



SCOPING AND ENVIRONMENTAL IMPACT ASSESSMENT

**Scoping and Environmental Impact Assessment
for the proposed Manganese Export Facility and
Associated Infrastructure in the Coega Industrial
Development Zone, Port of Ngqura and Tankatara area**

DRAFT EIA REPORT

CHAPTER 1:

INTRODUCTION



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CHAPTER 1: INTRODUCTION

Transnet SOC Ltd (hereinafter referred to as “Transnet”) is proposing to develop a 16 Mtpa throughput Manganese Ore Export Facility in the Coega Industrial Development Zone (IDZ) and on the adjacent property to the north-east of the IDZ (Remainder of Farm Tankatara Trust 643), located approximately 15 km north-east of Port Elizabeth within the Nelson Mandela Bay Municipality (NMBM) in the Eastern Cape Province.

The applicant has appointed the Council for Scientific and Industrial Research (CSIR) as the independent Environmental Assessment Practitioner (EAP) to undertake the Environmental Impact Assessment (EIA) and determine the biophysical, social and economic impacts associated with undertaking the proposed activity.

1.1 PROJECT OVERVIEW

Transnet is mandated to assist in facilitating 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, 2011a). Transnet’s mandate and strategic objectives are aligned with New Growth Path of the South African Government and the Statement of Strategic Intent issued by the Minister of Public Enterprises (Transnet, 2011a). Transnet is a key driver of the state’s development agenda and is considered as the largest freight logistics provider in South Africa (Transnet, 2011b).

Figure 1.1 below illustrates Transnet’s five-year (2012 to 2016) Capital Investment Plan in strategic corridors. As depicted in this figure, the Port of Ngqura falls within this plan, together with the Ports of East London and Port Elizabeth, forming the Southcor corridor for the transportation of automotives, manganese and general freight (Transnet, 2011b).

In line with this, Transnet SOC Ltd holds a primary objective to construct and operate a highly efficient Manganese Ore Export Facility in the Coega Industrial Development Zone (IDZ) and on the adjacent property to the north-east of the IDZ (Remainder of Farm Tankatara Trust 643). The regional location of the Coega IDZ is illustrated in Figure 1.2. The proposed Manganese Export Facility will be designed to handle a throughput capacity of 16 million tons per annum (Mtpa) of manganese ore, and will mainly consist of (i) a Manganese stockyard and handling facility in Zones 8 and 9 of the Coega IDZ, which includes the Port of Ngqura; and (ii) a rail compilation yard in Zones 11 and 13 of the Coega IDZ and on the adjacent Tankatara property located north-east of the Coega IDZ (i.e. Remainder Farm Tankatara Trust 643). In addition, the proposed project will comprise the doubling of the railway line between the proposed compilation yard and the existing rail marshalling yard (Zones 13). Transnet is intending to purchase (negotiations underway) the portion of the Tankatara property (currently zoned agricultural land-use) on which the compilation yard is proposed to be located and to rezone it to special land-use.



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The proposed facility will receive manganese ore from the existing rail link between Hotazel (in the Northern Cape Province) and Coega, via Postmasburg¹. Upon arrival at the proposed terminal site, the manganese ore will be offloaded and stockpiled in the proposed stockyard, reclaimed and finally transported via a proposed conveyor system to the existing Berths C100 and C101 in the Port of Ngqura, for exporting via ship.

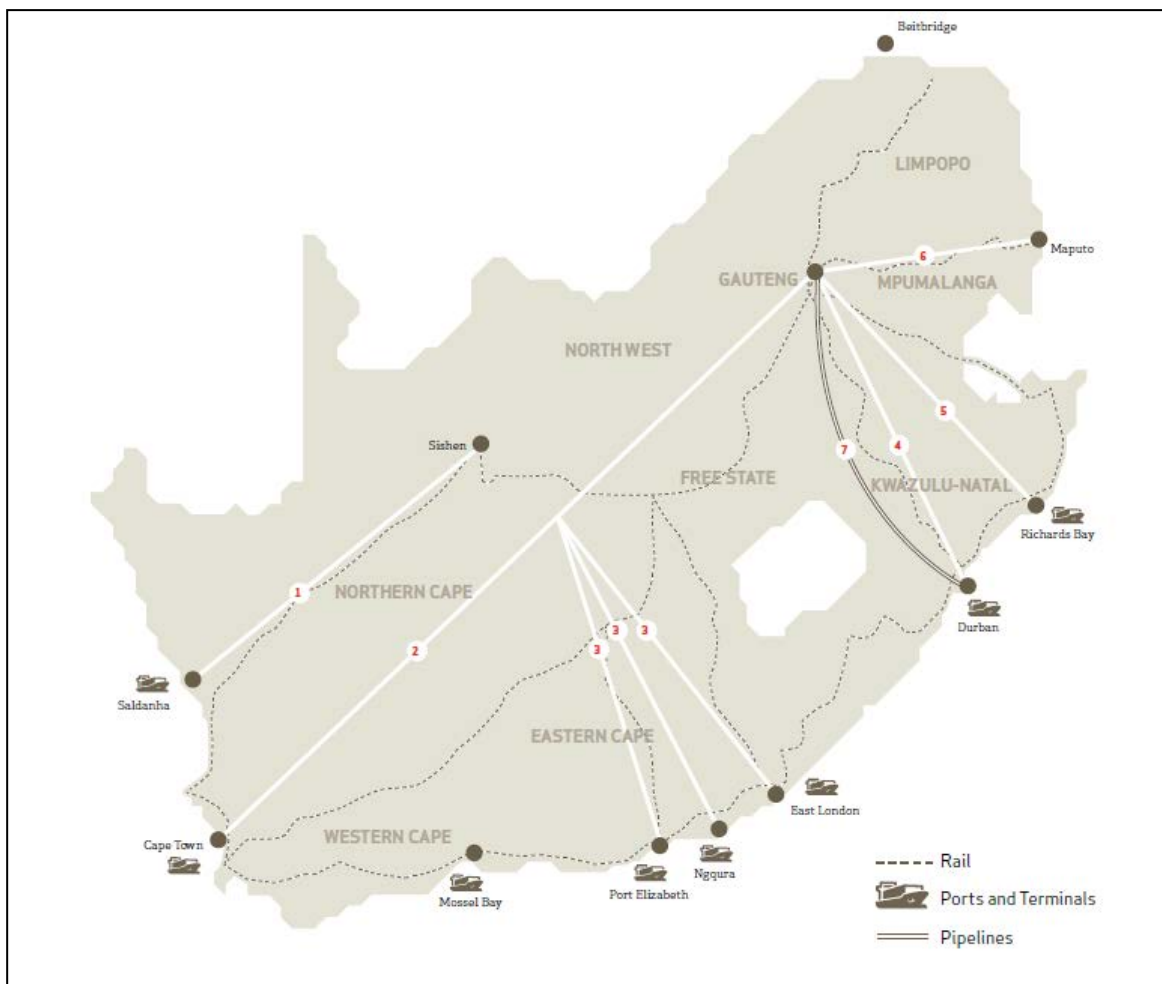


Figure 1.1: Transnet’s Five Year Capital Investment Plan in Strategic Corridors (red numbers) (Transnet, 2011b)

¹ An EIA was conducted in 2009 for the proposed rail upgrade between Hotazel and Coega, with an environmental authorisation granted by national DEA in November 2009. This environmental authorisation may need to be updated, based on recent design changes for the rail line, i.e. increase in throughput, and is the subject of a separate Environmental Authorisation Process.

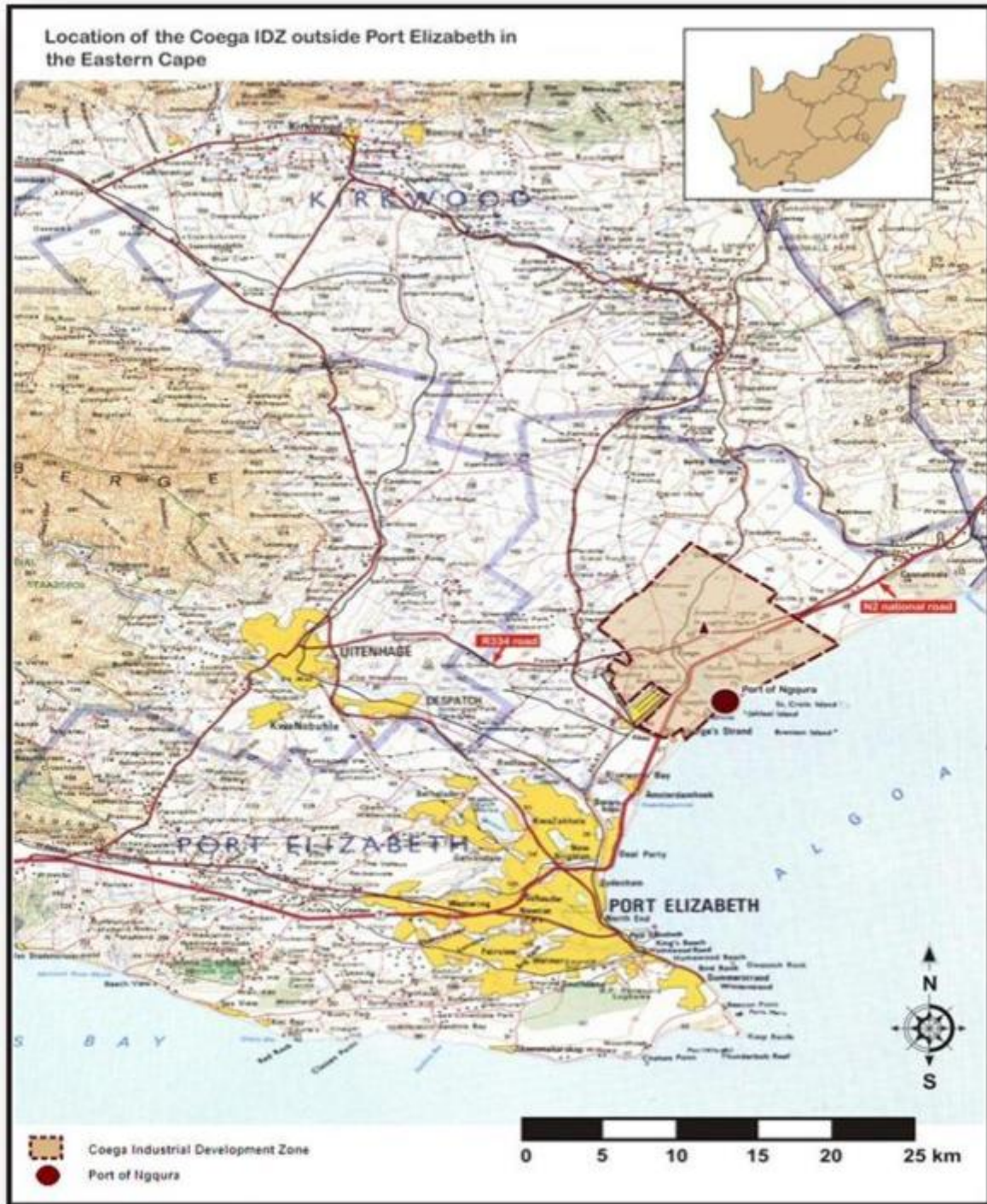


Figure 1.2: Location of the Coega IDZ outside Port Elizabeth in the Eastern Cape



1.2 PROJECT PROPONENT

Transnet is a state owned company in South Africa, which strives to deliver integrated, efficient services to promote economic growth within the country. Transnet is solely owned by the South African government; however it operates as a corporate entity. Transnet, operating as an integrated freight transport company, contains five Operating Divisions and is supported by Specialist Units as follows:

- Operating Divisions:
 - Transnet Freight Rail (TFR),
 - Transnet Rail Engineering (TRE),
 - Transnet National Ports Authority (TNPA),
 - Transnet Port Terminals (TPT), and
 - Transnet Pipelines (TPL).
- Specialist Units:
 - Transnet Capital Projects (TCP)
 - Transnet Property
 - Transnet Foundation

The above operating divisions focus on the operational aspects of Transnet's business, while TCP undertakes the development of new infrastructure. TCP manages the implementation and roll-out of mega infrastructure projects.

1.3 PROJECT MOTIVATION AND NEED

According to Geoscience Australia (2012), Manganese is classed as the twelfth most abundant element in the Earth's crust. Manganese is generally found in several minerals, however, pyrolusite (MnO_2) and rhodochrosite ($MnCO_3$) are considered to be the predominant Manganese minerals (Geoscience Australia, 2012). The International Manganese Institute (2012) notes that in terms of tonnage, Manganese is the fourth most used metal after iron, aluminium and copper.

Manganese is predominantly utilised in the production of iron and steel, however it is also a significant component in the manufacturing of dry cell batteries, as a trace nutrient in plant fertilizers and animal feeds, and for colouring ceramics and glass (Geoscience Australia, 2012; United States Geological Survey (USGS), 2012). In addition, Manganese Ore is used indirectly for the upgrading of ore to ferroalloys (USGS, 2012). Suitable substitutes for Manganese within its various applications do not exist (International Manganese Institute, 2012; USGS, 2012), thereby making Manganese an important mineral.

On a global scale, Figure 1.3 below illustrates the percentage of Manganese Ore exported by major countries in 2009. Based on 2009 results, Australia exported the highest amount on Manganese Ore, followed by South Africa, Gabon and Brazil.

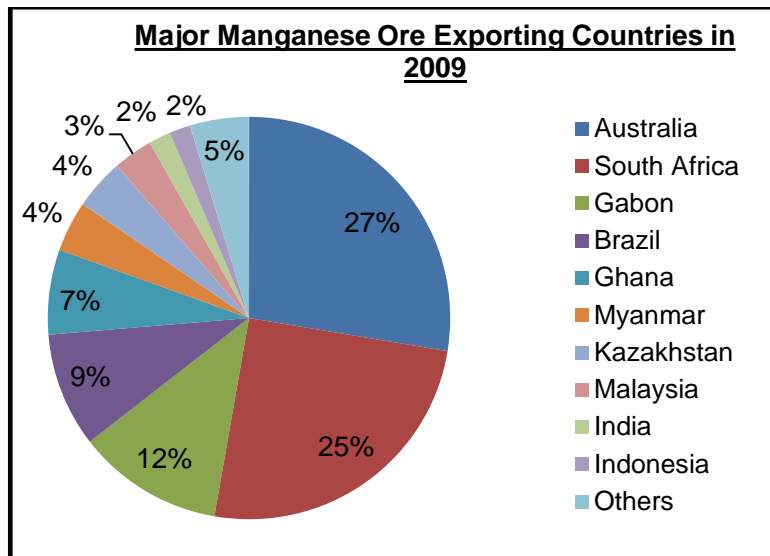


Figure 1.3: Major Manganese Ore Exporting Countries in 2009 (Data Source: International Manganese Institute, 2010).

In relation to the major African countries producing Manganese Ore, it is clear from Figure 1.4 below that South Africa produced the most Manganese Ore (wet tons) over a 10 year period extending from 2001 to 2010. South Africa therefore plays an important role in the Manganese Industry, and the demand for Manganese Ore is definitely present.

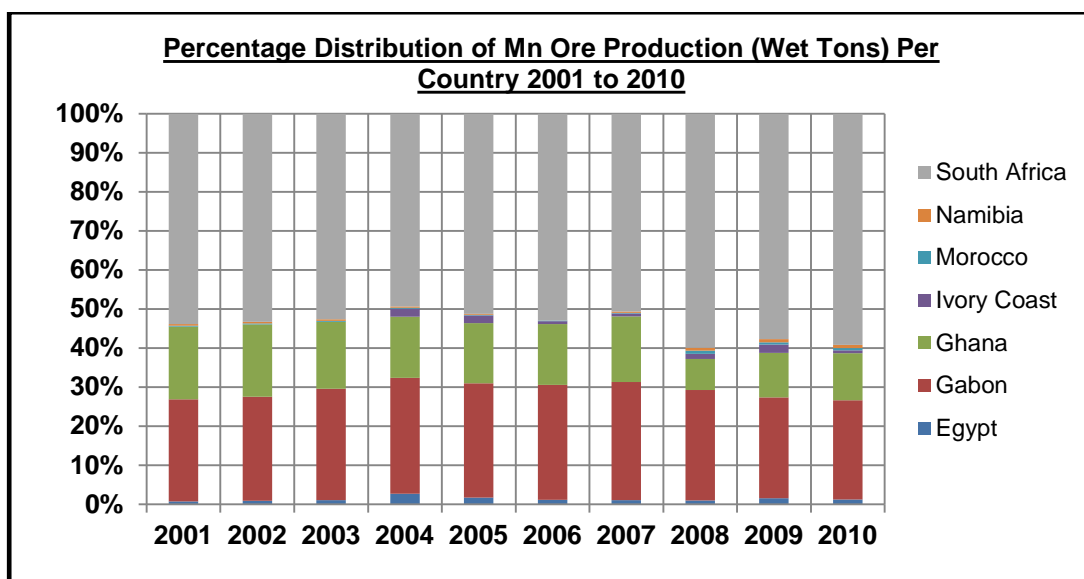


Figure 1.4: Percentage Distribution of Manganese Ore Production for the main African Countries from 2001 to 2010 (Data Source: International Manganese Institute, 2011).

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According to Transnet, the South African Manganese Industry is anticipated to experience a strong growth in export demand in the coming years, as illustrated in Figure 1.5 below. An audited Manganese Export Channel Allocation (MECA) process was conducted in 2009 and took into account the total market demand forecast over a period of ten years - reflected as the aggressive (MECA) demand graph. A subsequent process reduced demand to a more realistic “Revised Demand” when introducing qualifying factors such as mining readiness, readiness to respond to the Transnet operational requirements and overall financial stability across all participants. Despite the downward adjustment in demand, growth from South Africa remains buoyant. The projected global demand is just over 20 Mtpa of Manganese units by 2016, which at an average grade of 36% would equate to total production of 58Mtpa of Ore production (TCP, 2012).

This growth will be primarily driven by increasing global steel manufacturing as well as two secondary drivers, namely; a changing steel product mix to globally produce a greater percentage of higher grade steels, which in turn use higher grades of Manganese Ore, as well as China’s replacement of lower grade domestic ore resulting in a reduction in Chinese domestic production and global supply of lower grade Manganese by marginal producers such as Indonesia and Malaysia, who are high on the cost curve and cannot profitably sustain the exports of their low grade ores at the long term projected prices (TCP, 2012). Steel producers in Japan are also considered to generate a high demand for high grade Manganese Ore (TCP, 2008).

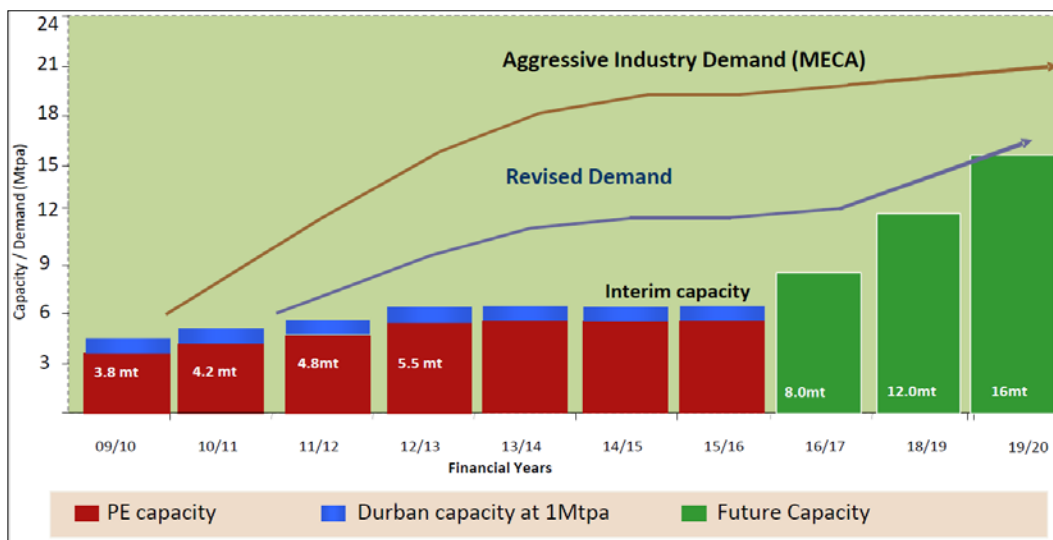


Figure 1.5: SA Manganese Export Demand

Reserves of low grade Ore with Manganese content less than 30% is abundant globally. Manganese reserves of medium to higher grade ores are mainly situated in the Southern Hemisphere, specifically Australia, Brazil, Gabon and South Africa, supplying over 90% of the international market (International Manganese Institute, 2012). South Africa alone represents more than 80 % of known world resources for Ore with Manganese content greater than 34 %. The remaining 20 % of known world resources of Manganese Ore is found in the Ukraine (9 %), Gabon (3 %), India (3 %), China (2 %), Australia (1 %), and other countries (3 %) (CES, 2010). Given the quality of reserves, the South African Manganese Industry is therefore considered to be uniquely positioned in order to capitalize on the

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projected growth in the Manganese sector (TCP, 2012). Apart from being classed as high grade, South African Manganese generally contains a low carbon content, which renders it ideal for crude steel production (Transnet, 2011c). South Africa is projected to be a potential major supplier of Manganese Ore in the future as many of the ore resources around the world are being depleted in both grade and tonnage (CES, 2010). The above factors, in addition to the fact that South African Manganese Ore contains minimal contaminants (particularly phosphorus); contribute to it being a preferred commodity on the international market (CES, 2010).

In South Africa, the Kalahari Manganese Basin contains a high concentration of Manganese mines producing predominantly higher grade ores, whilst smaller mining operations are dispersed around the Lohatla region, which contains outcrops of lower grade Manganese reserves. Figure 1.6 below depicts the current and new mines located in the Kalahari Basin, in close proximity to the town of Hotazel. Production costs vary across the respective mines, which is attributed to their mining activities such as low cost open-cast mining or high cost underground mining.

The adjacent table in Figure 1.6 below summarizes the unconstrained demand for South African Manganese Ore export capacity by producer with a total throughput of approximately 28 Mtpa. When considering global supply characteristics and long term price forecasts, a stable demand for approximately 16 Mtpa of Manganese Ore does exist. Exports of 16 Mtpa of Manganese Ore from South Africa represents nearly half (46%) of the projected global growth in Manganese demand to 2019.

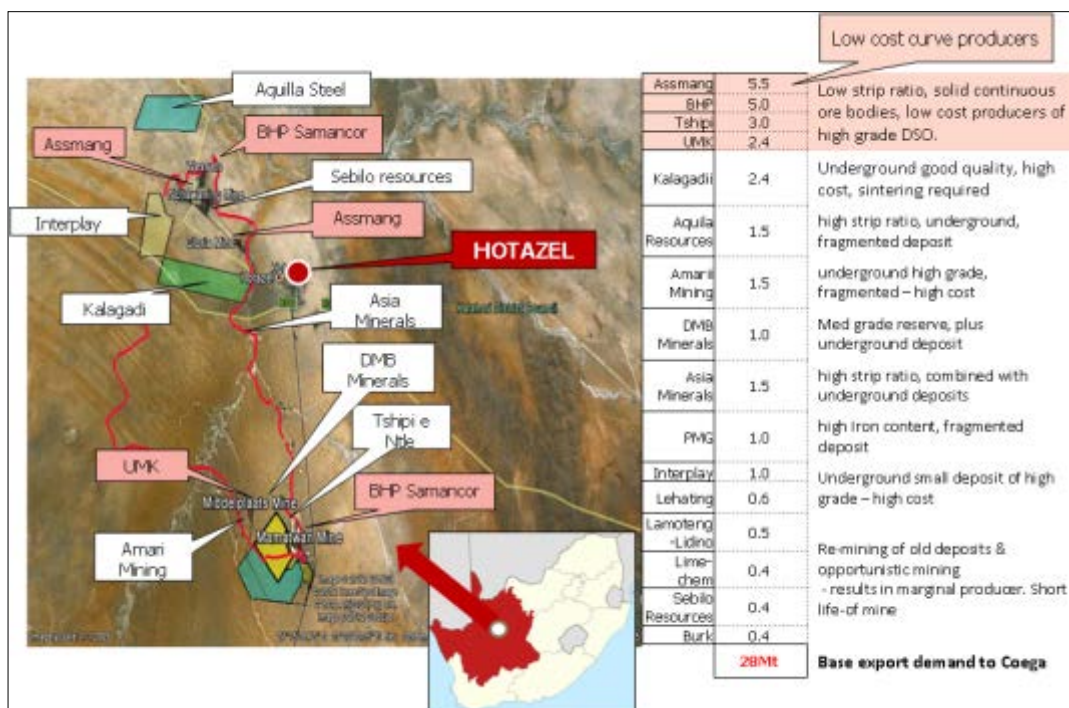


Figure 1.6: Manganese Mines in the Kalahari Basin and Demand security.



In line with the global uses, needs and demands for Manganese, the proposed Manganese Export Facility at the Port of Ngqura and Coega IDZ was therefore conceptualized based on the need to secure and enhance the Manganese export potential and concurrent supply to the international market. The proposed project is required to service the Manganese Mining Sector in South Africa in terms of exporting and future development, as well as to provide new mining companies with access to an efficient exporting facility. In line with this, the overarching objective of the proposed project is to increase the export volumes of Manganese Ore currently exported via the existing facility at the Port Elizabeth Harbour, which is capable of handling a throughput of 5.5 Mtpa. After making a commitment in Parliament in 2009, Transnet is planning to decommission the existing Manganese Facility at the Port Elizabeth Harbour once the proposed new Manganese Facility at the Port of Ngqura is ready to operate. This impending decommissioning also forms motivation towards the construction of a new Manganese Export Facility at the Port of Ngqura, Coega IDZ and adjacent property, i.e. Remainder of Farm Tankatara Trust 643 in order to maintain the revenue stream for the South African and Eastern Cape economy.

1.3.1 Needs and Desirability

It is an important requirement in the EIA process to review the need and desirability of the proposed project. Draft guidelines on "Need and Desirability" were published in the Government Gazette of 5 October 2012, for comment. These draft guidelines list specific questions to determine need and desirability of proposed developments. While this is not yet a strict requirement at the national level (i.e. Guidelines still in draft format), this checklist (Table 1.1) is a useful tool in addressing specific questions relating to the need and desirability of the project and will assist in explaining that need and desirability at the provincial and local context. The Department of Environmental Affairs and Development Planning (DEADP) in the Western Cape published similar guidelines in October 2011.

Table 1.1: DEA list of 14 questions (Draft guidelines, 5 October 2012) to determine the 'Need and Desirability' of a proposed development – Manganese Export Facility

<p>NEED ('timing')</p> <p>1. Is the land use (associated with the activity being applied for) considered within the timeframe intended by the existing approved Spatial Development Framework (SDF) agreed to by the relevant environmental authority? (i.e. is the proposed development in line with the projects and programmes identified as priorities within the credible IDP?)</p> <p>Answer: Yes</p> <p>Justification: The Integrated Development Plan (2006 -2011) of the Nelson Mandela Bay Municipality identifies five major performance areas, namely:</p> <ul style="list-style-type: none"> • Basic Service Delivery and Infrastructure Development, • Local Economic Development, • Municipal Transformation and Organisational Development, • Municipal Financial Viability and Management, and • Good Governance and Public Participation. <p>It is worthy to note that the proposed Manganese Export Facility could assist with infrastructure development and local economic development. Infrastructure development here refers primarily to increasing the capacity of the railway line servicing the IDZ. The secondary effect of an influx of job seekers and employees will also assist in creating a demand for additional infrastructure and services. It is safe to assume that the tax-base of the NMBM will grow (due to local job and revenue creation) commensurate with such additional demand, thereby providing the necessary income to finance infrastructure development. Local Economic development is anticipated to result from job creation and</p>
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increased revenue (resulting from the development of the manganese terminal) within the municipal boundaries of NMBM.

In addition, the Nelson Mandela Bay Municipality (NMBM) Spatial Development Framework (SDF) (dated March 2009) identifies the Coega IDZ and Port of Ngqura as one of the major development projects within the Municipality, which is aimed at increasing local development and investment. The Coega IDZ is the first IDZ to be established in South Africa and it is aimed at becoming one of the world's key manufacturing sectors (CSIR, 2002). An EIA was carried out for the establishment of the IDZ which assessed the impacts associated with changing the land use from agriculture to industry (CSIR, 2002). Authorisations to construct the Port of Ngqura and Coega IDZ were granted in 2002 by the National Department of Environmental Affairs and Tourism (CSIR, 2002).

Based on the above, it is clear that the Coega IDZ is an area that is authorised and designated for large industrial developments (CES, 2010), such as the proposed Manganese Export Facility. In addition, the Coega IDZ and Port of Ngqura is catered for in the NMBM Spatial Development Framework (March, 2009).

2. Should development, or if applicable, expansion of the town/area concerned in terms of this land use (associated with the activity being applied for) occur here at this point in time?

Answer: Yes

Justification: Development of the proposed activity would not result in an expansion of the nearby town (Port Elizabeth). The development of a modern Manganese Export Facility designed in line with recent environmental standards and applicable engineering specifications appears to address the need for local economic development. In addition, the proposed project will generate benefits to the national economy, as well as that of the Eastern Cape province. It will also positively influence the longevity and growth of manganese ore mines in the Kalahari Basin. In terms of the timing of the project, the proposed Manganese Export Facility will need to occur at this point in time considering that Transnet made a commitment in Parliament in 2009 to decommission the existing Manganese Facility at the Port Elizabeth Harbour. This impending forms motivation towards the construction of a new Manganese Export Facility.

3. Does the community/area need the activity and the associated land use concerned (is it a societal priority)? This refers to the strategic as well as local level (e.g. development is a national priority, but within a specific local context it could be inappropriate).

Answer: Yes

Justification: At a National level, the overall objective of the proposed project is to increase the export volumes of Manganese Ore currently exported via the existing facility at the Port Elizabeth Harbour. The proposed project is required to secure and enhance the Manganese export potential and supply to the international market. Based on this, the proposed project is likely to generate financial spin-offs for the NMBM and the Northern Cape as the mines are located in that area. At a local level, the decommissioning of the existing Manganese Terminal will offer an improved quality of life for the citizens of Port Elizabeth, and it will create alternative development potential for the property, which will contribute to the capacity of the NMBM (Olver, 2008).

4. Are the necessary services with adequate capacity currently available (at the time of application), or must additional capacity be created to cater for the development?

Answer: Partially

Justification: The existing service road will be used for the doubling of the railway line component of the project (except for a 1km section where the second railway will displace the existing service road). The necessary services (electricity and water supplies) will be provided by the CDC and NMBM (refer to Chapter 2, Sections 2.3.7, 2.3.8, 2.4.2 and 2.4.3 for more information).

5. Is this development provided for in the infrastructure planning of the municipality, and if not what will the implication be on the infrastructure planning of the municipality (priority and placement of services and opportunity costs)?

Answer: No



Justification: However, there is no anticipated negative impact on Municipal infrastructure planning (i.e. there will be no clash of priority development areas or land-uses) as additional infrastructure required to maintain the proposed activity would be provided and maintained by the applicant and/or CDC. The new power lines for the compilation yard are planned to be constructed by NMBM.

6. Is this project part of a national programme to address an issue of national concern or importance?

Answer: Yes

Justification: The need to secure Manganese Export potential, as well as finalise a strategy to achieve this, forms part of Transnet's five-year capital investment plan of R110,6 billion (Transnet, 2011b). The proposed project will address the issue of reaching an export volume of 16 Mtpa of Manganese Ore, which is of national importance, as described in the previous sections.

DESIRABILITY ('placing')

7. Is the development the best practicable environmental option for this land/site?

Answer: Yes, within reason

Justification: The proposed project will mainly take place within the Coega IDZ, which has been designated for large industries. In addition, the proposed project will be designed according to relevant national and international specifications and standards. It would be premature to decide on the overall environmental practicability of the proposed project prior to the completion of the impact assessment phase of this EIA process.

8. Would the approval of this application compromise the integrity of the existing approved and credible municipal IDP and SDF as agreed to by the relevant authorities?

Answer: No

Justification: The proposed activity appears to support the NMBM IDP through improving infrastructure development and local economic development. The manner in which the proposed development will contribute to these two IDP priority areas has been discussed in the preceding paragraphs.

9. Would the approval of this application compromise the integrity of the existing approved environmental management priorities for the area (e.g. as defined in EMFs), and if so, can it be justified in terms of sustainability considerations?

Answer: No (EMF not available)

Justification: The proposed project will be constructed and will operate in line with relevant national and international specifications and best practice procedures. The proposed project will also follow the guidelines and specifications compiled for tenants within the IDZ and Port of Ngqura, compiled by CDC and TNPA respectively. Based on this, it is anticipated that the environmental management priorities of the area will not be changed. The planning and layout of the proposed project infrastructure has been based on careful consideration of the environmental planning for the area, such as the Eastern Cape Biodiversity Conservation Plan (2007) and the Coega Open Space System (Revision 9 dated 2003), in order to avoid compromising the integrity of such planning priorities. Refer to Chapter 6 Terrestrial Ecology Specialist Study.

10. Do location factors favour this land use (associated with the activity applied for) at this place? (this relates to the contextualisation of the proposed land use on this site within its broader context)

Answer: Yes

Justification: The proposed project is mainly located in the Coega IDZ and Port of Ngqura, which contain an existing network of services that may become available to the proposed Manganese Export Facility. In addition, the proximity of the proposed Manganese Export Facility to a port is an essential and prevailing factor.

11. How will the activity or the land use associated with the activity applied for, impact on sensitive natural and cultural areas (built and rural/natural environment)?

The impact on sensitive natural vegetative areas was determined as part of the Terrestrial ecology specialist studies (refer to Chapter 6). Adequate mitigation measures have been provided in order to



reduce negative impacts on sensitive vegetative areas, where applicable. With this said, efforts have also been made to consider the sensitive Coega Open Space System in the design of the proposed project. The impact of the proposed activity on cultural areas is difficult to predict as value judgments on cultural resources are highly subjective. If applicable, issues such as this would be raised via the engagement of interested and affected parties during public meetings in order to determine ways in which the intrusion on the cultural landscape of the region can be minimised and mitigated. In addition, the heritage and visual impact assessment specialist studies cover this issue (refer to Chapter 14).

12. How will the development impact on people’s health and wellbeing (e.g. in terms of noise, odours, visual character and sense of place, etc)?

Health and Wellbeing The proposed project may lead to potential health and safety issues related to the emissions of PM₁₀ and VOCs. This has been assessed in the Air quality specialist study (refer to Chapter 5).

Noise It is anticipated that noise will be generated from the establishment of site construction areas and temporary workshops/storage areas, as well as during the construction phase from construction equipment and vehicles. Noise is also expected to be generated during the operational phase at the proposed compilation yard and from equipment such as the tippler, stacker and conveyors, and staff vehicles. However, the proposed project is located mainly within the Coega IDZ and should therefore not affect many residential areas. Assessment of potential noise impacts and related mitigation measures is included in the noise specialist study (refer to Chapter 12).

Odours These will be minimal during construction and operation.

Visual character and General Sense of place There will be impacts associated with the proposed project in terms of the sense of place and change in rural character of the surrounding landscape. This has been assessed in the Visual Impact Assessment study (refer to Chapter 13).

13. Will the proposed activity or the land use associated with the activity applied for, result in unacceptable opportunity costs?

Answer: No

Justification: The opportunity cost of not constructing the proposed facility would be the maintenance of the current status quo which consists of unoccupied developable industrial land and agricultural land with low economic yield.

14. Will the proposed land use result in unacceptable cumulative impacts?

Answer: No

Justification: The potential cumulative impacts connected to the proposed activity have been determined as part of the specialist studies (Chapters 5 to 14). Also refer to Chapter 17, Section 17.3 for a summary of most significant cumulative impacts. These studies identified existing and planned industries in the study area that could potentially give rise to cumulative impacts. Within the context of the existing planning, guidelines and approvals for the Coega IDZ and the Port of Ngqura, and the thresholds stipulated in relevant guidelines and standards (for example, for national air quality legislation), no unacceptable cumulative effects were identified in the EIA for the Manganese ore terminal.



1.4 REQUIREMENTS FOR AN ENVIRONMENTAL IMPACT ASSESSMENT

In terms of the EIA Regulations promulgated under Chapter 5 of the NEMA (Act 107 of 1998) published in GN R543, 544, 545 and 546 on 18 June 2010 and enforced on 2 August 2010 (as amended), a full Scoping and EIA Process is required for the proposed project. The need for a full Scoping and EIA is triggered by, amongst others, the inclusion of the following activity listed in GN R545 (Listing Notice 2):

1. “Physical alteration of undeveloped, vacant or derelict land for residential, retail, commercial, recreational, industrial or institutional use where the total area to be transformed is 20 hectares or more.”

Chapter 4 of this Draft EIA Report contains the list of activities contained in GN R544, 545 and 546 which may be triggered by the various project components and thus form part of this Scoping and EIA Process. These listed activities require authorisation from the relevant authority, which in this instance is the National Department of Environmental Affairs (DEA). The purpose of the EIA is to identify, assess and report on any potential impacts the proposed project, if implemented, may have on the receiving environment. The environmental assessment therefore needs to show the responsible authority, the DEA; and the project proponent, Transnet SOC Ltd, what the consequences of their choices will be in terms of impacts on the biophysical and socio-economic environment and how such impacts can be as far as possible enhanced or mitigated and managed as the case may be. In addition, the proposed project may result in the release of atmospheric emissions through its operations, thus requiring application for an Atmospheric Emission Licence (AEL) to be completed and submitted to the relevant AEL Authority, which in this case is the Nelson Mandela Bay Municipality (NMBM). The requirement of an AEL Application arises from conducting a listed activity in terms of Section 21 of the National Environment Management: Air Quality Act (NEM: AQA) (Act 39 of 2004).

The proposed project will also trigger certain listed waste management activities that have, or are likely to have, a detrimental effect on the environment in terms of the National Environmental Management: Waste Act (NEM: WA) (Act 59 of 2008). Based on this, an application for a Waste Licence was submitted to the relevant Authority, which in this case is the National DEA (refer to Appendix B).

In order to comply with the abovementioned legislation and regulations, a joint Scoping and Environmental Impact Assessment process has been conducted, integrating the application procedures for the Environmental Authorisation and for the AEL and Waste Licence Applications. The process is also designed to meet the requirements of the National Heritage Resources Act, 1999 (Act 25 of 1999).

In addition to the above, a Water Use Licence (WUL) is also required in terms of the proposed project. An application for the WUL will be submitted to the Department of Water Affairs (DWA), the relevant Authority, in terms of the National Water Act (Act 36 of 1998).

Chapter 4 includes more detail on the applications for the AEL, Waste Licence and WUL, as well as the listed activities which are applicable to the proposed project in terms of these applications.



1.5 EIA TEAM

The CSIR has been appointed by Hatch Africa on behalf of Transnet SOC Ltd to undertake the EIA and apply for the relevant authorisations required for this project. Public participation forms an integral part of the EIA Process and assists in identifying issues and possible alternatives to be considered during the EIA Process. The CSIR has therefore appointed Public Process Consultants (PPC) in a sub-contractor capacity to manage the Public Participation component of this EIA. The EIA team which is involved in the Scoping and EIA Process is listed in Table 1.2. This team includes the names of a number of specialists which have either been involved to date, or are planned to provide inputs during the EIA Process.

Table 1.2: EIA Team

EIA MANAGEMENT TEAM		
Paul Lochner	CSIR	Project Leader (EAPSA Certified)
Annick Walsdorff	CSIR	Project Manager
SPECIALIST TEAM		
Dr. Robin Carter	Lwandle Technologies	Marine Ecology Assessment
Jamie Pote	Private Consultant	Terrestrial Ecology (Particularly Vegetation)
Dr Brian Colloty	Scherman Colloty and Associates	Aquatic Ecology
Brett Williams	Safetech	Noise Impact Assessment
Henry Holland	Map(this)	Visual Impact Assessment
Philip De Souza	Emanti Management	Integrated Water Management Study
Julian Conrad	GEOSS	Groundwater Assessment
Dr. Mark Zunckel and Atham Raghundan Rietha Oosthuizen	Umoya-Nilu Consulting CSIR	Air Quality Assessment (including human health)
Pat Morant	CSIR	Avifauna Assessment
Dr. Johan Binneman	Eastern Cape Heritage Consultants	Archaeological Impact Assessment
Dr. John Almond	Natura Viva	Palaeontological Impact Assessment
PUBLIC PARTICIPATION PROCESS		
Sandy Wren	Public Process Consultants	Public Participation Process

1.6 DETAILS AND EXPERTISE OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONERS (EAP)

Over the past 30 years the CSIR has been involved in a multitude of projects across Africa and South Africa, with experience in 32 sub-Saharan African and Indian Ocean Island countries. The CSIR has been involved in the management and execution of numerous environmental projects and programmes for a range of both public and private sector clients and as a result CSIR staff offer a wealth of experience and appreciation of the environmental and social priorities and national policies and regulations in South Africa.

The Manganese Export Facility project EIA team is being led by Project Leader, Paul Lochner who will be supported by Project Manager, Annick Walsdorff (Refer to Appendix A for the Curriculum Vitae).



Paul Lochner - Paul has 19 years of experience in environmental assessment and management studies, primarily in the leadership and integration functions. This has included Strategic Environmental Assessments (SEA), EIAs and EMPs. He has been a certified Environmental Assessment Practitioner for South Africa (EAPSA) since July 2003; and has conducted several EIA processes both in South Africa and internationally. Examples include the SEA for Coega which provided the environmental framework for development within the IDZ and Port (1995), the EIA for the Jeffrey's Bay Wind Project proposed by Mainstream (2010), the EIA for the Electrawinds Wind Energy Project in the Coega IDZ (2011), the EIA for the Universal Wind project in the Coega IDZ (2012), the EIA for the Coega Aluminium Smelter (2002), the EIA for the Expansion of the Container Terminal and Construction of an Administration Craft Harbour at the Port of Ngqura for Transnet (2008), the EIA for Thesen Island at Knysna (1996), the EIA for Century City Wetlands in Cape Town (1996), the EIA for a resort development on Fregate Island in the Seychelles (1994), and the ESIA for a proposed Alumina Refinery at Sosnogorsk in the Komi Republic of Russia. In addition, Paul is also currently project leader on the EIA for the Coega Bulk Liquid Storage and Handling Facility proposed by Oiltanking Grindrod Calulo (OTGC), and the EIA for the proposed PhytoAmandla Biofuels facility in the Coega IDZ. He has also authored several Guidelines for national and provincial government, such as the Guideline for EMPs published in 2005 by the Western Cape government.

Annick Walsdorff - Annick has been involved with EIA project management (including contract and budget management, resources management, planning etc.) for various large development projects, quite recently involving an EIA for a large Manganese Mining Operation in Franceville, Gabon, for BHP Billiton Gabon. Annick also took part in the inception phase for the EIA for the Manganese Export Terminal and associated infrastructure at the Port of Ngqura, proposed by Transnet in December 2008. In 2008, Annick has been involved in the drafting of an EMP for the operation phase of the Berg River Dam (includes a new dam for water supply to the city of Cape Town) for TCTA. She actively participated in the EIA for the proposed desalination plant near Swakopmund for Namwater. She was also the Project Manager for a feasibility level oil spill response analysis for a refinery in Coega (2009) and currently manages a feasibility level oil spill analysis for a proposed tank farm in Saldanha Bay. In 2010, she conducted an environmental screening study for a proposed gas pipeline on the West Coast of South Africa for iGas. In addition, Annick managed an EIA for a proposed exploration drilling well in the Azobe Block, Port Gentil, Gabon (Tullow Oil Gabon) and for a proposed manganese mining operation in Franceville, Gabon (BHP Billiton). Annick has been affiliated with the International Association for Impact Assessment since 2009.

The EAP and Specialists Declaration of Interest forms can be found in Appendix A of the EIA Report.

1.7 OBJECTIVES OF THE DRAFT EIA REPORT

This EIA Report was preceded by a comprehensive scoping process that led to the submission of a Final Scoping Report (and Plan of study for the EIA) to the Department of Environmental Affairs (DEA) for approval on 03 September 2012. Approval of the Final Scoping Report was received on 15 October 2012 which marked the end of the Scoping phase (Appendix B), after which the EIA process moved into the impact assessment and reporting phase. For background on the scoping process, the reader is referred to the Final Scoping Report (CSIR, 2012).

The primary objective of this Draft EIA Report is to present the competent authority, the DEA, with a plan of study and an overview of the predicted impacts and associated management actions required to avoid or mitigate the negative impacts; or to enhance the benefits of the proposed project.



CHAPTER 1 – INTRODUCTION

In terms of legal requirements, a crucial objective of the EIA Report is to satisfy the requirements of Regulations 31, 32 and 33 of the NEMA EIA Regulations of 18 June 2010 which came into effect on 2 August 2010. These regulations regulate and prescribe the content of the EIA Report and specify the type of supporting information that must accompany the submission of the report to the authorities. An overview of where the requirements are addressed in this report is presented in Table 1.3 below.

Furthermore, this process is designed to satisfy the requirements of Regulations 55, 56 and 57 of the NEMA 2010 EIA Regulations relating to the public participation process and, specifically, the registration of I&APs and recording of submissions from interested and affected parties. All I&APs on the current database for this EIA (Appendix D) will be informed of the release of the Draft EIA Report for a 40-day comment period commencing on 16 April 2013. All comments received will be recorded and addressed in the Final EIA Report.

The Draft Environmental Management Plan (EMP) that is required as part of the EIA process (Regulation 33) is provided in Part B of this EIA Report.

Table 1.3: Summary of where requirements of an EIA Report (as defined in terms of Sections 31, 32 AND 33 of the NEMA EIA Regulations, 2010) are provided in this EIA Report

Section	Requirement for EIA Report	Where this is provided in this EIA Report
(2) (a) (i)	The EAP who compiled the report	Chapter 1, Appendix A
(2) (a) (ii)	The expertise of the EAP to carry out an environmental impact assessment	Chapter 1, Appendix A
(2) (b)	A detailed description of the proposed activity	Chapter 2
(2) (c)	A description of the property on which the activity is to be undertaken and the location of the activity on the property, or if it is:	Chapter 3 (overview), with more detail in Chapters 5 to 14
(2) (c) (i)	A linear activity, a description of the route of the activity	Not applicable
(2) (c) (ii)	An ocean-based activity, the coordinates where the activity is to be undertaken	Not applicable
(2) (d)	A description of the environment that may be affected by the activity and the manner in which the physical, biological, social, economic and cultural aspects of the environment may be affected by the proposed activity	Chapter 3 (overview), with more detail in Chapters 5 to 14
(2) (e)	Details of the public participation process conducted in terms of sub-regulation (1), including:	Chapter 4
(2) (e) (i)	Steps undertaken in accordance with the plan of study	Chapter 4
(2) (e) (ii)	A list of persons, organisations and organs of state that were registered as interested and affected parties	Appendix D
(2) (e) (iii)	A summary of comments received from, and a summary of issues raised by registered interested and affected parties, the date of receipt of these comments and the response of the EAP to those comments	Chapter 15
(2) (e) (iv)	Copies of any representation, objections and comments received from registered interested and affected parties	Appendices H & I
(2) (f)	A description of the need and desirability of the proposed activity	Chapter 1
(2) (g)	A description of identified potential alternatives to the proposed	Chapter 4



Section	Requirement for EIA Report	Where this is provided in this EIA Report
	activity, including advantages and disadvantages that the proposed activity or alternatives may have on the environment and the community that may be affected by the activity	
(2) (h)	An indication of the methodology used in determining the significance of potential environmental impacts	Chapter 4
(2) (i)	A description and comparative assessment of all alternatives identified during the environmental impact assessment process	Chapter 4
(2) (j)	A summary of the findings and recommendations of any specialist report or report on a specialised process	Chapter 16 and Summary
(2) (k)	A description of all environmental issues that were identified during the environmental impact assessment process, an assessment of the significance of each issue and an indication of the extent to which the issue could be addressed by the adoption of mitigation measures	Chapters 5 to 14
(2) (l)	An assessment of each identified potentially significant impact, including:	Chapters 5 to 14
(2) (l) (i)	Cumulative impacts	Chapters 5 to 14
(2) (l) (ii)	The nature of the impact	Chapters 5 to 14
(2) (l) (iii)	The extent and duration of the impact	Chapters 5 to 14
(2) (l) (iv)	The probability of the impact occurring	Chapters 5 to 14
(2) (l) (v)	The degree to which the impact can be reversed	Chapters 5 to 14
(2) (l) (vi)	The degree to which the impact may cause irreplaceable loss of resources	Chapters 5 to 14
(2) (l) (vii)	The degree to which the impact can be mitigated	Chapters 5 to 14
(2) (m)	A description of any assumptions, uncertainties and gaps in knowledge	Chapter 1 and Chapters 5 to 14 (for specialist studies)
(2) (n)	A reasoned opinion as to whether the activity should or should not be authorised, and if the opinion is that it should be authorised, any conditions that should be made in respect of that authorisation	Chapter 4, Chapters 5 to 14 and Chapter 16 (Conclusions and Recommendations)
(2) (o)	An environmental impact statement which contains	Chapter 16
(2) (o) (i)	A summary of the key findings of the environmental impact assessment	Chapter 16, Executive Summary
(2) (o) (ii)	A comparative assessment of the positive and negative implications of the proposed activity	Chapter 16 (Conclusions and Recommendations)
(2) (p)	A draft environmental management programme containing the aspects contemplated in regulation 33	Part B (EMP)
(2) (q)	Copies of any specialist reports and reports on specialised processes complying with regulation 32	Integrated into Chapters 5 to 14
(2) (r)	Any specific information that may be required by the competent authority	Not applicable
(2) (s)	Any other matters required in terms of sections 24 (4) (a) and (b) of the Act	Not applicable