

Burgan Cape Terminals (Proprietary) Limited hereafter referred to as Burgan Oil, appointed Environmental Resources Management Southern Africa (Pty) Ltd, hereafter referred to as ERM, as independent Environmental Assessment Practitioners (EAPs) to undertake the Environmental Impact Assessment (EIA) process for the proposed development of an oil and fuel storage and distribution facility (the facility) at the Eastern Mole, Port of Cape Town, Western Cape.

1.1 PURPOSE OF THIS REPORT

Fundamental to an environmental assessment is the identification, prediction and evaluation of the actual and potential environmental consequences of an activity and the options for mitigation of negative impacts and enhancement of positive impacts (DEAT, 2003).

It is often possible to introduce measures to avoid, mitigate or compensate for many of the negative environmental impacts of storage facilities. It is important to identify these potential impacts early in the planning process in order to ensure that environmental impacts are avoided, minimised or mitigated (DEAT, 2003).

The objectives of this report are to:

- Communicate the results of the EIA for the proposed development;
- Ensure that the impacts identified during the EIA process are adequately addressed;
- Provide a record of comments and responses received from Interested and Affected Parties (I&APs) during the process; and
- Facilitate an informed, transparent and accountable decision-making process by the relevant authorities.

The initial Draft Environmental Impact Report (DEIR) was available for public comment (see *Section 1.5*). Comments and responses received during the 40 day commenting period were incorporated into the released Draft EIR Revision 2. These comments raised new issues not previously mentioned in comments made in the scoping phase of the project. These new issues required substantive responses, which took the form of amended or supplemented specialist studies. Comments and responses received during the released Draft EIR Revision 2 commenting period have been incorporated into this Final EIR and submitted to the relevant authority, namely, the

Department of Environmental Affairs and Development Planning (DEA&DP) to inform their decision on environmental authorisation.

1.2

BRIEF DESCRIPTION

Transnet National Ports Authority has identified the establishment of a coastal fuel storage facility on a portion of land measuring 30,452m² in the Port of Cape Town as a strategic business opportunity and released a tender for the establishment of such a facility (*Figure 1.1*). Burgan Oil was nominated as the preferred bidder and has subsequently been awarded the tender to develop the facility.

Burgan's objective is to be an industry leader in the field of oil and fuel storage and related services, through employing the best skills and ensuring the company has appropriate capital support to deliver a professional and "best practice" service to the South African Oil Industry.

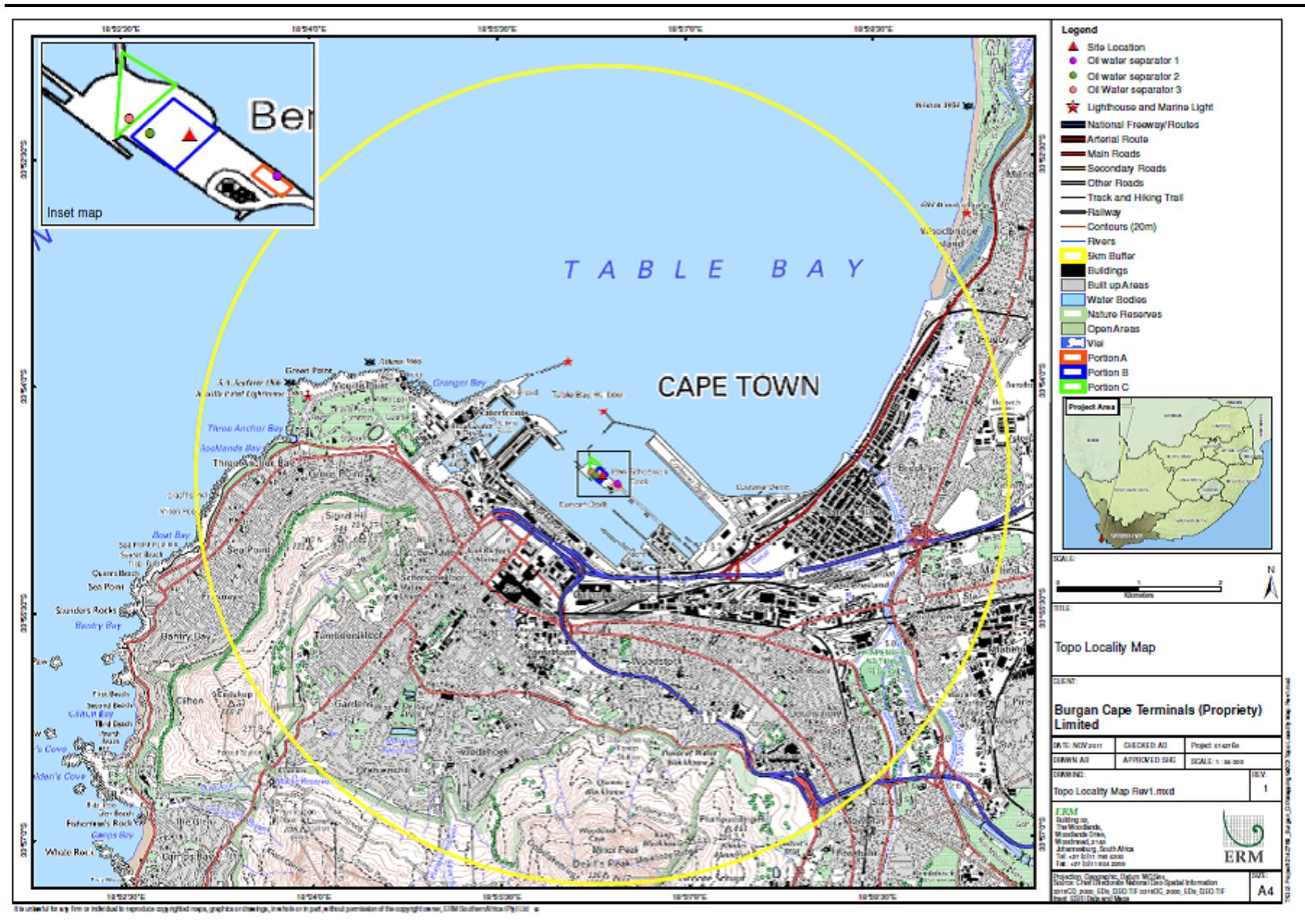
The proposed facility is expected to have a total working volume tank capacity of approximately 109,400m³ with the following tankage capacities:

- Diesel (AGO): 4 x 13,000m³ + 3 x 9,000m³ tanks
- Petrol (ULP): 3 x 9,000m³ tanks
- Ethanol: 1 x 1,700m³ service tank
- Bio Fame: 1 x 1,700m³ service tank

The associated drainage systems will consist of storm water, sewer and three oil-water separators.

Other on site infrastructure will include access roads, an office block, six bay road loading gantry, pump station, water reservoir and associated infrastructure. A detailed project description is described in *Chapter 4*.

Figure 1.1 Location of the Proposed Facility



1.3 *PROJECT PROPONENT*

Burgan Cape Terminals (Pty) Ltd is an independent South African oil storage and distribution company that provides fuel storage solutions to a range of petrochemical companies.

Registered Address:

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1.4 *DETAILS OF ENVIRONMENTAL ASSESSMENT PRACTITIONER*

1.4.1 *ERM Southern Africa*

ERM was appointed by Burgan Oil to undertake the EIA for the proposed establishment of a coastal oil and fuel storage facility on a portion of land measuring 30,452m² in the Port of Cape Town. ERM and the specialists appointed by ERM during the course of this EIA have no financial ties to nor are they a subsidiary, legally or financially, of Burgan Oil. Remuneration for the services by the Applicant (Burgan Oil) 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 4700 consultants 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. Our 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, Durban and Maputo. The Southern African Operating Company has a staff complement of over 180 dedicated environmental professionals offering expert skills in EIA, Environmental Management Plans (EMPs), Environmental Management Systems (EMSs), risk assessment, Environmental, Health and Safety (EHS) management and auditing, corporate social responsibility and socio-economic impact assessment, climate change services, specialist groundwater services as well as contaminated site management.

1.4.2

Project Team

The project team will include ERM consultants and support staff and external specialists. Details of ERM's core project team are provided below.

Table 1.1 *ERM Core Project Team*

Partner in Charge	Stuart Heather-Clark BSc Civil Eng (Hons), MPhil Environmental and Geographical Science, Registered EAPSA Practitioner
Principal Consultant	Tania Swanepoel B.Sc (Hons) (Geology); B.Sc (Hons) (Engineering & Env Geology)
Project Manager	Dean Alborough MSc Environmental Science and Biotechnology, University of Cape Town
Project Consultant	Stefan Milandri MSc Environmental Management
Facilitator	Liza van der Merwe BA (Hons) Development Studies, BA Development Studies, Sociology, Business Psychology

The Partner in Charge, Stuart Heather-Clark, is a certified environmental assessment practitioner and the project has been and will be conducted in terms of the code of ethics promulgated by the Certification Board for Environmental Assessment Practitioners of South Africa (EAPSA), which includes a requirement for independence. Stuart has overall responsibility for the team and delivery of the EIA study. Stuart has more than 18 years' experience in the field of Impact Assessment in South Africa, and is the Practice Leader for the Impact Assessment and Planning Team in ERM Southern Africa.

Tania Swanepoel is a Principal Consultant in the Impact Assessment and Planning team based in Cape Town, South Africa. Tania has over 16 years of broad based environmental experience. In the last seven years Tania has focused predominantly on environmental permitting projects in South Africa. She therefore remains abreast of legislation revisions in South Africa enabling her to provide ERM's multinational clients with *ad hoc* advice and guidance with regards to South African environmental and waste management legislation.

The Project Manager, Dean Alborough is a Senior Consultant with more than five years direct experience in integrated environmental management, having worked on projects in the oil and gas, renewable energy and mining industries, and more than seven years' experience in Environmental Science. His work experience has included ESIA's, EIA's, EMP's, environmental auditing and risk assessments.

Stefan Milandri is a consultant within ERM’s Impact Assessment and Planning (IAP) team based in Cape Town, South Africa. Stefan has a background in Environmental Management and Horticulture and obtained an MSc in Environmental Management from the University of Cape Town. His research focused on the design of environmentally sustainable systems, and involved a large-scale experiment which tested the ability of vegetation (biofilters) to treat polluted urban runoff. Prior to that, Stefan completed a BSc (Hons) in environmental management focusing on environmental and social management processes, environmental law, conflict resolution, water demand management and GIS. During the course of his studies, Stefan published three papers in accredited journals. Since joining ERM, Stefan has been involved in on- and off-shore oil and gas projects, and renewable energy projects, including a scoping report for the Mulungushi Hydropower Plant in Zambia, and the Environmental Impact Assessment Report for a Solar Power Plant in South Africa.

Liza van der Merwe is a Principal Consultant based at the ERM Southern Africa Cape Town office. Liza is part of the Southern Africa Impact Assessment Planning team. She has more than 23 years of consultancy experience and provides specialist land acquisition and resettlement support as well as stakeholder engagement experience in the environmental and social impact assessment process to ensure sustainable project development. In recent years Liza focussed her attention on extensive stakeholder engagement with project affected land owners as well as developing land acquisition, resettlement and compensation strategies on mega-infrastructure projects for clients in mining, petroleum and water supply industries in South Africa. Her approach is characterised by integrated objectives based planning and implementation within the broader project context.

1.4.3 *Specialists*

Specialist studies identified during the Scoping Phase and EIA Phase were undertaken to assist in assessing the potential impacts associated with the Project. Specialist’s details are provided in *Table 1.2* below.

Table 1.2 *Specialist studies and specialist qualifications*

Specialist Study	Name and Organisation	Qualifications
Traffic Impact Assessment	Bernard Phillips Kantey and Templer	Masters in Transportation Planning & Engineering Bachelor of Architectural Studies Diploma in Civil Engineering Certificate in Business Communication
Economic Assessment	Hugo van Zyl Independent Economic Researchers	BSc., BCom. Honours (Economics), Mcom. (Economics), PhD. (Economics)

Specialist Study	Name and Organisation	Qualifications
Industry Assessment	Paul Buley Independent	BSc (Chem Eng) PMD UCT School of Business Management
Air Quality Impact Assessment	Demos Dracoulides DDA Environmental Engineers	Diploma in Mechanical Engineering, M.Sc. in Engineering and Energy Studies
Quantitative Risk Assessment	Tim Price and Gary McFadden ERM	BEng Honours (Chemical), MEng (Chemical)
Contaminated Site Assessment	Ken King ERM	BSc Honours (Geology), MSc (Geology)

Specialist reports and declarations of independence are included in *Annex F-J*.

1.5 COMMENTING ON THE EIR

The initial Draft EIR was made available for a 40-day commenting period to I&APs and commenting authorities in order to provide I&APs and commenting authorities with an opportunity to comment on any aspect of the EIA. A copy of the Draft EIR was also lodged at the City of Cape Town Central Public Library and made available on the Project website <http://www.erm.com/burganoil> for the 40-day commenting period.

The Draft EIR Revision 2 was made available for a 21-day commenting period to I&APs and commenting authorities in order to provide I&APs and commenting authorities with an opportunity to comment on any aspect of the EIA and in particular, on new information proved in response to comments received on the earlier version. Changes from the initial DEIR were underlined. A copy of the Draft EIR Revision 2 was also lodged at the City of Cape Town Central Public Library and made available on the Project website <http://www.erm.com/burganoil>.

This released Final EIR has been made available to I&APs for a 21-day commenting period and commenting authorities in order to provide I&APs and commenting authorities with an opportunity to comment on any aspect of the EIA. A copy of the Final EIR has been made available on the Project website <http://www.erm.com/burganoil>. Any comments should be forwarded to ERM by **12 September 2014** at the address, telephone/fax numbers or e-mail address shown below.

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1.6

STRUCTURE OF THIS REPORT

The structure of this EIR is presented in *Table 1.3* below:

Table 1.3 *Structure of the Environmental Impact Report*

Chapter	Contents
Chapter 1 Introduction	Contains a brief description of the proposed activity, the Project team and an outline of the report structure.
Chapter 2 Administrative Framework	Outlines the legislative, policy and administrative requirements applicable to the proposed development.
Chapter 3 Approach and Methodology	Outlines the approach to the EIA study and summarises the process undertaken for the Project to date.
Chapter 4 Project Description	Includes a detailed description of the proposed activities and the alternatives.
Chapter 5 Needs and Desirability	Describes the need and desirability of the Project.
Chapter 6 Biophysical Baseline	Describes the receiving biophysical baseline environment.
Chapter 7 Socio-economic Baseline	Describes the receiving socio-economic baseline environment
Chapter 8 Impact Assessment	Describes and assesses the potential impacts of the proposed development on the biophysical and socio-economic baseline, describes relevant mitigation measures and discusses decommissioning and cumulative impacts.
Chapter 9 Conclusions and Recommendations	Summarises the key findings of the EIA and provides recommendations for the mitigation of potential impacts and the management of the Project.
Chapter 10 References	Contains a list of references used in compiling the report and specialist studies.

In addition, the report includes the following annexures:

- Annex A:* Burgan Oil HSE Policy
- Annex B:* Photographs
- Annex C:* Public Participation Documentation
- Annex D:* Comments and Responses Report
- Annex E:* Authority Communications
- Annex F:* Air Quality Specialist Report
- Annex G:* Traffic Specialist Report
- Annex H:* Quantitative Risk Assessment Specialist Report
- Annex I:* Economic Specialist Report
- Annex J:* Contaminated Site Assessment
- Annex K:* Environmental Management Programme (EMPr)