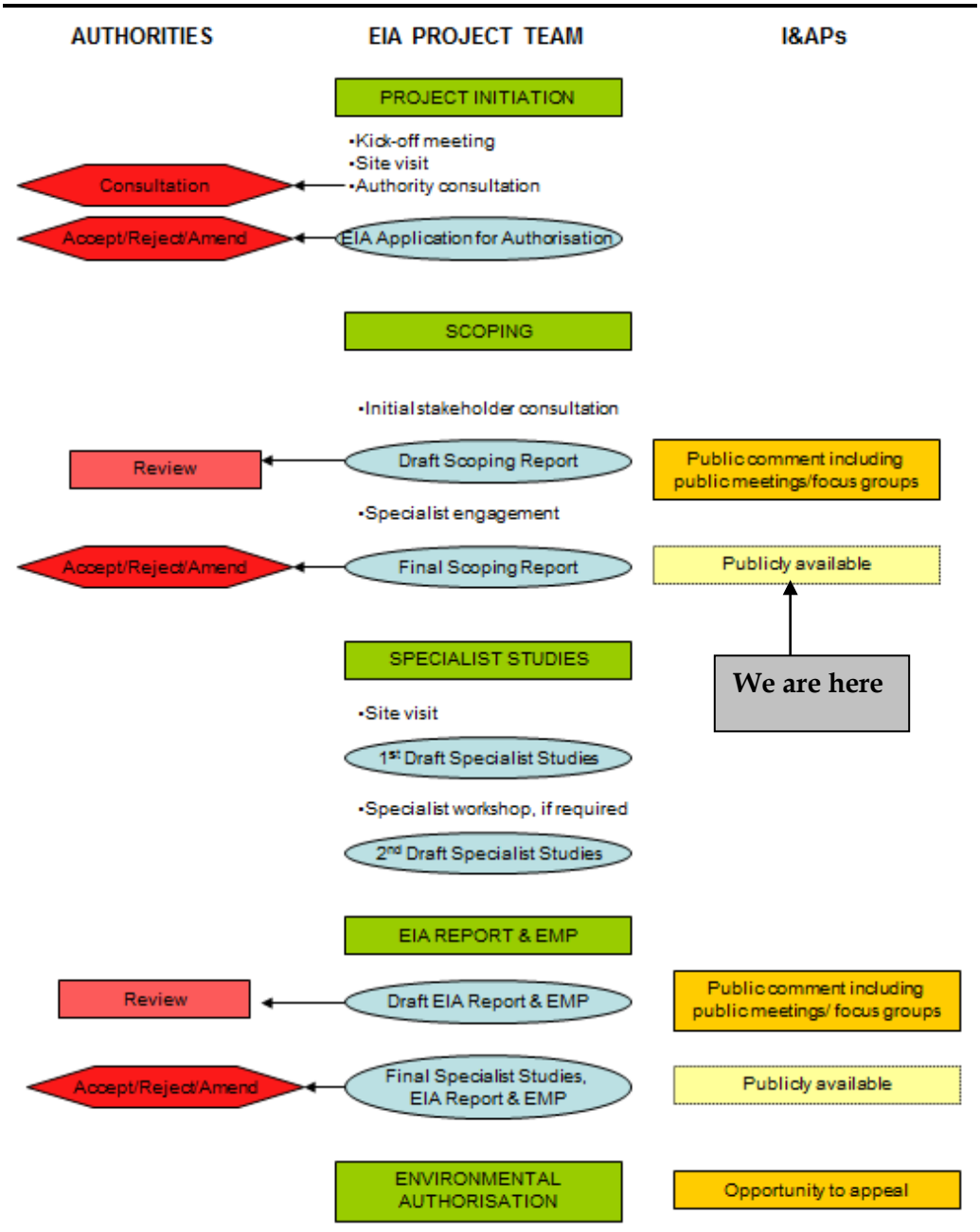
- '*Align the spatial development goals, policies etc. with the relevant provincial and national guidelines, principles and policies.*
- *Provide a long-term vision for the spatial form that Gamagara Municipality wishes to achieve in the future.*
- *Help to spatially coordinate, prioritise and align public investment within the municipality.*
- *Identify areas not suited for development, along with areas where development must be closely monitored and managed.*
- *Provide a framework that guides decision making regarding the nature, form, scale and location of urban development, land use change, infrastructure development and resource utilisation and protection.*'

The SDF recognises that the municipal area is primarily known for its mining activities and that linked to this the maintenance, upgrade and extension of transport corridors (ie railway lines) are imperative to ensuring sustainable development. The SDF also highlights the potential issues such as traffic congestion resulting from a large portion of goods transportation by road. The proposed project therefore fits with the objectives of the SDF for the municipality in that it is key in facilitating the expansion of the capacity of the existing manganese ore railway line.

The EIA process is illustrated in *Figure 3.1* and consists of the following three phases:

- Scoping Phase;
- Specialist Study Phase; and
- Integration and Assessment Phase.

Figure 3.1 EIA Process Flow Diagram



3.1 SCOPING PHASE

The first phase of the EIA process is the Scoping Phase, with an emphasis on public involvement. This project is currently in this phase of the EIA process. The various tasks and consultation activities undertaken thus far by ERM are described and summarised below.

3.1.1 Initial Site Visit and Project Initiation

As part of the project initiation ERM carried out an initial site reconnaissance visit from 1 to 5 October 2012. The purpose of the site visit was to familiarise the project team with the project proposal and study area and to begin the environmental and social screening and scoping process. English, Afrikaans, and Tswana site notices were put up at the site, local library and frequently visited shops within the area (see *Section 3.1.2* below).

3.1.2 Stakeholder Engagement

An integrated stakeholder engagement process is being undertaken; *Table 3.1* details the stakeholder engagement tasks that have been undertaken to date as well as those planned for the Scoping Phase.

Table 3.1 Stakeholder Engagement Tasks: Announcement and Scoping Phase

Activity	Details	Reference in Scoping Report
Announcement Phase/Stakeholder Consultation		
Field visit to towns and compilation yard.	Field visit during **1 – 5 October 2012** for the Northern Cape to gather baseline information, consult with key stakeholders, gather additional stakeholder information and put up site notices.	N/A
Distribution of project announcement letter and Background Information Document (BID).	BID and announcement documentation emailed and posted in English and Afrikaans to stakeholders on Wednesday 2 October and Thursday 3 October 2012.	**Annexure C** BID, letters, registration and comment sheet, adverts, site notices.
Placing of adverts.	Newspaper adverts, in English and Afrikaans, were placed in: • Somerset Budget on 04 October 2012; • Volksblad on 04 October 2012; • The Kathu Gazette on 06 October 2012; and • West and East Burger on 15 October 2012.	**Annexure C** BID, letters, registration and comment sheet, adverts, site notices.
Putting up of site notices.	English, Afrikaans, Xhosa and Tswana site notices were put up at the project site, local library and frequently visited shops within the study area.	**Annexure C** BID, letters, registration and comment sheet, adverts, site notices.

Identification of stakeholders.	Stakeholder database includes information from existing ERM databases, information provided by Transnet and stakeholder information gathered during the field visit.	**Annexure C** Stakeholder database.
Consultation with relevant stakeholders.	Consultations with key stakeholders and directly affected landowners were conducted between 24 September and 5 October 2012 in the Northern and Eastern Cape Provinces. All comments, issues of concern and suggestions are captured in the Comment and Response Report.	A Comment and Response Report is included in this Final Scoping Report.
Obtained comments from stakeholders.	Comments, issues of concern and suggestions received from stakeholders are captured in the Comment and Response Report.	A Comment and Response Report is included in this Final Scoping Report.
	Scoping Phase	
Announcement of Draft Scoping Report.	Draft Scoping Report announcement was sent to I&APs on the stakeholder database during November 2012 together with a schedule and venues for public meetings. The public review period extended from the 19 November 2012 to 09 January 2012 (thus excluding the period of 15 December to 02 January) A newspaper advert was placed in the Kathu Gazette to invite stakeholders to public meetings and to announce the availability of documents for review.	**Annexure C** Public Participation material.
Making Draft Scoping Report available to I&APs.	Draft Scoping Report and accompanying documents were placed at the Kathu Public Library. The Draft Scoping Report was also available on the project website: www.erm.com/transnet-expansion.	**Annexure C** Public Participation material.
Stakeholder meetings.	The public meeting was held in the town of Kathu. The meeting was held in the **Kathu Community Hall on 05 December 2012**. The public meeting was announced together with the announcement of the Draft Scoping Report availability.	A Comment and Response Report and Meeting Minutes is included in this Final Scoping Report.
Obtain comments from stakeholders.	Comments, issues of concern and suggestions received from stakeholders during the Draft Scoping Report public review period are captured in the Comment and Response Report, which is included in this Final Scoping Report.	A Comment and Response Report is included in this Final Scoping Report.

Making Final Scoping Report available to I&Ps	The Final Scoping Report was simultaneously submitted to competent authority and made available to I&APs in the first quarter of 2013. Thereafter a public review period of 21 days will be provided for I&APs to provide comments directly to DEA.	**N/A**

3.1.3 Authority Consultation

Authority consultation and involvement up until the release of the Final Scoping Report included:

- Submission of an EIA Application for Authorisation form to DEA on 24 August 2012. DEA's Acknowledgement of Receipt and approval to proceed with the Scoping Phase was received on 07 September 2012, DEA Reference 14/12/16/3/3/2/405, and is attached in *Annex E*.
- A WML Application form has also been submitted to DEA, this reference number will be included on public participation documents for the EIA process going forward.

3.2 SPECIALIST STUDIES PHASE

A number of specialist studies have been identified to address key issues of concern. The findings of these studies will be incorporated into the Environmental Impact Report (EIR). Further information related to the approach to the specialist studies and the impact assessment is contained in the Plan of Study for EIA in *Section 7.*

3.3 INTEGRATION AND ASSESSMENT PHASE

The final phase of the EIA process is the Integration and Assessment Phase, which is described in detail in the Plan of Study for EIA (*Section 7)*. The assessment of impacts proceeds through an iterative process considering three key elements:

a) Prediction of the significance of impacts that is the consequences of the proposals on the natural and social environment.
b) Development of mitigation measures to avoid, reduce or manage the impacts.
c) Assessment of residual significant impacts after the application of mitigation measures.

A synthesis of the specialist studies, which addresses the key issues identified during the Scoping Phase, will be documented in a Draft EIR. Relevant technical and specialist studies will be included as appendices to the Draft EIR which will be made available for the legislated public and authority comment

period and I&APs will be notified of the release of the report and where it can be reviewed.

Comments received on the Draft EIR will be assimilated and the EIA project team will provide appropriate responses to all comments. A Comments and Responses Report will be appended to the Final EIR, which will be submitted to DEA for decision-making.

Registered I&APs and members of the public will be notified when an Environmental Authorisation has been issued by DEA. A 20-day notice of intention to appeal period followed by a 30-day appeal period will follow the issuing of the Environmental Authorisation.

3.3.1 Proposed Timeframe for the EIA Process

The estimated schedule for the EIA process is presented in *Table 3.2*. *Section 7* of this report presents a more detailed Plan of Study for the EIA.

Table 3.2 Estimated EIA Process Schedule

Task	Date
Stakeholder Comment on Draft Scoping Report and Plan of Study for EIA	November 2012 – January 2013
Finalise Scoping Report and Plan of Study for EIA and submit to DEA	March 2013
Acceptance of Scoping Report received from DEA	March 2013
Specialist studies	February 2013
Prepare Draft EIR and EMP	March – May 2013
Stakeholder Comment on draft reports	May – June 2013
Finalise and submit reports to DEA	July 2013

4 PROJECT DESCRIPTION

This Chapter provides an overview of the proposed Mamathwane Compilation Yard. Project activities and requirements for the construction, operation and decommissioning of the compilation yard are discussed in this section as well as the motivation for the project and the alternatives considered.

4.1 PROJECT MOTIVATION

Transnet is responsible for South Africa's rail infrastructure network and has strategic aims to reduce the cost of doing business, building capacity, operating safely and improving efficiency. The company's growth vision relies heavily on optimising rail corridors in collaboration with its customers.

The existing railway infrastructure between the Port of Ngqura and Hotazel currently has an insufficient export capacity. There is therefore scope to increase the volumes transported along this rail line provided infrastructure upgrades and expansions are undertaken.

Transnet, in conjunction with the manganese mining industry, has identified an export requirement of up to 16 Mtpa for long term growth driven by increased demand for manganese ore to supply the increasing steel manufacturing (manganese form part of the product mix during steel manufacturing). This increase in global demand means that there is a need for larger volumes of manganese ore to be transported along the existing railway line to the Port of Ngqura. The need to meet the demands from the mining sector has led to Transnet's decision to upgrade the existing railway line between the Hotazel and the Port of Ngqura and the establishment of the proposed Mamathwane Compilation Yard is key in facilitating this increased capacity.

4.2 PROJECT LOCATION AND EXISTING LANDUSE

The project site is located at Mamathwane, Gamagara Local Municipality which falls within the John Taolo Gaetsewe District Municipality, in the Northern Cape Province. The Mamathwane Compilation Yard will be located approximately 3.5km south of the existing Mamathwane yard, adjacent to the Mamathwane mine which forms part of the Kalahari manganese fields.

Approximately 131ha of the project site is currently designated for agricultural use, with current agricultural practices comprising sheep and cattle farming. Land use in the surrounding area includes further sheep and cattle farming and extensive mining.

4.3 PROJECT COMPONENTS

The compilation yard will cover an area of 120ha and will be constructed adjacent to the existing manganese ore rail line. This will allow Transnet to receive train wagons from the various manganese mines and consolidate them into 200 wagon trains that will travel to the facilities proposed at the Port of Ngqura. Similarly empty wagon trains will be received at the compilation yard and deconsolidated to be returned to the manganese mines.

The compilation yard layout is indicated in *Figure 4.1*. Included in the compilation yard is a wagon servicing slab for the servicing of wagons, and a diesel refuelling facility for locomotives. A triangle is included in the layout to allow for locomotives to turn around. A locomotive maintenance shed will be used for some minor servicing of locomotives. Yard signalling will be automated. A Common User Facility will be constructed allowing the storage and loading of ore from smaller mining operations. Additionally, a dirty/oily water treatment facility is included. The project components are listed in more detail below.

4.3.1 *Compilation Yard Infrastructure*

The compilation yard will comprise of five rail lines and a balloon loop. The following buildings/facilities are included in the design of the compilation yard:

- Security building;
- Wagon servicing slab;
- Diesel refuelling facility;
- Oil/water separator;
- Locomotive maintenance shed;
- Relay rooms;
- Two shunter cabins; and
- Main TFR operations building.

In addition, the following associated components will also be developed as part of the compilation yard:

- Level crossings;
- Parking facilities;
- Extension of an existing culvert;
- Four metre wide maintenance road;
- New run-off railway line;
- New boundary fence;
- Permanent and temporary laydown areas;
- Sanding facility;
- New road over rail bridge;
- Mine access road; and
- Common User Facility.

Associated infrastructure located on the project site includes the following:

- Existing Mamathwane Eskom substation;
- Existing Eskom 132 kV overhead power line; and
- Mamathwane station building.

The yard will be electrified and the design will incorporate stormwater drainage as well as sewerage systems.

North Section

South Section

North Section

South Section

22°57'30"E 22°58'0"E 22°58'30"E 22°59'0"E 22°59'30"E 23°0'0"E 23°0'30"E 23°1'0"E

27°23'0"S 27°23'30"S 27°24'0"S 27°24'30"S 27°25'0"S 27°25'30"S 27°26'0"S 27°26'30"S 27°27'0"S

Legend

- Centreline Track
- Future Track
- Buildings
- Fence
- Roads
- Side Drains
- Structures
- Proposed Earthworks
- Existing Railway
- Contours (20m)
- River
- Main Road
- Other Roads
- Buildings

SCALE: 0 500 1 000 1 500 Metres

N

DATE: Oct 2012	CHECKED: NB	PROJECT: 0172056
DRAWN: AT	APPROVED: SHC	SCALE: 1 : 25 000

TITLE:

Figure 4.1: Project Site Layout of the Transnet Mamathwane Compilation Yard - North and South Sections

DRAWING: Transnet_Project_Site_Layout_Map3A3_Portrait.mxd

REV: A

CLIENT:

Transnet SOC Ltd

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ERM Southern Africa
175 Lunnon Road
Hillcrest, Pretoria
Tel: +27 12 362 0008
Fax: +27 12 362 8368

Projection:Geographic, Datum: WGS 84
Source: NGI - 2722BD_15_2009_143_RGB_RECT.tif
Inset Map: ESRI Data and Maps

SIZE: A3

C:\Users\Dell4\Documents\Thurlow Mapping\PRIVATE WORK\ERM\CONTRACT\GIS\0172056_TRANSNET\MXD\Transnet_Project_Site_Layout_Map3A3_Portrait.mxd

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4.3.2 Access and Internal Roads

The existing rail reserve boundary fence will be demolished and a new one will be constructed around the compilation yard in order to limit general access. In addition to the existing service roads, a four metre wide maintenance road will be constructed along the length of the compilation yard, a new road over rail bridge will be constructed and a deviate mine access road will be constructed.

4.3.3 Water Requirements

The water required at the project site during the construction phase is estimated to be 153 300m^3 while water requirements during operation are likely to be in the order of 64kl/day. It is envisaged that water will be sourced locally (from existing boreholes) or trucked in by road. Authorisation for water abstraction, if required, will be applied for separately to the Department of Water Affairs (DWA) by Transnet.

4.3.4 Borrow Pits

Geotechnical investigations will be undertaken to identify suitable sources of material to be used for construction. An explanation of the different material types is given in *Box 4.1*.

Box 4.1 Materials that can be extracted from borrow pits

Ballast – Coarse, crushed stone laid to form a bed for the sleepers and rails.

Bulk material – This material is used for earthworks within the rail prism before the construction of the structural sub-ballast layers (see *sub-base* below). The bulk material is comprised of material found in-situ and some fill material from elsewhere, if required.

Sub-base material – This material is used to construct the top layers of the rail prism onto which the ballast is then placed.

4.4 CONSTRUCTION CAMPS AND LAYDOWN AREAS

A laydown area will be established at the project site and will contain a site office, chemical toilets and lock-up facilities for valuables. No fuel or oil will be stored within the laydown area of the project site.

All electricity will be provided by mobile generators. Electricity will be used for lighting and industrial use such as welding and powering electrical equipment.

4.5 WASTE MANAGEMENT

Transnet is applying for a WML under the National Environmental Management: Waste Act (Act No. 59 of 2008) for storage, transfer and treatment facilities. An oil/water separator approximately with a capacity of 49m^3 will be installed adjacent to the locomotive maintenance shed. A waste storage area of 400m^2 will also be established adjacent to the maintenance shed. This area will be used to store waste at the site before removal by an appropriately licenced contractor.

All wastes will need to be managed and disposed of in a manner to prevent potential impacts on the environment and risks to human health and the principles of waste minimisation at source, segregation for reuse, recycling, treatment or disposal will apply to the handling of waste.

4.6 SOCIO-ECONOMIC ASPECTS

A number of jobs will be created by the proposed project. Job creation during the construction and operational phases of the project as well as aspects of skills development is elaborated on in the section below.

4.6.1 *Job Creation*

A number of both temporary and permanent jobs will be created through both the construction and operation phase of this project. Skilled, semi-skilled and unskilled labour will be required. Skilled labour will be sourced nationally, including the Eastern and Northern Cape, and semi-skilled and unskilled labour will be sourced locally as far as practicable.

Construction Phase (Temporary Labour)

The construction of the compilation yard will require both skilled and unskilled personnel, the numbers of which will be confirmed as part of the EIA Phase. Skilled labourers will be required to operate machinery and equipment on the project site. Skilled artisans and supervisors will also be required. Unskilled personnel will be used for manual labour tasks.

Operation Phase (Permanent Labour)

The following types of personnel *may* be recruited for the operational phase of the project: administrators, private secretaries, yard masters, yard officials, yard foreman, sundry workers, section managers, chief shedmen, shed assistants, shedmen, train assistants, train control officers, service drivers, train drivers and general personnel. In addition, both temporary and permanent jobs may be created in the manufacture of wagons and equipment for the railway line.

Potential socio-economic impacts associated with employment are identified for assessment in the EIA Phase (see *Section 6*).

4.7 ALTERNATIVES

In terms of the EIA Regulations, Section 28(1)(c) and NEMA, Section 24(4), feasible and reasonable alternatives are required to be considered in the EIA process. *'"Alternatives", in relation to a proposed activity, means different ways of meeting the general purposes and requirements of the activity, which may include alternatives to –*

(a) the property on which, or location where, it is proposed to undertake the activity;
(b) the type of activity to be undertaken;
(c) the design or layout of the activity;
(d) the technology to be used in the activity;
(e) the operational aspects of the activity; and
(f) the option of not implementing the activity (No Go)'.

This section outlines the alternatives considered in for the project.

4.7.1 Site Alternatives

The following strategic alternatives were originally considered by Transnet as part of their logistics studies for various export corridors:

- The Port of Saldanha and the Port of Ngqura were investigated as alternative ports of export of manganese ore. The existing ore line to the Port of Saldanha is used extensively for iron ore transport and strategically it is considered preferable for manganese ore to be transported to the Port of Ngqura via the existing railway line.
- The alternative to relocate the entire railway line from Sishen to De Aar, bypassing Kimberley, was also investigated and found to be unfeasible due to cost and environmental implications and risks.
- A new second railway line was considered for the entire length of the line, potentially negating the need for the compilation yard. However, this option was rejected due to cost, environmental risks as well as significant geographic constraints such as deep or narrow valleys and numerous river crossings.

There were two site alternatives considered for the project, the Mamathwane site and a site at Lohatla. There are two main reasons as to why the Lohatla site is considered unsuitable:

- The Lohatla site is further than the Mamathwane site from the mines and will require less efficient shunting and hauling operations due to the compilation and de-compilation of 200 wagon trains into 100 wagon trains for supply to the mines.
- The topography of the landscape at the Lohatla site does not suit the requirements of the yard layout required.

4.7.2 Design Alternatives

Layout alternatives for the Mamathwane site were considered, with the length and number of lines in the compilation yard being determined by the compilation yard's function of enabling the compilation and de-compilation of 200 wagon manganese trains.

4.7.3 Activity Alternatives

Activity alternatives relate to providing alternatives ways of achieving the same objectives. In this project, the objective is to increase the number of wagon trains available to transport manganese ore along the existing railway line. This can only be achieved via rail if the infrastructure is able to deal with the consolidated and deconsolidation of wagons for 16 Mtpa (i.e. a compilation yard with sufficient capacity). An activity alternative would, therefore, relate to transportation of these goods by road, rather than rail.

Assessing the potential for road transport would require involvement of other role players and government and would require considerable input and investigation, owing to the large geographic scale of the study area and the volumes of goods that need to be transported. There are a number of advantages and disadvantages to road transport which include the following:

- Advantages - include opportunities for small entrepreneurs / road transport contractors to benefit from the associated employment and economic opportunities.
- Disadvantages - include the impact on the public in terms of road infrastructure maintenance, vehicle congestion, vehicle emissions and road safety; accessibility and extent of major road networks; and the cost of transport by road.

4.7.4 Process Alternatives

Process alternatives are dictated by various aspects including but not limited to the operating conditions, throughput needs and design requirements and/or restrictions. The most optimal solution is found by limiting the extent of infrastructure and rolling stock investments required. This is achieved by

optimising the processes i.e. streamlining activities and using an optimal train length.

Shorter trains would result in increased train frequency and fleet size, with the latter carrying a significant capital cost. An increase in train frequency would require additional train slots in the overall schedule. The schedule would then slowly get more and more congested which would require additional loops to be extended or built to alleviate the problem, and the compilation yard would need to be of sufficient size to cope with the required consolidation and deconsolidation. This construction would carry a cost burden and potential environmental and social risks.

4.7.5 Material Alternatives

Due to the specialised nature of the material required for a project of this nature there are limited opportunities for considering material alternatives. Material requirements are dictated by train axle loads and design requirements so as to safely operate a compilation yard.

4.7.6 The No-go Alternative

The no-go alternative is the option of not implementing the project. Assuming that the compilation yard would not be constructed, the site would remain in its current state. There would be no direct negative environmental and socio-economic impacts associated with the construction and operation of the compilation yard. Similarly, there would be no potential positive impacts associated with the construction and operation of the compilation yard if the project is not executed, an increase in export capacity on the existing railway line between the Port of Ngqura and Hotazel will not be possible. This would indirectly have serious implications for South Africa's mining and would affect South Africa's export capabilities. This suggests direct negative consequences for the provincial and national economy. Local effects would be related to a lack of stimulation in terms of employment and opportunities for small and medium enterprises, which would benefit from the project.

5 ENVIRONMENTAL AND SOCIO-ECONOMIC BASELINE

The environment consists of interacting geological, biological, social, economic and cultural factors. It is essential that the effects of any proposed development on all aspects of the environment be assessed before a decision to proceed is taken. The environmental and socio-economic baseline conditions of the study area for this EIA are described briefly in this section. This description is based on a combination of desk-top research, analysis of maps and aerial photography and an initial site inspection. Further specialist studies will explore issues such as vegetation, noise and vibration, air quality, heritage resources and socio-economic considerations during the next phase of the EIA. The findings of these studies will inform the assessment of the impacts that the proposed development may have on these environmental and social aspects.

5.1 BIOPHYSICAL BASELINE

This section provides an overview of the biophysical components of the receiving environment.

5.1.1 Climate

The study area normally receives about 223mm of rain per year. Most rainfall occurs during the summer months. The area receives the lowest average rainfall (0mm) in June and the highest average rainfall (50mm) in February. The average midday temperatures range from 19.1°C in June to 33.2°C in January. The lowest temperatures are experienced in July, with an average minimum temperature of one degree Celsius during the night (1).

5.1.2 Landscape and Topography

The area is characterised by a very flat topography on the floodplain of a valley, dominated by Karoo farms. The Ga-Mogara River runs in a south to north direction approximately 13.5km from the project site. There are north south running mountains approximately 40km to the west and approximately 30km east of the project site.

5.1.3 Geology and Soils

Superior-type banded iron formations (BIF) of the Transvaal Supergroup crop out along the western margin of the Kaapvaal craton in the Northern Cape (see *Figure 5.1*). The majority of the hematite mineralisation is found in the area of Postmasburg and Sishen Mine. Iron ore and associated lithologies of the Transvaal and Olifantshoek Supergroups crop out intermittently along an

(1) http://www.saexplorer.co.za/south-africa/climate/hotazel_climate.asp. Accessed 8 October 2012.

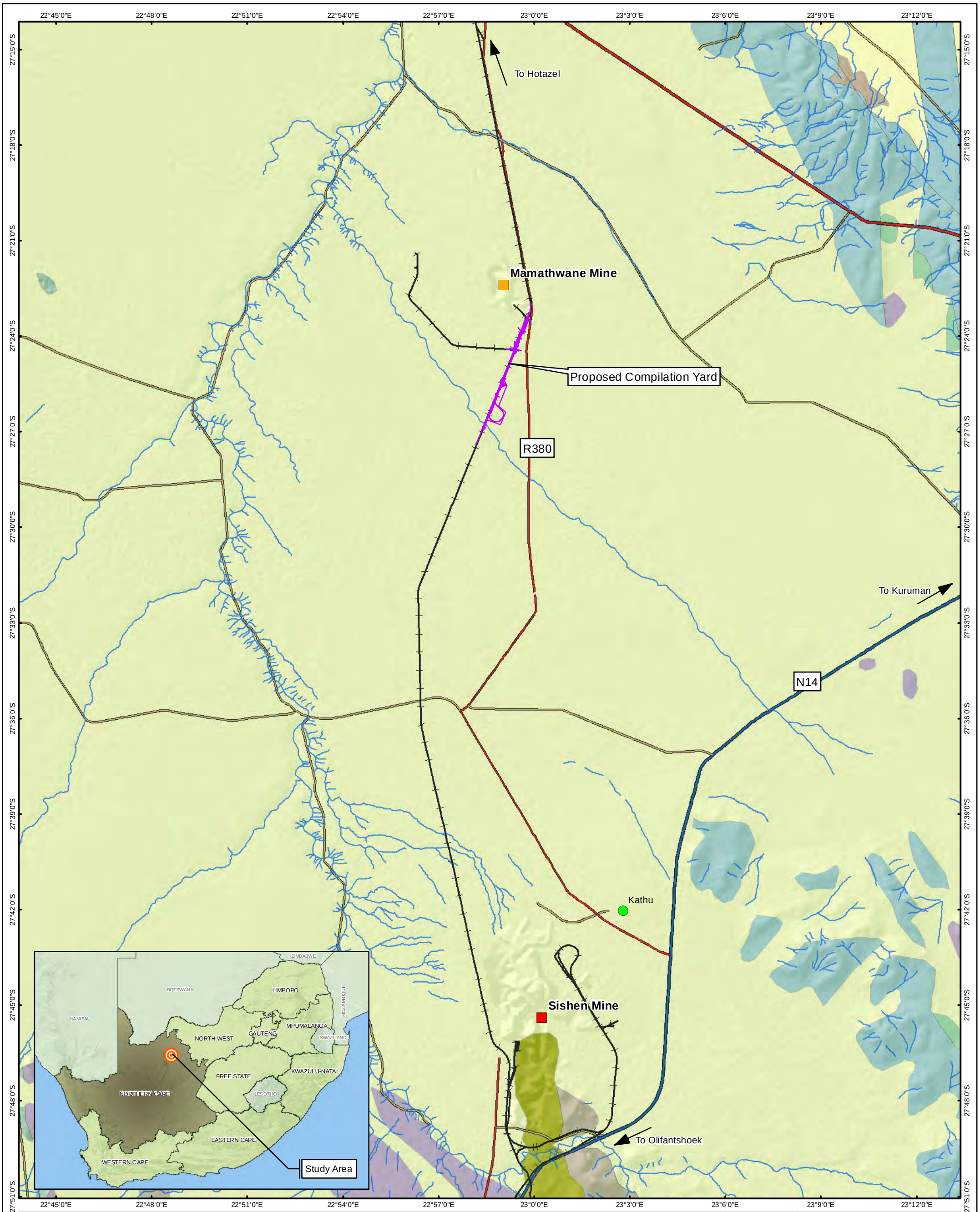
arcuate belt for 60 km within this sub-region(1). These outcrops shape a regional anticlinal structure known as the Maremane anticline. The area is located at the northern end of the anticline. The Transvaal Supergroup lithologies were deposited as part of an extensive epeiric sea, located on the central part of the Kaapvaal Craton. These geological strata developed within two related basins. The westernmost (the Griqualand West basin) is preserved in the Northern Cape. The Transvaal Supergroup comprises an extensive, basal carbonate platform sequence (the Campbell Rand Subgroup) conformably overlain by iron-formations of the Asbestos Hills Subgroup. In the vicinity of the Sishen Mine, the upper parts of the Asbestos Hills Subgroup have been ferruginized to ore grade. The Asbestos Hills Subgroup is unconformably overlain by sedimentary rocks (conglomerates, shales, flagstone and quartzite), known as the Gamagara Subgroup(1).

The study area is situated on the northern extremity of the Maremane anticline, where the lithologies strike north-south and plunge from the centre of the anticline in a northerly direction(1).

Campbell Rand Subgroup is separated from the overlying BIF of the Asbestos Hills Subgroup, by a siliceous, residual breccia (2), known locally as the Wolhaarkop Breccia. The BIF's of the Asbestos Hills Subgroup are fractured and brecciated, especially near the contact with the Wolhaarkop breccia(1).

The sedimentary rocks of the Gamagara Subgroup, overlie the laminated breccia ores. Partly ferruginized shales, interbedded with ore conglomerates and thick flagstones are also a charateristic of the Gamagara Subgroup. A buried glacial valley, filled with Dwyka tillite and mudstones has been identified in the study area, located between the Sishen mine and Kathu. The valley has a north-south orientation that changes to northwest between Dibeng and the Sishen mine. The valley does not fall within the planned open pit. The Kalahari Group located in the study area comprises boulder beds, clays, calcrete, dolocrete and windblown sands(1).

(1) http://www.exxaro.com/pdf/icpr/a/geology/iron.htm. Accessed 9 October 2012.
(2) Breccia is a rock composed of broken fragments of minerals, or rock cemented together by a fine-grained matrix.



Legend

- Mamathwane Mine
- Sishen Mine
- Towns
- Proposed Compilation Yard
- Existing Railway
- River
- National Freeway Route
- Arterial Route
- Main Road
- Secondary Road

Geology

- Andesite
- Diamictite
- Dolomite
- Banded Ironstone Formation
- Sand
- Shale

SCALE: 0 2 4 6 8 10 Kilometres

N

DATE: Oct 2012	CHECKED: NB	PROJECT: 0172056
DRAWN: AT	APPROVED: SHC	SCALE: 1 : 200 000

DRAWING: Transnet_Geology_Map5_A3_Portrait.mxd

REV: X

TITLE:

Figure 5.1: Geology Map of the Transnet Mamathwane Compilation Yard

CLIENT:

Transnet SOC Ltd

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ERM Southern Africa
175 Lunnon Road
Hillcrest, Pretoria
Tel: +27 12 362 0008
Fax: +27 12 362 8368

Projection:Geographic, Datum: WGS 84
Source:Geology ENPAT (2001)
Inset Map: ESRI Data and Maps

SIZE: A3

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5.1.4 Hydrology - Surface Water and Ground Water

The area has an aquifer classification of minor, i.e. a moderately yielding aquifer system of variable water quality. The dissolved solids (mg/L) are between 301-500mg, and the borehole distribution for the area is between 6-10.

Within the broader landscape, the Ga-Mogara River which is more than 10km to the west of the project site is a significant ecological feature. There is a river tributary system that traverses the southern portion of the project site. This river system runs in a south east to north west direction and feeds into the larger Ga-Mogara River that runs in a south to north direction located to the west of the project site.

5.1.5 Flora and Fauna

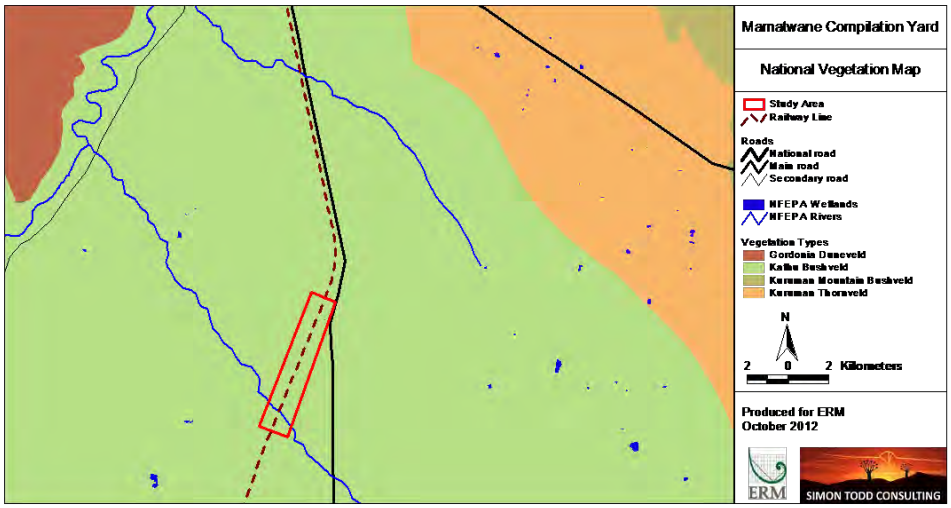
Vegetation

Broad-scale Vegetation Patterns:

According to the national vegetation map (Mucina & Rutherford 2006), the project site is entirely within the Kathu Bushveld vegetation type (*Figure 5.2*). This vegetation unit occupies an area of 7,443 km^2 and extends from around Kathu and Dibeng in the south through Hotazel and to the Botswana border between Van Zylsrus and McCarthysrus. It is associated with Aeolian red sand and surface calcrete, deep sandy soils of the Hutton and Clovelly soil forms. The Kathu Bushveld vegetation type is still largely intact, with less than 2 percent transformed by mining activity, and classified as Least Threatened[1]. However, it is poorly conserved and does not currently fall within any formal conservation areas. Although no endemic species are restricted to this vegetation type a number of Kalahari endemics are known to occur in this vegetation type such as False Umbrella Thorn *Acacia luederitzii* var *luederitzii*, Silverbrush Grass *Anthephora argentea* and Kalahari Buffalo Grass *Panicum kalaharense*. Other vegetation types which occur in the broad vicinity include Gordonia Duneveld and Kuruman Thornveld. These other vegetation types are also classified as Least Threatened. There are no listed vegetation types known from the project site.

[1] Least threatened in terms of the classification system found in Mucina & Rutherford, 2006. The system provides a classification of vegetation types into four levels (from Critically Endangered to Least Threatened) based on percentage of untransformed areas with this vegetation type and biodiversity targets.

Figure 5.2 Broad-scale Vegetation Types



Source: Simon Todd, 2012.

Fine-scale Vegetation Patterns:

Within the project site, the vegetation consists of a tree layer, comprised mainly of Grey Camel Thorn *Acacia haematoxylon,* Black Thorn *Acacia mellifera,* Camel Thorn *Acacia erioloba,* Silver Cluster-Leaf *Terminalia sericea* and Velvet Brandybush *Grewia flava*, with a grassy understorey consisting mainly of perennial grass species including Lehmann Lovegrass *Eragrostis lehmanniana* and Bushman Grass *Stipagrostis uniplumis*. There are some occasional shrubs present, such as January Bush *Gnidia polycephala*. Other large woody species that occurred at the site as scattered individuals or localised clumps include Karee *Searsia lancea,* Candle Thorn *Acacia hebeclada* and Kriedoring *Lycium hirsutum*. The overall flora diversity at the project site is considered low and there is little variation in the vegetation present. Apart from the Grey Camel Thorn *Acacia haematoxylon* and the Camel Thorn *Acacia erioloba*, there were no other threatened or protected species observed at the project site. Examples of the project site vegetation is shown in *Figure 5.3*, indicating the dominance of Camel Thorn *Acacia erioloba* and Grey Camel Thorn *Acacia haematoxylon* at the site, the relatively dense grass layer and the flat topographical nature of the project site.

Figure 5.3 Examples of Project Site Vegetation

Source: Simon Todd, 2012.

Flora Species of Conservation Concern:

According to the South African National Biodiversity Institute (SANBI) Integrated Biodiversity Information System (SIBIS) database, 202 plant species have been recorded from the four quarter degree squares 2722 BD and DB and 2723AC and CA maps. Although the study area does not contain very high plant diversity, this is nevertheless a relatively low total, suggesting that the study area has not been very well sampled in the past. Only one species, Camel Thorn *Acacia erioloba* is of conservation concern and is listed as Declining[1] by the South African Red Data List of Plants (2012). Several nationally protected tree species may occur on the project site including Grey Camel Thorn *Acacia haematoxylon* and Camel Thorn *Acacia erioloba* which are dominant species on the project site and Sheperd's Tree *Boscia albitrunca* which is widespread in the study area but was not observed on the project site.

[1] The species is declining but the population has not yet reached a threshold of concern

Fauna

Mammals:

The project site is located within the distribution range of 48 terrestrial mammals, and 8 bat species, indicating mammalian diversity at the site is potentially high (see species lists in *Annex E*). Species associated with rocky habitats are not likely to occur at the site, which is restricted to flat Kalahari sands. There are five terrestrial mammal species of conservation concern that may occur in the study area, namely the Brown Hyena *Hyaena brunnea* (Near Threatened), Black-footed Cat *Felis nigripes* (Vulnerable), Leopard *Panthera pardus* (Near Threatened), Honey Badger *Mellivora capensis* (Endangered) and Ground Pangolin *Smutsia temminckii* (Vulnerable) (South African Red Data Book (SARDB). Given that the area is currently used for livestock grazing, the abundance of larger predators such as Leopard and Brown Hyena is likely to be low as a result of persecution from farmers. There is a high probability that the other listed species occur in the area as the habitat is broadly suitable for all three. The Black-footed Cat, Honey Badger and Ground Pangolin are widely distributed across the arid and semi-arid parts of South Africa, a single individual of which has a home range far exceeding the extent of the study area. The development of the project site would therefore not constitute significant habitat loss for these species,

Reptiles:

The project site lies in or near the distribution range of 33 reptile species, indicating that reptile diversity at the project site is likely to be relatively low. Based on distribution maps and habitat requirements, the reptile faunal species composition is likely to comprise two tortoises, 11 snakes, 13 lizards and skinks, one chameleon and 5 geckos (see species list in *Annex E*). Of the species mentioned above, species associated with rocky habitats are unlikely to occur at the project site, which is likely characterised by species associated with sandy substrates or wide habitat tolerance. There are no listed reptiles known for the study area and there are also no narrow endemics which occur in the study area, indicating that the reptiles at the project site are likely to be largely widespread species of low conservation concern.

Amphibians:

The project site lies within the distribution range of 11 amphibian species, of which only three or four are likely to occur at the project site (see species list in *Annex E*). There is no natural surface water present at the site and no areas where water is likely to collect for any prolonged length of time. Therefore, only those species able to persist away from perennial water are likely to occur at the project site. The Giant Bullfrog *Pyxicephalus adspersus* is the only species of conservation concern occurring in the study area; however there is no breeding habitat for this species in or near the project site. Species which are likely to occur at the site such as sand and rain frogs, are widespread species associated with sandy substrates which characterise the study area. However, the project site is not considered to be of above-average significance for these species.

5.1.6 *Critical Biodiversity Areas and Broad-scale Processes*

No fine-scale conservation planning has been conducted for the study area. Additionally, the project site does not fall within a National Protected Areas Expansion Strategy focus area, indicating that it has not been recognised as a potentially important area for future conservation efforts. The habitats present on the project site are widely available across an extensive area surrounding the project site and the potential for broad-scale fragmentation or loss of connectivity is low. In terms of the broad-scale processes, the flat, open nature of the project site suggests that few such ecological gradients and processes are likely to be operating across the project site.

Within the broader landscape, the Ga-Mogara River which is more than 10 km to the west of the project site is a significant ecological feature that may be important for dispersal and broad-scale ecological processes.

5.1.7 *Protected Nature Conservation Areas*

The nearest nature reserve is the Tswalu Kalahari Reserve located approximately 55 km west-north-west of the project site and is unlikely to be affected by the proposed project.

5.2 *SOCIOECONOMIC BASELINE*

5.2.1 *Introduction*

The purpose of this section is to describe the socio-economic environment within which the proposed project is located. The proposed development will have benefits on a national level in terms of providing rail infrastructure and on a local scale in terms of providing employment (i.e. both temporary and permanent). The potential socio-economic impacts resulting from the proposed project will primarily be experienced at the local level; therefore, the socio-economic baseline description is focused on the local level.

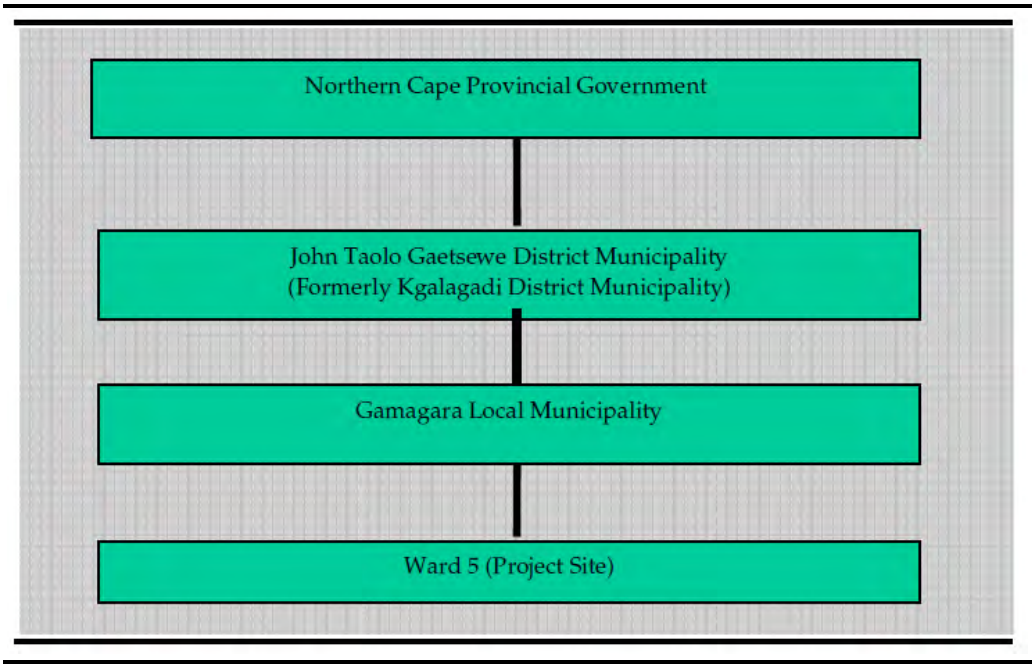
The description provided in this section is based on publically available and high level secondary information. A full and more current account of the project site will be provided as part of the socio-economic study for the EIA drawing on primary data collected for this project.

5.2.2 *Administrative Structure*

The project is located within the Gamagara Local Municipality which falls within the John Taolo Gaetsewe District Municipality, in the Northern Cape Province. The provincial government is responsible for providing a strategic vision and framework for the province, as well as ensuring cooperation between municipalities and ensuring each municipality performs their respective functions. The district and local municipalities are each responsible for the provision of services and infrastructure within their municipal

boundaries. This is facilitated through the development and implementation of IDPs, SDF and Local Economic Development (LED) Plans.

Figure 5.4 Administrative Structure



5.2.3 Provincial Level

The Northern Cape Province is the largest province in South Africa, measuring 361,830km^2. The primary metropolitan areas within the Northern Cape include Kimberly and Upington. Smaller district towns include Douglas, De Aar, Prieska, Victoria West, Hopetown and Colesburg.

The Northern Cape is the least populous province in South Africa, containing approximately 1.8 percent of the national population (1). The Province has a high poverty rate (2) despite the fact that the per capita Gross Domestic Product (GDP) in the Northern Cape is higher than the national average (3). The poverty rate for the Province is 48.5 percent, which is slightly lower than the national average (4). Poverty rates differ vastly between racial groups, with low poverty rates among the White and Asian populations, and high poverty rates among Coloured and African population groups (5). Over two thirds (70 percent) of the population live in urban areas, despite the vast extent of the Province.

(1) StatsSA, July 2011
(2) The poverty rate is defined as the number of people earning less than the minimum level of income deemed adequate in a country. The World Bank uses the figure of $1.25 per day.
(3) PROVIDE: Project Background Paper 2005.
(4) StatsSA, July 2011
(5) PROVIDE Project Background Paper 2005.

The Northern Cape faces the challenge of high unemployment rates and low income levels. The unemployment rate in the Province is 26.7 percent, which is above the national average of 23.9 percent (1).

5.3 *JOHN TAOLO GAETSEWE DISTRICT MUNICIPALITY*

John Taolo Gaetsewe District is one of five District Municipalities in the Northern Cape. It is located in the south eastern portion of the Northern Cape and is bordered by the Free State, Eastern Cape and Western Cape. The District is approximately 27,283 km² in size. The District comprise of three local municipalities namely, Joe Morolong, Ga-Segonyana and Gamagara.

The key economic sectors in the District are mining, social services, agriculture, tourism, manufacturing, and construction. Mining is the largest employer followed by the agricultural sector.

Table 5.1 provides a statistical summary of John Taolo Gaetsewe District Municipality.

Table 5.1 John Taolo Gaetsewe District Municipality

	Statistical Indicators in %	**Additional Comments**
DEMOGRAPHIC INDICATORS		
Population Size	224,799	
Population Growth Rate	9	The population has increased by 18,152 since the 2001 Population Census.
Rural/Urban Split	Mostly rural	The municipal area is rural, due to intensive agriculture undertaken
Racial Composition:		
African/Black	85	
Coloured	9	
White	5	
Indian/Asian	0.5	
Other	0.5	Foreign Nationals
The population is largely youthful at 69 percent (35 years old and below), and an economically active population 19 to 54 (61 percent) and five percent of population are elderly.		
SOCIO-ECONOMIC INDICATORS		
Education		
No Schooling	23 (2)	
Primary Schooling	35	
Secondary Schooling	25	
Grade 12	12	
Tertiary	5	
Employment rate	29	This category includes unspecified, children, elderly,
Unemployment rate	18	

(1) Unemployment rate for Q4 2011 according to StatsSA

(2) Based on the 2007 Community Survey

	Statistical Indicators in %	Additional Comments
Economically Inactive	53	sick and those who choose not to seek employment. During the 2007 Community Survey, over half of the population were classified as Economically Inactive.
ECONOMIC INDICATORS		
Annual growth rate	Between 4 and 6	The Municipality's economic growth target is 4 to 6 % which is in line with the Provincial economic growth strategy

Highest economic sector contributions:

Sector	Percentage Contribution
Mining	50.2
General Government Services	13.1
Wholesale, Retail, Catering, and Accommodation	8.4
Finance and Business	7.4
Transport and Communication	6.1
Community Services	5.1
Agriculture, Forestry, and Fishing	4.1
Manufacturing	3.2
Construction	1.2
Electricity and Water	1.2

Sources: StatSA: 2011 Population Census; 2007 Community Survey; and Kgalagadi Nodal Development Profile (no date)

5.3.1 The Municipal and Study Area

Gamagara Local Municipality comprises of an area of 2,619km^2, and is located in the north-eastern side of the Province and District, on the N14 National Road between Upington and Vryburg. The Municipality comprise of five towns, namely Kathu, Shesheng, Dibeng, Dingleton (former Sishen), and Olifantshoek. The Municipal administrative office is located in Kathu.
A significant portion of the Municipal area is used for extensive farming (livestock) and mining (iron ore). The single largest factor that has guided the development of the Municipal area is the iron ore mine at Sishen which has led to the establishment of the modern town of Kathu which is the largest town, while Dingleton is the smallest of the five towns.

Table 5.2 provides a statistical summary of Gamagara Local Municipality.

Table 5.2 Gamagara Local Municipality

	Statistical Indicators in %	Additional Comments
DEMOGRAPHIC INDICATORS		
Population Size	41,617 (1)	The population has increased by 13,563 since the 2001 Population Census.
Population Growth Rate	48	
Rural/Urban Split	Mostly rural	The municipal area is rural, due to intensive agriculture and mining activities undertaken
Racial Composition:		
African/Black	55	
Coloured	29	
White	14	
Indian/Asian	0	
Other	2	Foreign Nationals
The population is largely youthful at 68 percent (35 years old and below), and an economically active population 19 to 54 (72 percent) and three percent of population are elderly.		
SOCIO-ECONOMIC INDICATORS		
Education		
No Schooling	22	The number of people who have tertiary education has increased by two percent when its compared to the 2007 Community Survey where the number stood at six pecent
Primary Schooling	26	
Secondary Schooling	26	
Grade 12	18	
Tertiary	8	
Employment rate	49 (2)	Majority of the employed people work within the mining, agricultural and tourism sectors. Agricultural sector jobs are mainly seasonal or temporary
Unemployment rate	17	
Economically Inactive	34	
ECONOMIC INDICATORS		
Annual growth rate	Between 4 and 6	The Municipality's economic growth target is 4 to 6 % which is in line with the Provincial economic growth strategy
Highest economic sector contributions: Mining has the highest contribution to the local economy; this is due to the abundance of manganese ore and iron ore in the local municipal area. Mining has also contributed significantly to the establishment of the tourism sector in the Municipality, as most of its managers and other workers from outside the area are housed in the local B&Bs and hotels on a long term basis. Other important sectors in the economy include, trade, transport, finance, and agriculture. These sectors have been experiencing a renewed growth (with the sectors showing growth of between four and five percent).		
Sources: StatSA: 2011 Population Census; 2007 Community Survey; and 2009-2013 Gamagara Local Municipality Integrated Development Plan.		

(1) 2011 Population Census, StatsSA
(2) 2007 Community Survey, StatSA

5.3.2 Description of the Project Site

There are three farm portions which will be directly affected by the project, namely Portion 3 of Remainder of the farm Moab No. 700, Portion of Remainder of Portion 1 of the farm Shirley No 367, and Portion of Remainder of Portion 2 of the farm Walton No 390. All three farms are privately owned. The farms are used for agricultural purposes, specifically cattle, sheep and game farming. On farm Walton No 390, the landowner mines sand which he sells as a flea and tick remedy for livestock and pets. He also produces a multivitamin supplement for humans from this sand. These products form an important source of secondary income for the household.

The infrastructure found on site includes fences, houses, boreholes, water storage dams, and working areas.

22°45'0"E 22°48'0"E 22°51'0"E 22°54'0"E 22°57'0"E 23°0'0"E 23°3'0"E 23°6'0"E 23°9'0"E 23°12'0"E

27°18'0"S 27°21'0"S 27°24'0"S 27°27'0"S 27°30'0"S 27°33'0"S 27°36'0"S 27°39'0"S 27°42'0"S 27°45'0"S 27°48'0"S 27°51'0"S

To Hotazel

Ga-Segonyana LM

Moshaweng LM

Mamathwane Mine

Proposed Compilation Yard

R380

John Taolo Gaetsewe DM

To Kuruman

Gamagara LM

Kathu

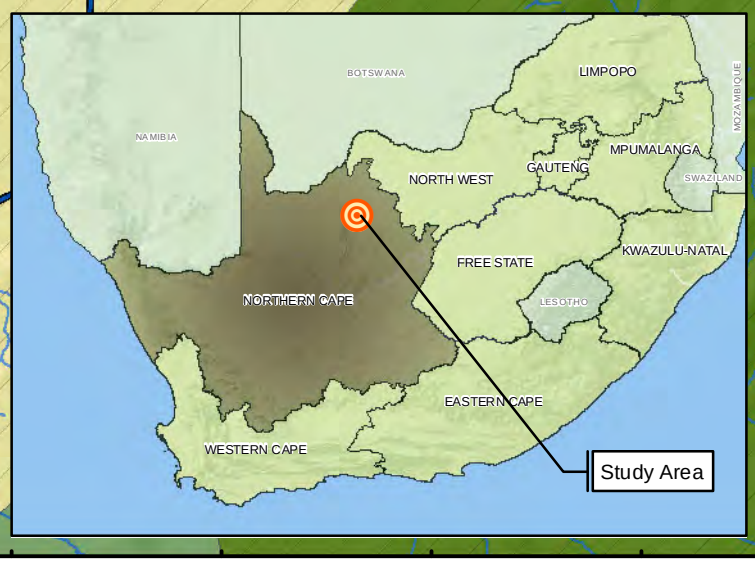
Sishen Mine

Ga-Segonyana LM

Tsantsabane LM

To Olifantshoek

Tsantsabane LM



Legend

- Mamathwane Mine
- Sishen Mine
- Towns
- Proposed Compilation Yard
- Existing Railway
- River
- National Freeway Route
- Arterial Route
- Main Road
- Secondary Road

Local Municipalities

- Gamagara
- Moshaweng
- Tsantsabane
- Ga-Segonyana

District Municipalities

- John Taolo Gaetsewe (Formerly Kgalagadi Municipality)

SCALE: 0 2 4 6 8 10 Kilometres

N

DATE: Oct 2012	CHECKED: NB	PROJECT: 0172056
DRAWN: AT	APPROVED: SHC	SCALE: 1 : 200 000

TITLE:

Figure 5.5: Municipal Map of the Transnet Mamathwane Compilation Yard

DRAWING: Transnet_Municipal_Boundaries_Map5_A3_Portrait

REV: A

CLIENT:

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Projection: Geographic, Datum: WGS 84
Source: ENPAT (2001)
Inset Map: ESRI Data and Maps

SIZE: A3

C:\Transnet_Locality_Map1A3_Portrait.mxd

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5.4.1 Palaeontology

The project site is located on rocks of the Kalahari Group and the fossils of interest which may be present in the geological strata present in the vicinity of the site are described below. In general, the quality of fossil preservation may be compromised in areas due to intense tectonic deformation, while extensive dolerite intrusion has compromised fossil heritage in portions of the Karoo Supergroup sediments (e.g. Ecca Group) due to resulting thermal metamorphism. In addition, pervasive calcretisation and chemical weathering of many near-surface bedrocks in the Northern Cape has further compromised their original fossil heritage in many areas (e.g. Ecca Group outcrop).

Fossils within the Kalahari Group

The fossil record of the Kalahari Group is generally sparse and low in diversity. The Gordonia Formation dune sands were mainly active during cold, drier intervals of the Pleistocene Epoch that were inimical to most forms of life, apart from hardy, desert-adapted species. Porous dune sands are not generally conducive to fossil preservation. However, mummification of soft tissues may have occurred and migrating lime-rich groundwater derived from the underlying bedrocks (including, for example, dolerite) may lead to the rapid calcretisation of organic structures such as burrows and root casts. Occasional terrestrial fossil remains that might be expected within this unit include calcretised rhizoliths (root casts) and termitaria (e.g. Hodotermes, the harvester termite), ostrich egg shells (Struthio) and shells of land snails (e.g. Trigonephrus) (Almond 2008, Almond & Pether 2008). Other fossil groups such as freshwater bivalves and gastropods (e.g. Corbula, Unio) and snails, ostracods (seed shrimps), charophytes (stonewort algae), diatoms (microscopic algae within siliceous shells) and stromatolites (laminated microbial limestones) are associated with local watercourses and pans. Microfossils such as diatoms may be blown by wind into nearby dune sands (Du Toit 1954, Dingle et al., 1983). These Kalahari fossils (or subfossils) can be expected to occur sporadically but widely, and the overall palaeontological sensitivity of the Gordonia Formation is therefore considered to be low. Underlying calcretes of the Mokolanen Formation might also contain trace fossils such as rhizoliths, termite and other insect burrows, or even mammalian trackways. Mammalian bones, teeth and horn cores (also tortoise remains, and fish, amphibian or even crocodiles in wetter depositional settings such as pans) may be expected occasionally expected within Kalahari Group sediments and calcretes, notably those associated with ancient, Plio-Pleistocene alluvial gravels.

5.4.2 Archaeology

Archaeological resources in the Northern Cape include prehistorical and historical sites particularly adjacent to rivers, hilltops and pans. These include

rock art, stone age sites as well as historical sites related to the Kimberley and South African War.

Although the project site is located adjacent to the existing manganese ore railway line and although the area may be largely disturbed, the possibility of finding a high density of stone tools is good based on archaeological work done in the vicinity of the site.

6.1 INTRODUCTION

A key part of the Scoping Phase is a preliminary identification and consideration of the ways in which the project may impact (positively and negatively) with environmental and socio-economic resources or receptors. The issues that are identified as potentially significant during the Scoping Phase provide focus for more detailed specialist studies for the EIA. Each of the potential issues will be briefly described in this section while the significance of any resulting impacts will be discussed and assessed in more detail in the EIR.

6.2 DESCRIPTION OF POTENTIAL IMPACTS

The potential impacts on environmental and socio-economic resources and receptors arising from the project include direct and indirect impacts. Impacts will also be linked to the different stages of the project which are identified as construction, operation and decommissioning.

Table 6.1 provides an overview of likely aspects arising from each of the key project activities and considers their likely interaction with socio-economic and environmental resources and receptors.

Table 6.1 Interaction between Project Activities and Receiving Environment

Key: Shaded box indicates potential interaction between the project and resource or receptor. The difference in shades indicates the predicted degree of interaction with darker shading indicating a greater degree of interaction.

	Environmental Resources/Receptors							**Socio-economic Resources/Receptors**							
Project Activities	Fauna	Flora	Geology and Soils	Surface Water	Groundwater	Air Quality	Noise and Vibration	Economy and Livelihoods	Traffic and Transport	Infrastructure Services	Land Use and Agricultural Potential	Landscape and Visual Amenity	Heritage/Archaeology/Palaeontology	Social and Cultural Structure	Health
Pre-construction and Construction															
Clearance of Vegetation (of the railway lines, maintenance roads, fence line and laydown areas)															

Project Activities	Environmental Resources/Receptors							Socio-economic Resources/Receptors							
	Fauna	Flora	Geology and Soils	Surface Water	Groundwater	Air Quality	Noise and Vibration	Economy and Livelihoods	Traffic and Transport	Infrastructure Services	Land Use and Agricultural Potential	Landscape and Visual Amenity	Heritage/Archaeology/Palaeontology	Social and Cultural Structure	Health
Construction of Roads															
Construction Camp															
Site Levelling and Grading															
Construction of Level Crossings															
Component Delivery															
Construction of Buildings (including operations building, shunter cabins, relay rooms, and locomotive maintenance shed)															
Construction of New Railway Lines															
Construction of New Overhead Electrical Cables															
Construction of Refuelling Facility															
Construction of Road over Rail Bridge															
Wastes and Emissions Handling and Disposal															
Operation															
Use of Railway Lines															
Use of Roads															
Use of Buildings															
Site Maintenance and Security															
Use of Refueling Facility															
Wastes and Emissions Handling and Disposal															
Decommissioning															
Removal of Railway Lines															
Removal of Overhead Railway Cables															

Project Activities	Environmental Resources/Receptors							Socio-economic Resources/Receptors							
	Fauna	Flora	Geology and Soils	Surface Water	Groundwater	Air Quality	Noise and Vibration	Economy and Livelihoods	Traffic and Transport	Infrastructure Services	Land Use and Agricultural Potential	Landscape and Visual Amenity	Heritage/Archaeology/Palaeontology	Social and Cultural Structure	Health
							■	■							■
Removal of Foundations	■	■	■	■			■	■	■			■			■
Removal of Roads	■	■	■	■			■					■			■
Removal of Buildings	■	■	■	■			■					■			■
Removal of Refueling Facility	■	■	■	■	■		■	■	■			■			■
Wastes and Emissions Handling and Disposal	■	■	■	■	■				■						■
Site Restoration & Rehabilitation	■	■	■	■				■	■		■	■	■	■	■

Note: This interactions matrix will be continually developed throughout the EIA process.

6.3 *POTENTIAL IMPACTS*

The following section describes potential impacts which will be assessed in the EIA Phase, based on the initial site visit, discussions with the project team and available information about the environmental effects of similar developments. It is likely that many of these impacts can be adequately addressed through the implementation of appropriate mitigation and management measures, however, some require further specialist investigation as part of the EIA Phase.

6.3.1 *Noise and Vibration*

During the construction phase, vehicles including delivery trucks and excavation equipment may produce an increase in noise disturbance. Impacts are likely to be minimal considering the rural and isolated location of the project site which has few receptors. Delivery vehicles may create some noise and vibration along access roads.

Increased noise levels are anticipated during the operational phase of the development from the use of the railway infrastructure by trains. The project is located adjacent to the existing railway line and therefore noise generated

by the movement of trains is not anticipated to be out of place given the status quo.

Potential noise impacts will be addressed in the EIR and appropriate mitigation measures if considered necessary will be included in the Draft Environmental Management Programme (EMP).

6.3.2 Air Quality and Dust

Limited dust generation may occur during construction due to vegetation clearance, transportation of materials, and the construction of the compilation yard and associated infrastructure. Taking into consideration the distance of potential sensitive receptors to the site, impacts from increased dust are not likely to be significant.

No dust generation is expected to occur during the operational phase of the compilation yard, except for minimal dust created by maintenance vehicles along gravel roads, which is expected to be infrequent. However, the storage and handling of ore which will take place at the Common User Facility may generate dust and therefore require an Air Emissions Licence.

A specialist air quality assessment will be undertaken in the EIA Phase of the project. Appropriate measures to manage impacts associated with dust generation will be developed and proposed as part of the Draft EMP.

6.3.3 Loss of Agricultural Land

A portion of the project site is currently zoned for agriculture (livestock grazing). The construction activities and the establishment of the compilation yard will result in a reduction in the area of land that is available for livestock grazing, as the compilation yard will be fenced off.

The potential impact of loss of grazing land will be assessed in the EIR and appropriate mitigation measures will be included in the Draft EMP, where necessary.

6.3.4 Loss of, or Damage to Palaeontology, Archaeological or Cultural Heritage Resources

Section 38 of the National Heritage Resources Act states that any person who intends to undertake a development categorised as-

'(a) the construction of a road, wall, power line, pipeline, canal or other similar form of linear development or barrier exceeding 300 m in length;
(c) any development or other activity which will change the character of a site -
(i) exceeding 5,000 m^2 in extent;'

must at the very earliest stages of initiating such a development, notify the responsible heritage resources authority and furnish it with details regarding the location, nature and extent of the project.

During construction excavations required for the installation of railway lines and buildings and road construction etc. and land clearing could disturb or destroy features of cultural heritage interest, if they exist on the site. These potential impacts will be assessed through a palaeontology and heritage specialist study in the EIA Phase along with the required submissions to the South African Heritage Resource Agency (SAHRA).

6.3.5 Visual and Aesthetic Landscape Impacts

The main landscape feature in the area is the existing Mamathwane mine, while on the site there are a number of existing man-made features including power lines, Eskom's Mamathwane substation, the existing railway line and roads. The project infrastructure will result in an alteration of the landscape character of the site itself however, given the disturbed nature of the surrounding landscape and the height of existing infrastructure, it is not anticipated that this would result in high visual intrusion.

The EIA Phase will consider the potential effects that the project will have on the landscape character and effects upon potential viewers.

6.3.6 Impact on Flora, Fauna and Habitats

Potential ecological impacts resulting from the development would stem from a variety of different activities and factors associated with the construction and operational phases of the project including:

Construction Phase

- Vegetation clearing for lines, roads, buildings etc., could impact listed plant species as well as high-biodiversity plant communities. Vegetation clearing will also lead to habitat loss for fauna and potentially the loss of sensitive faunal species, habitats and ecosystems.
- Increased erosion risk would be likely to result due to the loss of plant cover and soil disturbance created during the construction phase. This may impact downstream riparian and wetland habitats if a high volume of silt enters the drainage systems.
- Presence and operation of construction machinery on the site. This could create a physical impact as well as generate noise, pollution and other forms of disturbance at the site.
- Increased human presence could lead to poaching, illegal plant harvesting and other forms of disturbance such as fire.
- Loss of connectivity and habitat fragmentation may result due to the presence of the railway infrastructure, roads, fencing and other support infrastructure of the project.

Operational Phase

- Although the existing railway is already operational, the operation of the compilation yard will create a more persistent presence and generate noise

which may deter fauna amounting to a loss of connectivity and habitat fragmentation.
- Maintenance activities such as vegetation clearing may impact indigenous plant species as well as encourage alien plant invasion.

The above risk factors are likely to be manifested as the following impacts:

Impacts on Vegetation and Protected Tree Species

Some loss of vegetation is an inevitable consequence of the development. In addition, the density of the protected tree species Camel Thorn *Acacia erioloba* and Grey Camel Thorn *Acacia haematoxylon* at the project site is high and some loss of individuals of these species is likely to be unavoidable.

Alien Plant Invasion Risk

The disturbance created during construction will leave the site vulnerable to alien plant invasion. The existing railway line forms a potential corridor for the dispersal of alien species and many alien species are common along the existing line and would represent a ready source for the spread of invasive species on the project site.

Increased Erosion Risk

Increased erosion risk would result from soil disturbance and the loss of plant cover within cleared and disturbed areas. The site is however largely flat and it is anticipated that erosion risk would be associated with wind erosion as well as water erosion, although instances of the latter may be less frequent. Cleared and disturbed areas with loose exposed sand would be most vulnerable.

Direct Faunal Impacts

Increased levels of noise, pollution, disturbance and human presence is likely to impact fauna. Sensitive and shy fauna would move away from the area during the construction phase as a result of the noise and human activities present, while some slow-moving species would not be able to avoid the construction activities and may be killed. Some mammals and reptiles such as tortoises would be vulnerable to illegal collection or poaching during the construction phase as a result of the large number of construction personnel that are likely to be present. There are also a number of mammals of conservation concern which may occur in the area and some habitat loss for these species is likely to occur. It is not anticipated that the significance given the scale of the development relative to the distribution extent of these species.

Loss of Landscape Connectivity and Disruption of Broad-scale Ecological Processes

The presence of the compilation yard could potentially contribute to the disruption of broad-scale ecological processes such as dispersal, migration or the ability of fauna to respond to fluctuations in climate or other conditions.

Fencing would likely restrict animal movement and disrupt the connectivity of the landscape for fauna, which would no longer be able to pass through the site.

A botanical and ecological specialist study will be undertaken during the EIA Phase to assess the impact on terrestrial flora and fauna and the identification of appropriate mitigation and management measures to be included in the Draft EMP, where required.

6.3.7 Impact on Traffic during Construction

There will be an increase in traffic during construction as trucks and vehicles will be required to transport infrastructure, equipment and construction materials onto site and earth-moving vehicles will be involved in construction activities. This would decrease during the operational phase as trucks and vehicles will only be required for maintenance activities.

Further information regarding traffic levels and an assessment of significance will be provided in the EIR.

6.3.8 Impacts Due to Waste Generation

Waste from the construction and operational activities may arise from a range of sources including the following:

- Excavated material during construction (e.g. rock and soil);
- Waste from fuels and greases including storage of waste and treatment of oily water runoff using a separator;
- Waste from infrastructure components (e.g. scrap metal);
- Waste from workers on site including storage; and
- Waste from equipment, packaging, materials and vehicles.

A waste management licence application has been submitted to the DEA to ensure storage and treatment of waste during the operational phase is properly licenced and managed. Specific requirements for waste management and disposal will be identified in the Draft EMP.

6.3.9 Soils, Geology and Erosion Potential

The potential effects on soils and geology from construction, operation and decommissioning may include:

- The potential for soil properties at the site to be permanently altered due to site preparation (e.g. compaction of soil);
- The potential for increased erosion caused by increase runoff from concreted surfaces; and
- Site preparation and vegetation clearance activities which could cause instability and increased erosion potential.

These impacts can be mitigated or managed through the implementation of various measures such as the correct placement of infrastructure along or in dry drainage lines. The removal of vegetation and the development of access roads and hard standing surfaces may impact surface water flow and run off within the site and surrounds, during both the construction and operational phases. The input of additional water, mainly during construction, may exacerbate these impacts.

The potential impacts discussed above and any further impacts identified during the EIA Phase will be assessed in the EIR. These will be accompanied by the identification of appropriate mitigation and management measures, such as specific measures to manage surface water run-off, which will be included in the Draft EMP.

6.3.10 Surface Water and Groundwater Contamination

The potential for surface water contamination is an important consideration in relation to the construction of the compilation yard. Soil erosion leading to increased sediment load in surface water runoff could impact on drainage channels in the area. The presence and susceptibility of drainage features to potential sediment loading will be explored in the EIA Phase. The potential for groundwater contamination is associated with uncontrolled spills of fuels and lubricants during the construction and operational phases. The extent and impact of potential groundwater or surface water contamination is largely dependent on the nature of the subsurface soil conditions, their transmissivity and susceptibility to erosion. Apart from the permeability of the soil substrate, groundwater contamination could also occur through joints, fractures and contact zones associated with the geology.

Basic precautions to prevent groundwater and surface water impact during construction will be identified in the Draft EMP developed during the EIA Phase of the project.

6.3.11 Socio-Economic Impacts

Employment and procurement of local goods and services have been the issues of most interest to local stakeholders to date, and this is likely to continue. If managed well, it is the impact area with the greatest potential to have a significant positive effect on the area of influence.

The positive employment and procurement impacts would in turn result in positive impacts for the local economy over the duration of the project, i.e. from the construction phase through to decommissioning. Employment numbers will be reported on more fully during the EIA Phase and the associated socio-economic implications, positive and negative will be described and assessed. Related to the creation of employment, social impacts as a result of unmet expectations for employment and procurement may also occur. In addition, the influx of staff associated with the project may give rise to impacts on the social and cultural structure of the local communities.

Indirect social impacts may be associated with the proposed project and with other impacts identified in this section for example, increased noise, dust, vibration, construction and operational hazards, loss of agricultural land, road traffic hazards and sense of place.

The above-mentioned direct and indirect impacts will be described and assessed in the EIA Phase.

6.3.12 Human Health and Safety

There is the potential for impacts on human health and safety to occur as a result of accidents and unplanned events that may occur during the construction of the compilation yard.

The risk of injury will be mainly limited to the subcontractors as the site will be secured to avoid public incursion into the active development area. However there remains some risk of injury to others. Basic safety precautions and protective measures will be specified in the Draft EMP which, in turn, will be incorporated into subcontractor health and safety plans.

6.4 SCREENING OF IMPACTS

The preceding *Section 6.3* describes a number of potential impacts associated with the project. One of the purposes of Scoping is to offer a preliminary, qualitative assessment of potential environmental and social impacts associated with the project, thereby ensuring that those impacts that are potentially significant are assessed in the EIA Phase.

The following impacts have been identified and described above:

- Noise and vibration impacts;
- Impacts on air quality due to dust and emissions;
- Loss of agricultural land;
- Loss to archaeological, palaeontology and cultural heritage;
- Visual and landscape impacts;
- Impact on flora, fauna and habitats;
- Impact on traffic;
- Impact of waste generation;
- Impact on soils, geology, hydrology and erosion potential;
- Impact on surface and groundwater;
- Socio-economic impacts; and
- Health and safety.

The impacts which require further investigation through specialist studies are the following:

- Loss to archaeological, palaeontology and cultural heritage;

- Noise and vibration;
- Air quality;
- Natural vegetation and ecology; and
- Socio-economic.

The potential impacts identified will be assessed with input from the specialist studies mentioned above to determine the significance of the impact (i.e. the significance rating of the impact) and identify appropriate mitigation measures. The significance rating of an impact after mitigation is taken into account is the residual impact or the actual predicted impact associated with the proposed project.

Visual impacts, traffic disruption, loss of agricultural potential, waste generation, potential effects on hydrology, soils and geology and health and safety impacts will be addressed in the impact assessment and controlled through the implementation of standard environmental management measures that will be included in the Draft EMP.

The impact assessment methodology is discussed in more detail in *Section 7*.

6.5 CUMULATIVE IMPACTS

A cumulative impact is one which arises as a result of an impact from the project interacting with an impact from another activity to create an additional impact. For example, a residential property positioned between a railway project and an airport would result in the residential receptors experiencing the combined effect of the two noise sources. Although there are not many developments in the area, due to the presence of the Mamathwane mine it is important to follow a precautionary approach in accordance with NEMA to ensure that cumulative impacts are addressed or avoided. The following positive and negative significant cumulative impacts could result due to the project interacting with other facilities in close proximity:

- Visual intrusion;
- Air quality;
- Noise and vibration;
- Changes in (loss of) agricultural land;
- Change in sense of place and character of the area;
- An increase in employment opportunities;
- An increase in the significance of ecological impacts; and
- An increase in the significance of geological and hydrological impacts.

The cumulative impacts of the project will be qualitatively assessed in the EIR.

7 PLAN OF STUDY FOR EIA

7.1 INTRODUCTION

The Scoping Phase represents an initial step of the EIA process. A key outcome of scoping includes the creation of Plan of Study for a full EIA. The EIA will then be carried out prior to approval and Environmental Authorisation of the project. This section describes the Plan of Study for EIA as contemplated in regulation 28(1)(n) of R543 and sets out how the EIA will be conducted.

According to Government Notice R543 and Amendment R1159, Section 28(1)(n), a plan of study, must include the following:

a. *'a description of the tasks that will be undertaken as part of the environmental impact assessment process, including any specialist reports or specialised processes, and the manner in which such tasks will be undertaken;*
b. *an indication of the stages at which the competent authority will be consulted;*
c. *a description of the proposed method of assessing the environmental issues and alternatives, including the option of not proceeding with the activity; and*
d. *particulars of the public participation process that will be conducted during the environmental impact assessment process'…*

This chapter serves as the Plan of Study and sets out the following:

- Overview of activities to complete the EIA process;
- Specialists studies;
- Interaction with authorities;
- Stakeholder engagement activities;
- Proposed methodology for assessing impacts; and
- Provisional schedule for the EIA process.

7.2 OVERVIEW OF EIA TASKS

Following on from the Scoping Phase, the remainder of the EIA process will include the specialist studies and an Integration and Impact Assessment Phase; in parallel with these activities the EIA team will continue to interact with the Authorities and implement the stakeholder engagement process.

7.2.1 *Specialist Study Phase*

It is anticipated that all the specialist studies will be completed by February 2013. However, this timeframe is subject to the approval of this Scoping Report and Plan of Study for EIA by DEA. See *Section 7.2.2* below for further details.

7.2.2 Integration and Impact Assessment Phase

The aim of this phase is to synthesise the findings of the specialist studies and any other relevant available information into a Draft EIR (including a Draft EMP). Information will be presented in a clear and understandable report which is easy to comment on and will aid decision-making.

The Draft EIR and EMP will be published for a 40-day I&AP comment period. Registered I&AP's will be notified of the release of the report as will members of the public. Copies of the full report will be made available at key locations and on the project website.

Comments will be collated and the EIA project team will provide a response. Comments and responses will be documented in a Comments and Responses Report which will be appended to the Final EIR and submitted to DEA for decision-making.

Registered I&APs will be notified of the outcome of the EIA process once a decision (positive or negative) has been issued by DEA. The statutory appeal period will then follow.

The Integration and Impact Assessment Phase is anticipated to commence in March 2013. The commencement of this phase is, however, subject to the approval of the Final Scoping Report, including the Plan of Study for the EIA.

7.2.3 Interaction with Authorities

The DEA will be consulted once the Scoping Report is submitted for approval, to ensure that all the requirements for Scoping have been met.

Once the Integration and Impact Assessment Phase of the EIA is underway, the next key interaction with the DEA will be the submission of the Final EIR and EMP for decision. However, at the request of the DEA, the consultants would be willing to present the findings of the impact assessment and conduct a site visit, prior to decision-making.

The Northern Cape Department of Environment and Nature Conservation (DENC), the provincial commenting authority, will be engaged for their comments on the Draft EIR. In addition, a number of other commenting authorities will be approached for comment, including but not limited to the following:

- Ngwao Boswa Kapa Bokoni, the provincial heritage authority in the Northern Cape;
- SAHRA, the national heritage authority; and
- Department of Agriculture, Forestry and Fisheries given the potential impact on protected tree species.

7.2.4 Stakeholder Engagement Activities

Stakeholder engagement is an essential part of the EIA process. As such, a number of opportunities will exist for public involvement during the Integration and Impact Assessment Phase of the EIA. This will include the following:

- The Draft EIR will be released for a 40-day public and authority review period.
- A notification letter will be sent to all registered I&APs on the project database. This letter will invite I&APs to comment on the Draft EIR. Members of the public will also be notified via a newspaper advert.
- I&APs will be notified of the Environmental Authorisation and the statutory appeal period through correspondence and via a newspaper advert.

7.3 SPECIALIST STUDIES

As discussed in *Section 6*, a number of potentially significant issues were identified during scoping. The following specialist studies will, therefore, be commissioned to further investigate these issues and any data gaps:

- Archaeological, cultural heritage and palaeontology study;
- Air quality study;
- Noise and vibration study;
- Vegetation and terrestrial ecology study; and
- Socio-economic study.

During the specialist study phase, the appointed specialists will:

- Gather relevant data to provide a description of the affected environment;
- Assist the project team in assessing impacts (both negative impacts and benefits) according to a predefined assessment methodology (see *section 7.4*); and
- Suggest ways in which negative impacts could be mitigated and benefits enhanced.

Specialists who will be responsible for the specialist studies are identified in *Table 7.1*.

Table 7.1 Specialists

Specialist Study	Name and Organisation	Qualifications
Archaeological, Heritage and Palaeontology	Elize Becker	BSc Hons, Archaeology and Anthropology, University of Pretoria
	David Morris (peer review)	Head of Archaeology at the McGregor Museum in Kimberley and PhD candidate at the University of the Western Cape
	John Almond	PhD Earth Sciences (Palaeontology), University of Cambridge
Air Quality	Mark Zunckel	PhD Meteorology, University of Witwatersrand
Noise and Vibration	Demos Dracoulides (DDA Environmental Engineers)	MSc Engineering, (Energy Studies), University of Cape Town
Botany and Terrestrial Ecology	Simon Todd	MSc, Cum Laude Conservation Biology University of Cape Town
Socio-Economic	Janet Mkhabela	MA, Policy & Development Studies, University of KwaZulu-Natal

The terms of reference for each of the specialist studies are included in *Table 7.2* below. The results of the specialist studies will be integrated into the EIR during the Integration and Impact Assessment Phase.

Table 7.2 Terms of Reference for Specialist Studies

Specialist Study	Aim of the Study	Terms of Reference for specialist study
Archaeology, Cultural Heritage and Palaeontology	Determine the palaeontological, archaeological and cultural heritage impacts associated with the project.	• Collect secondary data on the occurrence and distribution of heritage, archaeological and palaeontology sites in the study area. • Survey the Area of Influence and identify and describe sites of interest. • Explain how the different elements of the project may affect any archaeological, heritage and palaeontology sites within the study area. • Evaluate the potential impacts (direct, indirect and cumulative) on sites of interest. • Describe mitigation/management measures that may be implemented to avoid or reduce any negative impacts on these sites and enhance benefits of the development. • Provide recommendations for any ongoing monitoring that may be necessary. • Liaison, submission and follow-up on all relevant permits, project applications and associated documents to the SAHRA and Ngwao Boswa Kapa Bokoni (Heritage Northern Cape), as required.
Air Quality	Determine the impacts associated with the project on air quality.	• Provide a description of the receiving environment with regard to ambient air quality, including meteorology, baseline air pollutant concentrations and sensitive receptors. • Describe the legal framework with respect to air quality. • Identify all project specific air pollutants from the Common User Facility by activity and source, including transport, stockpiles, materials handling and wind entrainment and develop an emission inventory. • Assess the impacts of the project (direct, indirect and cumulative) on ambient air quality by estimating the ambient concentrations of key pollutants described in the emission inventory. The assessment will consider the impacts associated operations using dispersion modelling. • The assessment of the significance of the impacts will be done by comparison of predicted ambient concentrations with South African Ambient Air Quality Standards.
Noise and Vibration	Determine the impacts result from noise and vibration associated with the project.	• Provide a description of the receiving environment with regard to ambient noise levels and vibration. • Describe the legal framework with respect to noise and vibration. • Identify project specific sources of noise and vibration. • Assess the impacts (direct, indirect and cumulative) of the project on the receiving environment in terms of noise and vibration. The assessment will consider impacts using noise modelling. • The assessment of the significance of the impacts will be done by comparison of predicted noise and vibration levels with the relevant South African regulations.

Specialist Study	Aim of the Study	Terms of Reference for specialist study
Vegetation and Terrestrial Ecology	Determine the impacts on vegetation and terrestrial ecology associated with the project.	• Undertake a desk and field-based investigation of the flora and fauna of the project site, integrating on site information with available data from atlases, research reports and other published sources. • Map the ecological sensitivity of the project site. • Assess the impacts (direct, indirect and cumulative) on flora and fauna that are associated with the project and describe relevant mitigation measures to reduce, avoid or minimise negative impacts to flora, fauna and habitats. • Provide recommendations for any ongoing monitoring that may be necessary.
Socio-economic	Assess the socio-economic impact associated with the project.	• Identify all relevant legislation, permits and standards that would apply to the project. • Provide a baseline description of the socio-economic environment that may be affected by the project activities. • The baseline description will be derived from secondary data and primary data collection. • Identify and assess socio-economic impacts (direct, indirect and cumulative) that may result from the construction and operation phases of the project. • Recommend mitigation measures that address the local context and needs.

7.4 IMPACT ASSESSMENT METHODOLOGY

An impact is essentially any change to a resource or receptor brought about by the presence of the project component or by the execution of a project related activity. The adequate assessment and evaluation of the impacts and benefits that will be associated with the project necessitates the development of a methodology that will reduce the subjectivity involved in making such evaluations. A clearly defined methodology is used in order to accurately determine the significance of the predicted impact on, or benefit to, the surrounding natural and/or socio-economic environment. For this the project must be considered in the context of the area and the affected communities.

Nonetheless, an impact assessment will always contain a degree of subjectivity, as it is based on the value judgment of various specialists and EIA practitioners. The evaluation of significance is thus contingent upon values, professional judgment, and dependent upon the environmental and community context. Ultimately, impact significance involves a process of determining the acceptability of a predicted impact to society.

The purpose of impact assessment is to identify and evaluate the likely significance of the impacts on identified receptors and resources according to defined assessment criteria, to develop and describe measures that will be taken to avoid, minimise, reduce or compensate for any potential adverse environmental effects, and to report the significance of the residual impacts that remain following mitigation. There are a number of ways that impacts may be described and quantified.

7.4.1 *Assessing Impacts*

Table 7.3 Defining Impact Characteristics

Characteristic	Definition	Designation
Type	A descriptor indicating the relationship of the impact to the project (in terms of cause and effect).	Direct Indirect Induced
Extent	The "reach" of the impact (e.g., confined to a small area around the project footprint, projected for several kilometres, etc).	Local Regional International
Duration	The time period over which a resource / receptor is affected.	Temporary Short-term Long-term Permanent
Scale	The size of the impact (e.g., the size of the area damaged or impacted, the fraction of a resource that is lost or affected, etc.)	(No fixed designations; intended to be a numerical value)
Frequency	Measure of the constancy or periodicity of the impact.	(No fixed designations; intended to be a numerical value)

A definition of each impact characteristic is provided to contextualise the requirements. The designations for each of the characteristics are defined below.

Table 7.4 Designations for Characteristics

Designations	Definition
Type	
Direct	Impacts that result from a direct interaction between the project and a resource/receptor (e.g., between occupation of a plot of land and the habitats which are affected).
Indirect	Impacts that follow on from the direct interactions between the project and its environment as a result of subsequent interactions within the environment (e.g., viability of a species population resulting from loss of part of a habitat as a result of the project occupying a plot of land).
Induced	Impacts that result from other activities (which are not part of the project) that happen as a consequence of the project (e.g., influx of camp followers resulting from the importation of a large project workforce).
Extent	
Local	Defined on a resource/receptor-specific basis
Regional	
International	
Duration	
Temporary	Defined on a resource/receptor-specific basis
Short-term	
Long-term	
Permanent	

The terminology and designations are provided to ensure consistency when these characteristics are described in an impact assessment deliverable.

An additional characteristic that pertains only to unplanned events (e.g., traffic accident, accidental release of fuel, community riot, etc.) is likelihood. The likelihood of an unplanned event occurring is designated using a qualitative (or semi-quantitative, where appropriate data are available) scale.

Table 7.5 Definitions of likelihood

Likelihood	Definition
Unlikely	The event is unlikely but may occur at some time during normal operating conditions.
Possible	The event is likely to occur at some time during normal operating conditions.
Likely	The event will occur during normal operating conditions (i.e. it is essentially inevitable).

Likelihood is estimated on the basis of experience and/or evidence that such an outcome has previously occurred. It is important to note that likelihood is a measure of the degree to which the unplanned event is expected to occur, not the degree to which an impact or effect is expected to occur as a result of the unplanned event. The latter concept is referred to as uncertainty, and this is typically dealt with in a contextual discussion in the impact assessment deliverable, rather than in the impact significance assignment process.

Assessing Significance

Once the impact characteristics are understood, they are used (in a manner specific to the resource/receptor in question) to assign each impact a magnitude. Magnitude is a function of the following impact characteristics:

- Extent
- Duration
- Scale
- Frequency
- Likelihood (for unplanned events only)

Magnitude essentially describes the degree of change that the impact is likely to impart upon the resource/receptor. The magnitude designations are as follows:

- Positive
- Negligible
- Small
- Medium
- Large

The methodology incorporates likelihood into the magnitude designation (i.e. in parallel with consideration of the other impact characteristics), so that the "likelihood-factored" magnitude can then be considered with the resource/receptor sensitivity/vulnerability/importance in order to assign impact significance.

The magnitude of impacts takes into account all the various dimensions of a particular impact in order to make a determination as to where the impact

falls on the spectrum from negligible to large. Some impacts will result in changes to the environment that may be immeasurable, undetectable or within the range of normal natural variation. Such changes can be regarded as essentially having no impact, and should be characterised as having a negligible magnitude.

In addition to characterising the magnitude of impact, the other principal step necessary to assign significance for a given impact is to define the sensitivity/vulnerability/importance of the impacted resource/receptor. There are a range of factors to be taken into account when defining the sensitivity/vulnerability/importance of the resource/receptor, which may be physical, biological, cultural or human. Where the resource is physical (for example, a water body) its quality, sensitivity to change and importance (on a local, national and international scale) are considered. Where the resource/receptor is biological or cultural (for example, the marine environment or a coral reef), its importance (for example, its local, regional, national or international importance) and its sensitivity to the specific type of impact are considered. Where the receptor is human, the vulnerability of the individual, community or wider societal group is considered. Other factors may also be considered when characterising sensitivity /vulnerability /importance, such as legal protection, government policy, stakeholder views and economic value.

As in the case of magnitude, the sensitivity/vulnerability/importance designations themselves are universally consistent, but the definitions for these designations will vary on a resource/receptor basis. The universal sensitivity/vulnerability/importance designations are:

- Low
- Medium
- High

Once magnitude of impact and sensitivity/vulnerability/importance of resource/receptor have been characterised, the significance can be assigned for each impact. The following provides a context for defining significance.

Table 7.6 Context for Defining Significance

• An impact of ***negligible*** significance is one where a resource/receptor (including people) will essentially not be affected in any way by a particular activity or the predicted effect is deemed to be 'imperceptible' or is indistinguishable from natural background variations.
• An impact of ***minor*** significance is one where a resource/receptor will experience a noticeable effect, but the impact magnitude is sufficiently small (with or without mitigation) and/or the resource/receptor is of low sensitivity/ vulnerability/ importance. In either case, the magnitude should be well within applicable standards.

• An impact of ***moderate*** significance has an impact magnitude that is within applicable standards, but falls somewhere in the range from a threshold below which the impact is minor, up to a level that might be just short of breaching a legal limit. Clearly, to design an activity so that its effects only just avoid breaking a law and/or cause a major impact is not best practice. The emphasis for moderate impacts is therefore on demonstrating that the impact has been reduced to a level that is as low as reasonably practicable (ALARP). This does not necessarily mean that impacts of moderate significance have to be reduced to minor, but that moderate impacts are being managed effectively and efficiently.
• An impact of ***major*** significance is one where an accepted limit or standard may be exceeded, or large magnitude impacts occur to highly valued/sensitive resource/receptors. An aim of IA is to get to a position where the project does not have any major residual impacts, certainly not ones that would endure into the long-term or extend over a large area. However, for some aspects there may be major residual impacts remaining even after all practicable mitigation options have been exhausted (i.e. ALARP has been applied). An example might be the visual impact of a facility. It is then the function of regulators and stakeholders to weigh such negative factors against the positive ones, such as employment, in coming to a decision on the project.

Based on the context for defining significance, the impact significance rating will be determined, using the matrix below.

Table 7.7 Impact Significance Rating Matrix

		Sensitivity/Vulnerability/Importance of Resource/Receptor		
		Low	Medium	High
Magnitude of Impact	Negligible	**Negligible**	**Negligible**	**Negligible**
	Small	**Negligible**	**Minor**	**Moderate**
	Medium	**Minor**	**Moderate**	**Major**
	Large	**Moderate**	**Major**	**Major**

7.4.2 Mitigation Potential and Residual Impacts

Once the significance of a given impact has been characterised using the above matrix, the next step is to evaluate what mitigation measures are warranted. In keeping with the Mitigation Hierarchy, the priority in mitigation is to first apply mitigation measures to the source of the impact (i.e., to avoid or reduce the magnitude of the impact from the associated project activity), and then to address the resultant effect to the resource/receptor via abatement or compensatory measures or offsets (i.e., to reduce the significance of the effect

once all reasonably practicable mitigations have been applied to reduce the impact magnitude).

Once mitigation measures are declared, the next step in the EIA process is to assign residual impact significance. This is essentially a repeat of the impact assessment steps discussed above, considering the assumed implementation of the additional declared mitigation measures.

The approach taken to defining mitigation measures is based on a typical hierarchy of decisions and measures, as described below.

Table 7.8 Mitigation Hierarchy

Avoid at Source; Reduce at Source: avoiding or reducing at source through the design of the project (e.g., avoiding by siting or re-routing activity away from sensitive areas or reducing by restricting the working area or changing the time of the activity).
Abate on Site: add something to the design to abate the impact (e.g., pollution control equipment, traffic controls, perimeter screening and landscaping).
Abate at Receptor: if an impact cannot be abated on-site then control measures can be implemented off-site (e.g., noise barriers to reduce noise impact at a nearby residence or fencing to prevent animals straying onto the site).
Repair or Remedy: some impacts involve unavoidable damage to a resource (e.g. agricultural land and forestry due to creating access, work camps or materials storage areas) and these impacts can be addressed through repair, restoration or reinstatement measures.
Compensate in Kind; Compensate Through Other Means: where other mitigation approaches are not possible or fully effective, then compensation for loss, damage and disturbance might be appropriate (e.g., planting to replace damaged vegetation, financial compensation for damaged crops or providing community facilities for loss of fisheries access, recreation and amenity space).

7.5 PROJECT TIMING

Table 7.9 outlines the current estimated timeline of the EIA process going forward.

Table 7.9 Planned Schedule for Future Activities

Task	Date
Stakeholder Comment on Draft Scoping Report and Plan of Study for EIA	November 2012 – January 2013
Finalise Scoping Report and Plan of Study for EIA and submit to DEA	February - March 2013
Acceptance of Scoping Report received from DEA	April 2013
Specialist studies	March - April 2013
Prepare Draft EIR and EMP	April - May 2013
Stakeholder Comment on Draft EIR and EMP	May - June 2013
Finalise and submit EIR and EMP to DEA	July 2013

The 40 day comment period for I&APs (14 November 2012 to 04 January 2013) on the Draft Scoping Report has been completed and the Final Scoping Report will be submitted to DEA for approval. On acceptance of the Final Scoping Report by DEA, the EIA will proceed with the Integration and Impact Assessment Phase.

I&APs will be notified of the availability of the Draft EIR for comment.

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Annex A

Administrative Framework

CONTENTS

A1 ADMINISTRATIVE FRAMEWORK

A1.1 INTRODUCTION

This Annex provides a description of the institutional framework applied to the project, and the most relevant national and provincial legislation, policies and guidelines that have been taken into consideration. The content is as follows:

- Relevant South African government departments and regulators;
- South African law relevant to environmental and social standards deemed applicable to the project; and
- International conventions and standards to which South Africa is a signatory and with which the project must comply (relating to issues such as climate change and biodiversity).

A1.2 GOVERNMENT DEPARTMENTS AND REGULATORS

There are a number of Ministries and Departments that have an interest in and will take responsibility for ensuring that the project is implemented in an environmentally responsible manner. The concept of co-operative governance is becoming increasingly important in relation to the adjudication of Environmental Impact Assessment (EIAs) in South Africa and whenever an activity falls within the jurisdiction of more than one organ of state, there must be co-ordination and co-operation between those organs of state in the consideration of EIAs and decision-making.

A1.2.1 National

Department of Environmental Affairs (DEA)

The DEA falls under the Ministry of Water and Environmental Affairs and is responsible for all environmental affairs and decision making.

In terms of South Africa's Constitution, responsibility for the environment is shared between provincial and national government. Although decision-making on EIAs is, under most circumstances, a provincial competency, this project is being processed by the DEA, who is the national controlling authority based in Pretoria. The DEA is, therefore, the competent authority for this project and will be responsible for making a decision whether or not to authorise the project.

Department of Water Affairs (DWA)

The DWA falls within the Ministry of Water and Environmental Affairs and is the custodian of South Africa's water resources. While striving to ensure that

all South Africans gain access to clean water and safe sanitation, the department also promotes effective and efficient water resources management to ensure sustainable economic and social development.

Unlike the DEA which has separate government departments in each province, DWA has regional offices in different areas.

South African Heritage Resources Agency (SAHRA)

SAHRA is the national body responsible for policy development for heritage resources management. They are the controlling authority in terms of the National Heritage Resources Act (Act 25 of 1999). SAHRA administers heritage in the province particularly where archaeology and palaeontology are the dominant concerns. Heritage Northern Cape (Ngwao Boswa Kapa Bokoni) deals largely with built environment issues at this stage. Archaeology, including rock art, graves of victims of conflict and other graves not in formal cemeteries are administered by the national heritage authority, SAHRA.

A1.2.2 Provincial

Northern Cape Department of Environment and Nature Conservation (DENC)

DENC is the provincial department responsible for tourism, environmental affairs and conservation in the Northern Cape.

DENC's mission is to 'conserve and protect the natural environment for the benefit, enjoyment and welfare of present and future generations by integrating sustainable utilisation with socio-economic development'.
With regard to the EIA for the Transnet compilation yard, DENC are regarded as an important commenting authority and will provide comment on the EIA and input to the national Department's decision-making process.

Heritage Northern Cape (Ngwao Boswa Kapa Bokoni)

As explained above, Heritage Northern Cape (Ngwao Boswa Kapa Bokoni) deals largely with the built environment issues at this stage. Amongst other things Boswa administers:

- World Heritage Sites;
- Provincial Heritage Sites;
- Heritage Areas;
- Registered Sites;
- 60 year old structures; and
- Public monuments & memorials.

In terms of Section 28(8) of the Heritage Resources Act (Act 25 of 1999) and Regulation 3(3)(a) of PN 298 (29 August 2003) (as discussed below) an application will be made to SAHRA regarding the project. HNC will provide comment on the project.

Other

- Northern Cape Department of Transport, Safety and Liaison – will be responsible for the granting of exemption permits for the conveyance of abnormal loads on public roads.
- Department of Agriculture and Land Reform and Rural Development.

A1.2.3 Municipal

Certain Departments, such as the Planning and Roads Departments, from the John Taolo Gaetsewe District Municipalities will also be involved as commenting authorities for the EIA. External to the EIA but also relevant to the project are land-use planning applications which are dealt with by the planning departments at a local government level.

A1.3 LEGISLATIVE AND POLICY REQUIREMENTS

The proposed activity is subject to legislative and policy requirements at a national and provincial level. The most important of these are listed below.

National:

- National Environmental Management Act (NEMA) (Act No. 107 of 1998), as amended;
- NEMA EIA Regulations (2006 and 2010);
- National Water Act (Act No. 36 of 1998);
- National Environmental Management: Biodiversity Act (Act No. 10 of 2004);
- National Environmental Management: Waste Act (Act No. 59 of 2008);
- National Forest Act (Act No. 84 of 1998);
- National Heritage Resources Act (Act No. 25 of 1999);
- Occupational Health and Safety Act (Act No. 85 of 1993);
- Subdivision of Agricultural Land Act (Act No. 70 of 1970);
- Department of Environmental Affairs and Tourism (DEAT) Integrated Environmental Management Information Series No.2, Scoping, 2002;
- Noise Control Regulations, Environment Conservation Act (Act No. 73 of 1989) and SANS Code 10328, Methods for Environmental Noise Impact Assessments in Terms of NEMA; and
- Conservation of Agricultural Resources Act (Act 43 of 1983).

Provincial – Northern Cape:

- Northern Cape Planning and Development Act (Act 7 of 1998); and
- Northern Cape Nature Conservation (Act 9 of 2009).

A brief description of the requirements in the above listed Acts and Regulations is provided below.

A1.3.1 National Environmental Management Act (Act 107 of 1998)

Section 24 of the National Environmental Management Act (NEMA) as amended gives effect to the South African Constitution, which states that all South African citizens have a right to an environment that is not harmful to their health or well being.

Key principles of NEMA are described in **Chapter 1** of the Act and include the following:

- Development must be socially, environmentally and economically sustainable;
- Environmental management must be integrated;
- Decisions concerning the environment must take into account the needs, interests and values of all I&APs;
- Community well-being and empowerment must be promoted through environmental education and awareness, and the sharing of knowledge and experience;
- Decisions must be taken in an open and transparent manner; and
- Access to information must be provided in accordance with law.

Chapter 5 of NEMA deals with Integrated Environmental Management and focuses on promoting the use of appropriate environmental tools, such as Environmental Impact Assessment. Section 24 requires that activities be investigated that may have a potential impact on the environment, socio-economic conditions, and cultural heritage. The results of such investigations must be reported to the relevant authority. Procedures for the investigation and communication of the potential impact of activities are contained in Section 24 (4) of the Act, which requires that:

- The potential impact, including the cumulative effects of the activity and its alternatives must be investigated;
- The significance of the potential impact must be assessed;
- Mitigation measures which minimise adverse environmental impacts must be investigated;
- The option of not implementing the activity must be considered;
- There must be public participation, independent review and conflict resolution in all phases of the investigation and assessment of impacts; and
- Where an activity falls within the jurisdiction of more than one organ of state, there must be co-ordination and co-operation between those organs of state in the consideration of assessments.

Chapters 1 and 5 of NEMA provide a basis for consideration of potential impacts associated with a proposed development, by the competent authority.

These chapters provide the framework legislation for the more detailed EIA regulations (see *Section A1.3.2* below). These regulations form the basis of ERM's approach to the EIA.

Section 28 of the Act is specific regarding "duty of care" for the environment and remediation of environmental damage. Accordingly, every person who causes, has caused or may cause significant pollution or degradation of the environment must take reasonable measures to prevent such pollution or degradation from occurring, continuing or recurring. The Act defines pollution broadly as any change in the environment caused by substances, radioactive or other waves, or emissions of noise, odours, dust or heat.

The environmental authorities may direct an individual or organisation to rectify or remedy a potential or actual pollution problem. If such a directive is not complied with, the authorities may undertake the work and recover the costs from the responsible party.

Section 28 would be relevant to the construction and operational phase of the proposed development. The proponent is obligated, in terms of NEMA, to implement measures and take actions to prevent any form of pollution to air, water or land.

A1.3.2 NEMA EIA Regulations

On 18 June 2010 revised EIA Regulations (Government Notice No R. 543, 544, 545 and 546) were promulgated in terms of Section 24(5) of NEMA. These regulations came into effect on 1 August 2010, replacing the regulations of 21 April 2006. A description of these regulations is provided below.

The Minister of Water and Environmental Affairs has in terms of Sections 24(2)(a) and (d) of NEMA, listed the activities which may have a detrimental effect on the environment in Government Notices GN544, 545 and 546. The regulations require that written authorisation is obtained from the Minister or his delegated authority, in this case the national Department of Environmental Affairs (DEA), in respect of which the investigation, assessment and communication of potential impacts of these activities must follow the procedure as described in Regulations 26 to 35 of the EIA Regulations. Such authorisation, which may be granted subject to conditions, will only be considered once the regulatory requirements have been met. Government Notice R543 sets out the procedures that need to be complied with.
The activities that would be relevant to the project are listed in the Environmental Impact Assessment (EIA) Regulations. Activities from listings GN544, GN545 and GN546 would be relevant. GN544 activities require a Basic Assessment process and GN545 activities require a more comprehensive Scoping and EIA process. Given the applicability of activities from all three listings, a Scoping and EIA process is being undertaken.
The EIA Regulations, June 2010 (Government Notice R544, R545 and R546) identify activities which may have a detrimental effect on the environment and the listed activities which may be triggered by the project. These include:

Table 1.1 Relevant Listed Activities (EIA Regulations, 2010)

Relevant Notice	Activity Numbers (in terms of Relevant Notice)	Description of Listed Activity
GN545, 2010	11	*The construction of railway lines, stations or shunting yards, excluding:* *(ii) 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;* The proposed activity comprises the construction of a new compilation yard with associated infrastructure including railway lines and shunting areas at Mamatwane in the Northern Cape.
GN545, 2010	15	*Physical alteration of undeveloped, vacant or derelict land to commercial, recreational, industrial or institutional use where transformation is 20 hectares or more:* *Except where such physical alteration takes place for:* *linear development activities: or agriculture or afforestation where activity 16 in this Schedule will apply.* The compilation yard will involve the transformation of undeveloped land over an extent of 20 hectares or more; the dimensions of which is being confirmed during the Scoping Phase.
GN544, 2010	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).* The Common User Facility at the compilation yard will require the storage of manganese and iron ore.
GN544, 2010	11	*The construction of infrastructure or structures covering 50 square metres or more within 32 metres of a watercourse.* Certain components of the proposed activity may be located with 32 metres of a watercourse; this is being confirmed during the Scoping Phase.

Relevant Notice	Activity Numbers (in terms of Relevant Notice)	Description of Listed Activity
GN544, 2010	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.* Diesel storage with a combined capacity in excess of 80 cubic meters but not exceeding 500 cubic metres will be required.
GN544, 2010	18	*The infilling or depositing of any material of more than 5 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock from* *(i) a watercourse;* *(ii) the sea;* *(iii) the seashore;* *(iv) the littoral active zone, an estuary or a distance of 100 metres inland of the high-water mark of the sea or an estuary, whichever distance is the greater.* Construction related activities in the vicinity of the river (Vlermuislaagte River) south of the compilation yard may trigger this listed activity. This is being confirmed during the Scoping Phase.
GN544, 2010	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.* It is anticipated that the construction of the compilation yard may include road construction, the layout and dimensions is being confirmed during the Scoping Phase.
GN544, 2010	23 (ii)	*The transformation of undeveloped land to industrial use, outside an urban area bigger than 1 hectare.* The compilation yard is proposed to be located outside of an urban area over an area of more than one hectare; the dimensions of the affected areas is being confirmed during the Scoping Phase.

Relevant Notice	Activity Numbers (in terms of Relevant Notice)	Description of Listed Activity
GN544, 2010	24	*The transformation of land bigger than 1000 square metres in size to industrial land where such land was zoned open space or conservation.* The proposed compilation yard may encroach on areas zoned as open space however; this is being confirmed during the Scoping Phase.
GN546, 2010	12	*The clearance of an area of 300 square metres or more of vegetation where 75% or more of the vegetation cover constitutes indigenous vegetation.* *a. Within any critically endangered or endangered ecosystem listed in terms of section 52 of the NEMBA or prior to the publication of such a list, within an area that has been identified as critically endangered in the National Spatial Biodiversity Assessment 2004;* *b. Within critical biodiversity areas identified in bioregional plans.* The presence of endangered ecosystems/critical biodiversity areas and the potential effect clearing may have on these areas, will be confirmed by the ecologist.

A1.3.3 National Water Act (Act 36 of 1998)

The National Water Act (NWA) is the primary legislative instrument for the control and management of South Africa's water resources. In addition to ensuring equitable access to and use of water, a key function of the NWA is to ensure the protection of a national water resource from pollution. Many provisions in the NWA are similar to those in NEMA, but refer specifically to pollution of a water resource, whereas NEMA refers to any change in an environment (land, water, air). The definition of "water resource" includes surface water bodies, groundwater and aquifers.

Section 19 of the Act deals with the prevention and remediation of pollution. It is the responsibility of an owner of land, a person in control of land or a person who occupies or uses that land to take all reasonable measures to prevent pollution of a water resource from occurring, continuing or recurring. If these measures are not taken the authorities may do whatever is necessary to prevent the pollution or remedy its effects and may recover all reasonable costs. This Section includes pollution that may arise from contaminated stormwater.

Section 20 deals with the control of emergency incidents. In this Section, "incident" includes any incident or accident in which a substance –

- pollutes or has the potential to pollute a water resource; or
- has, or is likely to have, a detrimental effect on a water resource.

The onus is therefore on Transnet to ensure that storm water runoff is not contaminated, particularly during the construction phase.

The Act requires a person to obtain a Water Licence for 'water use', which in terms of Section 21 includes the following activities which may be relevant to the project:

- taking water from a water resource;
- storing water;
- impeding or diverting the flow of water in a watercourse;
- disposing of waste in a manner which may detrimentally impact on a water resource; and
- altering the bed, banks, course or characteristics of a watercourse.

Generally a water use must be licensed unless it is listed in Schedule I of the Act, is an existing lawful use, is permissible under a general authorisation, or if a responsible authority waives the need for a licence. Section 39 of the Act allows the Minister to issue General Authorisations for certain activities which then do not require a water use licence. General Authorisation GNR 398, 26 March 2004, gives the landowner/occupier/lawful user permission to alter the bed, banks or characteristics of a water course (including for roads) without the requirement for a Water Use License, as long as the following conditions are met:

- The alteration:
    - does not impact on a water resource or on another person's water use, property or land; and
    - is not detrimental to the health and safety of the public in the vicinity of the activity
- The natural migration patterns of aquatic biota and the sustainable ecological functioning of the system are not interfered with;
- The alteration activity does not extend for more than 50 metres continuously or a cumulative distance of 100 metres on that property or land, measured along the watercourse;
- The volume of flow is not reduced except for natural evaporative losses;
- Strict erosion control measures are to be taken during and after construction to ensure no erosion of the bed and banks of the river takes place;
- The water quality is not detrimentally affected; and
- All necessary measures are taken to stabilize the structure and surrounding area. This will include:-
    - rehabilitation of the riparian habitat integrity by ensuring that during rehabilitation only indigenous shrubs and grasses are used in restoring the bio-diversity;
    - rehabilitation of disturbed and degraded riparian areas to restore and upgrade the riparian habitat integrity to sustain a bio-diverse riparian ecosystem;

- removal of alien vegetation and all new alien vegetation recruitment must be controlled; and
- annual habitat assessment must be carried out to monitor the sustainability of the diversion and compliance with the above conditions. Action must be taken to rectify any impacts

- Any structure built fully or partially in or across a watercourse does not exceed-
  - a height of 10 metres, measured from the natural level of the bed of the watercourse on the downstream face of the structure to the crest of the structure;
  - a width of 10 metres, measured at the widest part of the structure; or
  - a length of 50 metres, measured from one edge of the watercourse to the other; or
  - occur within a distance of 500 meters upstream or downstream of another structure that alters the bed, banks or characteristics of the same watercourse, measured along the watercourse.

Transnet must ensure that any potential water crossings meet the above requirements or alternatively a Water Use License may be required Section 2.8 (1) of the General Authorisation states that a person who uses water in terms of this authorisation must submit a registration form for the registration of the water use if the alteration involves mining related activities or occurs within a distance of 1 000 meters from any other alteration, measured along the watercourse.

A1.3.4 National Environmental Management: Biodiversity Act (Act 10 of 2004)

Amongst other objectives, the Biodiversity Act seeks to provide for the management and conservation of biological diversity and its components, the sustainable use of indigenous biological resources, and the fair and equitable sharing of benefits arising from bio-prospecting of indigenous biological resources. It further seeks to provide for co-operative governance in biodiversity management and conservation.

Chapter 1 provides that the Act give effect to conventions affecting biodiversity to which South Africa is a party. These would include the United Nations Convention on Biological Diversity (CBD), the Convention on Trade in Endangered Species (CITES), the Ramsar Convention and the Bonn Convention.

Significantly, the Act provides for the protection of ecosystems and species that are threatened or in need of protection and seeks to prevent the introduction and spread of alien or invasive species. As such, it controls and regulates:

- certain threatening activities occurring in identified ecosystems;
- certain activities which may negatively impact on the survival of identified threatened or protected species; and
- certain restricted activities involving alien or listed invasive species.

In accordance with the Biodiversity Act, an important function of the EIA and associated specialist studies is to ensure that sensitive vegetation is not detrimentally affected by the installation and construction activities associated with the establishment of the compilation yard and its associated infrastructure.

A1.3.5 National Forests Act (No. 84 of 1998):

The National Forests Act provides for the protection of forests as well as specific tree species, quoting directly from the Act: "*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*".

Some loss of vegetation is an inevitable consequence of the project. The density of the protected tree species *Acacia erioloba* and *Acacia haematoxylon* at the project site is high and some loss of individuals of these species is likely to be unavoidable.

A1.3.6 National Heritage Resources Act (Act 25 of 1999)

The protection and management of South Africa's heritage resources is controlled by the National Heritage Resources Act (NHRA), 1999 (Act No. 25 of 1999). The objective of the NHRA is to introduce an integrated system for the management of national heritage resources.

Archaeology, Palaeontology and Meteorites

According to Section 35 (Archaeology, Palaeontology and Meteorites) and Section 38 (Heritage Resources Management) of the South African National Heritage Resources Act (SAHRA), palaeontological heritage impact assessments (PIAs) and archaeological impact assessments (AIAs) are required by law in the case of developments in areas underlain by potentially fossiliferous (fossil-bearing) rocks, especially where substantial bedrock excavations are envisaged, and where human settlement is know to have occurred during prehistory and the historic period. Depending on the sensitivity of the fossil and archaeological heritage, and the scale of the development concerned, the palaeontological, and archaeological impact assessment required may take the form of (a) a stand-alone desktop study, or (b) a field scoping plus desktop study leading to a consolidated report. In some cases these studies may recommend further palaeontological and archaeological mitigation, usually at the construction phase. These recommendations would normally be endorsed by the responsible heritage management authority, Heritage Northern Cape (HNC), to whom the reports are submitted for review.

As part of the EIA, a Heritage Impact Assessment (including both archaeology and palaeontology) will be submitted to HNC and SAHRA to elicit comments. Comments received will be included in the Comments and Responses Report in *Annex C*.

Table 1.2 outlines when a permit is required depending on the sensitivity of the heritage resources.

Table 1.2 Permitting requirements for fossil, built environment and Stone Age archaeology

PERMIT APPLICATION SECTION 35 – FOSSILS, BUILT ENVIRONMENT FEATURES, SHIPWRECKS & STONE AGE ARCHAEOLOGY (Ref : NHRA 1999: 58):
(a) destroy, damage, excavate, alter, deface or otherwise disturb any archaeological or palaeontological site or any meteorite; (b) destroy, damage, excavate, remove from its original position, collect or own any archaeological or palaeontological material or object or any meteorite; (c) trade in, sell for private gain, export or attempt to export from the Republic any category of archaeological or palaeontological material or object, or any meteorite.

Burial Grounds and Graves

A Section 36 permit application is made to the South African Heritage Resources Agency (SAHRA) which protects burial grounds and graves that are older than 60 years, and must conserve and generally care for burial grounds and graves protected in terms of this section, and it may make such arrangements for their conservation as it sees fit. SAHRA must also identify and record the graves of victims of conflict and any other graves which it deems to be of cultural significance and may erect memorials associated with these graves and must maintain such memorials. A permit is required under the conditions listed in *Table 1.3*.

Table 1.3 Permitting requirements for burial grounds and graves older than 60 years to Heritage Northern Cape (HNC) and historic burials to the South African Heritage Resources Agency (SAHRA)

PERMIT APPLICATION SECTION 36 – BURIAL GROUNDS & GRAVES (REF: NHRA 1999 : 60)
(a) destroy, damage, alter, exhume or remove from its original position or otherwise disturb the grave of a victim of conflict, or any burial ground or part thereof which contains such graves (b) destroy, damage, alter, exhume, remove from its original position or otherwise disturb any grave or burial ground older than 60 years which is situated outside a formal cemetery administered by a local authority; or (c) bring onto or use at a burial ground or grave referred to in paragraph (a) or (b) any excavation equipment, or any equipment which assists in the detection or recovery of metals (d) SAHRA or a provincial heritage resources authority may not issue a permit for The destruction or damage of any burial ground or grave referred to in subsection (3)(a) unless it is satisfied that the applicant has made satisfactory arrangements for the exhumation and re-interment of the contents of such graves, at the cost of the applicant

Table 1.4 Permitting requirements for heritage resources management

PERMIT APPLICATION SECTION 38 (Ref: NHRA 1999 : 62)
(a) the construction of a road, wall, powerline, pipeline, canal or other similar form of linear development or barrier exceeding 300 m in length; (b) the construction of a bridge or similar structure exceeding 50 m in length; (c) any development or other activity which will change the character of a site exceeding 5 000 m^2 in extent; or (ii) involving three or more existing erven or subdivisions thereof; or (iii) involving three or more erven or divisions thereof which have been consolidated within the past five years; or (iv) the costs of which will exceed a sum set in terms of regulations by SAHRA or a provincial heritage resources authority; (d) the re-zoning of a site exceeding 10 000 m^2 in extent; or (e) any other category of development provided for in regulations by SAHRA or a provincial heritage resources authority.

A1.3.7 Occupational Health and Safety Act (Act 85 of 1993)

The purpose of the OHSA (Act 85 of 1993) is to provide for the health and safety of persons at work or in connection with the use of equipment and machinery. It also provides for the protection of people other than employees from hazards arising from or in connection with activities of persons at work. In this regard an employer is required to bring about and maintain, as far as reasonably practicable, a work environment that is safe and without risk to the health and well-being of workers. The Act is administered by the Department of Labour who have established provincial offices. Occupational health and safety inspectors from these provincial offices undertake inspections and investigations at workplaces to ensure compliance with OHSA.

The Act covers *inter alia*:

- General duties of employers to their employees;
- Electing of Health and Safety Representatives and establishment of Health and Safety Committees; and
- Reporting and investigation of incidents.

Health and safety aspects of the project, as well as employment and labour relations within the construction, operation and decommissioning phases of the project, will need to be undertaken in accordance with OHSA.

A1.3.8 Subdivision of Agricultural Land Act (Act No. 70 of 1970)

The land use is currently zoned for mainly for agricultural use and the project aims to acquire land which is currently zoned for agricultural use. In terms of Section 7 of the Legal Succession to the South African Transport Services Act, 1989 read with the Sub-Division of Agricultural Land Act, 1970, Transnet would not need to follow a process of rezoning.

A1.3.9 Integrated Environmental Management Information Series

The Department of Environmental Affairs and Tourism (DEAT) Information Series of 2002 consists of 20 documents. The documents were drafted as sources of information on the concepts and approaches to Integrated Environmental Management (IEM). IEM is a key instrument of NEMA and provides the overarching framework for the integration of environmental assessment and management principles into environmental decision-making. The aim of the information series is to provide general information on techniques, tools and processes for environmental assessment and management. ERM have referred to these various documents for information on the most suitable approach to the environmental assessment process for the project.

The Information series on assessing impacts is particularly relevant to the EIR. This document outlines the approaches to and the objectives of assessing impacts.

A1.3.10 Northern Cape Nature Conservation (Act 9 of 2009)

The Northern Cape Nature Conservation Act provides inter alia for the sustainable utilisation of wild animals, aquatic biota and plants as well as permitting and trade regulations regarding wild fauna and flora within the province. In terms of this act the following section may be relevant with regards to any security fencing the development may require.
Manipulation of boundary fences

19. No Person may –

> *erect, alter remove or partly remove or cause to be erected, altered removed or partly removed, any fence, whether on a common boundary or on such person's own property, in such a manner that any wild animal which as a result thereof gains access or may gain access to the property or a camp on the property, cannot escape or is likely not to be able to escape therefrom;*

A1.3.11 Municipal Bylaws

- Certain activities related to the project may, in addition to national legislation, be subject to control by municipal by-laws for aspects such as planning, dust, noise and roads, as well as the John Taolo Gaetsewe District Municipality Integrated Development Plans (IDPs).

A1.3.12 International Guidelines

- IFC Performance Standards; and
- Equator Principles.

The IFC applies Performance Standards (PS) to manage social and environmental risks and impacts and to enhance development opportunities in its private sector financing. The PS may also be applied by other financial

institutions electing to apply them to projects in emerging markets. Together, the following eight PS establish standards that the client is to meet throughout the life of an investment by IFC or other relevant financial institution:

- PS 1: Social and Environmental Assessment and Management System;
- PS 2: Labour and Working Conditions;
- PS 3: Pollution Prevention and Abatement;
- PS 4: Community Health, Safety and Security;
- PS 5: Land Acquisition and Involuntary Resettlement (n/a);
- PS 6: Biodiversity Conservation and Sustainable Natural Resource Management;
- PS 7: Indigenous Peoples (n/a);
- PS 8: Cultural Heritage.

PS 1 establishes the importance of: (i) integrated assessment to identify the social and environmental impacts, risks, and opportunities of projects; (ii) effective community engagement through disclosure of project-related information and consultation with local communities on matters that directly affect them; and (iii) the client's management of social and environmental performance throughout the life of the project. PS 2 through 8 establish requirements to avoid, reduce, mitigate or compensate for impacts on people and the environment, and to improve conditions where appropriate. While all relevant social and environmental risks and potential impacts should be considered as part of the assessment, PS 2 through 8 describe potential social and environmental impacts that require particular attention in emerging markets. Where social or environmental impacts are anticipated, the client is required to manage them through its Social and Environmental Management System consistent with PS 1.

The Equator Principles (EPs) similarly are a credit risk management framework for determining, assessing and managing environmental and social risk in project finance transactions. Project finance is often used to fund the development and construction of major infrastructure and industrial projects. The EPs are adopted voluntarily by financial institutions and are applied where total project capital costs exceed US$10 million. The EPs are primarily intended to provide a minimum standard for due diligence to support responsible risk decision-making.

The EPs, based on the IFC's Performance Standards on social and environmental sustainability and on the World Bank Group Environmental Health and Safety Guidelines (EHS Guidelines), are intended to serve as a common baseline and framework for the implementation by each adopting institution of its own internal social and environmental policies, procedures and standards related to its project financing activities.

The relevant sections of the World Bank General Environment, Health and Safety Guidelines, as well as the industry specific Guideline on Railways would also be applicable.

This EIA will be undertaken in alignment with the requirements of the EP and IFC Performance Standards. The EIA of course is only one step in the process of complying with the EP and IFC Performance standards and also would require the developer to keep to commitments made during the EIA process and to build on this by also meeting its commitments towards pre-construction and post construction monitoring, the conditions of approval that the DEA may impose, the EMPr and an ongoing commitment towards environmental best practice. It is therefore recommended that the developer also commit to establishing and Environmental Management System against which the developer's ongoing performance can be monitored.

Annex B

Photolog

Photo.1 *Mamathwane Station Buildings*

Photo.2 *Mamathwane Loop Extension Facing West: Houses in Vicinity to Compilation Yard*

Photo.3 Mamathwane Compilation Yard: Facing North Along Railway Line at the Northern End of the Project Site

Photo.4 Mamathwane Compilation Yard: Facing North East Along Railway Line at the Northern End of the Project Site

Photo.5 Mamathwane Compilation Yard: Facing East Along Railway Line at the Northern End of the Project Site

Photo.6 Mamathwane Compilation Yard: Facing South East Along Railway Line at the Northern End of the Project Site

Photo.7 Mamathwane Compilation Yard: Facing South Along Railway Line at the Northern End of the Project Site

Photo.8 Mamathwane Compilation Yard: Facing South-west Along Railway Line at the Northern End of the Project Site

Photo.9 Mamathwane Compilation Yard: Facing West Along Railway Line at the Northern End of the Project Site

Photo.10 Mamathwane Compilation Yard: Facing North-west Along Railway Line at the Northern End of the Project Site

Photo.11 Mamathwane Compilation Yard: Facing North Along Railway Line at the Southern End of the Project Site

Photo.12 Mamathwane Compilation Yard: Facing North-east Along Railway Line at the Southern End of the Project Site

Photo.13 ***Mamathwane Compilation Yard: Facing East Along Railway Line at the Southern End of the Project Site***

Photo.14 ***Mamathwane Compilation Yard: Facing South-east Along Railway Line at the Southern End of the Project Site***

Photo.15 *Mamathwane Compilation Yard: Facing South Along Railway Line at the Southern End of the Project Site*

Photo.16 *Mamathwane Compilation Yard: Facing South-west at the Southern End of the Project Site at a Level Crossing*

Photo.17 *Mamathwane Compilation Yard: Facing West Along Railway Line at the Southern End of the Project Site*

Photo.18 *Mamathwane Compilation Yard: Facing North-west Along Railway Line at the Southern End of the Project Site*

Annex C

Public Participation Documentation

- Site Notices
- Background Information Document
- Adverts
- Stakeholder Database
- Notification to Stakeholders

Site Notices were erected at the Mamathwane Compilation Yard site on the 18 October 2012.

Figure 1.1 Site Notice (English)

PROPOSED EXPANSION OF TRANSNET'S EXISTING MANGANESE ORE EXPORT RAILWAY LINE AND ASSOCIATED INFRASTRUCTURE, NORTHERN AND EASTERN CAPE

INVITATION TO COMMENT AND REGISTER

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.

ENVIRONMENTAL AUTHORISATIONS REQUIRED

Before the proposed project may proceed, an amendment process, a basic assessment process and an environmental impact assessment process needs to be undertaken in terms of the National Environmental Management Act (NEMA) (Act 107 of 1998), as amended. The decision-making authority on all these processes will be the National Department of Environmental Affairs (DEA).

Before the proposed project may proceed the following processes must be undertaken in terms of the National Environmental Management Amendment Act (NEMA) (Act 107 of 1998):

- Amendment of existing environmental authorisations (DEA Reference No. 12/12/20/1240);
- Basic Assessment Process;
- Environmental Impact Assessment Process

The project requires environmental authorization from the National Department of Environmental Affairs as the competent authority.

ERM Southern Africa (Pty) Ltd has been appointed as the Independent Environmental Assessment Practitioner (EAP) to undertake the above-mentioned processes. This site notice serves as notification of the commencement of the public participation process for these processes. To register as an Interested and Affected Party (I&AP), to comment on or to enquire about the proposed project please contact **Paul Monare** of ERM:

Tel: (011) 798 4300; Fax: 086 292 7318 or Email: transnet@erm.com
Postal Address: Postnet Suite 624, Private Bag X29, Gallo Manor, 2052
www.erm.com/transnet-expansion

Please quote the ERM reference number on correspondence:
ERM Ref no.: 0172056

Basic Assessment: DEA Ref no.: 14/12/16/3/3/2/405 Amendment Ref no.: 12/12/20/1240
Scoping/EIA DEA Ref no.: 14/12/16/3/3/2/688

TRANSNET

Notice is given of a Public Participation Process and the intention to apply for Environmental Authorisation in terms of the EIA Regulations, 2010 under the National Environmental Management Act (Act No. 107 of 1998), as amended. The proposed BA activities include GN R544 Activity 11, 13, 23 (ii), 24 and 53 and GN R546 Activity 12. The proposed EIA activities include GN R544 2, 11, 13, 22, 23(ii) and 24 and GN R545 Activity 11 and 15 and GN R546 Activity 12.

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Figure 1.2 Site Notice (Afrikaans)

VOORGESTELDE UITBREIDING VAN TRANSNET SE BESTAANDE SPOORLYN VIR DIE UITVOER VAN MANGAANERTS, ASOOK VERWANTE INFRASTRUKTUUR IN DIE NOORD- EN OOS-KAAP

UITNODIGING OM KOMMENTAAR TE LEWER EN TE REGISTREER

Transnet (SOC) Beperk (hierna Transnet genoem) beoog om die bestaande spoorlyn vir die vervoer van mangaanerts vanaf Hotazel in die Noord-Kaap na die Ngqura-hawe in die Oos-Kaap uit te brei. Die groeiende aanvraag in mangaanerts is die rede vir die uitbreiding van die uitvoerkorridor se kapasiteit na 16 miljoen ton per jaar (Mtpa). Die voorgestelde uitbreiding sluit die volgende in:

- Uitbreiding van verskeie bestaande spoorlusse ("rail loops") in die Noord- en Oos-Kaap;
- Die lê van twee nuwe spoorlusse in die Noord-Kaap; en
- Die bou van 'n nuwe monteerwerf naby Hotazel in die Noord-Kaap.

OMGEWINGMAGTIGING NODIG

'n Wysigingsproses, 'n basiese invloedbepalingsproses en 'n volledige omgewingsinvloedbepalingsproses kragtens die Wet op Nasionale Omgewingsbestuur (NEMA) (Wet 107 van 1998), soos gewysig, moet gevolg word voordat daar met die proses begin kan word. Die besluitnemings owerheid vir al hierdie prosesse is die Nasionale Departement van Omgewingsake (DOS).

Die volgende prosesse moet dus kragtens die Wet op Nasionale Omgewingsbestuur (NEMA) (Wet 107 van 1998) uitgevoer word voordat daar met die projek voortgegaan kan word:

- Wysiging van bestaande omgewingsmagtigings (DOS Verwysingsnr. 12/12/20/1240);
- Basiese Invloedbepalingsproses (BIB);
- Volledige Omgewingsinvloedbepalingsproses (OIB).

Die projek vereis 'n omgewingsmagtiging van die Nasionale Departement van Omgewingsake as die bevoegde owerheid .

ERM Southern Africa (Edms) Bpk is as die Onafhanklike Omgewingsbeoordelingspraktisyn aangestel om bogenoemde prosesse uit te voer. Hierdie terreinkennisgewing dien as kennisgewing dat die prosesse van openbare deelname 'n aanvang geneem het. Indien u as 'n Belanghebbende en Geaffekteerde Party (B&GP) wil registreer, kommentaar wil lewer of meer oor bogenoemde proses wil uitvind, word u versoek om met **Paul Monare** van ERM in verbinding te tree by:

Tel: (011) 798 4300; Faks: 086 292 7318 of Epos: transnet@erm.com
Posadres: Postnet Suite 624, Privaatsak X29, Gallo Manor, 2052
www.erm.com/transnet-expansion

Dui asseblief die ERM verwysingsnommer op alle korrespondensie aan:
ERM Verwysingsnr: 0172056

Basiese Invloedbepaling: DOS Verwysingsnr: 14/12/16/3/3/2/405 Wysiging Verwysingsnr: 12/12/20/1240
Omvang/ OIB: DOS Verwysingsnr: 14/12/16/3/3/2/688

TRANSNET

Kennis word gegee van 'n Proses van Openbare Deelname en die voorneme om aansoek te doen vir 'n Omgewingsmagtiging kragtens die OIB-regulasies 2010, van die Wet op Nasionale Omgewingsbestuur (Wet Nr. 107 van 1998), soos gewysig. Die voorgestelde BIB-aktiwiteite sluit in GK R544: Aktiwiteit 11, 13, 23 (ii), 24 en 53; en GK R546 Aktiwiteit 12. Die voorgestelde OIB-aktiwiteite sluit in GK R544: 2, 11, 13, 22, 23(ii) en 24; en GK R545: Aktiwiteit 11 en 15; en GK R546: Aktiwiteit 12.

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Figure 1.3 Site Notice (Setswana)

KATOLOSO E E TSHITSHINTSWENG YA SEPORO SA TRANSNET SA GA JAANA SA THOMELONTLE YA MANKANESE, GAMMOGO LE MAFARATLHATLHA A A TSAMAELANANG, KAPA BOKONE LE KAPA BOTLHABA

TALETSO YA GO TSHWAELA LE GO IKWADISA

Transnet (SOC) Limited (e morago ga fano e bidiwang Transnet) e tshitshinya go atolosa seporo sa mankanese sa ga jaana go tswa kwa Hotazel mo Kapa Bokone go ya kwa Port of Ngqura kwa Kapa Botlhaba. Patlo e e golelang pele ya mankanese e feletse e dirile gore go nne le tlhokego ya go atolosa bogolo jwa tsela ya diromelwantle go ya go ditone tse di 16 milione ka ngwaga (Mtpa). Katoloso e e tshitshintsweng e akaretse tse di latelang:

- Katoloso ya digole (loops) tsa seporo tse di mmalwa tsa ga jaana kwa Kapa Bokone le Kapa Bophirima;
- Go tsenngwa ga digole (loops) tsa seporo tse pedi tse dintšhwa kwa Kapa Bokone; le
- Kago ya *compilation yard* e ntšhwa gaufi le Hotazel mo Kapa Bokone.

GO TLHOKIWA DITHEBOLO TSATIKOLOGO

Pele ga porojeke e e tshitshintsweng e ka tswelela pele, thulaganyo ya tlhabololo, thulaganyo ya tlhatlhobo ya theo le tshekatsheko ya kamo ya tikologo di tlhoka go dirwa go ya ka Molao wa Taolo ya Tikologo wa Bosetšhaba (National Environmental Management Act (NEMA)) (Moalo 107 wa 1998), jaaka o tlhabolotswe. Dithebolo tsa Tikololo di tlaa ntshediwa dithulaganyo tseno ka fa tlase ga Lefapha la Merero ya Tikologo la Bosetšhaba (DEA) jaaka bothati jo bo laolang.

Pele porojeke e e tshitshintsweng e ka tswelela dithulaganyo tse di latelang di tshwanetse go ya ka Moalo wa Tlhabololo ya Tikologo wa Bosetšhaba (National Environmental Management Amendment Act (NEMA)) (Molao 107 wa 1998):

- Tlhabololo ya dithebolo tsa tikologo tsa ga jaana (DEA Nomoro ya referense. 12/12/20/1240);
- Thulaganyo ya Tlhatlhobo ya Theo;
- Thulaganyo ya Tlhatlhobo ya Kamo ya Tikologo

Porojeke e batla thebolo ya tikologo go tswa go Lefapha la Merero ya Tikologo la Bosetšhaba jaaka bothati jo bo laolang.

ERM Southern Africa (Pty) Ltd e tlhomilwe go nna modiragatsi wa Tlhatlhobo ya Tikologo yo o Ikemetseng (EAP) yo o diragatsang thulaganyo e e umakilweng fa godimo. Kitsiso eno e tlaa dira jaaka kitsiso ya tshimololo ya tirego ya botsayakarolo jwa setšhaba mo dithulaganyong tse. Go ikwadisa jaaka Mokgatlhegi le Moamegi (Interested and Affected Party (I&AP)), go tshwaela kgotsa go botsa ka ga porojeke e e tshitshintsweng tsweetswee ikgolaganye le **Paul Monare** wa ERM:

Mogala: (011) 798 4300; Fekese: 086 292 7318 kgotsa Imeile: transnet@erm.com
Aterese ya Poso: Postnet Suite 624, Private Bag X29, Gallo Manor, 2052
www.erm.com/transnet-expansion

Tsweetswee bolela dinomoro tsa referense tse di latelang mo kwalelanong ya gago:
ERM Nomoro ya referense.: 0172056

Thulaganyo ya Tlhatlhobo: DEA Nomoro ya referense.: 14/12/16/3/3/2/405
Nomoro ya reference ya paakanyo.: 12/12/20/1240
Thulaganyo ya pele ga kago/EIA DEA Ref no.: 14/12/16/3/3/2/688

TRANSNET

Go fiwa kitsiso ka Thulaganyo ya Botsayakarolo jwa Setšhaba le maikaelello a go kopa Thebolo ya Tikolgo go ya ka melawana ya EIA, 2010 ka fa tlase ga Molao wa Taolo ya Tikologo wa Bosetšhaba (Molao wa Nomoro. 107 wa 1998), jaaka o tlhabolotswe. Ditiro tsa BA tse di tshitshintsweng di akaretsa GN R544 Activity 11, 13, 23 (ii), 24 le 53 le GN R546 Activity 12. Ditiro tsa EIA tse di tshitshintsweng di akaretsa GN R544 2, 11, 13, 22, 23(ii) le 24 le GN R545 Activity 11 le 15 le GN R546 Activity 12.

ERM

Figure 1.4 Site Notice (Xhosa)

UCEBO LOKWANDISA ISIPORO SIKALOLIWE SA-TRANSNET, ESIKHOYO, SOKUTHUMELA I-MANGANIZI KWAMANYE AMAZWE KWAKUNYE NAMAZIKO AWOYANYANISWA NASO, EMNTLA NASE MPUMA KOLONI

ISIMEMO SOKUNIKA IZIMVO KWANOKU BHALISA

U-Transnet (SOC) Limited (ngenxa yoku ekubhekiselelwe kuyo njenge Transnet) yenza isindululo sokwandisa umzila kaloliwe okhoyo we manganizi (manganese ore) ukusuka e-Hotazel kumNtla Koloni ukuya kutsho kwi Zibuko lase Ngqura eMpuma Koloni. Ukukhula kwebango le manganizi kubangele isidingo sokwandisa umthamo wepaseji yokuthumela kwelinye ilizwe ukuya kwii toni ezizigidi ezili-16 ngonyaka (Mtpa). Ukwandisa okusisindululo kuquka oku kulandelayo:

- Ulwandiso lweziporo zikaloliwe ezikhoyo ezininzi emNtla nase Mpuma Koloni;
- Ukufakelwa kweziporo zikaloliwe ezintsha ezimbini emNtla Koloni; kwakunye
- Nokwakhiwa kweyadi yokuhlanganisela kufuphi ne Hotazel emNtla Koloni.

UGUNYAZISO LOMMANDLA OLUFUNEKAYO

Phambi kokuba umsebenzi osisindululo okokuba ungaqalisa, inkqubo yolungiso, inkqubo yokuhlola esisiseko kwakunye nenkqubo yokuhlola ukuchaphazeleka kommandla kufuneka yenziwe ngokwendlela Yomthetho Wolawulo Lommandla Wesizwe (YWLW/NEMA) (Umthetho 107 ka 1998), njengokuba kulungisiwe. Ugunyaziso Lommandla luzakunikezelwa ezinkqubo ezingaphantsi kwe Sebe Lesizwe Lemicimbi Yezendalo (SLLY/DEA) njenge linegunya elinobuchule.

Phambi kokuba umsebenzi osisindululo okokuba ungaqalisa ezinkqubo zilandelayo kufuneka zenziwe ngokwendlela Yomthetho Wombandela Wolawulo Lommandla Wesizwe (YWLW /NEMA) (Umthetho 107 ka 1998):

- Umbandela okhoyo wogunyaziso lommandla (Inombolo Yokubhekiselela ye SLLY/DEA. 12/12/20/1240);
- Inkqubo Yokuhlola Esisiseko;
- Inkqubo Yokuhlola Ukuchaphazeleka Kommandla

Umsebenzi ufuna isigunyaziso sommandla esivela kwi Sebe Lesizwe Lemicimbi Yezendalo njenge linegunya elinobuchule.

U-ERM Southern Africa (Pty) Ltd iye yakhethwa njenge Gcisa Lokuhlola Ummandla Elizimeleyo (GLUE/EAP) ukuba yenze lenkqubo ikhankanywe ngasentla. Esisaziso sesiza sinikwe njenge saziso sokuqalisa kwenkqubo yokuthatha inxaheba kwabahlali kwezi nkqubo. Ukubhalisa njenge Qela Elichaphazelekayo Nelinomdla (QEN/I&AP), ukunika izimvo okanye ukubuza malunga nomsebenzi osisindululo nceda uqhagamshelane no **Paul Monare** we ERM:

Umnxeba:(011) 798 4300; I-Fax: 086 292 7318 okanye i-Email: transnet@erm.com
Idilesi Yeposi: Postnet Suite 624, Private Bag X29, Gallo Manor, 2052
www.erm.com/transnet-expansion

Nceda ukowute lenombolo yokubhekiselela ilandelayo kwimbalelwano:
Ukuhlola Okusisiseko; Inombolo yokubhekiselela ye DEA.: 14/12/16/3/3/2/405
Inombolo yokubhekiselela Yombandela.: 12/12/20/1240
Scoping/Inombolo yokubhekiselela ye EIA DEA.: 14/12/16/3/3/2/688

Inombolo yokubhekiselela ye ERM.: 0172056

TRANSNET

Isaziso sinikeziwe Senkqubo Yokuthatha Inxaheba Kwabahlali kwakunye nenjongo yokufaka isicelo Sesigunyaziso Sommandla ngokwendlela Yolawulo lwe EIA, 2010 ngaphantsi Komthetho Wolawulo Lommandla Wesizwe (Umthetho ongunombolo. 107 ka 1998), njengokuba kulungisiwe. Imisebenzi esisindululo ye BA iquka i-GN R544 Umsebenzi 11, 13, 23 (ii), 24 kwakunye no 53 kwakunye ne GN R546 Umsebenzi 12. Imisebenzi esisindululo ye EIA iquka i-GN R544 2, 11, 13, 22, 23(ii) kwakunye no 24 kwakunye GN R545 Umsebenzi 11 kwakunye no 15 kwakunye ne GN R546 Umsebenzi 12.

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Figure 1.5 Proof of Site Notices

PROPOSED EXPANSION OF TRANSNET'S EXISTING MANGANESE ORE EXPORT RAILWAY LINE AND ASSOCIATED INFRASTRUCTURE, NORTHERN AND EASTERN CAPE

Site Notices: Draft Scoping Report

Photos	Placement Date	Description
Northern Cape Site Notices		
	18 October 2012	Mamathwane
	18 October 2012	Mamathwane

Figure 2.1 Background Information Document (BID) (English)

PROPOSED EXPANSION OF TRANSNET'S EXISTING MANGANESE ORE EXPORT RAILWAY LINE AND ASSOCIATED INFRASTRUCTURE, NORTHERN AND EASTERN CAPE

Background Information Document

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

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.

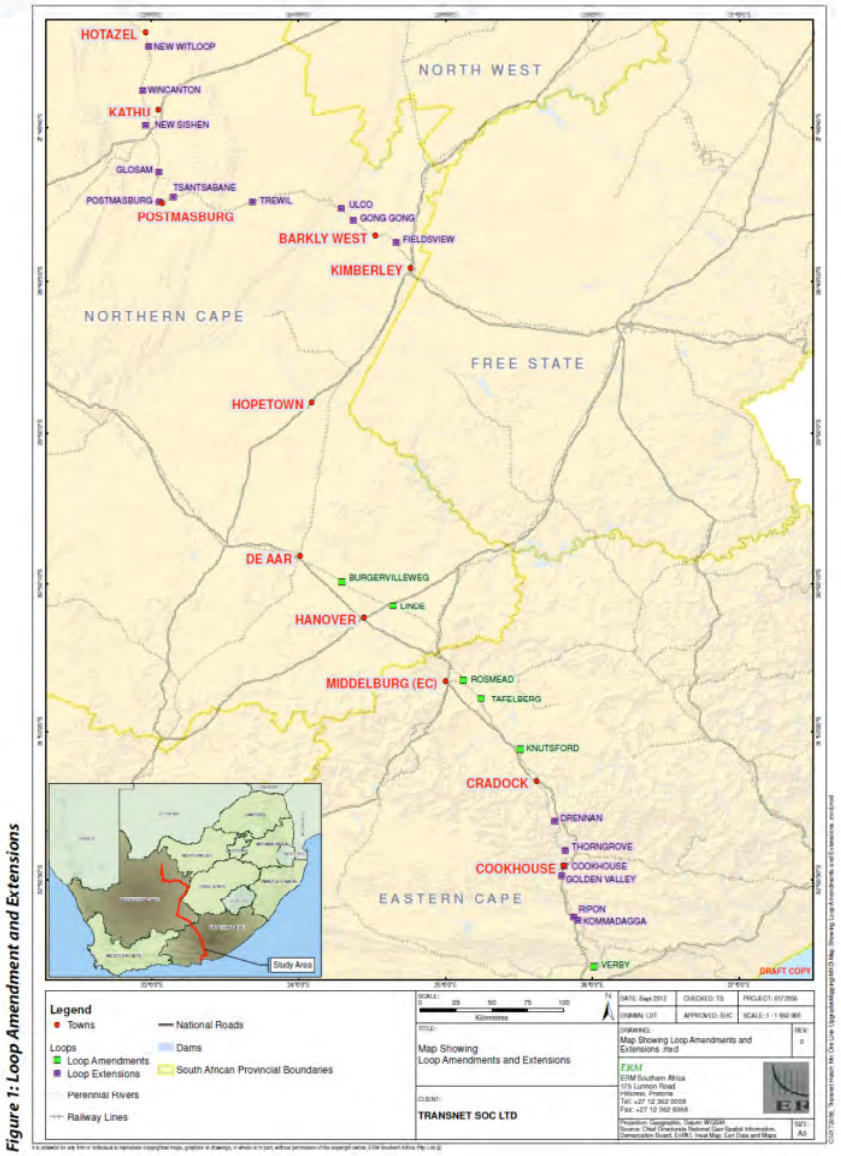


Figure 1: Loop Amendment and Extensions

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
  - 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

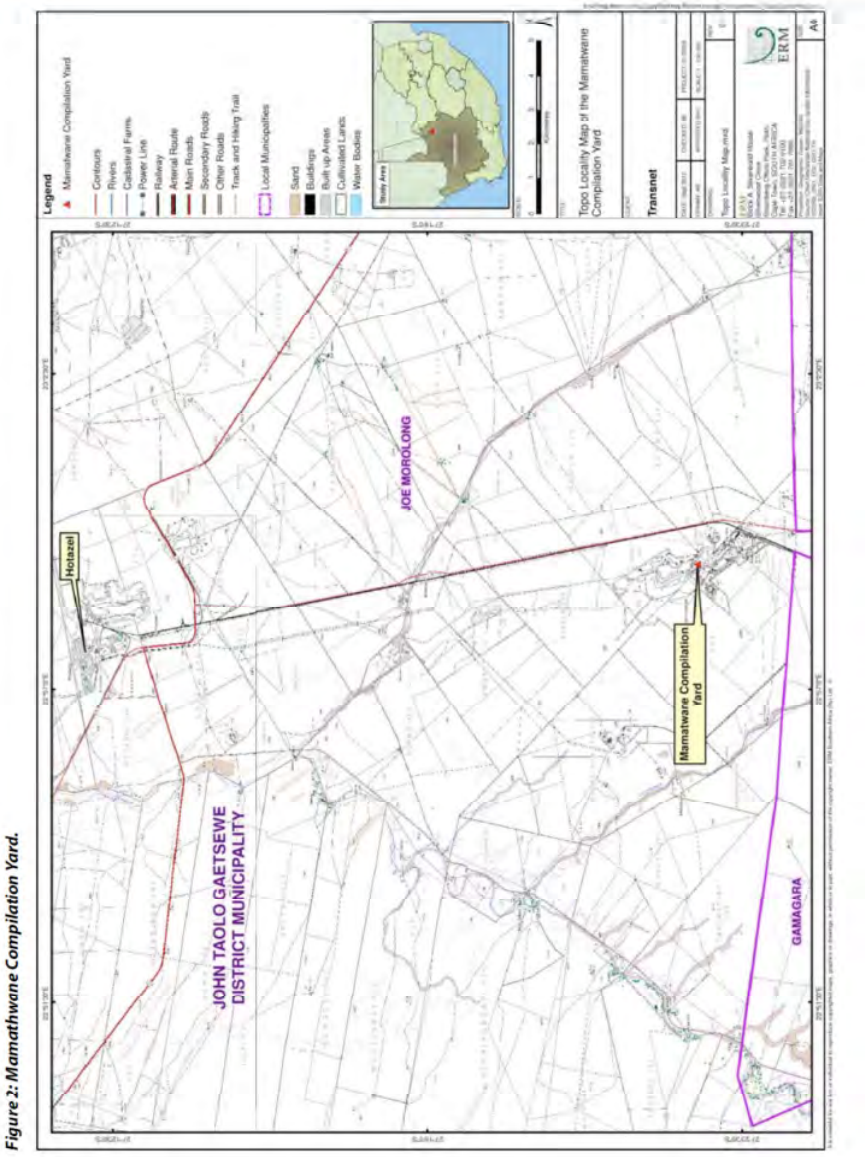


Figure 2: Mamathwane Compilation Yard.

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.

7

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:

011 798 4300

086 292 7318

transnet@erm.com

Postnet Suite 624, Private Bag X29, Gallo Manor, 2052

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

Figure 2.2 Background Information Document (BID) (Afrikaans)

VOORGESTELDE UITBREIDING VAN TRANSNET SE BESTAANDE SPOORLYN EN VERWANTE INFRASTRUKTUUR VIR DIE UITVOER VAN MANGAANERTS IN DIE NOORD- EN OOS-KAAP

AGTERGROND-INLIGTINGSDOKUMENT

Transnet (SOC) Beperk (hierna Transnet genoem) beoog om die bestaande spoorlyn vir die vervoer van mangaanerts vanaf Hotazel in die Noord-Kaap na die Ngqura-hawe in die Oos-Kaap uit te brei.

Die groeiende aanvraag in mangaanerts is die rede vir die uitbreiding van die kapasiteit van die uitvoerkorridor na 16 miljoen ton per jaar (Mtpa). Die voorgestelde uitbreiding sluit die volgende in:

- Uitbreiding van verskeie bestaande spoorlusse ("rail loops") in die Noord- en Oos-Kaap;
- Die lê van twee nuwe spoorlusse in die Noord-Kaap; en
- Die bou van 'n nuwe monteerwerf naby Hotazel in die Noord-Kaap.

'n Wysigingsproses, 'n basiese invloedbepalingsproses en 'n volledige omgewingsinvloedbepalingsproses kragtens die Wet op Nasionale Omgewingsbestuur (NEMA) (Wet 107 van 1998), soos gewysig, moet gevolg word voordat daar met die proses begin kan word. Die besluitnemings owerheid vir al hierdie prosesse is die Nasionale Departement van Omgewingsake (DOS).

ERM Southern Africa (Edms) Bpk is as die Onafhanklike Omgewingsbeoordelingspraktisyn aangestel om bogenoemde prosesse uit te voer.

Die doel van hierdie dokument is om:

- Agtergrondinligting oor die voorgestelde projek te verskaf;
- Die verlangde omgewingsmagtigingsprosesse te beskryf; en
- Die verlangde prosesse van openbare deelname te beskryf.

AGTERGROND

In Suid-Afrika is die meeste mangaanmyne wat oorwegend 'n hoër graad erts produseer in die Kalahari Mangaankom, rondom Hotazel in die Noord-Kaap, gekonsentreer. Na verwagting sal die mangaanbedryf in die komende jare 'n groot aanvraag na die uitvoer daarvan beleef. Gegewe die kwaliteit van die mangaanerts-reserwes, is Suid-Afrika in die posisie om voordeel te trek uit die geskatte groei in die mangaanbedryf indien die beperkinge van die huidige vervoerlogistiek aangespreek word.

Transnet het in 2008, in samewerking met die mangaanerts-mynboubedryf, die behoefte aan 'n vergroting in die kapasiteit van die vervoerkorridor geïdentifiseer. Die huidige kapasiteit beloop 5.5 Miljoen ton per jaar (Mtpa). 'n Omgewingsmagtigingsproses is hiervoor uitgevoer en die projek is in 2009 gemagtig om met konstruksie te begin. Die magtiging is uitgereik op die projekvoorstel om die uitvoerkapasiteit na 12 Mtpa te verhoog. Intussen het Transnet, in samewerking met die mangaanerts-mynboubedryf, tot die slotsom gekom dat meer as 12 Mtpa nodig is vir langtermyn groei. Hierdie groei word hoofsaaklik gedryf deur die wêreldwye toename in die vervaardiging van staal en 'n verandering in die produksamestelling van staal om 'n groter persentasie hoër graad staal te vervaardig, wat beteken dat 'n hoër graad mangaanerts daarvoor nodig is. Daarby kan marginale verskaffers, wat 'n hoë koste-kurwe het, nie winsgewend volhou met die uitvoer en wêreldwye voorsiening van 'n laer graad mangaanerts nie. Op grond van die toename in die aanvraag na mangaanerts, het die mynboubedryf aangedui dat die uitvoerkapasiteit na 16 Mtpa verhoog moet word. Hierdie verandering aan die oorspronklike ontwikkelingsvoorstel vereis dus 'n bykomende omgewingsmagtigingsproses.

Neem asseblief kennis: Die huidige magtiging is van krag op die gebied tussen Kimberley en De Aar, en die opgradering van hierdie gebied mag in 2013 begin.

BEOOGDE PROJEK EN BESKRYWING VAN DIE PROSES

Die beoogde uitbreiding van die huidige spoorlyn vir die uitvoer van mangaanerts na 16 Mtpa bestaan uit drie komponente en word hieronder opgesom.

Wysigingsproses

'n Wysigingsproses is nodig vir die voorgestelde veranderings in die uitbreiding van die spoorlusse ("rail loops") wat reeds in 2009 gemagtig is (DEA Verwysingsnr. 12/12/20/1240). Dit sluit in twee lusse in die Noord-Kaap en vier in die Oos-Kaap (sien Figuur 1). Die vorige magtiging het die uitbreiding van hierdie lusse gemagtig. Hierdie ses lus-uitbreidings moet egter verder uitgebrei word om die verwagte 16 Mtpa te kan hanteer. Die wysigingsproses behels dus die indiening van 'n aansoek by die DOS, gevolg deur 'n verslag waarin die veranderings in ontwerp aangedui word, asook die gepaardgaande impakte en die verlangde prosesse van openbare deelname en skakeling met die publiek.

Die omgewingsmagtiging vir die volgende lusse moet dus gewysig word:

Noord-Kaap

- Burgervilleweg
- Linde

Oos-Kaap

- Rosmead
- Tafelberg
- Knutsford
- Verby

Basiese Invloedbepalingsproses (BIB)

'n BIB-proses is nodig die uitbreiding van bestaande spoorlusse / die bou van nuwe spoorlusse wat nie deel was van die aanvanklike magtiging wat in 2009 uitgereik is nie. Dit sluit in 10 spoorlusse in die Noord-Kaap en vier in die Oos-Kaap (sien Tabel 2 en Figuur 1).

Tabel 2: Opsomming van die lusse wat uitgebrei / nuwe lusse wat gebou moet word (sien Figuur 1)

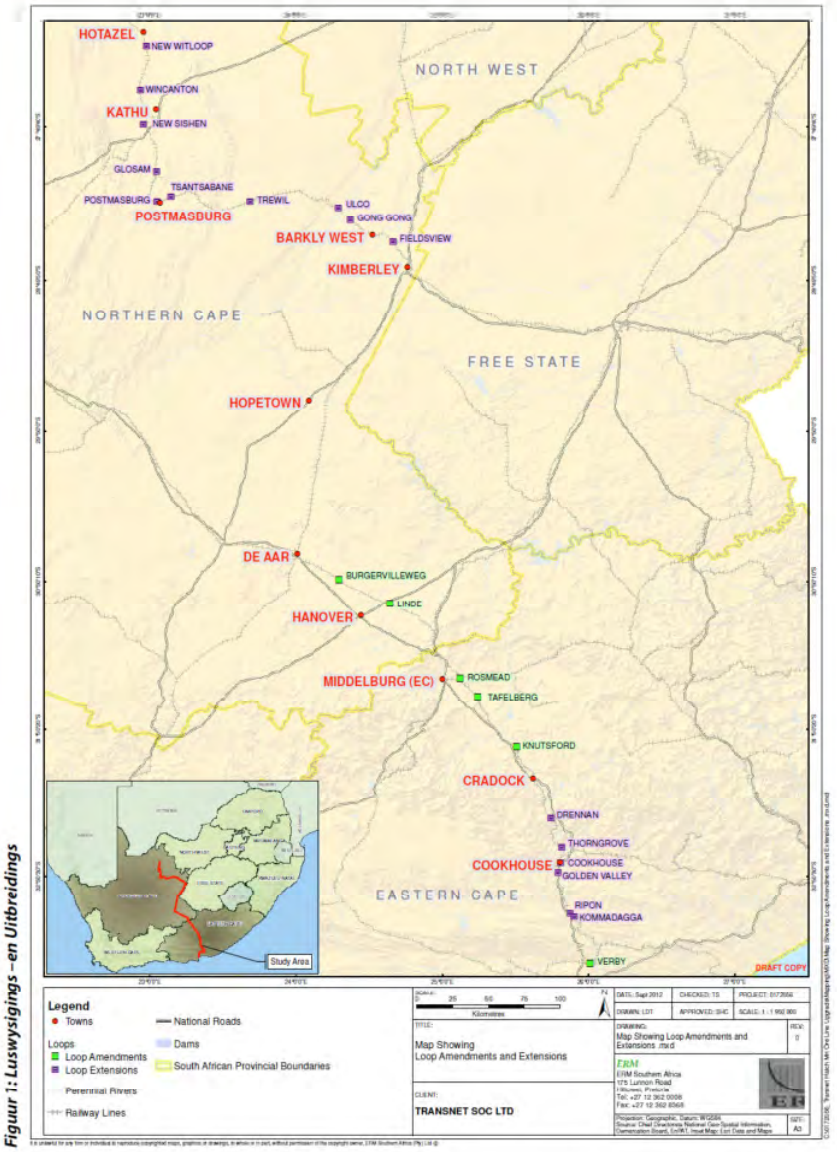
Noord-Kaap	
Witloop	Nuwe Lus
Wincanton	Uitbreiding van lus
Sishen	Nuwe Lus
Glosam	Uitbreiding van lus
Postmasburg	Uitbreiding van lus
Tsantsabane	Uitbreiding van lus
Trewil	Uitbreiding van lus
Ulco	Uitbreiding van lus
Gong Gong	Uitbreiding van lus
Fieldsview	Uitbreiding van lus

Oos-Kaap	
Drennan	Uitbreiding van lus
Thorngrove	Uitbreiding van lus
Cookhouse-Golden Valley	Verdubbeling van lyn
Ripon-Kommadagga	Verdubbeling van lyn

Omvang- en Omgewingsinvloedbepalingsproses (OIB)

'n Omvang-/OIB-proses is nodig vir die bou van 'n nuwe monteerwerf (sien Figuur 2) by Mamathwane, ongeveer 22 km suid van Hotazel in die Noord-Kaap. Hierdie monteerwerf sal ongeveer 120 ha beslaan en langs die hooflyn opgerig word. Daar sal vyf werf-spoorlyne wees wat elk 200 treinwaens sal kan akkommodeer, sowel as geboue en verwante infrastruktuur vir die bedryf daarvan. Die werf sal ook oor 'n gemeenskaplike gebruiksfasiliteit vir klein mynboubedrywighede beskik.

Bykomend tot die magtiging daarvan kragtens die NEMA-wetgewing, vereis die monteerwerf ook 'n Afvalbestuurslisensie (ABL), en waarskynlik ook 'n Lugvrystelllingslisensie (LVL). Die noodsaaklikheid van 'n LVL sal eers bevestig kan word nadat die verlangde tegniese inligting bekom is.



Figuur 1: Luswysigings – en Uitbreidings

GK 544:

Aktiwiteit 2: Die konstruksie van fasiliteite of infrastruktuur vir die opberging van erts of steenkool wat 'n lisensie vir atmosferiese emissies vereis kragtens die Wet op Nasionale Omgewingsbestuur: Lugkwaliteit, 2004 (Wet No. 39 van 2004).

Aktiwiteit 11: Die bou van infrastruktuur of strukture van 50 vierkante meter of meer binne 32 meter van 'n waterloop.

Aktiwiteit 13: Die konstruksie van fasiliteite of infrastruktuur vir die opberging, of vir die opberging en hantering, van gevaarlike goedere, waar sodanige opberging plaasvind in houers met 'n gesamentlike kapasiteit van meer as 80 maar hoogstens 500 kubieke meter.

Aktiwiteit 22: Die bou van 'n pad, buite stedelike gebiede –

i. met 'n reserwe breër as 13,5 meter, of

ii. waar daar nie 'n reserwe is nie, waar die pad breër as 8 meter is, of

iii. waarvoor 'n omgewingsmagtiging verkry is vir die roetebepaling ingevolge aktiwiteit 5 in Goewermentskennisgewing 387 van 2006 of aktiwiteit 18 in Goewermentskennisgewin 545 van 2010.

Aktiwiteit 23ii: Die transformasie van onontwikkelde grond tot nywerheidsgebruik, buite 'n stedelike gebied, groter as 1 hektaar.

Aktiwiteit 24: Die transformasie van grond groter as 1 000 vierkante meter tot nywerheidsgebruik, waar sodanige grond as oop ruimte of vir bewaring gesoneer was of in gelykwaardige sonering gehad het.

Aktiwiteit 53: Die uitbreiding van spoorlyne, stasies of rangeerwerwe, waar die ontwikkelingsvoetspoor groter sal word, uitgesonder –

i. spoorlyne, rangeerwerwe en spoorwegstasies in nywerheidskomplekse of -sones;

ii. ondergrondse spoorlyne in myne; en

iii. bykomende spoorlyne binne die reserwe van 'n bestaande spoorlyn.

GK 545

Aktiwiteit 11: Die konstruksie van spoorlyne, stasies of rangeerwerwe, uitgesonder

i. spoorlyne, rangeerwerwe en spoorwegstasies in nywerheidskomplekse of -sones;

ii. ondergrondse spoorlyne in 'n mynbougebied; en

iii. bykomende spoorlyne binne die reserwe van 'n bestaande spoorlyn.

Aktiwiteit 15: Die fisiese verandering van onontwikkelde, onbesette of verwaarloosde grond vir residensiële, kleinhandel-, kommersiële, ontspannings-, nywerheid- of institusionele gebruik waar die totale gebied wat verander staan te word, 20 hektaar of meer is; uitgesonderd waar sodanige fisiese verandering plaasvind vir:

i. lineêre ontwikkelingsaktiwiteite; of

ii. landbou of bebossing, waar aktiwiteit 16 van hierdie Bylae van toepassing sal wees.

GK 546

Aktiwiteit 12: Die skoonmaak van plantegroei op 'n gebied van 300 vierkante meter of meer waar 75% of meer van die plantegroei inheemse plantegroei is

WETGEWING

Die NEMA, soos gewysig, lys sekere aktiwiteite wat 'n omgewingsmagtiging verg voordat daarmee voorgegaan kan word.

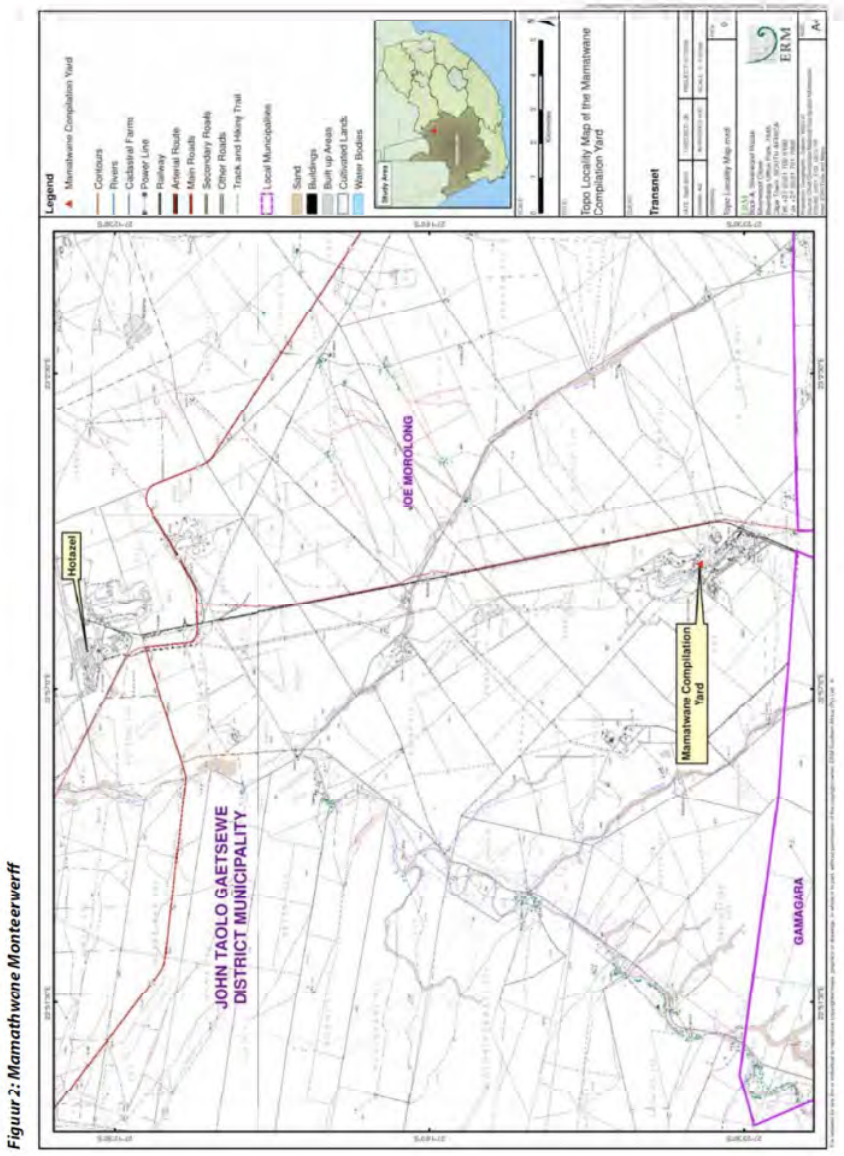
Die voorgestelde uitbreiding van die bestaande spoorlusse / bou van nuwe lusse wat nie in 2009 gemagtig is nie, gee aanleiding tot verskeie aktiwiteite wat in GK R544 en R546 gelys is, en dus onderwerp is aan 'n Basiese Invloedbepalingsproses (sien Boks 1).

Die voorgestelde oprigting van 'n monteerwerf gee aanleiding tot aktiwiteite gelys in GK R544, R545 en R546, en is dus onderworpe aan 'n OIB-proses (sien Boks 1), asook 'n Afvalbestuurslisensie kragtens GK 718 van die Wet op Nasionale Afvalbestuur (59 van 2008).

Daar word voorgestel dat hierdie prosesse gelyktydig uitgevoer word (sien Figuur 3).

Boks 1: Gelyste aktiwiteite wat verband hou met die voorgestelde uitbreiding van die spoorlyn en die bou van 'n nuwe monteerwerf.

Figuur 3: Vloeidiagram van die Proses



Figuur 2: Mamathwane Monteerwerff

6

MOONTLIKE KWESSIES EN SPESIALISSTUDIES

Die projekspan het omgewingskwessies geïdentifiseer wat tydens die Wysiging-, Basiese Invloedbepaling-, en die Omvang-/OIB-prosesse te voorskyn mag kom. Dit sluit in:

- Versteuring van grond en oppervlaktes tydens die bou van die lusse;
- Geraas en vibrasie vanaf beide die konstruksie-aktiwiteite en die gevolglike toename in treinbedrywighede;
- Kommer oor verkeersveiligheid a.g.v. swaarvoertuigverkeer (konstruksie-voertuie) en by padkruisings;
- Kommer oor stof tydens konstruksie;
- Die visuele effek van die konstruksie op die landskap, en die gevoel van plek by elke lus;
- Kulturele, erfenis- of argeologiese kwessies;
- Ekonomiese gevolge en kwessies rondom werkverskaffing; en
- Ekologiese kwessies.

Die projekspan sal hierdie lys verfyn na afloop van die aanvanklike prosesse van openbare deelname en skakeling met die publiek.

Sekere spesialisstudies word uitgevoer om die moontlike kwessies wat tot dusver geïdentifiseer is, te beoordeel en aan te spreek. Hierdie studies sluit in:

- Kulturele erfenis, argeologie en paleontologie;
- Maatskaplik;
- Geraas en vibrasie;
- Lugkwaliteit; en
- Ekologie.

7

PROSESSE VAN OPENBARE DEELNAME EN SKAKELING MET DIE PUBLIEK

Prosesse vir openbare deelname en skakeling met die publiek sal gevolg word, en sal insluit die plasing van advertensies in plaaslike / streekskoerante, kennisgewings op terrein, en die verspreiding van Agtergrond-inligtingsdokumente (AIDs).

Daar word beoog om openbare vergaderings te hou om belanghebbendes die geleentheid te bied om aan die proses deel te neem. Fokusgroepvergaderings word ook beoog om inligting aan spesifiek-geïdentifiseerde belanghebbendes oor te dra. Hierdie vergaderings sal deur ERM in Engels en Afrikaans gehou word, en in Tswana/Xhosa vertaal word.

Afskrifte van die konsep en finale verslae sal beskikbaar gestel word by plekke wat vir die publiek toeganklik is, sodat die publiek en spesifieke belanghebbendes dit kan deurlees. Dit sal ook aan die kommentaargewende owerhede versprei word, soos die Departement van Waterwese, die Provinsiale Departemente van Landbou, die Provinsiale Departement van Omgewingsake, Plaaslike Owerhede, Distriksmunisipaliteite, die DOS se Departemente van Afvalbestuur, Besoedeling en Afvalbestuur, en die Suid-Afrikaanse Nasionale Padagentskap. Dit sal ook by die DOS, die bevoegde owerheid, ingedien word. Inligting oor die openbare vergaderings sal by wyse van koerantadvertensies en skriftelike kennisgewings aan die alle geregistreerde belanghebbendes en die algemene publiek oorgedra word.

Indien u as 'n belanghebbende wil registreer, kommentaar op die voorgestelde projek wil lewer, vrae wil vra, of meer inligting verlang, word u versoek om die aangehegte Kommentaar- en Registrasievorm in te vul en te stuur aan Paul Monare by ERM:

011 798 4300

086 292 7318

transnet@erm.com

Postnet Suite 624, Privaatsak X29, Gallo Manor, 2052

Besoek www.erm.com/transnet-expansion
vir die nuutste nuus en inligting oor die projek.

Figure 2.3 Background Information Document (BID) (Setswana)

KATOLOSO E E TSHITSHINTSWENG YA SEPORO SA TRANSNET SA GA JAANA SA THOMELONTLE YA MANKANESE, GAMMOGO LE MAFARATLHATLHA A A TSAMAELANANG, KAPA BOKONE LE KAPA BOTLHABA

tokomane ya tshedimosetso ya maitshetlego

Transnet (SOC) Limited (e morago ga fano e bidiwang Transnet) e tshitshinya go atolosa seporo sa mankanese sa ga jaana go tswa kwa Hotazel mo Kapa Bokone go ya kwa Port of Ngqura kwa Kapa Botlhaba.

Patlo e e golelang pele ya mankanese e feletse e dirile gore go nne le tlhokego ya go atolosa bogolo jwa tsela ya diromelwantle go ya go ditone tse di 16 milioneka ngwaga (Mtpa). Katoloso e e tshitshintsweng e akaretse tse di latelang:

- Katoloso ya digole (loops) tsa seporo tse di mmalwa tsa ga jaana kwa Kapa Bokone le Kapa Bophirima;
- Go tsenngwa ga digole (loops) tsa seporo tse pedi tse dintšhwa kwa Kapa Bokone; le
- Kago ya compilation yard e ntšhwa gaufi le Hotazel mo Kapa Bokone.

Pele ga porojeke e e tshitshintsweng e ka tswelela pele, thulaganyo ya tlhabololo, thulaganyo ya tlhatlhobo ya theo le tshekatsheko ya kamo ya tikologo di tlhoka go dirwa go ya ka Molao wa Taolo ya Tikologo wa Bosetšhaba (National Environmental Management Act (NEMA)) (Moalo 107 wa 1998), jaaka o tlhabolotswe. Lefapha la Merero ya Tikologo la Bosetšhaba (DEA) ke bothati jo bo nang le taolo ya porojeke e.

ERM Southern Africa (Pty) Ltd e tlhomilwe go nna modiragatsi wa Tlhatlhobo ya Tikologo yo o Ikemetseng (EAP) yo o diragatsang thulaganyo e e umakilweng fa godimo.

Maikaelelo a tokomane e ke go fa:

- Tshedimosetso ya maitshetlego ka ga porojeke e e tshitshintsweng;
- Tlhaloso ya dithulaganyo tse di tlhokagalang tsa thebolo ya tsa tikologo;
- Tlhaloso ya dithulaganyo tse di tlhokagalang tsa botsayakarolo jwa setšhaba.

MAITSHETLEGO

Mo Aforikaborwa kokoano e ntsi ya meepo e e ntshang mankanese ya manya a boleng jo bo kwa godimo e kwa Kalahari Manganese Basin, mo tikologong ya Hotazel mo Kapa Bokone. Go solofetswe gore madirelo a mankanese a tlaa itemogela patlo ya diromelwantle e e nonofileng mo dingwageng tse di tlang. Ka ntlha ya boleng jwa dirasefe tsa manya a mankanese, Aforikaborwa o mo maemong a go sologelwa ke kgolo e e akanyeditsweng pele mo madirelong a mankanese fa dikganedi tsa dithulaganyetso tsa dipalangwa tsa ga jaana di ka siamisiwa.

Ka 2008 Transnet, ka tirisano le madirelo a meepo ya manya a mankanese e kaile tlhokego ya go oketsa bogolo jwa tsela ya thomelontle go feta bogolo jwa ga jaana jwa ditone tse di 5.5 Millione ka ngwaga (Mtpa). Thulaganyo ya thebolo ya tikologo e simolotse tebang le se mme porojeke e ne ya rebolwa gore e tswelele pele ka kago ka 2009. Tshitshinyo ya porojeke e mo go yona thebolo eno e filweng e ne e theilwe mo go fitlheleleng bogolo jwa thomelontle ya 12 Mtpa ka kgolo ya pakatelele. Kgolo eno e tlaa tlhotlhelediwa segolo bogolo ke go dirwa ga setala mo lefatsheng lotlhe mo go oketsegang le tlhakanyo ya dikumo tsa setala e e fetogang ya go dira phesente e kgolwane ya setala sa boleng jo bo kwa godimo, se l esona se dirisang boleng jo bo kwa godimo jwa manya a mankanese. Go theilwe mo patlong e e oketsegang ya manya a mankanese madirelo a meepo a kaile tlhokego ya bogolo bo bo oketsegileng ba diromelwantle tsa 16 Mtpa. Ka jalo, diphetogo mo tshitshinyong ya ntlha ya tlhabololo di dira gore go ne botlhokwa go nna le dithulaganyo tsa thebolo ya tikologo tsa tlaleletso.

Tsweetswee ela tlhoko: Thebolo e e leng teng ga jaana e maleba le lefelo le le fa gare ga Kimberly le De Aar le gone ntšhwafatso ya ya karolo eno e ka nna ya simologa mo bogaufing.

POROJKE E E TSHITSHINTSWENG LE TLHALOSO YA THULAGANYO (TIREGO)

Katoloso e e tshitshintsweng ya seporo sa ga jaana sa thomelontle ya mankanese go ya go 16 Mtpa e na le dikarolo tse tharo mme e sobokilwe fa tlase.

Thulaganyo ya tlhabololo/paakanyo

Thulaganyo ya tlhabololo e tlhokelwa diphetolo tse di tshitshintsweng tsa dikatoloso tsa digole (loops) tse di neng di setse di rebotswe ka 2009 (DEA Nomoro ya referense. 12/12/20/1240). Se se akaretsa digole (loops) tse pedi mo Kapa Bokone le tse nne kwa Kapa Botlhaba (Bona Popego 1). Thebolo e e fetileng e letleletse katoloso ya digole (loops) tseno. Le fa go ntse jalo dikatoloso tsa digole (loops) tse no tse thataro di tlhoka go nna dikgolo go na le ka fa go neng go solofetswe ka teng gore di kgone go akaretsa bogolo ba 16 Mtpa. Thulaganyo ya tlhabololo e tlaa akaretsa go tsenngwa ga kopo go DEA e e latelwang ke pego e e tlhalosang diphetogo tsa disaene, dikamo tse di tsamaelanang gammogo le dithulaganyo tse di tlhokigang tsa botsayakarolo ba setšhaba le puisano le bannaleseabe.

Thebolo ya tikologo ya digole (loops) tse di latelang e tlaa tlhoka tlhabololo:

Kapa Bokone

- Burgervilleweg
- Linde

Kapa Botlhaba

- Rosmead
- Tafelberg
- Knutsford
- Verby

Thulaganyo ya Tlhatlhobo ya Theo

Thulaganyo ya Tlhatlhobo ya Theo e tlhokelwa katoloso ya digole (loops) tsa seporo tsa ga jaana / tsenyo ya digole (loops) tse dintšhwa tsa seporo tse di neng di se karolo ya thebolo ya ntlha e e weditsweng ka 2009. Se se akaretsa digole (loops) tsa seporo di le 10 kwa Kapa Bokone le tse nne kwa Kapa Botlhaba (bona Lenane 2 le Popego 1).

Lenane 2: Tshoboko ya digole (loops) tse di tlaa katolosiwang / digole (loops) tse di tlaa tsenngwang (bona Popego 1)

Kapa Bokone	
Witloop	Loop **e ntšhwa**
Wincanton	Katoloso ya loop
Sishen	Loop **e ntšhwa**
Glosam	Katoloso ya loop
Postmasburg	Katoloso ya loop
Tsantsabane	Katoloso ya loop
Trewil	Katoloso ya loop
Ulco	Katoloso ya loop
Gong Gong	Katoloso ya loop
Fieldsview	Katoloso ya loop

Kapa Botlhaba	
Drennan	Katoloso ya loop
Thorngrove	Katoloso ya loop
Cookhouse-Golden Valley	Go dira seporo sebedi
Ripon-Kommadagga	Go dira seporo sebedi

Thulaganyo ya pele ga kago (scoping) le EIA

Thulaganyo ya Pele ga kago (scoping)/EIA e tlhokelwa go agiwa ga ***compilation yard*** **e ntšhwa (bona** Popego 2) kwa Mamathwane phopholetso ya 22km kwa borwa jwa Hotazel kwa Kapa Bokone. ***Compilation yard*** eno e tlaa akaretsa kgaolo ya 120 ha le gone e tlaa agiwa go bapa le seporo se segolo. E tlaa nna le diporo tsa jarata tse tlhano tse di kgonang go amogela materoko a terena le 200 seporo sengwe le sengwe gammogo le dikago tsa ditiro le mafaratlhatlha a a tsamaelanang. Jarata gape e tlaa nna le lefelo le tiriso e e tlwaelegileng go direla ditiro tse dinnye tsa moepo.

Mo godimo ga go tlhoka thebolo ka fa tlase ga NEMA, ***compilation yard*** le yona e tlaa batla Laesense ya taolo ya Matlakala (Waste Management License – WML)) e bile gongwe e ka tlhoka Laesense ya Tshololo ya Mowa (Air Emissions License (AEL)). Tlhokego ya AEL e tlaa tlhomamisiwa fa tshedimosetso ya thekenikhale e e tlhokiwang e le teng.

Figure 1: Koketso ya digole tsa seporo

GN 544:

Tiro 2: Kago ya meago kgotsa mafaratlhatlha a polokelo ya manya kgotsa malatlha e e tlhokang laesense ya ntshetso mo moweng go ya ka Molao wa Boleng ba Mowa: wa Taolo ya Tikologo wa Bosetšhaba (Molao wa Nomoro. 39 wa 2004).

Tiro 11: Kago ya mafaratlhatlha kgotsa dikago tse di khurumetsang disekweremetara tse di 50 kgotsa go feta mo dimetareng tse di 3w2 tsa metsi.

Tiro 13: Kago ya dikago kgotsa mafaratlhatlha a polokelo kgotsa a polokelo le tsholo, ya dithoto tse di kotsi, foo poloko ya go nna jalo e nnang mo ditshoding tsa motlhamo o o kopaneng wa 80m³ mme o sa fete 500m³.

Tiro 22: Kago ya tsela, ka kwa ntle ga mafelo a a mo ditoropong.

i. ya rasefe e e bophara jo bo fetang dimetara tse 13,5 kgotsa,

ii. koo tsela e le bophara go feta dimetara tse 8, kgotsa

iii. e e neng ya fiwa thebolo ya tikologo ya go tlhomamisa tsela e e tlaa tsewang go ya ka tiro 5 mo Kitisong ya Puso (Government Notice) 387 ya 2006 kgotsa tiro 18 mo Kitsisong 545 ya 2010.

Tiro 23ii: Phetolo ya lefetshe le le sa tlhabololwang gore e nne le le dirisediwang madirelo, e le lefatshe le le ka kwa ntle ga mafelo a a toropo e bile le feta heketara e e le 1.

Tiro 24: Phetolo ya lefatshe la bogolo jo bo fetang disekweremetara tse di 1000 go nna lefatshe la madirelo foo lefatshe la go nna jalo le neng le segetswe go nna naga e e bulegileng kgotsa mabaka a tshomarelo.

Tiro 53: Katoloso ya diporo, diteišene kgotsa di-shanting yards koo go tlaa nnang le motlhala wa tlhabololo e e oketsegileng go sa akaretse:

i. diporo, di-shunting lines le diteišene tsa terena mo ditikatikweng tsa madirelo kgotsa dikgaolo;

ii. diporo tse di ka fa tlase ga lefatshe tse di mo meepong; le

iii. diporo tsa tlaleletso mo teng ga rasefe ya seporo sa terena se se ntseng se le teng.

GN 545

Tiro 11: Kago ya diporo, diteišene tsa terena kgotsa di-shunting yards, go sa akaretse

i. diporo, di-shanting yards le diteišene tsa terena mo ditikatikweng ts amadirelo kgotsa

ii. diporo tse di ka fa tlase ga lefatshe mo kgaolong ya moepo, le diporo tsa tlaleletso mo rasefeng ya seporo sa terena se se ntseng se le teng;

Tiro 15: Phetolo ya popego ya lefatshe le le sa tlhabololwang, le le se nang ope, le le sa tlholeng le na le tiriso e e siametseng kgwebo, boitapoloso, madirelo kgotsa setheo foo phetolo e leng diheketara tse di 20 kgotsa go feta:

Kwa ntle ga phetolo eo ya popego e nnang teng ka ntlha ya mabaka a:

1. tatamalo ya ditiro tsa tlhabologo: kgotsa
2. temothuokgotsatemoyadikgwafootiro16moLenanengle e tlaa tlamang.

GN 546

Tiro 12: Go rengwa ga disekweremetara tse di 300 kgotsa go feta tsa sekgwa foo 75% kgotsa go feta ya sekgwa e leng sekgwa sa tlhago.

PEOMOLAO

Molao wa Taolo ya Tikologo wa Bosetšhaba (NEMA), jaaka o tlhabolotswe o fa lenane la ditiro tse di tlhokang thebolo ya tikologo pele ga tshimololo.

Katoloso e e tshitshintsweng ya katoloso ya digole (loops) tsa seporo tsa ga jaana / tsenyo ya digole (loops) tse dintšhwa tse di neng di sa rebolwa ka 2009 di baka gore go nne le ditiro tse di mmalwa tse di kwadilweng mo GN R544 le R546 mme ka jalo di tlhoka thulaganyo/tirego ya Tlhatlhobo ya Theo (bona Lebokoso 1).

Kago e e tshitshintsweng ya compilation yard e baka gore go nne le ditiro tse di kwadilweng mo GNR 544, R545 le R546 mmeka jalo e tlhoka thulaganyo (tirego) ya EIA (bona Lebokoso 1) le GN 718 la Molao wa Taolo ya Matlakala (59 wa 2008) Laesense ya Taolo ya Matlakala.

Go tshitshinngwa gore dithulaganyo tse di nne teng ka nako e le nngw (bona Popego 3).

Lebokoso 1: Ditiro tse di kwadilweng tse di tsamaelanang le katoloso ya seporo e e tshitshintsweng le kago ya *compilation yard*

Popego 3: Setshwantsho sa Kelelo ya Thulaganyo

Itsise Porojeke

- Kitsiso e e tlhomameng ya porojeke go banaleseabe botlhe (malatsi a le 30):
  - Lekwalo la kitsiso le phatlhalatso ya BID;
  - Go bewa ga dikitsiso tsa mafelo;
  - Go bewa ga dipapatso mo dikuranteng;
  - Kwadiso ya banaleseabe.

Tlhatlhobo ya pele ga kago (scoping) le Tlhatlhobo ya Theo

- Itsise go nna teng ga Pego ya Tlhomo ya EIA, Pego EMP gore di lebiwe ke setšhaba (malatsi a le 40).
- Nna le dikopano tsa setšhaba le dikopano tsa ditlhopha tsa puisano le banaleseabe.
- Ntšhwafatsa Pego ya Tlhomo ya Pele ga Kago (Scoping) le Pego ya Ditshwaelo le Ditsibogo.
- Tlhagiso ya Pego ya Bofelo ya Pele ga Kago (Scoping) go bathati le go dira gore e nne teng go bonwa ke setšhaba (malatsi a le 21).

Tlhatlhobo ya Kamo

- Itsise go nna teng ga Tlhomo ya dipego tsa EIA le EMP gore setšhaba di e lebe (malatsi a le 40).
- Ntšhwafatso Tlhomo ya Dipego tsa EIA le EMP gammogo le Pego ya Ditshwaelo le Ditsibogo.
- Tlhagiso ya Dipego tsa Bofelo go bathati le go dira gore di nne teng go bonwa ke setšhaba (malatsi a le 21).

Go tsaya Tshwetso

- Itsise banaleseabe ditshwetso tse di tswang kwa bathating ba ba laolang.
- Fa tshedimosetso e e tlhokafalang mo tiregong ya ikuelo mo kitsisong.

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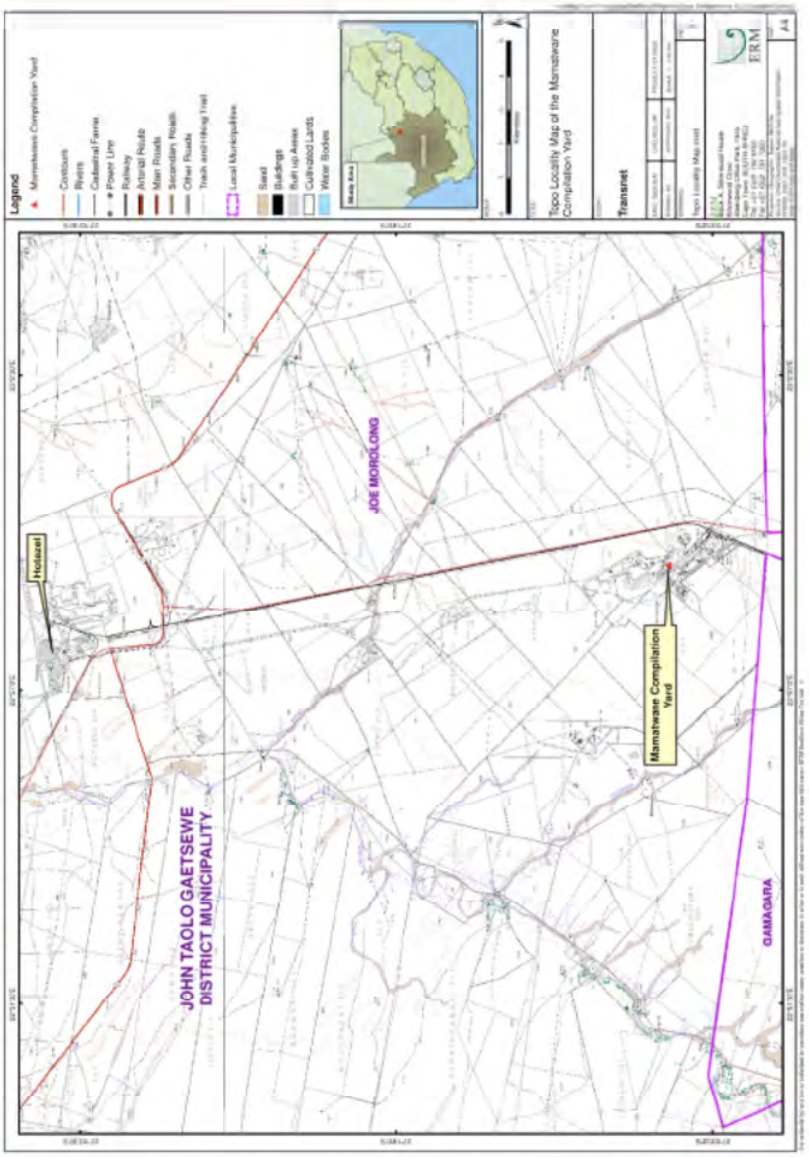

Figure 2: Lebala le kntswa la ditimeka

DIKGANG TSE DI KA NNANG TENG LE DITHUTOPATLISISO TSA BOITSEANAPE

Setlhopha sa porojeke se kaile dintlha tsa tikologo tse di ka tlhagang ka nako ya thulaganyo ya Tlhabololo, Tlhatlhobo ya Theo le Pele ga kago (Scoping)/EIA. Tsone di akaretsa:

- Kgoreletso ya mmu le lefatshe e e bakilweng ke kago ya digole (loops);
- Modumo le thoromo tse di bakilweng ke ditiro tsa kago le ditiro tsa terena tse di oketsegileng tse di tlang morago;
- Matshwenyego a polokego a a tlang ka ntlha ya dirori ts akago tse dikgolo thata le kwa makgabaganyong a tsela le seporo;
- Matshwenyego a lorole lo lo thunsthiwang ka nako ya kago;
- Kamo e kago e tlaa nnang le yona mo tebong ya lenaga le kamo e e ka kgonegang ya maikutlo a lefelo kwa segoleng (loop) sengwe le sengwe;
- Merero ya setso, ngwaoboswa kgotsa thutamarope / akheoloji;
- Ditlamorago tsa ikonomi le merero e e amanang le go thapiwa; le
- Merero ya ekholoji.

Setlhopha sa tiro se tlaa baakanya gape lenane le morago ga dithulaganyo tsa go tsaya karolo ga setšhaba ga ntlha le puisano le bannaleseabe.

Dithutopatlisiso tsa boitseanape di dirwa go tlhatlhoba le go siamisa dikgang tse di ka nnang teng tse di kailweng mme tsone di akaretsa:

- Ngwaoboswa ya setso, thutamarope (akhioloji) le palaentogy;
- Loago;
- Modumo le thoromo;
- Boleng jwa mowa; le
- Ikholoji.

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DITHULAGANYO TSA BOTSAYAKAROLO JWA SETŠHABA LE PUISANO LE BANNALESEABE

Dithulaganyo tsa botsayakarolo jwa setšhaba le puisano le bannaleseabe di tlaa tshwarwa mme di tlaa akaretsa go bewa ga dipapatso mo dikuranteng tsa selegae / kgaolo, go bewa ga dikitsiso le phatlhalatso ya Ditokomane tsa Tshedimosetso ya Maitshetlego (BIDs).

Go tshitshinngwa gore go nniwe le dikopano tsa setšhaba gore go tle go fiwe bannaleseabe tshono ya go akarediwa mo thulaganyong (tiregong). Dikopano tsa setlhopha sa puisano le tsone di a tshitshinngwa go tsamaisa phetiso ya tshedimosetso segolo bogolo go bannaleseabe ba ba kailweng. Dikopano tse di tlaa tsamaisiwa ke ERM ka Seesimane, Seaforikanse mme di tlaa fetolelwa mo Setswaneng/Sethoseng.

Tlhomo le dipego tsa bofelo tse tsotlhe di gatisitsweng mo pampiring di tlaa nna teng go bonwa ke setšhaba le bannaleseabe ba ba totobaditsweng kwa mafelong a a kgonang go fitlhelelwa ke setšhaba; di tlaa phatlhaladiwa kwa bathating ba ba tlaa tshwaelang mo go tsona ba ba jaaka Lefapha la Merero ya Metsi (DWA), Mafapha a Temothuo a Diporofense, Mafapha a Tikologo a Diporofense, Dimmasepala tsa Selegae, Dimmasepala tsa Dikgaolo, Lefapha la Merero ya Tikologo (DEA): Taolo ya Matlakala, Mafapha a taolo ya Kgotlelo le Matlakala, Setheo sa Ditsela sa Aforikaborwa sa Bosetšhaba (South African National Roads Agency) le go fiwa DEA jaaka bothati jo bo laolang. Dintlha tsa dikopano tsa setšhaba di tlaa itsisiwe go bannaleseabe botlhe ba ba kwadisitsweng le setšhaba ka kakaretso ka dipapatso tsa dikuranta le kitsiso e e kwadilweng.

Fa o ka eletsa go ikwadisa jaaka monnaleseabe, go tshwaela ka ga porojeke e e tshitshintsweng, go botsa kgotsa go kopa tshedimosetso e nngwe gape tsweetswee tlatsa Foromo ya Ditshwaeleo le Kwadiso e e mametleletsweng o bo o e romelela Paul Monare wa ERM:

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Tsweetswee etela www.erm.com/transnet-expansion go bona tshedimosetso e ntšhwafaditsweng ya kgapetsakgapetsa gammogo le tshedimosetso ya porojeke.

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Figure 2.4 Background Information Document (BID) (Xhosa)

UKUCETYWA KOKWANDISA ISIPORO SIKALOLIWE ESIKHOYO SOKUTHUMELA KWELINYE ILIZWE I-MANGANESE ORE YE TRANSNET KWAKUNYE NAMAZIKO AWOYANYANISWA NASO, EMNTLA NASE MPUMA KOLONI

UKUBHALWA PHANTSI KOXWEBHU LWENKCUKACHA

I-Transnet (SOC) Limited (ngenxa yoku ekubhekiselelwe kuyo njenge Transnet) iceba ukwandisa umzila kaloliwe okhoyo we manganese ore ukusuka e-Hotazel kumNtla Koloni ukuya kutsho kwi Zibuko lase Ngqura eMpuma Koloni.

Ukukhula kwebango le manganese ore kuye kwabangela isidingo sokwandisa umthamo wepaseji yokuthumela kwelinye ilizwe ukuya kwii toni ezizigidi ezili-16 ngonyaka (Mtpa). Ukwandisa okucetyiweyo kuquka oku kulandelayo:

Ulwandiso lweziporo zikaloliwe ezikhoyo ezininzi emNtla nase Mpuma Koloni;

- Ukufakelwa kweziporo zikaloliwe ezintsha ezimbini emNtla Koloni; kwakunye
- Nokwakhiwa kweyadi yokuhlanganisela kufuphi ne Hotazel emNtla Koloni.

Phambi kokuba umsebenzi ocetyiweyo okokuba ungaqalisa, inkqubo yolungiso, inkqubo yokuhlola esisiseko kwakunye nenkqubo yokuhlola ukuchaphazeleka kommandla kufuneka yenziwe ngokwendlela Yomthetho Wolawulo Lommandla Wesizwe (NEMA) (Umthetho 107 ka 1998), njengokuba kulungisiwe. Isebe Lemicimbi Yezendalo (DEA) ligunya elinobuchule lomsebenzi ocetyiweyo.

I-ERM Southern Africa (Pty) Ltd iye yakhethwa njenge Gcisa Lokuhlola Ummandla Elizimeleyo (EAP) ukuba yenze lenkqubo ikhankanywe ngaphambili.

Injongo yoluxwebhu kukunikezela:

- Ukubhalwa phantsi kwenkcukacha malunga nomsebenzi ocetyiweyo;
- Ingcaciso yenkqubo yogunyaziso lommandla efunekayo;
- Ingcaciso yenkqubo yokuthatha inxaxheba kukawonke-wonke efunekayo.

UKUBHALWA PHANTSI

Emzantsi Afrika oloha zikiso ngqondo lwemigodi ye manganese evelisa ngokuphambili ii-ores zodidi oluphezulu lukwizibuko le Kalahari Manganese, elingqonge i-Hotazel emNtla Koloni. Kucingelwa okokuba ishishini le manganese lizakubanamava ebango elikhulu lokuthumela kwelinye ilizwe kwiminyaka ezayo. Kubhengezwe ikhwalithi yovimba be manganese ore, uMzantsi Afrika ukwisikhundla sokuzuza ukusuka ekukhuleni okuqikelelweyo kushishino lwe manganese ukuba izithintelo kulungiselelo lothutho lwangoku lucacisiwe.

Ngo 2008 i-Transnet, ngokumanyene noshishino lokomba lwe manganese ore yaqaphela imfuneko yokwandisa umthamo wepaseji yokuthumela kwelinye ilizwe ukuya ngaphezulu komthamo wangoku wee toni ezizigidi ezi-5.5 ngonyaka (Mtpa). Inkqubo yogunyaziso lommandla iqalisa ngokuphathelelene noku kwaye umsebenzi wagunyaziswa okokuba uqhubeke ngokwakha ngo 2009. Ukucetywa komsebenzi apho esisigunyaziso sanikezelwayo sasibhekiselele ekuphumezeni umthamo we-12 Mtpa wokuthumela kwelinye ilizwe. Kamva i-Transnet, ngokubambisene noshishino lokomba lwe manganese, yaqaphela imfuneko yokuthumela kwelinye ilizwe engaphezulu kwe 12 Mtpa yokukhula kwexesha elide. Oku kukhula kuzakuphenjelelwa ngokuphambili kukwanda kokwenziwa kwesinyithi sehlabathi kwakunye nokutshintsha komxube wemveliso yesinyithi ekuveliseni ipersenteji enkulu yodidi oluphezulu lwezinyithi, ezakuthi emva koko isebenzise udidi oluphezulu lwe manganese ore. Ekongezeni, uhanjiso lwehlabathi lwe manganese ore yodidi oluphantsi ngabavelisi abasakhasayo, abaphezulu kwigophe leendleko, abanako ukugcina ngenzuzo ukuthumela kwelinye ilizwe i-ore yabo ekudidi oluphantsi. Ngokubhekiselele kwibango elinyukileyo le manganese ore ishishini lokomba liye labonakalisa imfuneko yokunyuka kokuthunyelwa kwelinye ilizwe komthamo oyi-16 Mtpa. Ngako oko, utshintsho kucetyo lokuqala lophuhliso lufuna ungezeleleko lweenkqubo zogunyaziso lommandla.

Nceda uqaphele: Ugunyaziso olukhoyo lusemthethenì kwindawo ephakathi kwe Kimberley kwakunye ne and De Aar kwaye ukuhlaziywa kwelicandelo kungaqalisa kungekudala.

UMSEBENZI OCETYIWEYO KWAKUNYE NENGCACISO ZENKQUBO

Ukwandiswa okucetyiweyo womzila kaloliwe okhoyo we manganese ore wokuthumela kwelinye ilizwe ukuya kwi 16

Mtpa wenziwa zizinto ezintathu kwaye zishwankathelwe ngezantsi.

Inkqubo yokulungisa

Inkqubo yokulungisa ifunelwa utshintsho olucetyiweyo olusekwandisoni iziporo zikaloliwe obesele zigunyazisiwe ngo 2009 (Inombolo Yokubhekiselela ye DEA. 12/12/20/1240). Oku kuquka iziporo zikaloliwe ezimbini emNtla Koloni nezine eMpuma Koloni (khangela Umfanekiso 1). Ugunyaziso lwangaphambili luvumele ukwandiswa kwezi ziporo zikaloliwe. Ngoko ke, oku kwandiswa kweziporo zikaloliwe zintandathu kufuneka kubekukhulu kunokokuba bekucingelwe ngaphambili ukuze kubonelele umthamo oyi 16 Mtpa. Inkqubo yokulungisa izakubandakanya ukungeniswa kwesicelo kwi DEA kulandelwe yingxelo echaza utshintsho kuyilo, iimpembelelo ezayamene noko kwakunye nokuthatha inxaheba kukawonke-wonke kwakunye neenkqubo zobandakanyeko lwabachaphazelekayo.

Ugunyaziso lommandla lwezi ziporo zikaloliwe zilandelayo luzakufuna ulungiso:

EmNtla Koloni

- Burgervilleweg
- Linde
- Tafelberg
- Knutsford
- Verby

EMpuma Koloni

- Rosmead

Inkqubo Yokuhlola Esisiseko

Inkqubo ye BA ifunelwa ukwandiswa kweziporo zikaloliwe ezikhoyo / ukufakelwa kweziporo zikaloliwe ezintsha ebezingeyo nxenye yogunyaziso lwasekuqaleni olugqitywe ngo 2009. Oku kuquka iziporo zikaloliwe ezili-10 emNtla Koloni kwakunye nesine eMpuma Koloni (khangela Uluhlu 2 kwakunye Nomfanekiso 1).

Uluhlu 2: Isishwankathelo seziporo zikaloliwe ezizakwandiswa / iziporo zikaloliwe ezintsha ezizakufakelwa (khangela umfanekiso 1)

EmNtla Koloni	
Witloop	Isiporo sikaloliwe esitsha
Wincanton	Ukwandiswa kwesiporo sikaloliwe
Sishen	Isiporo sikaloliwe esitsha
Glosam	Ukwandiswa kwesiporo sikaloliwe
Postmasburg	Ukwandiswa kwesiporo sikaloliwe
Tsantsabane	Ukwandiswa kwesiporo sikaloliwe
Trewil	Ukwandiswa kwesiporo sikaloliwe
Ulco	Ukwandiswa kwesiporo sikaloliwe
Gong Gong	Ukwandiswa kwesiporo sikaloliwe
Fieldsview	Ukwandiswa kwesiporo sikaloliwe

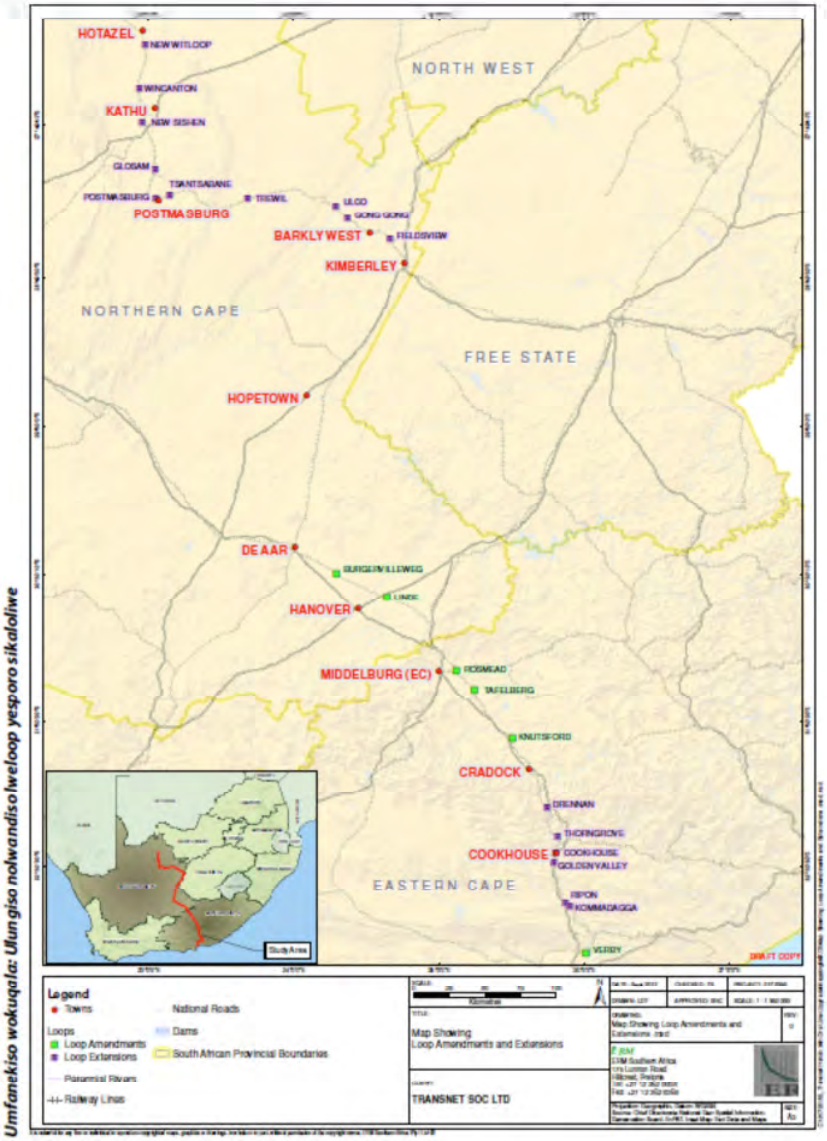
EMpuma Koloni	
Drennan	Ukwandiswa kwesiporo sikaloliwe
Thorngrove	Ukwandiswa kwesiporo sikaloliwe
Cookhouse-Golden Valley	Ukuphindwa kabini komzila kaloliwe
Ripon-Kommadagga	Ukuphindwa kabini komzila kaloliwe

Uludwe lweentshukumo kwakunye nenkqubo ye EIA

Uludwe lweentshukumo/inkqubo ye EIA ifunelwa ukwakha iyadi yokuhlanganisela entsha (khangela Umfanekiso 2) kwi Mamathwane kuqikelelo lwe 22km emazantsi e-Hotazel omNtla Koloni. Leyadi yokuhlanganisela izakuthatha indawo eyi 120 ha kwaye izakwakhiwa kufuphi nomzila kaloliwe ophambili. Izakwenziwa ziiyadi zemizila kaloliwe emihlanu engafumana iinqelo zololiwe abangama-200 nganye kananjalo nezakhiwo zokusebenza kwakunye namaziko awoyanyaniswa naso. Iyadi kananjalo inesisetyenziswa somsebenzisi esiqhelekileyo sokubonelela ngemisebenzi yokomba emincinane.

Ekongezeni ekufumaneni ugunyaziso ngaphantsi kwe NEMA, iyadi yokuhlanganisela izakufuna kananjalo Ilayisensi Yolawulo Lwenkunkuma (WML) kwaye mhlawumbi ingafuna Ilayisensi Yokukhupha Umoya (AEL). Into efunekayo ye AEL izakuqinisekiswa xa ulwazi lobugcisa olufunekayo lufumaneka.

3



Umfanekiso wokugala: Ufungiso nolwandiso lweloop yesporo sikaloliwe

GN 544:

Umsetyenzana 2: Ukwakhiwa kweztsetyenztswa okanye amaziko okugcina I-ore okanye ilahle elifuna ilayisensi yokukhupha umoya ngokwendlela Yolawulo Lommandla Westzwe: Umthetho Wekhwalithi Yomoya (Umthetho ongunombolo. 39 ka 2004).

Umsetyenzana 11: Ukwakhiwa kwamaziko okanye izakhiwo ezithatha I-50 yezikwere zeemitha okanye nangaphezulu phakathi kwi 32 yeemitha zomlambo.

Umsetyenzana 13: Ukwakhiwa kweztsetyenztswa okanye amaziko okugcina, okanye okugcina nokuphatha, impahla enobungozi, apho ukugcina okunjalo kwenzeka kwizikhongezelo eztnomthamo odityanisiweyo wama-80 kodwa ongaggithiyo kuma 500 eemitha ze cubic.

Umsetyenzana 22: Ukwakhiwa kwendlela, ngaphandle kweendawo zasedolophini,

I. enovimba obanzi kune 13,5 yeemitha okanye,

II. apho kungekho khona uvimba apho indlela ibanzi kune 8 yeemitha, okanye

III. apho kufunyenwe ugunyaziso lommandla ukugqibela indlela ngokwendlela yomsetyenzana 5 kwi Saziso Sikarhulumente 387 ka 2006 okanye umsetyenzana 18 kwi Saziso 545 ka 2010.

Umsetyenzana 23ii: Ukutshintshwa komhlaba ongaphuhlswanga ukuba usetyenziselwe ushishino, ngaphandle kwendawo yasedolophini enkulwana kunesi-1 se hectare.

Umsetyenzana 24: Ukutshintshwa komhlaba omkhulu kune 1000 yesikwere seemitha ngokobukhulu ukuya kumhlaba woshishino apho umhlaba onjalo wawahlulwe njenge sithuba esivulekileyo okanye ulondolozo.

Umsetyenzana 53: Ukwandiswa kwemizila kaloliwe, izitishi okanye ityadi zokusherxisela apho kuzakubakho isiporo sophuhliso olunyukileyo kungaguki:

I. imizila kaloliwe, ityadi zokusherxisela kwakunye neztitishi zendlela kaloliwe kwizakhiwo zoshishino okanye kwindawo ezahlulweyo;

II. imizila kaloliwe yangaphantsi komhlaba emigodini; kwakunye

III. nemizila kaloliwe eyongezelelekileyo phakathi kovimba womzila kaloliwe okhoyo.

GN 545

Umsetyenzana 11: Ukwakhiwa kwemizila kaloliwe, izitishi okanye ityadi zokusherxisela, kungaguki

I. imizila kaloliwe, ityadi zokusherxisela kwakunye neztitishi zikaloliwe kwizakhiwo zoshishino okanye

II. imizila kaloliwe yangaphantsi komhlaba kwindawo yase mgodini; kwakunye nemizila kaloliwe eyongezelelekileyo phakathi kovimba womzila kaloliwe okhoyo:

Umsetyenzana 15: Ukulungtswa okuphathekayo kosetyenztso olungaphuhlisekanga, olulilize okanye olulahlweyo ukuya kurhwebo, ekuzonwabiseni, ushishino okanye eleziko apho ukutshintshwa kungama- 20 zee hectares okanye ngaphezulu:

Ngaphandle kwalapho ulungiso oluphathekayo lwenzelwa:

1. Imisetyenzana yomlinganiselo yophuhliso: okanye
2. Ulimo okanye isitishi sangaphambili apho umsetyenzana 16 kolu Ludwe lwenkqubo uzakusebenzseka.

GN 546

Umsetyenzana 12: Ukucocwa kwendawo engama 300 yesikwere seemitha okanye ngaphezulu sezityalo apho I-75% okanye ngaphezulu okuthathwa zityalo kwenziwa zityalo zelilizwe.

UWISO-MTHETHO

I-NEMA, njengokuba kulungisiwe, idwelisa imisetyenzana efuna ugunyaziso lommandla phambi kokuqalisa.

Ukwandiswa okucetyiweyo kwiziporo zikaloliwe ezikhoyo / ukufakelwa kweziporo zikaloliwe ezintsha ebezingagunyaziswanga ngo 2009 kuqalisa imisetyenzana emininzi edweliswe ku GN R544 kwakunye no R546 kwaye ngoko ke kufuna Inkqubo Yokuhlola esisiseko (khangela Ibhokisi 1).

Ukwakhiwa okucetyiweyo kweyadi yentlanganisela kuqalisa imisetyenzana emininzi edweliswe ku GNR 544, R545 kwakunye no R546 kwaye ngoko ke kufuna Inkqubo ye EIA (khangela Ibhokisi 1) kwakunye no GN 718 Womthetho Wolawulo Wenkunkuma (59 ka 2008) Ilayisensi Yolawulo Lwenkunkuma.

Ezinkqubo zicetyelwe okokuba zisebenze ngaxeshanye (khangela Umfanekiso 3).

Ibhokisi 1: Imisetyenzana eyoyanyaniswa nokwandiswa komzila kaloliwe ocetyiweyo kwakunye nokwakhiwa kweyadi yokuhlanganisela

Umfanekiso 3: Inkqubo ye Dayagramu Equkuqelayo

Ukwazisa Umsebenzi

- Isaziso esisemthethweni somsebenzi kubo bonke abantu abachaphazelekayo (iintsuku ezingama-30):
  - Incwadi yesaziso kwakunye nokuhanjiswa kwe BID;
  - Ukubekwa kwezaziso zezizа;
  - Ukubekwa kweentengiso kumaphepha-ndaba;
  - Ukubhaliswa kwabantu abachaphazelekayo

Uludwe Lweentshukumo Kwakunye Nokuhlolwa Okusisiseko

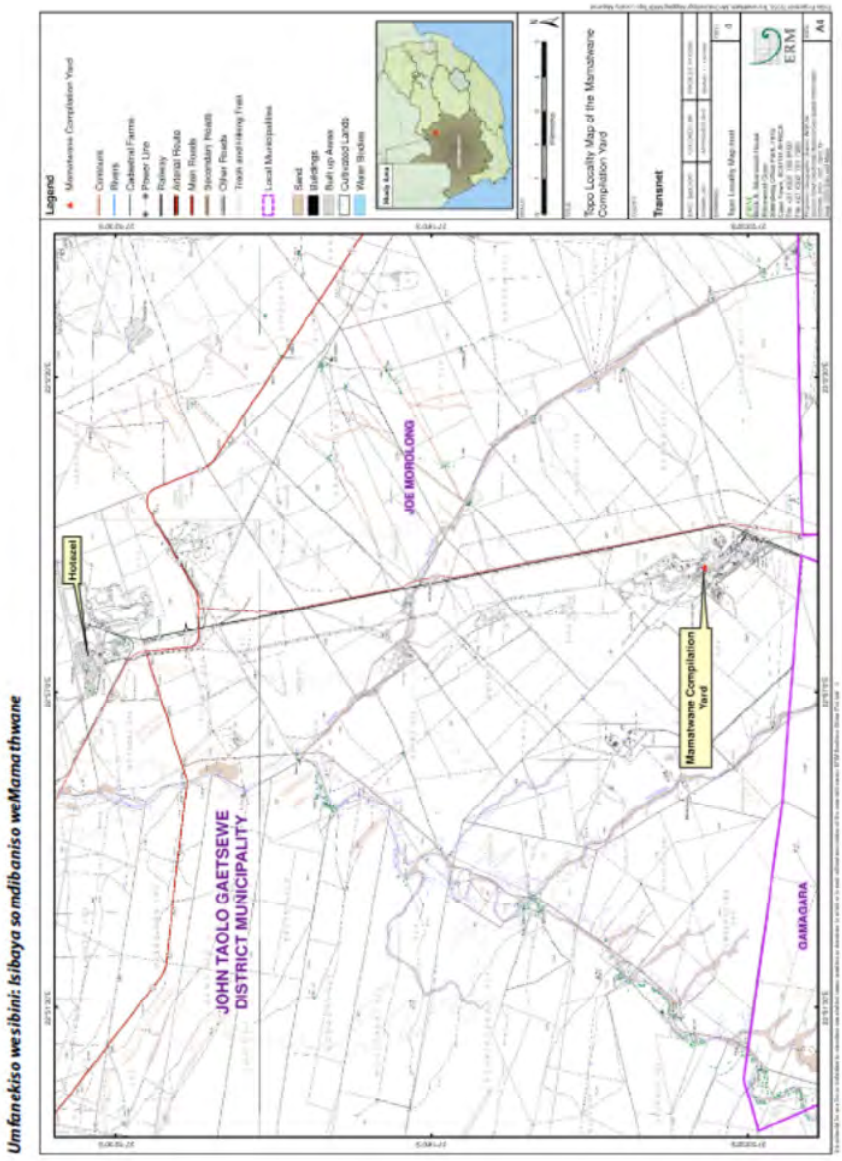
- Ukwazisa ubukho Bengxelo Yokuhlola Esisiseko Esisishwankathelo, I-EMP kwakunye Nengxelo Yoludwe lweentshukumo zokuphononongwa nguwonke-wonke (iintsuku ezingama-40).
- Ukubamba iintlanganiso zikawonke-wonke kwakunye neentlanganiso zamaqela ogqaltselo nabantu abachaphazelekayo.
- Ukuhlaziya Ingxelo Yoludwe lweentshukumo Esisishwankathelo Kwanokunika uluvo kwakunye Nengxelo Eyimpendulo.
- Ukungenisa Ingxelo Yoludwe lweentshukumo Yokugqibela kwabasemagunyeni kwaye yenziwe ifumaneke kwixesha lokuphononongwa nguwonke-wonke (iintsuku ezingama-21).

Ukuhlulowa kwempembelelo

- Ukwazisa ubukho be EIA Esisishwankathelo kwakunye Neengxelo ze EMP zokuphononongwa nguwonke-wonke (iintsuku ezingama-40).
- Ukuhlaziya I-EIA Esisishwankathelo kwakunye Neengxelo ze EMP Kwanokunika uluvo kwakunye Nengxelo Eyimpendulo.
- Ukungenisa Ingxelo Yokuggibela kwabasemagunyeni kwaye yenziwe ifumaneke kwixesha lokuphononongwa nguwonke-wonke (iintsuku ezingama-21).

Ukwenziwa kwesigqibo

- Ukwazisa ngesigqibo esisuka kwabasemagunyeni abanobuchule ukuya kubantu abachaphazelekayo.
- Ukunikezela ngolwazi olufunekayo lwenkqubo yokubhena ekwaziswni


Legend
Mamatwane Compilation Yard
Contours
Rivers
Cadastral Farms
Power Line
Railway
Arterial Route
Main Roads
Secondary Roads
Other Roads
Trails and Hiking Trail
Local Municipalities
Sand
Buildings
Built-up Areas
Cultivated Lands
Water Bodies
Study Area
Topo Locality Map of the Mamatwane Compilation Yard
Transnet
ERM
A4
JOE MOROLONG
JOHN TAOLO GAETSEWE DISTRICT MUNICIPALITY
Hotazel
Mamatwane Compilation Yard
GAMAGARA
Umfanekiso wesibini: Isibaya somdibaniso weMamathwane

6

IMIBA ENOKUBAKHO KWAKUNYE NOPHONONONGO LWEE NCUTSHE

Iqela lomsebenzi liqaphele imiba yommandla engavela ngexesha Lolungiso, Ukuhlolwa Okusisiseko kwakunye noludwe lweentshukumo /inkqubo ye EIA. Ezi ziquka:

- Ukuphazamiseka komhlaba okusuka ekwakhiweni kweziporo zikaloliwe;
- Ingxolo kwakunye nongcangcazelo zombini zisuka kwimisetyenzana yokwakha nakunyuko lwakamva lomsetyenzana kaloliwe;
- Inkxalabo yokhuseleko yezihambi-ndlela zombini ngenxa yeenqwelo-mafutha zokwakha ezinzima kwaneendawo zokunqumla umgaqo;
- Inkxalabo ngothuli oludaleke ngexesha lokwakha;
- Isiphumo esibonakalayo sokwakha kwimbonakalo-mhlaba kwakunye nesiphumo esinokubakho kwimvakalo yendawo kwisiporo sikaloliwe ngasinye;
- Imiba yenkcubeko, amafa okanye i-arkiyoloji;
- Imiba yonobangela yezoqoqosho kwakunye nomsebenzi; kwakunye
- Imiba ye Ikholoji.

Iqela lomsebenzi lizakuphucula oluluhlu emva kokuthathwa kwenxaxheba kokuqala kwakunye neenkqubo zokubandakanyeka kwabachaphazelekayo.

Uphononongo lwee ncutshe lwenzelwe ukuhlola kwanokucacisa imiba enokubakho ethe yaqatshelwa kwaye ezi ziquka:

- Ilifa lenkcubeko, i-arkiyoloji kwakunye ne palaeontogy;
- Ekuhlaleni;
- Ingxolo kwakunye nongcangcazelo;w
- Ikhwalithi yomoya; kwakunye I-ikholoji

UKUTHATHA INXAXHEBA KUKAWONKE-WONKE KWAKUNYE NEENKQUBO ZOKUBANDAKANYEKA KWABACHAPHAZELEKAYO

Ukuthatha inxaxheba kukawonke-wonke kwakunye neenkqubo zokubandakanyeka kwabachaphazelekayo zizakwenziwa kwaye zizakuquka ukubekwa kweentengiso kumaphepha-ndaba asekuhlaleni / nakowommandla, ukubekwa kwezazisi zeziza kwakunye nokuhanjiswa kwee BIDs.

Iintlanganiso zikawonke-wonke zicetyiwe ukuze kunikezwe abachaphazelekayo ithuba lokuzibandakanya kwinkqubo. Iintlanganiso zamaqela ogqaliselo zicetyiwe kananjalo ekwenzeni lula ushenxiso lolwazi ngokukodwa kubantu abachaphazelekayo abaqatshelweyo. Ezintlanganiso zizakwenziwa lula yi ERM ngesiNgesi nange Sibhulu kwaye zizakuguqulelwa kwisiTswana/kwisiXhosa.

Ushicilelo lwesikhutshelo esibhaliweyo kwakunye neengxelo zokuqobela zizakwenziwa ukuba zifumaneke kuwonke-wonke nakubantu abathile abachaphazelekayo kwiindawo ezifikeleleka kuwonke-wonke; zihanjiswe kwabasemagunyeni abanika izimvo njenge Sebe Lemicimbi Yezamanzi (DWA), Amasebe Olimo Lephondo, Amasebe Ommandla Wephondo, Oomasipala Basekuhlaleni, Oomasipala Besithili, DEA: Ulawulo Lwenkunkuma, Ungcoliseko kwakunye namaSebe Olawulo Lwenkunkuma, i-Arhente Yeendlela Zelizwe yoMzantsi Afrika kwaye ingeniswe kwi DEA njengonegunya onobuchule. Iinkcukacha zeentlanganiso zikawonke-wonke zizakwaziswa kubo bonke abachaphazelekayo ababhaliweyo nakuwonke-wonke jikelele ngendlela yeentengiso zephepha-ndaba kwakunye nesaziso esibhaliweyo.

Ukubangaba unganqwenela ukubhalisa njengochaphazelekayo, ukunikezela ngoluvo kumsebenzi ocetyiweyo, ukuveza imibuzo, okanye ukucela ulwazi olungolunye nceda ugcwalise lfomu Yokunika Uluvo kwakunye Nokubhalisa kwaye uyithumele ku Paul Monare we ERM:

011 798 4300

086 292 7318

transnet@erm.com

Postnet Suite 624, Private Bag X29, Gallo Manor, 2052

Nceda utyelele u www.erm.com/transnet-expansion ngokwaziswa kwarhoqo kwakunye nolwazi lomsebenzi.

8

Figure 3.1 Advert (English)

PROPOSED EXPANSION OF TRANSNET'S EXISTING MANGANESE ORE EXPORT RAILWAY LINE AND ASSOCIATED INFRASTRUCTURE, NORTHERN AND EASTERN CAPE

INVITATION TO COMMENT AND REGISTER

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.

ENVIRONMENTAL AUTHORISATIONS REQUIRED

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

Before the proposed project may proceed the following processes must be undertaken in terms of the National Environmental Management Amendment Act (NEMA) (Act 107 of 1998):

- Amendment of existing environmental authorisations (DEA Reference No. 12/12/20/1240);
- Basic Assessment Process;
- Environmental Impact Assessment Process

The project requires environmental authorisation from the National Department of Environmental Affairs as the competent authority.

ERM Southern Africa (Pty) Ltd has been appointed as the Independent Environmental Assessment Practitioner (EAP) to undertake the above-mentioned processes. This advertisement serves as notification of the commencement of the public participation process for these processes. To register as an Interested and Affected Party (I&AP), to comment on or to enquire about the proposed project please contact Paul Monare of ERM before 29 October 2012:

Tel: (011) 798 4300; Fax: 086 292 7318 or Email: transnet@erm.com
Postal Address: Postnet Suite 624, Private Bag X29, Gallo Manor, 2052
www.erm.com/transnet-expansion

Please quote the ERM reference number on correspondence:
ERM Ref no.: 0172056

Basic Assessment: DEA Ref no.: 14/12/16/3/3/2/405 Amendment Ref no.: 12/12/20/1240
Scoping/EIA DEA Ref no.: 14/12/16/3/3/2/688

TRANSNET

Notice is given of a Public Participation Process and the intention to apply for Environmental Authorisation in terms of the EIA Regulations, 2010 under the National Environmental Management Act (Act No. 107 of 1998), as amended. The proposed BA activities include GN R544 Activity 11, 13, 23 (i), 24 and 53 and GN R546 Activity 12. The proposed EIA activities include GN R544 2, 11, 13, 22, 23(ii) and 24 and GN R545 Activity 11 and 15 and GN R546 Activity 12.

ERM

Figure 3.2 Advert (Afrikaans)

VOORGESTELDE UITBREIDING VAN TRANSNET SE BESTAANDE SPOORLYN VIR DIE UITVOER VAN MANGAANERTS, ASOOK VERWANTE INFRASTRUKTUUR IN DIE NOORD- EN OOS-KAAP

UITNODIGING OM KOMMENTAAR TE LEWER EN TE REGISTREER

Transnet (SOC) Beperk (hierna Transnet genoem) beoog om die bestaande spoorlyn vir die vervoer van mangaanerts vanaf Hotazel in die Noord-Kaap na die Ngqura-hawe in die Oos-Kaap uit te brei. Die groeiende aanvraag in mangaanerts is die rede vir die uitbreiding van die uitvoerkorridor se kapasiteit na 16 miljoen ton per jaar (Mtpa). Die voorgestelde uitbreiding sluit die volgende in:

- Uitbreiding van verskeie bestaande spoorlusse ("rail loops") in die Noord- en Oos-Kaap;
- Die lê van twee nuwe spoorlusse in die Noord-Kaap; en
- Die bou van 'n nuwe monteerwerf naby Hotazel in die Noord-Kaap.

OMGEWINGMAGTIGING NODIG

'n Wysigingsproses, 'n basiese invloedbepalingsproses en 'n volledige omgewingsinvloedbepalingsproses kragtens die Wet op Nasionale Omgewingsbestuur (NEMA) (Wet 107 van 1998), soos gewysig, moet gevolg word voordat daar met die proses begin kan word. Die Nasionale Departement van Omgewingsake (DOS) is die bevoegde owerheid wat die Omgewingsmagtigings vir hierdie prosesse uitreik.

Die volgende prosesse moet dus kragtens die Wet op Nasionale Omgewingsbestuur (NEMA) (Wet 107 van 1998) uitgevoer word voordat daar met die projek voortgegaan kan word:

- Wysiging van bestaande omgewingsmagtigings (DOS Verwysingsnr. 12/12/20/1240);
- Basiese Invloedbepalingsproses (BIB);
- Volledige Omgewingsinvloedbepalingsproses (OIB).

Die projek vereis 'n omgewingsmagtiging van die Nasionale Departement van Omgewingsake as die bevoegde owerheid .

ERM Southern Africa (Edms) Bpk is as die Onafhanklike Omgewingsbeoordelingspraktisyn aangestel om bogenoemde prosesse uit te voer. Hierdie terreinkennisgewing dien as kennisgewing dat die prosesse van openbare deelname 'n aanvang geneem het. Indien u as 'n Belanghebbende en Geaffekteerde Party (B&GP) wil registreer, kommentaar wil lewer of meer oor bogenoemde proses wil uitvind, word u versoek om met **Paul Monare** van ERM in verbinding te tree by:

Tel: (011) 798 4300; Faks: 086 292 7318 of Epos: transnet@erm.com
Posadres: Postnet Suite 624, Privaatsak X29, Gallo Manor, 2052
www.erm.com/transnet-expansion

Dui asseblief die ERM verwysingsnommer op alle korrespondensie aan:
ERM Verwysingsnr: 0172056

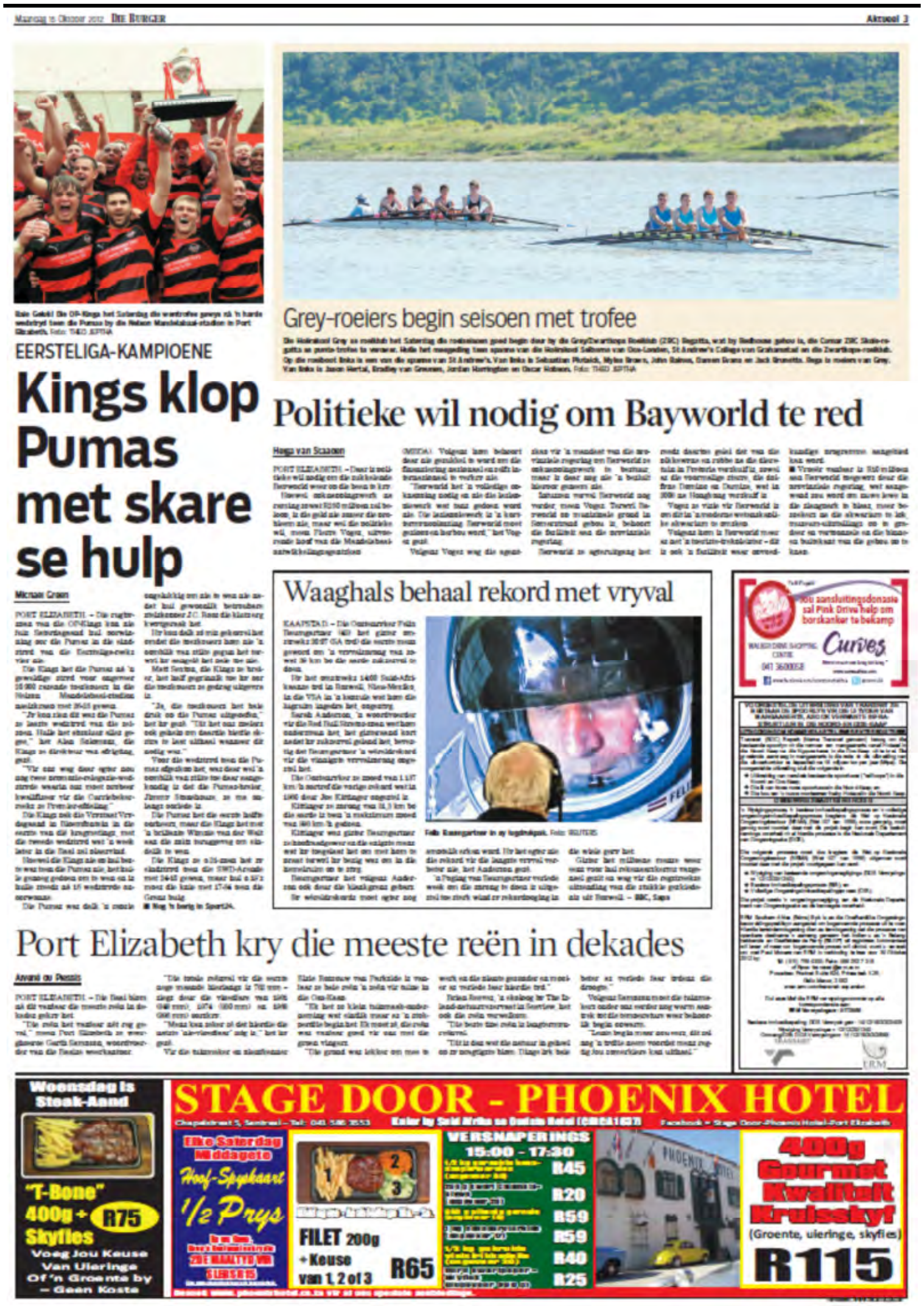
Basiese Invloedbepaling: DOS Verwysingsnr: 14/12/16/3/3/2/405 Wysiging Verwysingsnr: 12/12/20/1240
Omvang/ OIB: DOS Verwysingsnr: 14/12/16/3/3/2/688

TRANSNET

Kennis word gegee van 'n Proses van Openbare Deelname en die voorneme om aansoek te doen vir 'n Omgewingsmagtiging kragtens die OIB-regulasies 2010, van die Wet op Nasionale Omgewingsbestuur (Wet Nr. 107 van 1998), soos gewysig. Die voorgestelde BIB-aktiwiteite sluit in GK R544: Aktiwiteit 11, 13, 23 (ii), 24 en 53; en GK R546 Aktiwiteit 12. Die voorgestelde OIB-aktiwiteite sluit in GK R544: 2, 11, 13, 22, 23(ii) en 24; en GK R545: Aktiwiteit 11 en 15; en GK R546: Aktiwiteit 12.

ERM

Figure 3.3 Proof of Advert in Die Burger Oos 15 October 2012



Aktueel 3

EERSTELIGA-KAMPIOENE

Kings klop Pumas met skare se hulp

Michael Green

Grey-roeiers begin seisoen met trofee

Politieke wil nodig om Bayworld te red

Hugo van Schalkwyk

Waaghals behaal rekord met vryval

Port Elizabeth kry die meeste reën in dekades

Amané du Plessis

Jou aansluitingsdonasie sal Pink Drive help om borskanker te bekamp

Curves

041 3600058

STAGE DOOR - PHOENIX HOTEL

Woensdag is Steak-Aand

"T-Bone" 400g + Skyfies R75

Voeg Jou Keuse Van Uieringe Of 'n Groente by – Geen Koste

Elke Saterdag Middagete

Hoof-Spyskaart 1/2 Prys

FILET 200g + Keuse van 1, 2 of 3 R65

VERSNAPERINGS 15:00 - 17:30

R45

R20

R59

R59

R40

R25

400g Gourmet Kwaliteit Kruisskyf (Groente, uieringe, skyfies) R115

Figure 3.4 Proof of Advert Die Burger Wes 15 October 2012

SUN CITY

Sangers kuierplek belet ná 'moleste'

Lawaaiwater-blues

Woeste see karnuffel roeiers

WP-jonges rig hoop op meer as nét Curriebeker

Op ons App

Program

VERITAS

BLINDINGS & LOUVRES

Roll Blindings

Nie wat jy verwag het nie?

Cape Dentures

Figure 3.5 Proof of Advert Kathu Gazette 6 October 2012

06 Oktober / October / Diphalane 2012 • KATHU GAZETTE 5

Besoek ons NUWE webtuiste ! www.kathugazette.co.za

KATHU

Kumba Engages with the Northern Cape Media

Kumba is known for good stakeholder relationships. And since collaboration is one of the company's values, we realise that we need our stakeholders to make a real difference in the communities we operate in. On Tuesday 25 September 2012 a media engagement took place at the Albatross restaurant at the Kalahari Country Club in Kathu. This formed part of a media contact week. Other engagements with the media in the Northern Cape had taken place in Upington and Kimberley respectively. The reason for these engagements is to continue to foster good relationships.

Right : **The Kathu Media Engagement** : *At the Back from left to right* : **Bertie Fourie (Die Ghaap), Annerie Louw (Kalahari Bulletin), Judi Bolweg (Kathu Gazette).** *Second Row from left to right* : **George Benjamin (Public Affairs Manager Kolomela Mine), Gert Schoeman (Communication Manager Kumba Corporate Office), Hecter Nortje (Kathu Gazette), KG Mmereki (Kurara FM).** *Front from left to right* : **Mandi Jordaan (Communication Officer Sishen Mine) Tanya Aucamp (Communication Manager Sishen Mine), Zelda Malan (Communication Practitioner Kolomela Mine) Jennett Senye (Kurara FM), Phapaano Sebecho (Kurara FM).**

Sishen's PIT Receives Third Prize at 2012 Symposium

From left to right are Virginia Tyobeka (KIO Executive Head of HR), Dr Con Fauconnier (Former CEO of Kumba Resources and Exxaro Resources), Natalie Lochner (PIT Industrial Engineering) and Justine Benson (Young Talent and Staffing Manager).

Sishen mine was well represented at this year's Kumba Iron Ore Professional in Training (PIT) Annual Symposium, where Natalie Lochner scooped up the third prize for her project. Held at Kievits Kroon Country Estate in Pretoria from 27 to 28 August 2012, the symposium provided young engineers with the opportunity to showcase their innovative projects. Natalie says her project focused on doing process and system optimisations at the Sishen Occupational Health Centre. This came after she realised that, as from 2008, the Sishen Occupational Health Centre capacity came under strain due to an increase in contractors requiring entry permits to Sishen Mine. Therefore, she investigated the root causes by identifying system bottlenecks and conducting Monte Carlo Simulation on the processing times of the surveillance tests. These improvements resulted in a decrease of 60 percent customer waiting time, the recovery and enhancement of the management infrastructure and an increase in capacity from 50 to 55 clients per day.

ATTENTION:
All Community Members above 18 years residing in John Taolo Gaetsewe District

Members of the John Taolo Community hereby wish to inform you that they would like to launch the Civic Organisation namely: John Taolo Gaetsewe Civic Organisation.

For further information contact

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Figure 3.6 Proof of Advert Somerset Budget 4 October 2012

Somerset Budget
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CRADOCK SKOU– *25 - 27 OKTOBER 2012*

Cradock Skou lok hierdie jaar wye belangstelling uit en behoort 'n groot verrassing vir 'n ieder en elk te wees. Die groot verskeidenheid stalletjies is reeds bykans 'n maand gelede al vol bespreek.

'n Nuutjie vanjaar is die SA Kaapse Boerperd Kampioenskap asook die Kaapland SA Vleismerino Kampioenskap wat beslis 'n hoogtepunt sal wees. Al die ander afdelings, nl. Merino, Angora, Boerbok, Slaglam en Dorper behoort baie goed ondersteun te word. Mev. Ezelle Marais sal op 'n later stadium 'n volledige berig oor die Perde-afdeling in die koerant plaas.

Die Jeugskou gaan vanjaar uit sy nate bars en sal seker dubbeld so groot soos verlede jaar wees. Dit sal agter die lang skuur langs die rivier aangebied word.

Die grootte van die terrein blyk 'n taai probleem te wees. 'n Nuwe hek is by die kroeg ingesit om die stalletjiehouers in die lang skuur, toegang na die kroeg en perde-vertoners te akkommodeer. Daar word 'n beroep op besoekers gedoen om die parkeerterrein naby die Frans Loots-brug te gebruik. Senior burgers wat moeilik beweeg, kan die Skoukantoor (048 - 881 2488) of Hendrik Opperman (0823256748) bel om julle vanaf die hoofhek in te help na die terrein.

Die skemerkelkie is Donderdagaand en die Skoudans Vrydagaand. Chris Britz sal die musiek tydens die twee geleenthede verskaf.

Die Cradock Landbougenootskap bedank al die borge, vertoners, werkers, stalletjiehouers en die publiek vir hulle ondersteuning in die verlede. Die borge is uiters positief oor vanjaar se skou. Daar word op die algemene publiek se ondersteuning staatgemaak.

PROPOSED EXPANSION OF TRANSNET'S EXISTING MANGANESE ORE EXPORT RAILWAY LINE AND ASSOCIATED INFRASTRUCTURE, NORTHERN AND EASTERN CAPE

INVITATION TO COMMENT AND REGISTER

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:

- Expansion 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.

ENVIRONMENTAL AUTHORISATIONS REQUIRED

Before the proposed project may proceed, an amendment process, a basic assessment process and an environmental impact assessment process needs to be undertaken in terms of the National Environmental Management Act (NEMA) (Act 107 of 1998), as amended. The decision making authority on all these processes will be the National Department of Environmental Affairs (DEA).

Before the proposed project may proceed the following processes must be undertaken in terms of the National Environmental Management Amendment Act (NEMA) (Act 107 of 1998):

- Amendment of existing environmental authorisations (DEA Reference No. 12/12/20/1240);
- Basic Assessment Process; and
- Environmental Impact Assessment Process.

The project requires environmental authorisation from the National Department of Environmental Affairs as the competent authority.

ERM Southern Africa (Pty) Ltd has been appointed as the Independent Environmental Assessment Practitioner (EAP) to undertake the above mentioned processes. This advertisement serves as notification of the commencement of the public participation process for these processes. To register as an Interested and Affected Party (I&AP), to comment on or to enquire about the proposed project please contact Paul Maluma at ERM before 30 October 2012.

Tel: (011) 798 4300 Fax: 086 262 7216
or Email: transnet@erm.com
Postal Address: Postnet Suite 624, Private Bag X29
Gallo Manor, 2052
www.erm.com/transnet-expansion

Please quote the ERM reference number on correspondence:
ERM Ref No: 0172316

Basic Assessment: DEA Ref No: 14/12/16/3/3/1/475
Amendment Ref No: 12/12/20/1240
Scoping/EIA DEA Ref No: 14/12/16/3/3/2/468

TRANSNET

ERM

HEELWAT VELDBRANDE IN DIE DISTRIK

MIDDELBURG

Die afgelope ruk was hier 'n paar veldbrande in die omgewing. Een was in die omgewing van Nooitgedacht en op die plase van Dave Turner, Jan-Pieter Blom en andere.

'n Tweede brand het op die plaas Bedstead van Louis van der Merwe begin. Dit is onseker hoe die brand ontstaan het.

Die brand het verder versprei na Groothoek van Lukie Strydom. 'n Deel van Willie Joubert se bergveld het in die slag gebly. Ander plase wat deurgeloop het, was Sewefontein, Geluk en Brandkraal.

Sover kon vasstel, is geen veeverliese gely nie. Baie skade is aan reservoirs, groen tenks en plastiese pype aangerig.

By Louis van der Merwe het ongeveer 500 hektaar in die slag gebly. Die meeste skade was by Lukie Strydom waar 1800 hektaar gebrand het.

Hank McGregor eyes Hansa Fish to erase World Champs Disappointment

CRADOCK–
After being controversially dumped out of the defence of his world marathon championship title in Rome, Hank McGregor is sizing up the SA K2 champs at the Hansa Fish River Canoe Marathon in Cradock on 5 and 6 October as the ideal opportunity to erase the nightmare of his disqualification and win the one K1 title that has eluded him.

"I have come home with real mixed emotions and not much to show for all the hard work I put into my training," said McGregor. "I am hugely disappointed. It is such an anti-climax. Thank goodness I have something that I can channel my energies into to deal with that."

"The Hansa Fish K1 title is the one major K1 title that I have not won and I would love to tick that box," said the Team Best 4 Kayak Centre captain.

"Len Jenkins owns the K1 race and even though I have caught him with K2 wins, I really want to bag the K1 title as well."

Jenkins will be acutely aware of the danger posed by a Hank McGregor licking his wounds, and will also have to deal with the challenges of disqualification disappointment and recovering from the travel back from Europe to be in top form for the start on Friday morning at Grassridge dam.

"There is a real sense of unfinished business going into the Hansa Fish, which I think will make for a great race," said McGregor.

"What happened in Rome I blame squarely on the course that was set up for the event. At least at the Fish there won't be any disqualifications on the portages!" he chuckled.

"There is a lot of positive energy around to feed off," he added. "Our little training group did really well. Grant van der Walt's (gold) medal (in the U23 K1 race) was unbelievable and if you look back at the K1 and K2 races with Len (Jenkins), Jasper (Mocké) and Simon (van Gysen) and Grant (Van der Walt) and myself, we were all on the front bunches throughout. It is going to be great to race each other in Cradock!"

The controversial disqualification of McGregor and Jenkins from the K1 senior men's race is still reverberating around the canoeing world, with howls of outrage over the apparently selective prosecution of the two South Africans and the refusal to consider apparently equally strong evidence on other paddlers at the front of the race.

"It is still going on, but it is something that I have to put behind me now and focus on something a lot more positive this weekend," said McGregor.

"It is such a great event, with an unbelievable vibe and everyone seems so happy there, that it is just what we need right now," he added.

The Hansa Fish takes place in Cradock on Friday 5 and Saturday 6 October 2012 and will decide the SA K1 River Championships. More information can be found at www.fishmarathon.org.za

Hank McGregor wants to erase the nightmare of the World Marathon Champs in Rome by winning his first K1 title in the Hansa Fish River Canoe Marathon. Despite several wins in K2 races, Hank McGregor has never won a K1 Hansa Fish title. "It is one box I would love to tick," says McGregor. *JonVellacott/Gameplan Media*

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Figure 3.7 Proof of Advert Volksblad 4 October 2012

Figure 4.1 Stakeholder Database

PROPOSED EXPANSION OF TRANSNET'S EXISTING MANGANESE ORE EXPORT RAILWAY LINE AND ASSOCIATED INFRASTRUCTURE, NORTHERN AND EASTERN CAPE *Stakeholder Database*		
Name	**SURNAME**	**ORGANISATION**
National Authority		
Nimrod	Zalk	National Government Department of Trade and Industry (The DTI)
Nyiko	Nkosi	National Government Department of Environmental Affairs
George	Mahlalela	National Government Department of Roads and Transport
Mariagrazia	Galimberti	South African Heritage Resources Agency (SAHRA)
Kathryn	Smuts	South African Heritage Resources Agency (SAHRA)
Andrew	Timothy	Provincial Heritage Resources Agency (PHRA) Northern Cape
Sello	Mokhanya	Provincial Heritage Resources Agency (PHRA) Eastern Cape
Mandisa	Fatyela	National Government Department of Public Works
Nobubele	Ngele	National Government Department of Water Affairs
Peter	Thabethe	National Government Department of Agriculture, Forestry and Fisheries
Provincial Authority: Northern Cape		
Denver	van Heerden	Provincial Government of Environmental Affairs & Nature Conservation
Julius	Mutyorauta	Provincial Government of Environmental Affairs & Nature Conservation
Dineo	Moleko	Provincial Department of Tourism Environment and Conservation
Viljoen	Mothibi	Northern Cape Provincial Department of Agriculture and Land Affairs
Phemelo	Manankong	Provincial Government of Agriculture, Land Reform&Rural Dev
Cynthia	Fortune	Northern Cape Agriculture and Land Affairs
Abe	Abrahams	Northern Cape Department of Water Affairs (DWA)
K.	Streuders	Department of Water Affairs (DWA)
A.J.	McDonald	Provincial Government of Environmental Affairs: Marine & Coastal Management - Oceans & Coasts
Clive	Moses	National Development Agency (NDA)
Pieter	Swart	Northern Cape Department of Mineral Resources
John	Block	Provincial Government of Economic Affairs and Tourism
Steven	Jonkers	Provincial Government of Transport, Safety and Liaison
Kenny	Mmoiemang	Provincial Government of Cooperative Governance, Human Settlement and Traditional Affairs
Dawid	Rooi	Provincial Government of Roads & Public Works
K.	Nogwili	Provincial Government of Roads & Public Works
Provincial Authority: Eastern Cape		
Lawrence	Musisi	Directorate: Economics and Marketing, Eastern Cape Department of Agriculture
Alistair	McMaster	Province of the Eastern Cape: Economic Development , Environmental Affairs and Tourism
M.L.	Zote	Provincial Heritage Resources Authority
Bulumko	Nelana	Provincial Government of Economic Development and Environmental Affairs
Glen	Thomas	Eastern Cape Provincial Department of Agriculture and Land Affairs
Yvonne	Matsheketwa	Provincial Government of Agriculture and Rural Development
T.	Kgare	Department of Roads and Transport
Albert	Mfenyana	Department of Economic Development and Environmental Affairs
Jeff	Govender	Provincial Department of Economic Development and Environmental Affairs
Andries	Struwig	Provincial Department of Economic Development and Environmental Affairs
A.	Starkey	Department of Water Affairs
Zoleka	Capa	Rural Development and Agriculture Reform
Temba	Hani	Nelson Mandela Bay Metro Municipality
A.	Arthur	Nelson Mandela Bay Metro Municipality
M.V.	Mangis	Provincial Government of Department of Public Works
District Municipalities: Northern Cape		
Maccollen	Jack	Pixley Ka Seme District Municipality
Simphiwe	Nundze	Pixley Ka Seme District Municipality
Frank	Mdee	Frances Baard District Municipality
Kenneth	Lucas	Frances Baard District Municipality
Daluxolo	Ngxanga	Siyanda District Municipality
Mandisa		Siyanda District Municipality
MP	Bokgwathile	John Taolo Gaetsewe District Municipality
Johnny	Swart	John Taolo Gaetsewe District Municipality
District Municipalities: Eastern Cape		
Ted	Pillay	Cacadu District Municipality
Howard	Sikweza	Cacadu District Municipality
Noxolo	Ngwazi	Chris Hani District Municipality
Francois	Nel	Chris Hani District Municipality
Local Municipalities: Northern Cape		

Isaac	Visser	Emthanjeni Local Municipality
Francois	Taljaard	Emthanjeni Local Municipality
Jacobus	Jood	Emthanjeni Local Municipality
Elizabeth	Folorunsho	Emthanjeni Local Municipality
Sipho	Sthonga	Emthanjeni Local Municipality
Xoliswa	Qhanqa	Emthanjeni Local Municipality
G.H.	Akharwaray	Sol Plaatjie Local Municipality
Keith	Williams	Sol Plaatjie Local Municipality
Vanugh	Settley	Sol Plaatjie Local Municipality
Magda	Lefleur	Sol Plaatjie Local Municipality
H.	Robinson	Dikgatlong Local Municipality
Kenneth	Lucas	Dikgatlong Local Municipality
M.J.	Hendricks	Dikgatlong Local Municipality
Koos	Malan	Dikgatlong Local Municipality
	Risels	Dikgatlong Local Municipality
Sana	Kemming	Dikgatlong Local Municipality
George	Damoense	Dikgatlong Local Municipality
Eddie	Manuel	Dikgatlong Local Municipality
Marvelous	Seele	Dikgatlong Local Municipality
Poppy	Mlambo-Izquierdo-Rodriguez	Kgaelopele Local Municipality
Gustav	von Mollendorf	Kgaelopele Local Municipality
O.G.	Selao	Kgaelopele Local Municipality
	Stafie	Kgaelopele Local Municipality
Obakeng	Isaacs	Tsantsabane Local Municipality
Julies	Theys	Tsantsabane Local Municipality
Mimi	Swart	Tsantsabane Local Municipality
Elsie	Bosch	Tsantsabane Local Municipality
Mina	Oliphant	Tsantsabane Local Municipality
Mpho	Mashila	Tsantsabane Local Municipality
Cecilia	Tshabalala	Tsantsabane Local Municipality
Clement	Itumeleng	Gamagara Local Municipality
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Victor	Gorah	Gamagara Local Municipality
Frank	Visagie	Gamagara Local Municipality
Patricia	Selonyane	Gamagara Local Municipality
Segopovisho	Rapelange	Gamagara Local Municipality
Johann	Burger	Gamagara Local Municipality
Elma	Taljaard	Gamagara Local Municipality
Tshepo	Bloom	Joe Morolong Local Municipality
Semeo	Seleka	Joe Morolong Local Municipality
Sepalamelo	Matshidiso	Joe Morolong Local Municipality
Elitha	Chimana	Joe Morolong Local Municipality
A.C.	Mpofu	Umsobomvu Local Municipality
Mannetjies	Rossouw	Umsobomvu Local Municipality
Frank	Mashilo	Renosterberg Local Municipality
Gladwin	Nieuwenhuizen	Thembelihle Local Municipality
Tanya	Gorrah	Thembelihle Local Municipality
Local Municipalities: Eastern Cape		
Lonwabo	Ngogo	Sundays River Valley Local Municipality
Ambeswe	Bavuma	Sundays River Valley Local Municipality
T.	Manene	Sundays River Valley Local Municipality
Sydney	Zondani	Sundays River Valley Local Municipality
Norma	Ngquse	Sundays River Valley Local Municipality
Davlin	Sauls	Blue Crane Route Local Municipality
Nomsa	Ngcipe	Blue Crane Route Local Municipality
Zoliswa	Funiselo	Blue Crane Route Local Municipality
Zoliswa	Funiselo	Blue Crane Route Local Municipality
Zoliswa	Funiselo	Blue Crane Route Local Municipality
Fransika	van Der Merwe	Blue Crane Route Local Municipality
Mncedi	Mali	Blue Crane Route Local Municipality
Fransika	van Der Merwe	Blue Crane Route Local Municipality
Mawandile Sydney	Tantsi	Inxuba Yethemba Local Municipality
Nolutando	Majiba	Inxuba Yethemba Local Municipality
Noxolo	Nontyi	Inxuba Yethemba Local Municipality
Nwabisa	Mongo	Inxuba Yethemba Local Municipality
Ethel	Maki	Inxuba Yethemba Local Municipality

Simphiwe	Sekenisi	Inxuba Yethemba Local Municipality
Ntombekhaya	Baart	Makana Local Muncipality
Ndumiso	Nongwe	Makana Local Muncipality
Interested Groups: Northern Cape		
Morne	du Plessis	World Wide Fund South Africa
Suzanne	Erasmus	Wildlife and Environment Society of SA (WESSA)
David	Morris	McGregor Museum (Archaeology, Living Heritage, Graves, Community Development)
Lilian	Mokoto	Kimberley Library
Sarah	Letsoalo	Mokala National Park
Rene	de Kock	SANRAL Western Region (Western and Northern Cape)
Tania	Anderson	WESSA: Northern Cape
Christy	Bragg	Endangered Wildlife Trust (EWT)
Sakkie	Louw	Boesmanland Farmers Union
Johan	van Rensberg	AgriSA
Interested Groups: Eastern Cape		
Jenny	Gon	WESSA Eastern Cape
Morne	du Plessis	World Wide Fund South Africa
Nanna	Gouws	SANRAL
Sharlene	Matthews	AgriSA (Eastern Cape)
Ross	Zietsman	Birdlife SA
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Charl	Jooste	Eskom Holdings Ltd Distribution: Northen Cape
Henk	Landman	Eskom Holdings Ltd Distribution: Western Region
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Frans	Strydom	Transnet Freight Rail
Cobus	Cloete	Transnet Freight Rail
Pumelela	Mabeka	Transnet Freight Rail
Mavin	Bhana	
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Mpho	Rakau	Landowner
Andre	Marais	Landowner
April	Bloom	Landowner
Arie	Fourie	Landowner
Heidi and Naude	Greyling	Landowner
Henley	Booysen	Landowner
John	James	Landowner
Andrew	Truter	Landowner
Vorster	Terblanche	Landowner
Fredrick	Engelbrecht	Landowner
Valentyn	Maritz	Landowner
Christiaan	Troskie	Landowner
Gareth Allen	Asher	Landowner
Gareth Allen	Asher	Landowner
William	Asher	Landowner
	Loenen	Landowner
W.E.	Brotherton	Landowner
Gareth Joseph	Collet	Landowner
Herbert Hilton	Collett	Landowner
Chad	Comley	Landowner
Gerrit Hendrik	De Lange	Landowner
Hermanus	du Toit	Landowner
Nico	Erasmus	Landowner
Stephanus	Ferreira	Landowner
Keith Hadley	Finnemore	Landowner
Gerhard	Fourie	Landowner
Mervin Stanley	Gowar	Landowner
Glen	Heath	Landowner
Neville Pannell	Kingwill	Landowner

Johan Frederick	Lehman	Landowner
Lillian Berna	Lochner	Landowner
Inus	Malan	Landowner
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	Olivier	Landowner
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Bluelilliesbush Dairy Farming		Landowner
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PCL		Landowner
Sunday's River Citrus		Landowner
Other Stakeholders		
Rilette	Avenant-Buys	Assmang
L	Botha	N1 Construction
Johann	Brink	COEGA Development Corporation PE
Anita	de Klerk	Central Cradock Farmer's Association
Joseph and Audrey	Douw	Ultramatix Twelve
Pieter	du Toit	Exxaro Corporate Centre
Edmund Trust		Edmund Trust TM 5555
Abraham	Ferreira	We Care Rail Services & Construction
Sifiso	Gwamanda	Coreinfra Technologies
Karel	Heyns	Heyns Civil Construct Trade Vendors 110
	Kwelichov	ANC
Thys Andrew	Meyer	ANC - Green Point, Kimberley
Aubrey	Sambonkwe	Klipplaat Development Forum
H.J.	Schoeman	TFR Infra
Ettienne	Schoeman	GWK
Phemelo	Sehunelo	Kimberley Consolidated Mines
Maureen	Sesedi	ANC - Womens League, Kimberley
Vic	Smailes	Master Builders Association - Northern Cape
Louis	van der Mescht	Mesh Steel & Weld
Dennis	Watson	Cookhouse Service Station
Koki	York	Papkuil Boerevereniging
Gunther	Strauss	Shamwari Game Reserve
Jackie	Markram	Agri-Kuruman
Fufe	Makatong	DEDAT:JTG
Mashudu	Dzivhani	PPC Lime Acres
Jeonely		Makepe
Johannes		Groenwater Community
Jane	Kefumile	Groenwater Community
L.B.	Ketumile	Groenwater Community
Maria	Klip	Groenwater Community
Gert	Klopper	Finsch Mine, De Beers
Susan	Koiberg	Narysec Community
Iris	Kolberg	Groenwater Community
Boipelo	Mathere	Narysec Community
K.	Mokang	Narysec Community
Veronica	Molele	Narysec Community
P.N.	Mongwato	PPC Lime Acres
Keolebogile	Mogatiwe	Narysec Community
Daphny	Motshabeng	CPA Member
Gloria	Nkatswang	Narysec Community
Jeffrey	Plaatjies	Groenwater Community
Patricia	Hooibaadjie	Groenwater Community
Avril	Seleke	Narysec Community
D.T.	Selekiso	Groenwater Community
Nelly	Senye	Groenwater Community
Fikiswa	Thimbela	Paterson Librarian
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Victor	Appie	
E.D.	August	
E.M.	Baardt	
Themba	Bango	
Ilse	Bob	
Jouma	Brouns	
V.A.	Brown	
Veronica	Brown	
Zandisila	Coduk	
Carol	Coetzee	
E.	Davids	
M.N.	de Wee	

Sharon	de Wee	
Lincoln	Geldenhuys	
V.L.	Herman	
Elia	Hermans	
Freddie	Jacobs	
Jane	Jacobs	
Judilyn	Jonas	
Gladys	Jonkers	
R.J.	Kock	
Maria	Koopman	
P.	Leonard	
K.	Madupi	
F.	Malan	
Elize	Maloka	
J.	Martins	
S.	Matthews	
Annetjie	Matthews	
M.P.	Meintjie	
Rebecca	Methu	
Deidre	Methu	
Thys	Methu	
	Mietasmeer	
Cecilia	Moeng	
D.	Mogale	
Driek	Motsomai	
M.	Norman	
Mieka	Olifant	
S.G.	Oliphant	
R.	Oliphant	
Patricia	Olivier	
T.	Olivier	
Maria	Pergoo	
Nikoelien	Pergoo	
Eunice	Peters	
Vumi	Seogter	
Rachel	Stander	
K.	Steyn	
Magret	Swarts	
Sylvia	Van Niel	
Jan	Van Wyk	
S.	Visagie	
R.	Vissagie	
Nobantu	Waka	
E.K.	Williams	
Jerry	Williams	
J.	Williams	
Ruth	Williams	
L.T.	Zantsi	
L.	Bogodile	
Andries	de Klerk	
Conny	Dipone	
T.	Fosi	
O.P.	Ghiri	
Obakeng	Kepron	
T.	Kgorouyone	
Adam	Klip	
Katlego	Lekwene	
Johannes	Lekwene	
Motsamai Dan	Mafuza	
R.	Mogatuwe	
Nelson	Mohle	
P.	Moingoti	
Keitumetse	Seboko	

Figure 5.1 Notification Letter to Stakeholders (English) 2 October 2012

Environmental Resources Management
Johannesburg Office
Building 32, 1st Floor
The Woodlands Office Park,
Woodlands Drive
Woodmead, 2148
South Africa
Tel: +27 (0) 11 798 4300
Fax: +27 (0) 11 804 2289
www.erm.com

Postal Address:
Postnet Suite 624
Private Bag X29
Gallo Manor, 2052
Johannesburg
South Africa

2 October 2012 *Project number: 0172056*

Dear Sir/Madam,

PROPOSED EXPANSION OF TRANSNET'S EXISTING MANGANESE ORE EXPORT RAILWAY LINE AND ASSOCIATED INFRASTRUCTURE, NORTHERN AND EASTERN CAPE

Basic Assessment Ref no.: DEA Ref no.: 14/12/16/3/3/2/405
Amendment Ref no.: 12/12/20/1240
Scoping/EIA DEA Ref no.: 14/12/16/3/3/2/688

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 of an existing environmental authorisation (DEA Reference No. 12/12/20/1240), a Basic Assessment (BA) process and Environmental Impact Assessment (EIA) process needs to be undertaken in terms of the National Environmental Management Act (NEMA) (Act 107 of 1998), as amended. The decision-making authority on all these processes will be the National Department of Environmental Affairs (DEA). ERM Southern Africa (Pty) Ltd has been appointed as the Independent Environmental Assessment Practitioner to undertake the mentioned processes.

Important milestones in the EIA, BA and Amendment processes

- **Project announcement and stakeholder registration**: The attached Background Information Document (BID) provides more information about the project and associated regulatory process. You are invited to register as an interested and affected party (I&AP) and to participate in the regulatory processes. The due date for I&AP registration and comment on the BID is **Thursday, 1 November 2012**.
- **Public review of the Draft Scoping, Draft BA and Amendment Reports:** These reports will be made available for public review in November 2012 and I&APs will be invited to attend Public Meetings and will be informed about the relevant dates in due course.
- **Public review of the Final Scoping and Final BA Reports:** These reports will be made available for public review during the first quarter of 2013.
- **Public review of the Draft EIA Report:** The Draft EIA report will be made available for public review during the second quarter of 2013 and I&APs will be invited to attend Public Meetings and will be informed about the relevant dates in due course.
- **Public review of the Final EIA Report:** The Final EIA report will be made available for public review during the third quarter of 2013.

Registered Company address:
Environmental Resources Management
Southern Africa (Pty) Ltd
Building 32, 1st Floor,
The Woodlands Office Park,
Woodlands Drive
Woodmead, 2148

Company registration number
2003/001404/07

Directors
Jeremy Sobol (Managing)
Dylan Campbell
Grant Bassingthwaighte
John Alexander (UK)
John Simonson (UK)

Offices worldwide

A member of the Environmental Resources Management Group

How to comment on the BID?

You are welcome to provide comments on the BID in the following manner:

- Completing the enclosed registration and comment sheet and submitting it to ERM by Thursday, 1 November 2012;
- Writing a letter or additional written submission by mail, email of fax; and/or
- Calling ERM to provide comments telephonically.

We invite you to become involved in the regulatory processes and to raise any comments, concerns and suggestions about the proposed project and/or the public participation process. Further correspondence will be with registered I&APs only.

Should you require any additional information, please contact **Paul Monare** at: (011) 798 4300, fax 086 292 7318 or email: transnet@erm.com. The project website will also be updated throughout the process, please feel free to visit www.erm.com/transnet-expansion

Kind Regards,

Nestus Bredenhann
Senior Consultant

Enclosed:

- *Background Information Document*
- *Registration and Comment Sheet*

Figure 5.2 Notification Letter to Stakeholders (Afrikaans) 2 October 2012

Environmental Resources Management
Johannesburg Office
Building 32, 1st Floor
The Woodlands Office Park,
Woodlands Drive
Woodmead, 2148
South Africa
Tel: +27 (0) 11 798 4300
Fax: +27 (0) 11 804 2289
www.erm.com

Postal Address:
Postnet Suite 624
Private Bag X29
Gallo Manor, 2052
Johannesburg
South Africa

2 October 2012 *Projeknommer: 0172056*

Geagte Heer/Dame

VOORGESTELDE UITBREIDING VAN TRANSNET SE BESTAANDE SPOORLYN VIR DIE UITVOER VAN MANGAANERTS, ASOOK VERWANTE INFRASTRUKTUUR IN DIE NOORD- EN OOS-KAAP

Basiese Invloedbepalings/DOS Verwysingsnommer: 14/12/16/3/3/2/405
Wysigings Verwysingsnommer: 12/12/20/1240
OIB/DOS Verwysingsnommer: 14/12/16/3/3/2/688

Transnet (SOC) Beperk (hierna Transnet genoem) beoog om die bestaande spoorlyn vir die vervoer van mangaanerts vanaf Hotazel in die Noord-Kaap na die Ngqura-hawe in die Oos-Kaap uit te brei. Die groeiende aanvraag in mangaanerts is die rede vir die uitbreiding van die uitvoerkorridor se kapasiteit na 16 miljoen ton per jaar (Mtpa). Die voorgestelde uitbreiding sluit die volgende in:

- Uitbreiding van verskeie bestaande spoorlusse ("rail loops") in die Noord- en Oos-Kaap;
- Die lê van twee nuwe spoorlusse in die Noord-Kaap; en
- Die bou van 'n nuwe monteerwerf naby Hotazel in die Noord-Kaap.

'n Wysigingsproses, 'n Basiese Invloedbepalingsproses (BIB) en 'n volledige Omgewingsinvloedbepalingsproses (OIB) kragtens die Wet op Nasionale Omgewingsbestuur (NEMA) (Wet 107 van 1998), soos gewysig, moet gevolg word voordat daar met die proses begin kan word. Die besluitnemings owerheid vir al hierdie prosesse is die Nasionale Departement van Omgewingsake (DOS). ERM Southern Africa (Edms) Bpk is as die Onafhanklike Omgewingsbeoordelingspraktisyn aangestel om bogenoemde prosesse uit te voer.

Mylpale in die O&MIB, BIB –en Wysigingsprosesse

- **Aankondiging van projek en registrasie**: Die aangehegte Agtergrond-inligtingsdokument (AID) verskaf meer inligting oor die voorgestelde projek en die regulatorieseprosesse. U word hartlik uitgenooi om as Belanghebbende en Geaffekteerde Party (B&GP) te registreer en aan die proses deel te neem. Die sperdatum vir registrasie deur B&GPe en vir aanvanklike kommentaar en kwessies is **Donderdag, 1 November 2012.**
- **Openbare oorsig van die Konsep OIB, Konsep Basiese Invloedbepalings - en Wysigingsverslae:** Hierdie verslae sal beskikbaar gestel word vir openbare kommentaar in November 2012 en B&GPe sal uitgenooi word om openbare vergaderings by te woon. Genoegsame tyd sal verskaf word om die nodige datums en tye aan B&GPe te verskaf.
- **Openbare oorsig van die Finale OIB –en Finale Basiese Invloedbepalingsverslae:** Hierdie verslae sal beskikbaar gestel word vir openbare kommentaar gedurende die eerste kwartaal van 2013.
- **Openbare oorsig van die Konsep Omgewingsinvloedbepalingsverslag:** Hierdie verslag sal beskikbaar gestel word vir openbare kommentaar gedurende die tweede kwartaal van 2013 en B&GPe sal uitgenooi word om openbare vergaderings by te woon. Genoegsame tyd sal verskaf word om die nodige datums en tye aan B&GPe te verskaf.

Registered Company address:
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Southern Africa (Pty) Ltd
Building 32, 1st Floor,
The Woodlands Office Park,
Woodlands Drive
Woodmead, 2148

Company registration number
2003/001404/07

Directors
Jeremy Sobril (Managing)
Grant Bassingthwaighte
John Alexander (UK)
John Simonson (UK)

Offices worldwide

A member of the Environmental Resources Management Group

- **Openbare oorsig van die Finale Omgewingsinvloedbepalingsverslag:** Hierdie verslag sal beskikbaar gestel word vir openbare kommentaar gedurende die derde kwartaal van 2013.

Kommentaar op die Agtergrond-inligtingsdokument (AID)

U is welkom om op die AID kommentaar te lewer deur:

- Die aangehegte registrasie- en kommentaarblad te voltooi en aan ERM te stuur teen Donderdag, 1 November 2012;
- 'n Brief te skryf of 'n bykomende skriftelike voorlegging in te dien; en
- Per epos, faks of telefoon met die kantoor vir openbare deelname in verbinding te tree.

Ons wil u hartlik uitnooi om betrokke te raak met die openbare deelname proses en om enige kommentaar, kwessies of voorstelle oor die voorgestelde projek of openbare deelname proses te lewer. Verdere korrespondensie sal gestuur word aan geregistreerde B&GPs.

Indien u meer inligting tree asseblief in verbinding met **Paul Monare** by Tel: (011) 798 4300, Faks 086 2927318 of e-pos transnet@erm.com. Die projekwebwerf sal ook deurlopend opgedateer word, voel vry om te besoek by www.erm.com/transnet-expansion.

Die uwe
ERM

Nestus Bredenhann
Senior Konsultant

Ingesluit:

- *Agtergrond-inligtingsdokument*
- *Registrasie en Kommentaarblad*

Figure 5.3 Registration and Comment Sheet

Voorgestelde Uitbreiding van Transnet se Bestaande Spoorlyn vir die Uitvoer van Mangaanerts, Asook Verwante Infrastruktuur in die Noord- en Oos-Kaap

REGISTRASIE- EN KOMMENTAARBLAD

September 2012

Vul asseblief die onderstaande vorm in indien u enige vrae, kommentaar of voorstelle oor die voorgestelde projek het.

Stuur asb. u kommentaar terug teen 30 Oktober 2012

Stuur hierdie kommentaarblad terug aan **Paul Monare** van ERM:

Faks: 086 292 7318 of e-pos: gamsberg@erm.com of besoek www.erm.com/transnet-expansion

Posadres: Postnet Suite 624, Privaatsak X29, Gallo Manor, 2052

Registreer my asb. formeel as h belanghebbende en geaffekteerde party (B&GP) en voorsien my van verdere inligting gedurende die Wysigings, BIB -en OIB-prosesse.			Ja	Nee
Ek verkies om my kennisgewings op die volgende manier te ontvang:	E-pos	Pos	Faks	

Kommentaar:

Registreer asb. die volgende persone vir hierdie Wysigings, BIB -en OIB-prosesse:

Vul asb. u korrekte kontakbesonderhede vir die databasis hieronder in:

Titel en Naam:			
Organisasie:			
Telefoon:		Faks:	
Selfoon:		E-pos:	
Posadres:			

Naam	Handtekening	Datum

Projek nommer: 0172056

Dankie vir u waardevolle bydrae

Proposed Expansion of Transnet's Existing Manganese Ore Export Railway Line and Associated Infrastructure, Northern and Eastern Cape

REGISTRATION & COMMENT SHEET

September 2012

Should you have any queries, comments or suggestions regarding the proposed project, please note them below.

Please return your comments by 30 October 2012

Return this comment sheet to **Paul Monare** of ERM:

Fax Number: 086 292 7318 or email: transnet@erm.com or visit www.erm.com/transnet-expansion

Postal Address: Postnet Suite 624, Private Bag X29, Gallo Manor, 2052

Please formally register me as an interested and affected party (I&AP) and provide further information and notifications during the Amendment, BA and EIA processes			Yes	No
I would like to receive my notifications by:	Email	Post	Fax	

Comments:

Please register the following people for this Amendment, BA and EIA:

Please fill in your contact details below for the project database:

Title and Name:			
Organisation:			
Telephone:		Fax:	
Cellphone:		Email:	
Postal Address:			

Name: Signature: Date:

Project number: 0172056

Thank you for your valuable contribution

Voorgestelde Uitbreiding van Transnet se Bestaande Spoorlyn vir die Uitvoer van Mangaanerts, Asook Verwante Infrastruktuur in die Noord- en Oos-Kaap

REGISTRASIE- EN KOMMENTAARBLAD

September 2012

Vul asseblief die onderstaande vorm in indien u enige vrae, kommentaar of voorstelle oor die voorgestelde projek het.

Stuur asb. u kommentaar terug teen 30 Oktober 2012

Stuur hierdie kommentaarblad terug aan **Paul Monare** van ERM:

Faks: 086 292 7318 of e-pos: gamsberg@erm.com of besoek www.erm.com/transnet-expansion

Posadres: Postnet Suite 624, Privaatsak X29, Gallo Manor, 2052

Registreer my asb. formeel as h belanghebbende en geaffekteerde party (B&GP) en voorsien my van verdere inligting gedurende die Wysigings, BIB -en OIB-prosesse.			Ja	Nee
Ek verkies om my kennisgewings op die volgende manier te ontvang:	E-pos	Pos	Faks	

Kommentaar:

Registreer asb. die volgende persone vir hierdie Wysigings, BIB -en OIB-prosesse:

Vul asb. u korrekte kontakbesonderhede vir die databasis hieronder in:

Titel en Naam:			
Organisasie:			
Telefoon:		Faks:	
Selfoon:		E-pos:	
Posadres:			

Naam Handtekening Datum

Projek nommer: 0172056

Dankie vir u waardevolle bydrae

Voorgestelde Uitbreiding van Transnet se Bestaande Spoorlyn vir die Uitvoer van Mangaanerts, Asook Verwante Infrastruktuur in die Noord- en Oos-Kaap

REGISTRASIE- EN KOMMENTAARBLAD

September 2012

Vul asseblief die onderstaande vorm in indien u enige vrae, kommentaar of voorstelle oor die voorgestelde projek het.

Stuur asb. u kommentaar terug teen 30 Oktober 2012

Stuur hierdie kommentaarblad terug aan **Paul Monare** van ERM:

Faks: 086 292 7318 of e-pos: gamsberg@erm.com of besoek www.erm.com/transnet-expansion

Posadres: Postnet Suite 624, Privaatsak X29, Gallo Manor, 2052

Registreer my asb. formeel as h belanghebbende en geaffekteerde party (B&GP) en voorsien my van verdere inligting gedurende die Wysigings, BIB -en OIB-prosesse.			Ja	Nee
Ek verkies om my kennisgewings op die volgende manier te ontvang:	E-pos	Pos	Faks	

Kommentaar:

Registreer asb. die volgende persone vir hierdie Wysigings, BIB -en OIB-prosesse:

Vul asb. u korrekte kontakbesonderhede vir die databasis hieronder in:

Titel en Naam:			
Organisasie:			
Telefoon:		Faks:	
Selfoon:		E-pos:	
Posadres:			

Naam Handtekening Datum

Projek nommer: 0172056

Dankie vir u waardevolle bydrae

Proposed Expansion of Transnet's Existing Manganese Ore Export Railway Line and Associated Infrastructure, Northern and Eastern Cape

REGISTRATION & COMMENT SHEET

September 2012

Should you have any queries, comments or suggestions regarding the proposed project, please note them below.

Please return your comments by 30 October 2012

Return this comment sheet to **Paul Monare** of ERM:

Fax Number: 086 292 7318 or email: transnet@erm.com or visit www.erm.com/transnet-expansion

Postal Address: Postnet Suite 624, Private Bag X29, Gallo Manor, 2052

Please formally register me as an interested and affected party (I&AP) and provide further information and notifications during the Amendment, BA and EIA processes	Yes	No
I would like to receive my notifications by:	Email	Post / Fax

Comments:

Please register the following people for this Amendment, BA and EIA:

Please fill in your contact details below for the project database:

Title and Name:			
Organisation:			
Telephone:		Fax:	
Cellphone:		Email:	
Postal Address:			

Name Signature Date

Project number: 0172056

Thank you for your valuable contribution

Proposed Expansion of Transnet's Existing Manganese Ore Export Railway Line and Associated Infrastructure, Northern and Eastern Cape

REGISTRATION & COMMENT SHEET

September 2012

Should you have any queries, comments or suggestions regarding the proposed project, please note them below.

Please return your comments by 30 October 2012

Return this comment sheet to **Paul Monare** of ERM:

Fax Number: 086 292 7318 or email: transnet@erm.com or visit www.erm.com/transnet-expansion

Postal Address: Postnet Suite 624, Private Bag X29, Gallo Manor, 2052

Please formally register me as an interested and affected party (I&AP) and provide further information and notifications during the Amendment, BA and EIA processes	Yes	No
I would like to receive my notifications by:	Email	Post / Fax

Comments:

Please register the following people for this Amendment, BA and EIA:

Please fill in your contact details below for the project database:

Title and Name:			
Organisation:			
Telephone:		Fax:	
Cellphone:		Email:	
Postal Address:			

Name Signature Date

Project number: 0172056

Thank you for your valuable contribution

Annex D

Communication with DEA

environmental affairs
Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

Private Bag X 447 · PRETORIA · 0001 · Fedsure Building · 315 Pretorius Street · PRETORIA
Tel (+ 27 12) 310 3911 · Fax (+ 2712) 322 2682

NEAS Reference: DEA/EIA/0001421/2012
DEA Reference: 14/12/16/3/3/2/405
Enquiries: Mmatlala Rabothata
Tel: 012 395 1768/1694 **Fax:** 012 320 7539 **E-mail:** mrabothata@environment.gov.za

Mr Danie Neuman
Environmental resources Management Southern Africa (ERM) (Pty) Ltd
Postnet Suite 624
Private Bag X29
GALLO MANOR
2052

Fax: 011 804 2289
Tel: 011 798 4300

PER FACSIMILE / MAIL

Dear Mr Neuman

ACKNOWLEDGEMENT OF RECEIPT AND ACCEPTANCE OF NEW APPLICATION FOR ENVIRONMENTAL AUTHORISATION (SCOPING & EIA PROCESS) FOR THE ESTABLISHMENT OF A NEW RAIL COMPILATION YARD IN MAMATHWANE NEAR HOTAZEL, NORTHERN CAPE PROVINCE

The Department confirms having received the application form and details of EAP and Declaration of interest for environmental authorisation for the abovementioned project on 24 August 2012. You have submitted these documents to comply with the Environmental Impact Assessment Regulations, 2010. The Application is accepted.

However, you are requested to submit the project schedule, indicating the different phases and expected timelines of the project (as per point 2.2 of the Application Form template).

Please include both reference numbers (NEAS Reference and DEA Reference), as listed above, on all documents and correspondence submitted to the Department.

In addition, please consider the following during compilation of reports for this application for environmental authorisation:

- All applicable Departmental Guidelines must be considered throughout the application process. These can be downloaded from the Department's website: www.environment.gov.za, Environmental Impact Management button, listed under "EIA Administration": Integrated Environmental Management Information Series link. These include, but are not limited to, the following topics: Scoping, Environmental Impact Reporting, Stakeholder Engagement, Specialist Studies, Impact Significance, Cumulative Effects Assessments, Alternatives in EIA and Environmental Management Plans.

- Please be advised that in terms of the EIA Regulations and NEMA the investigation of alternatives is mandatory. Alternatives must therefore be identified, investigated to determine if they are feasible and reasonable. It is also mandatory to investigate and assess the option of not proceeding with the proposed activity (the "no-go" option).
- Should water, solid waste removal, effluent discharge, stormwater management and electricity services be provided by the municipality, you are requested to provide this office with written proof that the municipality has sufficient capacity to provide the necessary services to the proposed development. Confirmation of the availability of services from the service providers must be provided together with the reports to be submitted.
- In the reports to be submitted it must clearly be demonstrated in which way the proposed development will meet the requirements of sustainable development. You must also consider energy efficient technologies and water saving devices and technologies for the proposed development. This could include measures such as the recycling of waste, the use of low voltage or compact fluorescent lights instead of incandescent globes, maximising the use of solar heating, the use of dual flush toilets and low-flow shower heads and taps, the management of storm water, the capture and use of rainwater from gutters and roofs, the use of locally indigenous vegetation during landscaping and the training of staff to implement good housekeeping techniques.
- A detailed and complete EMPr must be submitted with the EIR. This EMPr must not provide recommendations but must indicate actual remediation activities which will be binding on the applicant. Without this EMPr the documents will be regarded as not meeting the requirements and will be returned to the applicant for correction.
- The applicant/EAP is required to inform this Department in writing upon submission of any draft report, of the contact details of the relevant State Departments (that administer laws relating to a matter affecting the environment) to whom copies of the draft report were submitted for comment. Upon receipt of this confirmation, this Department will in accordance with Section 24O(2) & (3) of the National Environmental Management Act, 1998 (Act 107 of 1998) inform the relevant State Departments of the commencement date of the 40 day commenting period, or 60 days in the case of the Department of Water Affairs for waste management activities which also require a licence in terms of the National Water Act, 1998 (Act 36 of 1998).
- Should it be necessary to apply for a permit in terms of the National Heritage Resources Act, 1999 (Act 25 of 1999), please submit the necessary application to SAHRA or the relevant provincial heritage agency and submit proof thereof with the Environmental Impact Assessment Report. The relevant heritage agency should also be involved during the public participation process and have the opportunity to comment on all the reports to be submitted to this Department.

You are required to submit the final site layout plan together with the Final EIR to the Department. All available biodiversity information must be used in the finalisation of the layout plan.

The Environmental Management Programme (EMPr) submitted as part of the application for environmental authorisation must include the following:

- All recommendations and mitigation measures to be recorded in the Final EIR.
- A plant rescue and protection plan which allows for the maximum transplant of conservation important species from areas to be transformed. This plan must be compiled by a vegetation specialist familiar with the site in consultation with the ECO and be implemented prior to commencement of the construction phase.

- An open space management plan to be implemented during the construction and operation of the facility.
- A re-vegetation and habitat rehabilitation plan to be implemented during the construction and operation of the facility including timeframes for restoration which must indicate rehabilitation within the shortest possible time after completion of construction activities to reduce the amount of habitat converted at any one time and to speed up the recovery to natural habitats.
- An alien invasive management plan to be implemented during construction and operation of the facility. The plan must include mitigation measures to reduce the invasion of alien species and ensure that the continuous monitoring and removal of alien species is undertaken.
- A storm water management plan to be implemented during the construction and operation of the facility. The plan must ensure compliance with applicable regulations and prevent off-site migration of contaminated storm water or increased soil erosion. The plan must include the construction of appropriate design measures that allow surface and subsurface movement of water along drainage lines so as not to impede natural surface and subsurface flows. Drainage measures must promote the dissipation of storm water run-off.
- An effective monitoring system to detect any leakage or spillage of all hazardous substances during their transportation, handling, use and storage. This must include precautionary measures to limit the possibility of oil and other toxic liquids from entering the soil or storm water systems.
- An erosion management plan for monitoring and rehabilitating erosion events associated with the facility. Appropriate erosion mitigation must form part of this plan to prevent and reduce the risk of any potential erosion.
- A traffic management plan for the site access roads to ensure that no hazards would results from the increased truck traffic and that traffic flow would not be adversely impacted. This plan must include measures to minimize impacts on local commuters e.g. limiting construction vehicles travelling on public roadways during the morning and late afternoon commute time and avoid using roads through densely populated built-up areas so as not to disturb existing retail and commercial operations.
- An environmental sensitivity map indicating environmental sensitive areas and features identified during the EIA process.
- Measures to protect hydrological features such as streams, rivers, pans, wetlands, dams and their catchments, and other environmental sensitive areas from construction impacts including the direct or indirect spillage of pollutants.

You are requested to submit two (2) electronic copies (the main report must be separated from the Appendices (each appendix saved separately) (CD/DVD) and two (2) hard copies of both the Draft and Final Report to the Department. The hard copies must be double-sided printed; double-punched and must be bound using a lever arch file (two or four holes).

The EAP must, in order to give effect to regulation 56 (2), before submitting the Environmental Impact Assessment Report to the Department give registered interested and affected parties access to, and an opportunity to comment on the report in writing.

In terms of regulation 67 of the EIA Regulations, 2010 this application will lapse if the applicant (or the EAP on behalf of the applicant) fails to comply with a requirement in terms of the Regulations for a period of six months after having submitted the application, unless the reasons for failure have been communicated to and accepted by this Department.

You are hereby reminded of Section 24F of the National Environmental Management Act, Act No 107 of 1998, as amended, that no activity may commence prior to an environmental authorisation being granted by the Department.

Yours sincerely

Mr Mark Gordon
Chief Director: Integrated Environmental authorisations
Department of Environmental Affairs
Letter signed by: Ms Mmatlala Rabothata
Designation: Environmental Officer: Integrated Environmental Authorisations
Date: 07/09/12

cc	Mr W van Dyk	Transnet	Fax: 011 612 4528
	Mr D van Heerden	NC DENC	Fax: 053 807 7367
	Mr S Sebusho	Gamagara Local Municipality	Fax: 053 723 2021

ERM has over 100 offices
Across the following
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Korea
Malaysia
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The Netherlands
Peru
Poland
Portugal
Puerto Rico
Russia
Singapore
South Africa
Spain
Sweden
Taiwan
Thailand
UK
US
Vietnam
Venezuela

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