CHAPTER 1:
INTRODUCTION

Contents

Tables & Figures

CHAPTER 1: INTRODUCTION

1.1 Background

Oiltanking Grindrod Calulo (PTY) Ltd (OTGC) is an independent bulk liquid storage provider in South Africa. The company is an amalgamation of the internationally renowned Oiltanking GmbH, as well as the locally based Grindrod South Africa (PTY) Ltd and Calulo Terminals (PTY) Ltd. Each of the aforementioned companies comprises several subsidiary companies. Oiltanking GmbH is a subsidiary of Marquard and Bahls AG, which is a leading privately owned petroleum company. Oiltanking GmbH owns and operates 69 terminals in 21 countries within Europe, North America, South America, India, Asia, and the Middle East. The Calulo Group is an investment group with interests in a range of business entities mainly in the petroleum, chemicals, and other oil and gas sector related activities. Grindrod South Africa (PTY) Ltd is a subsidiary of the Grindrod Freight Services Division which focuses on the transportation, storage and handling of dry liquid bulk commodities. OTGC specialises in developing, constructing, and operating liquid bulk storage terminals throughout South Africa.

In line with this, OTGC holds a primary objective to construct and operate a world class, highly efficient Bulk Liquid Storage and Handling Facility in Zone 8 of the Coega Industrial Development Zone (IDZ) in the Port of Ngqura, located approximately 15 km north-east of Port Elizabeth within the Nelson Mandela Bay Municipality (NMBM) in the Eastern Cape Province. The regional location of the Coega IDZ is illustrated in Figure 1.1 (Page 1-11). The proposed project will comprise a tank farm consisting of storage tanks with a total combined capacity of approximately 790 000 m^3 for both phases of the project, road and rail tanker loading gantries, pipelines extending between the tank farm and the berth(s), marine loading arms and other related infrastructure at the berth(s). The rail tanker loading gantry is included in the scope of work to ensure that the necessary equipment is provided to facilitate rail loading should it become necessary in the future. The rail tanker loading gantry will be constructed only if the demand arises. An overall phased approach will be adopted for the construction phase of the project. This phased approach will involve the initial construction of the inland components of the project such as the tank farm, followed by the construction of the remaining components in a seaward direction, such as the pipelines and berth infrastructure.

Furthermore, TNPA are planning to construct a new series of A-Berths on the eastern side of the Port and moving up the Coega River channel, as part of the Port of Ngqura expansion plans. Once the new A-series Berths are constructed, there will be a need to re-structure the port infrastructure in order to account for and make provision for the existing and future developments within the Port of Ngqura. Based on this concept, it is

intended that the new A-series Berths will be constructed with the overall objective to serve as a liquid bulk berth, whilst the existing Berth B100 will be earmarked to handle other materials. Further to this, the proposed A-series Berths will be situated closer to the tank farm, and will offer a more direct pipeline link to the tank farm as opposed to Berth B100. As such, it is anticipated that the land-side infrastructure associated with this Bulk Liquid Storage and Handling Facility may possibly be relocated from Berth B100 to the A-series Berths once they have been constructed. The impacts associated with the transfer of infrastructure from the existing Berth B100 to the proposed A-series Berths will also be assessed in this Environmental Impact Assessment (EIA).

In addition to the above, it must be pointed out that Transnet National Ports Authority (TNPA) will commission and undertake a separate EIA for the construction of the proposed A-series Berths. As a precautionary measure, it cannot be assumed or guaranteed that TNPA shall be granted Environmental Authorisation for the construction of the new A-series Berths. This therefore warrants the need to include both berth options (Berth B100 and A-series Berths) in the EIA for this project.

1.2 Project Motivation and Need

The Energy Security Master Plan (ESMP) for Liquid Fuels highlights the increase in demand for liquid fuels and the significance of security of supply to the economy of South Africa. The national ports' system plays a crucial role in the provision of port infrastructure to allow liquid fuels to be imported into the country; however, there are currently limited opportunities at existing South African ports to expand liquid bulk handling and storage facilities. Based on the assessed growth in demand for liquid fuels, the Port of Ngqura currently provides an opportunity to create additional liquid bulk handling and storage infrastructure within the national ports' system. Therefore, such a facility at the Port of Ngqura will provide necessary independent bulk liquid storage and handling services to the local market, as well as the international market via exporting. As a result, the proposed project will ensure that the economy of South Africa is improved by providing more efficient facilities of this nature, and it will ensure that the fuel requirements within South Africa are maintained and secured.

Furthermore, the construction of a new recognised, world-class Bulk Liquid Storage and Handling Facility in the Port of Ngqura will also serve as an alternative tank farm location in the Eastern Cape, considering that the existing tank farm at the Port Elizabeth Harbour is planned to be decommissioned. Moreover, the development of the proposed tank farm will ensure that the current fuel supply to the customers in the petroleum industry is secured, which will in turn maintain the income generated from this economically significant sector.

According to Olver (2008), the relocation of the tank farm from the Port Elizabeth Harbour to the Port of Ngqura will enhance the development of the Coega IDZ. In addition, it will

create alternative development potential once the tank farm is relocated, which will positively influence the economy of the Port Elizabeth area. The existing tank farm at the Port Elizabeth Harbour is in a poor condition which results in both environmental, visual and safety impacts. The relocation of the tank farm to the Coega IDZ will ensure that the quality of life of the citizens of Port Elizabeth is enhanced by improving the environmental quality, and it will enhance the value of current land assets along the coastline, which will contribute to the capacity of the NMBM (Olver, 2008).

It is important to mention that this EIA currently underway for the proposed Bulk Liquid Storage and Handling Facility in the Port of Ngqura is entirely independent to the EIA being undertaken for the decommissioning of the tank farm at the Port Elizabeth Harbour. Despite the planned decommissioning of the Port Elizabeth Harbour tank farm forming a small motivating factor for the development of the proposed Bulk Liquid Storage and Handling Facility in the Port of Ngqura, the two studies are independent and are being run separately. As a result, the concomitant impacts for the decommissioning of the Port Elizabeth Harbour tank farm will not be assessed in this project.

Why the Coega IDZ?

The proposed project will be located within Zone 8 of the Coega IDZ approximately 15 km north-east of Port Elizabeth, which is situated in the economically disadvantaged Eastern Cape Province. The Coega IDZ is a premier location for new industrial investments in South Africa. It covers an area of approximately 11 000 hectares of which approximately 8690 hectares is available for development. The Coega IDZ constitutes a phased development which is focused around industry clusters. The Coega IDZ has been divided into a total of 14 different zones. Sectors which have been identified for the IDZ consist of Automotive, Agro Processing, Metallurgical, Educational and Training, Petro Chemical, General Manufacturing, Business Process Outsourcing and Energy. The proximity of the IDZ to the newly established deep water Port of Ngqura, as well as major transport routes and other predominant development centres such as Johannesburg and Cape Town, creates a platform for global exports by attracting foreign and local investment in manufacturing, export orientated and other industries.

Zone 8 of the Coega IDZ is considered to be the most suitable area for the establishment of the proposed Bulk Liquid Storage and Handling Facility. Alternative locations further inland, outside of the IDZ were explored; however this option was deemed unfeasible due to the large capital costs associated with constructing longer pipelines, booster pumps and further servitudes (Olver, 2008). Therefore, considering that the location of the tank farm is largely governed by the proximity to the port, Zone 8 of the Coega IDZ (the Port Cluster) forms a suitable location in this regard. Considering the above, the relocation of the tank farm to the Coega IDZ is definitely warranted as it is an area designated and designed for industry and trade, as well as to improve the socio-economic livelihoods of the Eastern Cape citizens.

1.3 Requirements for an Environmental Impact Assessment and Atmospheric Emissions Licence

In terms of the Environmental Impact Assessment 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, a full Scoping and EIA process is required for the proposed project. The need for the full Scoping and EIA is triggered by, amongst others, the inclusion of the following activity listed in GN R545 (Listing Notice 2):

1. *"The construction of facilities or infrastructure for the storage, or storage and handling of a dangerous good, where such storage occurs in containers with a combined capacity of more than 500 cubic metres."*

Chapter 4 of this Final Scoping 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 Environmental Impact Assessment process. These listed activities require authorisation from the relevant authority, which in this instance is the Provincial Department of Economic Development, Environmental Affairs and Tourism (DEDEAT). 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 DEDEAT; and the project proponent, OTGC, 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 will result in the release of atmospheric emissions through its operations, and thus requires an application for an Atmospheric Emission Licence (AEL) to be completed and submitted to the relevant AEL Authority, which in this case is the 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). Chapter 4 includes more detail of the AEL process and the listed activities which may be applicable to the proposed project in terms of the AEL application.

In order to comply with the abovementioned legislation and regulations, a joint Scoping and EIA process will be conducted for the applicable listed activities and the AEL required.

1.4 EIA Team

The CSIR has been appointed by OTGC to undertake the EIA required for the project. Public participation forms an integral part of the environmental assessment 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 the EIA. The EIA team which is involved in the Scoping and full EIA process is listed in Table 1.1 below. 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 1.1: EIA Team

EIA MANAGEMENT TEAM		
Paul Lochner	CSIR	Project Leader (EAPSA) Certified
Ismail Banoo	CSIR	Project Manager (EAPSA) Certified
Rohaida Abed	CSIR	Project Consultant
SPECIALIST TEAM		
Alison Dehrman	Peak Practice	Oil Spill Contingency Plan Review
Dr. Robin Carter	Lwandle Technologies	Marine Ecology Assessment
Jamie Pote	Private Consultant	Terrestrial Ecology (Particularly Vegetation)
Michael Oberholzer	RisCom	Risk Assessment
Benton Pillay	Umoya-Nilu Consulting	Air Quality Assessment
Philip De Souza	Emanti Management	Integrated Water Management Study
Roy Bowman	SSI Engineers and Environmental Consultants	Traffic Impact Assessment
Dr. Johan Binneman	Eastern Cape Heritage Consultants	Heritage Impact Assessment: Archaeological Impact Assessment
Dr. John Almond	Natura Viva	Heritage Impact Assessment: Palaeontological Impact Assessment
PUBLIC PARTICIPATION PROCESS		
Sandy Wren	Public Process Consultants	Public Participation Process

1.5 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 OTGC Bulk Liquid Storage and Handling Facility project EIA team is being led by Project Leader, Paul Lochner who will be supported by Project Manager, Ismail Banoo (Refer to Appendix A for the CV's).

Paul Lochner - Paul has 19 years 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, the EIA for the Jeffrey's Bay Wind Project proposed by Mainstream, the EIA for the Electrawinds Wind energy project in the Coega IDZ, the EIA for the Coega Aluminium Smelter, the EIA for the expansion of the container terminal and construction of an administration craft harbour at the Port of Ngqura for Transnet, the EIA for Thesen Island at Knysna, the EIA for Century City Wetlands in Cape Town, the EIA for a resort development on Fregate Island in the Seychelles, and the ESIA for a proposed alumina refinery at Sosnogorsk in the Komi Republic of Russia. In addition, he is also currently busy with the EIA for the Coega Crude Oil Refinery for PetroSA. In 2002, he was the project manager for the EIA for the Coega Aluminium Smelter proposed by Pechiney (one of the largest EIA's conducted in the IDZ to date), which was approved by the Eastern Cape provincial environmental authorities in December 2002. In 2003, he prepared the Construction EMP for the proposed smelter and obtained authority approval for this EMP. He has authored several Guidelines, such as the Guideline for EMPs published in 2005 by the Western Cape government.

Ismail Banoo – Ismail Banoo has 12 years experience in environmental assessment and management studies. Ismail has been a certified environmental assessment practitioner for South Africa since January 2006. He holds a Master's degree in Environmental Science from the University of KwaZulu-Natal. His involvement in several industrial and port related Environmental Impact Assessments has afforded him an in-depth understanding of the sustainability issues facing development in South Africa and Africa. He was project manager for the EIA for the port expansion project at the Port of Ngqura within the Coega IDZ and is currently project manager for the EIA being conducted for a marine pipeline and servitude on behalf of the Coega Development Corporation. He has been involved in several private sector and development agency funded projects in South Africa, Botswana, Mozambique and Angola, and has participated in various international conferences and workshops. He has also facilitated numerous EIA/SEA training courses for universities as well as the private and public sector in South Africa and other African countries.

1.6 Objectives of the Final Scoping Report

The Scoping Phase of the EIA refers to the process of determining the spatial and temporal boundaries for the EIA. In broad terms, this involves three important activities:

- Confirming the process to be followed and opportunities for stakeholder engagement;
- Clarifying the project scope and alternatives to be covered; and
- Identifying the key issues to be addressed in the impact assessment phase and the approach to be followed in addressing these issues.

This is done through parallel initiatives of consulting with the lead authorities involved in the decision-making for this EIA application; consulting with the public to ensure that local issues are well understood; and consulting with the EIA specialist team to ensure that "technical" issues are identified. The scoping process is supported by a review of relevant background literature on the local area. Through this comprehensive process, the environmental assessment can identify and focus on **key issues** requiring assessment and identify **reasonable alternatives**.

The primary objective of the Final Scoping Report is to present key stakeholders (including affected organs of state) with an overview of the project and key issues that require assessment in the EIA Phase and allow the opportunity for the identification of additional issues that may require assessment.

Issues raised in response to the Draft Scoping Report have been captured in an Issues and Responses Trail which is included in this Final Scoping Report and Plan of Study for EIA. These documents will be submitted to the competent authority, the DEDEAT, for approval. This approval is planned to mark the end of the Scoping phase after which the EIA process moves into the impact assessment and reporting phase.

In terms of legal requirements, a crucial objective of the Final Scoping Report is to satisfy the requirements of Regulations 28 and 29 of the NEMA EIA Regulations. These sections regulate and prescribe the content of the Scoping Reports and specify the type of supporting information that must accompany the submission of the Scoping Report to the authorities. An overview of where the requirements of Sections 28 and 29 are addressed in this Final Scoping Report is presented in Table 1.2 (Page 1-10).

Furthermore, this process is designed to satisfy the requirements of Regulations 54, 55, 56 and 57 of the NEMA EIA Regulations relating to the public participation process and, specifically, the registration of and submissions from interested and affected parties.

In addition, Regulation 15 of the NEMA EIA Regulations describes the requirements that need to be fulfilled if the Applicant is not the owner of the land on which the activity is to be undertaken. This regulation stipulates that the Applicant must provide written notice to the Landowner, which provides information of the proposed project and the public

participation process. However, in this case, TNPA (the registered Landowner) undertook a tender process to appoint a suitable bidder (OTGC) to construct and operate the proposed Bulk Liquid Storage Facility for a 20 year period. Based on this, TNPA, are adequately aware of the proposed project, which renders Regulation 15 of the NEMA EIA Regulations not applicable in this particular case.

Table 1.2: Summary of where the various components of a Scoping Report (as defined in terms of Section 28 of the NEMA EIA Regulations) are provided in this Final Scoping Report

Section	Requirement for Scoping Report	Where this is provided in this Final Scoping Report
28 (1)(a)	Details of the EAP who prepared the report.	Chapter 1 and Appendix A
28 (1)(b)	Description of the proposed activity	Chapter 2
28 (1)(c)	Description of any feasible and reasonable alternatives	Chapter 4
28 (1)(d)	Description of the property and the location of the activity on the property.	Chapters 1 and 2
28 (1)(e)	Description of the affected environment	Chapter 3
28 (1)(f)	Identification of all legislation and guidelines considered for the preparation of Scoping Report	Chapter 4
28 (1)(g)	Description of environmental issues and potential impacts, including cumulative impacts	Chapter 6
28(1)(h)	Details of the public participation process	Chapters 4 and 5
28(1)(h)(i)	Steps taken to notify potential Interested and Affected Parties (I&APs) of the application	Appendix E and F
28(1)(h)(ii)	Proof of notice boards, advertisements and notices notifying potential I&APs	Appendices E, F and G
28(1)(h)(iii)	List of all persons or organizations identified and registered in terms of regulation 55 as I&APs	Appendix D
28(1)(h)(iv)	Summary of issues raised by I&APs, date received and response by EAP	Chapter 5
28(1)(i)	Description of the need and desirability of the proposed activity	Chapter 1
28(1)(j)	Description of identified potential alternatives to the proposed activity	Chapter 4
28(1)(k)	Copies of representations, objections and comments received in connection with application or Scoping Report	Appendix H
28(1)(l)	Copies of the minutes of meetings held by the EAP with I&APs and other role players	Appendix I
28(1)(m)	Responses by the EAP to representations, comments and views	Chapter 5
28(1)(n)	Plan of Study for EIA setting out the proposed approach to the EIA	Chapter 6
28(1)(n)(i)	Description of tasks undertaken as part of the EIA, including specialists reports and the manner in which tasks will be undertaken	Chapter 6
28(1)(n)(ii)	Indication of stages at which competent authority will be consulted	Chapter 6

Section	Requirement for Scoping Report	Where this is provided in this Final Scoping Report
28(1)(n)(iii)	Description of proposed method for assessing environmental issues and alternatives, including no-go alternative	Chapter 6
28(1)(n)(iv)	Particulars of public participation process to be conducted during EIA	Chapter 4 and 6
28(1)(o)	Specific information required by the competent authority	No specific information was required
28(1)(p)	Any other matters required in terms of Sections 24(4)(a) and (b) of the Act.	No other matters were required
28(2)	Guidelines applicable to the kind of activity which is the subject of the application	Chapter 4
28(3)	Detailed written proof of an investigation as required by 24(4)(b)(i) of the Act and motivation if no reasonable or feasible alternatives as contemplated in subregulation (1)(c) exist	Chapter 4
29(a)	Copies of representations, and comments received in connection with application or Scoping Report from I&APs	Appendix H
29(b)	Copies of the minutes of meetings held by the EAP with I&APs and other role players which record the views of the participants	Appendix I
29(c)	Any responses by the EAP to those representations, comments and views	Chapter 5

Next page/…

Figure 1.1: Location of the Coega IDZ outside Port Elizabeth in the Eastern Cape

Figure 1.1 Location of the Coega IDZ outside Port Elizabeth in the Eastern Cape