



EIA REFERENCE NUMBER: E12/2/4/2-A2/75-3030/11
ENQUIRIES: Ms. M. Schippers
DATE OF ISSUE: 08 JUN 2015

The Director
Burgan Cape Terminals (Pty) Ltd.
1st Floor Hudson House
28 Hudson Street
CAPE TOWN
8001

Attention: Mr. S. W. van Zelst

Tel: (021) 431 1000
Fax: (021) 401 0501

Dear Sir

APPLICATION FOR ENVIRONMENTAL AUTHORISATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT NO. 107 OF 1998) AND THE ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS, 2010: THE PROPOSED BURGAN FUEL STORAGE AND DISTRIBUTION FACILITY AND ASSOCIATED INFRASTRUCTURE, ON ERF 174306, EASTERN MOLE, PORT OF CAPE TOWN.

With reference to your application for the abovementioned, find below the outcome with respect to this application.

ENVIRONMENTAL AUTHORISATION

DECISION

By virtue of the powers conferred on it by the National Environmental Management Act, 1998 (Act No. 107 of 1998) and the Environmental Impact Assessment Regulations, 2010 and the Environmental Impact Assessment Regulations, 2014 ("NEMA EIA Regulations") the competent authority herewith **grants environmental authorisation** to the applicant to undertake the listed activities specified in section B below with respect to the preferred layout alternative 3 described in the Environmental Impact Assessment Report ("EIAR") dated August 2014.

The granting of this environmental authorisation is subject to compliance with the conditions set out in section E below.

A. DETAILS OF THE APPLICANT FOR THIS ENVIRONMENTAL AUTHORISATION

Burgan Cape Terminals (Pty) Ltd.
c/o Mr. S. W. van Zelft
1st Floor Hudson House
28 Hudson Street
CAPE TOWN
8001

Tel: (021) 431 1000
Fax: (021) 401 0501

The abovementioned company is the holder of this environmental authorisation and is hereinafter referred to as "the applicant".

B. LISTED ACTIVITIES AUTHORISED

Government Notice No. R545 of 18 June 2010 –

Activity Number: 3
Activity Description:

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.

Activity Number: 5
Activity Description:

The construction of facilities or infrastructure for any process or activity which requires a permit or license in terms of national or provincial legislation governing the generation or release of emissions, pollution or effluent and which is not identified in Notice No. 544 of 2010 or included in the list of waste management activities published in terms of section 19 of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) in which case that Act will apply.

Activity Number: 24
Activity Description:

Construction or earth moving activities in the sea, an estuary, or within the littoral active zone or a distance of 100 metres inland of the high-water mark of the sea or an estuary, whichever distance is the greater, in respect of:

- (i) facilities associated with the arrival and departure of vessels and the handling of cargo;*
- (ii) piers;*
- (iii) inter- and sub-tidal structures for entrapment of sand;*
- (iv) breakwater structures;*
- (v) coastal marinas;*
- (vi) coastal harbours or ports;*
- (vii) structures for reclaiming parts of the sea;*
- (viii) tunnels; or*
- (ix) underwater channels;*

but excluding —

- (a) activities listed in activity 16 in Notice 544 of 2010,
- (b) construction or earth moving activities if such construction or earth moving activities will occur behind a development setback line;
- (c) where such construction or earth moving activities will occur in existing ports or harbours where there will be no increase of the development footprint or throughput capacity of the port or harbour; or
- (d) where such construction or earth moving activities takes place for maintenance purposes.

Activity Number: 26

Activity Description

Commencing of an activity, which requires an atmospheric emission license in terms of section 21 of the National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004), except where such commencement requires basic assessment in terms of Notice of No. R544 of 2010.

On 04 December 2014, the Minister of Environmental Affairs promulgated regulations in terms of Chapter 5 of the National Environmental Management Act, 1998 (Act No. 107 of 1998) ("NEMA"), viz, the Environmental Impact Assessment ("EIA") Regulations 2014 (Government Notice No. R. 982, R. 983, R. 984 and R. 985 in Government Gazette No. 38282 of 04 December 2014). Please note that these regulations came into effect on 08 December 2014. The activities listed below are the similarly listed activities in terms of the NEMA EIA Regulations, 2014.

Government Notice No. R984 of 04 December 2014 –

Activity Number: 4

Activity Description:

The development 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.

Activity Number: 6

Activity Description:

The development of facilities or infrastructure for any process or activity which requires a permit or licence in terms of national or provincial legislation governing the generation or release of emissions, pollution or effluent, excluding –

- (i) activities which are identified and included in Listing Notice 1 of 2014;
- (ii) activities which are included in the list of waste management activities published in terms of section 19 of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) in which case the National Environmental Management: Waste Act, 2008 applies; or
- (iii) the development of facilities or infrastructure for the treatment of effluent, wastewater or sewage where such facilities have a daily throughput capacity of 2000 cubic metres or less.

Activity Number: 28
Activity Description:

Commencing of an activity, which requires an atmospheric emission license in terms of section 21 of the National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004), excluding –

- (i) activities which are identified and included in Listing Notice 1 of 2014;*
- (ii) activities which are included in the list of waste management activities published in terms of section 19 of the National Environmental Management: Waste Act, 2008 (Act No.59 of 2008) in which case the National Environmental Management: Waste Act, 2008 applies; or*
- (iii) the development of facilities or infrastructure for the treatment of effluent, wastewater or sewage where such facilities have a daily throughput capacity of 2000 cubic metres or less.*

The abovementioned is hereinafter referred to as "the listed activities".

The applicant is herein authorised to undertake the following alternative related to the listed activities:

The proposed development will entail the construction of a fuel storage and distribution facility on Erf 174306, Eastern Mole, Port of Cape Town.

The proposed site is split into two Plots. Plot 1 will include the following:

- Loading gantries;
- Fire/foam pump station;
- Fire water/foam tank;
- An office block;
- A guard house;
- A 2.4m high security fence with a truck entrance/exit gates and emergency exits;
- A Vapour Recovery Unit;
- An oil water separator;
- Associated lighting; and
- Associated infrastructure.

Plot 2 will include the following:

- Three bunded storage areas;

Bund A:

3 x unleaded petrol ("ULP") storage tanks; and
3 x automotive gas oil ("AGO") storage tanks.

Bund B:
4 x AGO storage tanks

Bund C
1 x ethanol storage tank; and
1 x biofame storage tank.

- A road loading pump bay;
- A 2.4m high security fence;
- An aboveground fuel pipeline with a diameter of approximately 0.25m and approximately 900m in length;
- Associated lighting; and
- Associated infrastructure.

The proposed development will also include a fuel, fire protection and electrical system.

Existing access roads will be used to gain access to the site.

The proposed facility will have a total storage capacity of approximately 1 18 000m³. The footprint of the proposed development and associated infrastructure will be approximately 30 452m².

C. PROPERTY DESCRIPTION AND LOCATION

The listed activities will take place on Erf 174306, Eastern Mole, Port of Cape Town.

The SG 21 digit codes is: C01600070017430600000

Co-ordinates: 33° 54' 36.27" South
18° 26' 17.72" East

hereinafter referred to as "the site".

D. DETAILS OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER

ERM South Africa (Pty) Ltd.
c/o Mr. S. van den Berg
2nd Floor, Great Westerford
240 Main Road
RONDEBOSCH
7700

Tel: (021) 681 5400
Fax: (021) 686 0736

E. CONDITIONS OF AUTHORISATION

1. This environmental authorisation is valid for a period of **five years** from the date of issue. The holder must commence with the listed activities within the said period or this environmental authorisation lapses and a new application for environmental authorisation must be submitted to the competent authority, unless the holder has lodged a valid application for the amendment of the validity period of this environmental authorisation, before the expiry of this environmental authorisation. In such instances, the validity period will be automatically extended ("the period of administrative extension") from the day before this environmental authorisation would otherwise have lapsed, until the amendment application for the extension of the validity period is decided. The listed activities, including site preparation, may not commence during the period of administrative extension.
2. The listed activities, including site preparation, may not commence within 20 (twenty) calendar days of the date of issue of this environmental authorisation. In the event that an appeal notice and subsequent appeal is lodged with the competent authority, the effect of this environmental authorisation is suspended until such time as the appeal is decided.
3. The applicant must in writing, within 12 (twelve) calendar days of the date of this decision and in accordance with Regulation 10(2)–
 - 3.1. Notify all registered interested and affected parties of –
 - 3.1.1. the outcome of the application;
 - 3.1.2. the reasons for the decision as included in Annexure 1;
 - 3.1.3. the date of the decision; and
 - 3.1.4. the date of issue of the decision;
 - 3.2. Draw the attention of all registered interested and affected parties to the fact that an appeal may be lodged against the decision in terms of Chapter 7 of the Environmental Impact Assessment Regulations, 2010 detailed in section F below;
 - 3.3. Draw the attention of all registered interested and affected parties to the manner in which they may access the decision;
 - 3.4. Provide the registered Interested and Affected Parties with-
 - 3.4.1. the name of the holder (entity) of this Environmental Authorisation;
 - 3.4.2. the name of the responsible person for this Environmental Authorisation;
 - 3.4.3. the postal address of the holder;
 - 3.4.4. the telephonic and fax details of the holder;
 - 3.4.5. the e-mail address if any; and
 - 3.5. Publish a notice in the newspapers contemplated in Regulation 54(2)(c) and (d), and which newspaper was used for the placing of advertisements as part of the Public Participation Process, that –
 - 3.5.1. informs all interested and affected parties of the decision;
 - 3.5.2. informs all interested and affected parties where the decision can be accessed; and
 - 3.5.3. informs all interested and affected parties that an appeal may be lodged against the decision in terms of the National Appeal Regulations, 2014.

4. A minimum of seven (7) calendar days notice, in writing, must be given to the competent authority before commencement of construction activities.
 - 4.1. The notice must make clear reference to the site details and EIA Reference number given above.
 - 4.2. The notice must also include proof of compliance with the following conditions described herein:
Conditions: 2, 3 and 13.
5. The holder is responsible for ensuring compliance with the conditions by any person acting on his behalf, including an agent, sub-contractor, employee or any person rendering a service to the holder.
6. Any changes to, or deviations from the scope of the description set out in section B above must be accepted or approved, in writing, by the competent authority before such changes or deviations may be implemented. In assessing whether to grant such acceptance/approval or not, the competent authority may request such information as it deems necessary to evaluate the significance and impacts of such changes or deviations and it may be necessary for the holder to apply for further authorisation in terms of the applicable legislation.
7. The applicant must notify the competent authority in writing, within 24 hours thereof if any condition herein stipulated is not being complied with.
8. The draft Environmental Management Programme ("EMP") submitted as part of the application for environmental authorisation is hereby approved on condition that the following be included and must be implemented:
 - 8.1. An Oil Spill contingency plan and mitigation measures to minimise the potential impact on the marine environment and fauna in the event of an oil spill.
 - 8.2. An application for amendment to the EMP must be submitted to the competent authority if any amendments other than those mentioned above, are to be made to the EMP and this may only be implemented once the amended EMP has been authorised by the competent authority.
 - 8.3. The EMP must be included in all contract documentation for all phases of implementation.
 - 8.4. The updated EMP must be submitted to this Department for information purposes.
9. A copy of the environmental authorisation and the EMP must be kept at the site where the listed activities will be undertaken. Access to the site referred to in section C above must be granted and the environmental authorisation and EMP must be produced to any authorised official representing the competent authority who requests to see it for the purposes of assessing and/or monitoring compliance with the conditions contained herein. The environmental authorisation and EMP must also be made available for inspection by any employee or agent of the applicant who works or undertakes work at the site.
10. The applicant must submit an application for amendment in terms of Chapter 5 of the NEMA EIA Regulations, 2014 of the environmental authorisation to the competent authority where any detail or scope with respect to the environmental authorisation must be amended, added, substituted, corrected, removed or updated.

11. Non-compliance with a condition of this environmental authorisation or EMP may result in suspension of this environmental authorisation and may render the holder liable for criminal prosecution.
12. Notwithstanding this environmental authorisation, the holder must comply with any other statutory requirements that may be applicable to the undertaking of the listed activities.
13. The holder must appoint a suitably experienced Environmental Control Officer ("ECO"), or site agent for the construction phase of the proposed development to ensure compliance with the EMP and the conditions contained herein.
14. The storage facility and associated infrastructure must be installed and managed in accordance with the requirements of the Occupational Health and Safety Act No. 85 of 1993 (OHSA), the relevant SANS codes and Major Hazardous Installation ("MHI") Regulations and flammable-storage by-laws. The following proposed engineering design features that reduce risks must be implemented:
 - 14.1. A copy of the MHI Risk Assessment must be available on the site at all times for inspection by the relevant authorities.
15. Leak detection equipment must be installed in accordance with the relevant SANS codes.
16. During tanker delivery of fuel at the facility, the tanker driver must be present at all times during product off-loading. Should an incident occur an emergency cut-off switch must be used to immediately stop fuel delivery.
17. The Emergency Response Plan ("ERP") (dated October 2011) must be implemented. The following, *inter alia*, must be adhered to in this regard:
 - 17.1. This ERP must be updated as and when required, to ensure the relevant and/or required emergency response procedures are included;
 - 17.2. All staff must be provided with the necessary emergency response training;
 - 17.3. Staff must be regularly reminded of their respective roles in emergencies; and
 - 17.4. Relevant signage must be erected at the facility warning staff and visitors of the hazards in relation to the goods stored on site.
18. The Burgan Oil Cape Town Terminal Design Operating and Control Philosophy (dated 12 June 2014 and compiled by Fabri Consulting Engineers) as included in the EIAR must be implemented to reduce the risks associated with fuel spillage and overfilling of tanks.
19. The following mitigation measure as indicted in the Economic Specialist Report (dated July 2014 and compiled by Dr. H. van Zyl of Independent Economic Researchers) and the Fuel Sector Specialist Report (dated June 2014 and compiled by Mr P. Buley) must be implemented:
 - 19.1. The applicable requirements with respect to relevant legislation governing the import of fuel must be met.

20. Burgan Cape Terminals (Pty) Ltd. must ensure that effective stock inventory monitoring, recording and regular auditing will take place for the early identification of possible leaks and to keep a leak history for the site. Should any leaks be discovered, remediation of the pollution must take place immediately.
21. Dust suppression methods must be used to mitigate dust during the construction phase. No potable water must be used to mitigate dust nuisance. Alternative dust suppression methods (such as shade netting screens and/or straw stabilisation, etc.) must be implemented instead.
22. All noise and sounds generated during all phases of the proposed development must comply with the relevant SANS codes and standards.
23. Employment opportunities must be afforded to the local community (as far as possible) during the construction and operational phase of the proposed development.

F. APPEALS

Appeals must comply with the provisions contained in Chapter 7 of the NEMA EIA Regulations.

1. An appellant must –
 - 1.1. submit a notice of intention to appeal to the Minister, within 20 (twenty) calendar days of the date of the decision;
 - 1.2. submit the appeal within 30 (thirty) calendar days after the lapsing of the 20 (twenty) calendar days contemplated in regulation 60(1), for the submission of the notice of intention to appeal; and
 - 1.3. within 10 (ten) calendar days of having lodged the notice of intention to appeal, provide each person and organ of state registered as an interested and affected party in respect of the application, or the applicant, with –
 - 1.3.1. a copy of the notice of intention to appeal form; and
 - 1.3.2. a notice indicating where and for what period the appeal submission will be made available for inspection by such person, organ of state, or applicant, on the day of lodging it with the Minister, and that a responding statement may be made on the appeal within 30 (thirty) calendar days from the date the appeal submission was lodged with the Minister.
2. A person, organ of state or applicant who submits a responding or answering statement in terms of regulation 63 must within 10 (ten) calendar days of having submitted the responding or answering statement, serve a copy of the statement on the other party.
3. If the person, organ of state or applicant fails to meet a timeframe with respect to the requirements as detailed above, the person, organ of state or applicant must immediately submit a written explanation to the Ministry providing a concise explanation for the non-compliance.
4. All notice of intention to appeal and appeal forms must be submitted by means of one of the following methods:

By post: Western Cape Ministry of Local Government, Environmental Affairs and
Development Planning
Private Bag X9086
CAPE TOWN
8000

By facsimile: (021) 483 4174; or

By hand: Attention: Mr J. de Villiers
Room 809
8th Floor Utilitas Building, 1 Dorp Street, Cape Town, 8001

5. A prescribed notice of intention to appeal form and appeal form as well as assistance regarding the appeal processes is obtainable from the office of the Minister at: Tel. (021) 483 3721, E-mail Jaap.DeVilliers@westerncape.gov.za or URL <http://www.westerncape.gov.za/eadp>.

G. DISCLAIMER

The Western Cape Government, the Local Authority, committees or any other public authority or organisation appointed in terms of the conditions of this environmental authorisation shall not be responsible for any damages or losses suffered by the holder, developer or his/her successor in any instance where construction or operation subsequent to construction is temporarily or permanently stopped for reasons of non-compliance with the conditions as set out herein or any other subsequent document or legal action emanating from this decision.

Your interest in the future of our environment is appreciated.

Yours faithfully



MR. ZAAHIR TOEFY
DIRECTOR: DEVELOPMENT MANAGEMENT (REGION 1)

DATE OF DECISION: 08/06/2015

Copies to: (1) Mr. S. van den Berg (ERM South Africa (Pty) Ltd.)
(2) Ms. S. Hustwick (City of Cape Town)

Fax: (021) 686 0736
Fax: (021) 425 4448

FOR OFFICIAL USE ONLY:

EIA REFERENCE NUMBER:
NEAS EIA REFERENCE NUMBER:

E12/2/4/2-A2/75-3030/11
WCP/EIA/0000643/2011

ANNEXURE 1: REASONS FOR THE DECISION

In reaching its decision, the competent authority, *inter alia*, considered the following:

- a) This application was submitted in terms of the NEMA EIA Regulations, 2010, and was pending at the time of the promulgation of the Environmental Impact Assessment Amendment Regulations, 2014. Some of the listed activities herein authorised may not have been listed under the previous NEMA EIA Regulations, but are now listed in terms of the Environmental Impact Assessment Amendment Regulations, 2014. In accordance with Regulation 53(3) of GN No. R. 982, these activities may be authorised as if applied for.
- b) The information contained in the application form dated 01 September 2011 and received by the competent authority on 06 September 2011, the Scoping Report received by the competent authority on 07 June 2012, the EIAR dated August 2014 and received by the competent authority on 14 October 2014, the EMP submitted together with the EIAR and the additional information received on 12 March 2015 and 21 April 2015, respectively;
- c) The listed activities applicable in terms of the EIA Regulations (08 December 2014), and the assessment of the activities in the EIAR dated August 2014;
- d) The decision of the National Energy Regulator issued to Burgan Cape Terminals (Pty) Ltd. on 09 December 2014 for the construction and operation of the fuel storage and distribution facility.
- d) Relevant information contained in the Departmental information base, including, the Guidelines on Public Participation, Alternatives and Exemptions (dated March 2013);
- e) The objectives and requirements of relevant legislation, policies and guidelines, including section 2 of the National Environmental Management Act, 1998 (Act No. 107 of 1998);
- f) The comments received from interested and affected parties and the responses provided thereon, as included in the EIAR dated August 2014; and
- g) The site visit conducted on 03 June 2014 and attended by officials of this Department (Mr. Z. Toefy, Ms. T. Dreyer and Ms. M. Schippers); Mr. S. van den Berg and Mr. S. Heather-Clark of ERM South Africa (Pty) Ltd. and Mr. S. van Zelts (applicant).

All information presented to the competent authority was taken into account in the consideration of the application for environmental authorisation. A summary of the issues which, according to the competent authority, were the most significant reasons for the decision, is set out below.

1. Public Participation

The public participation process ("PPP") included, *inter alia*, the following:

- identification of and engagement with interested and affected parties;
- giving written notice to the owners of the land and owners and occupiers of land adjacent to the site where the listed activities are to be undertaken, the municipality and ward councillor, and the various organs of state having jurisdiction in respect of any aspect of the listed activities; and
- the placing of a newspaper advertisement in the 'Cape Times' on 29 September 2011, the 'Cape Towner' on 29 September 2011 and 'Die Burger' on 30 September 2011.

Concerns were raised during the public participation process with regard to the economic impact of the proposed development relating to:

- Potential impacts of the proposed development on the local fuel sector due to imports of fuel into Cape Town; and

- Potential impacts of the proposed development on existing fuel refining, storage and distribution facilities.

The Department is satisfied that the PPP that was followed met the minimum legal requirements.

Specific management and mitigation measures have been considered in this environmental authorisation and in the EMP to adequately address significant concerns raised.

2. Alternatives

Layout Alternatives

Various layout alternatives have been considered during the engineering design of the proposed facility. Three main layouts were investigated as well as the “no-go” alternative.

Layout Alternative 1

Layout alternative 1 entailed designing the layout of the tanks in accordance with the SANS 10089 requirements for fuel storage tanks which is less stringent in their requirements of safety distance between tanks. This would allow the distribution and storage facility to have a total storage capacity of 110 000m³. This alternative was not preferred as it will not allow for optimum storage capacity at the facility.

Layout Alternative 2

Layout alternative 2 entailed designing the layout of the tanks in accordance with the Transnet National Ports Authority Guidelines on fuel storage at the harbour. These guidelines are more conservative with their specifications of safety distances between tanks. The increase distances between the tanks would allow for the distribution and storage facility to have a total storage capacity of 78 000m³. This alternative was not preferred as it will not allow for optimum storage capacity at the facility.

Layout Alternative 3 (preferred alternative – herewith authorised)

Layout alternative 3 (drawing number VTTI-0105-2011 Plot 1 and VTTI-0105-2010 Plot 2) entailed designing the layout of tanks in accordance with the SANS 10089 requirements for fuel storage tanks (approved by the Transnet National Ports Authority). This layout will allow for the distribution and storage facility to have a total storage capacity of 118 000m³. Layout alternative 3 was preferred (SANS 10089 requirements for fuel storage tanks) since it is less stringent with respect safety distances between tanks and would therefore allow for greater storage capacity.

“No-Go” Alternative

The “no-go” alternative is the option of not implementing the proposed development. The preferred alternative will not result in unacceptable impacts and therefore the “no-go” alternative was not warranted.

3. Impacts, assessment and mitigation measures

3.1. Activity Need and Desirability

The proposed development is consistent with the City of Cape Town's Integrated Development Plan (2012-2017) and Spatial Development Framework (June 2011). The necessary services are available to cater for the proposed development. The industrial nature of the site and its location next to an existing fuel storage facility is consistent with the land use and current activities in the Port.

The proposed development will result in increased fuel storage infrastructure and additional opportunities for importing fuel thereby increasing security of supply. The proposed development will also facilitate access to cleaner fuels.

3.2. Environment

The proposed activity will be located adjacent to an existing tank farm located at the Port of Cape Town. The proposed site is located approximately 2km south-east of the Victoria & Alfred ("V&A") Waterfront and is primarily used for liquid bulk storage and further serves as a ship bunkering area. The installation of the new fuel storage and distribution facility is therefore in line with the current bulk storage and industrial use associated with this area of the harbour. The proposed site is however also located in close proximity to the Atlantic Ocean and the proposed development may have potential impacts on marine life and aquatic ecosystems due to potential fuel spills associated with the proposed development. With the implementation of effective management and mitigation measures prescribed in the EMP (herewith approved as part of the environmental authorisation) and the conditions of this environmental authorisation, the potential marine impacts are expected to be managed to acceptable levels.

3.3. Air Quality

The findings of the Air Quality Assessment Report (dated January 2014 and compiled by D. Dracoulides and A. Xu of DDA Environmental Engineers) as included in the EIAR, confirmed that the emissions of volatile organic compounds ("VOC's") associated with the fuel storage and distribution facility will fall below the National Ambient Air Quality Standards and will therefore not have a significant negative impact on the environment. The Air Quality Assessment Report also confirmed that with the installation of the Vapour Recovery Unit, the emitted quantities of VOC's as a result of the fuel storage and distribution facility will be reduced. As such, potential negative impacts on air quality will be reduced.

3.4. Risk/Health and Safety

According to the MHI Risk Assessment Report (dated August 2014 and compiled by Mr T. Price and Mr. P. Instone of ERM South Africa (Pty) Ltd.) the risks associated with the proposed development are hydrocarbon fires associated with pipework failures, hydrocarbon fires associated with tank failures, storage tank fires as a result of overfilling, vapour cloud explosions and flash fires.

The Risk Assessment concluded that the proposed development has the potential to adversely affect the health and safety of people working on-site and people off-site. The report further indicates that the individual risk of fatality posed by the proposed development can be considered tolerable if the measures proposed in the Burgan Oil Cape Town Terminal Design Operating and Control Philosophy (as included as Appendix F in the EIAR) are implemented. The applicant has provided a letter of commitment to implement the abovementioned Operating and Control philosophy. The implementation of the Operating and Control Philosophy has been included as a condition of this environmental authorisation.

The study further concluded that the proposed fuels storage and distribution facility will be considered a MHI in accordance with the MHI Regulations as the risks associated with the proposed fuels storage and distribution facility will extend beyond the site boundary. The study further indicates that the largest drivers for an incident are from Buncefield type overfilling incidents and recommended that industry best practises such as the Buncefield Incident Report recommendations be considered.

3.5. Socio Economic Impacts

The proposed development is expected to provide approximately 110-130 contract jobs during the construction phase and approximately 19 permanent jobs during the operational phase. According to the Economic Specialist Report (dated July 2014 and compiled by Dr. H. van Zyl of Independent Economic Researchers and Prof. A. Leiman of School of Economics, University of Cape Town), the proposed development is compatible with the relevant policies and plans relating to security of supply, the maintenance of strategic stocks, infrastructural needs, spatial and capacity planning at the port and the facilitation of greater competition. The proposed development will enhance security of supply of fuels to the region and direct fuel imports to Cape Town. The Fuel Sector Specialist Report (dated June 2014 and compiled by Mr P. Buley) further indicated that the proposed development will have a positive impact on the security of supply of fuel. As such, the impacts on the security of supply of fuels have been identified as being of moderate positive significance by the Economic and Fuel Sector Specialists. The Economic Specialist Report further indicates that the proposed development presents an opportunity to facilitate competition in the market for the storage and distribution of fuel.

The impacts on competitors including the associated socio-economic impacts and risks have been assessed by the Economic Specialist (Dr. H. van Zyl of Independent Economic Researchers). The impacts on competitors including associated socio-economic impacts and risks as a result of the proposed development were identified by the specialist as being of minor negative significance. The impacts on competitors including the associated socio-economic impacts and risks have been further considered by the Fuel Sector Specialist (Mr. P. Buley in the reports dated June 2014 and in the Addendum to the Fuel Sector Specialist Report dated 11 March 2015). The specialist identified the impacts on competitors as a result of the proposed development as being of minor negative significance should the mitigation measures contained in the specialist report be implemented. The mitigation measures provided will mitigate the potential impacts on competitors to acceptable levels.

3.6. Traffic Impacts

According to the Traffic Impact Statement (dated February 2014 and compiled by Kantey and Templer (Pty) Ltd.) traffic generated as a result of the proposed development will be insignificant in the context of the background traffic in the Cape Town Harbour and the surrounding road network. The proposed development will therefore not have a significant traffic impact on the surrounding area.

3.7. Heritage/Archaeological Impacts

A Notice of Intent to Develop dated 24 January 2012 was submitted to Heritage Western Cape ("HWC"). HWC in their comment (dated 30 January 2012) indicated that there is no reason to believe that the proposed development will impact on any heritage resources.

3.8. Soil and Groundwater Impacts

The construction phase of the proposed development may lead to contamination of groundwater as a result of fuel leaks from machinery, waste and effluent and the operational phase may lead to contamination of groundwater as a result of fuel pipeline leaks, faulty equipment and spills. Since the site is already transformed and fill material from other areas has been used to establish the port, the potential negative impacts on soil as a result of the proposed development will be insignificant.

With the implementation of effective management and mitigation measures prescribed in the environmental authorisation and the EMP, the potential impacts are expected to be managed to acceptable levels.

3.9. Visual Impact

The proposed site is located in the Port of Cape Town which constitutes an industrial area. The V&A Waterfront is located to the north-west and the lower Cape Town CBD and the suburb of Woodstock to the south-west of the proposed site with large scale road transport routes. Given that the broader landscape character of the proposed site comprises of industrial facilities and infrastructure, the potential visual impact associated with the proposed development has been identified as being of minor negative significance.

3.10. Impact Assessment and significance

- 3.10.1. The impact on air quality during the construction phase of the proposed development has been identified in the EAIR as being negligible post mitigation. Potential impacts will be mitigated by the implementation of the conditions of this environmental authorisation and the EMP.

The impact on air quality during the operational phase of the proposed development has been identified in the EAIR as being negligible post mitigation. Air quality impacts will be further mitigated by the implementation of the conditions of this environmental authorisation and the EMP.

- 3.10.2. The main hazards associated with the proposed development are fires and explosions, due to the flammability of the products to be stored on the site. The MHI Risk Assessment simulated a number of relevant incident scenarios that could occur during the operational phase of the project. This was done taking the prevailing meteorological conditions of the surrounding region into account.

The main mitigation objective is therefore to avoid or minimise the risk of an incident (i.e. fire or explosion) occurring from a leak or spill from the tanks or ancillary equipment at the proposed site. Although the MHI Risk Assessment concluded that the proposed development may adversely affect the health and safety of people working on-site and off-site, this impact has been identified as tolerable after mitigation. The proposed facility, equipment and associated infrastructure will be designed in accordance with the relevant SANS codes and standards. The potential impacts will be mitigated by the implementation of the conditions of the environmental authorisation and the EMP.

- 3.10.3. The socio-economic impact with respect to the improved security of supply of fuels to the Western Cape has been identified in the EIA as being of moderate positive significance.

The impact with respect to increased opportunities for competition as a result of the proposed development has been identified as being of moderate positive significance.

The impact on competitors as a result of the proposed development has also been assessed and has been identified in the EIA as being of minor to moderate negative significance post mitigation.

The proposed development will have both positive and negative socio-economic impacts, however the negative socio-economic impacts has been rated as being of minor significance. The potential negative impacts will be mitigated by the implementation of the conditions of the environmental authorisation.

- 3.10.4. Potential traffic impacts have been identified in the EIA as being negligible, since the traffic that will be generated as a result of the proposed development will be insignificant in the context of the background traffic in the Cape Town Harbour and the surrounding road network. A total of 10 tanker trips (per direction) are anticipated.

- 3.10.5. Potential groundwater contamination during the construction and operational phase of the proposed development has been identified in the EIAR as being of minor negative significance post mitigation. All concrete mixing will take place on an impervious surface, waste will be stored in designated temporary storage areas. Further, the tanks will be bunded and a drainage system will be installed to treat contaminated surface runoff. These impacts will be further mitigated by the implementation of the conditions of this environmental authorisation and the EMP.
- 3.10.6. The potential visual impacts associated with the proposed development have been identified in the EIAR as being of minor negative significance given the industrial nature of the proposed site and its location adjacent to an existing fuel storage facility.
- 3.10.7. The impact on the marine environment as a result of a potential fuel spill during product offloading has been identified in the EIAR as being of moderate-minor negative significance post mitigation. These impacts will be further mitigated by the implementation of the conditions of this environmental authorisation and the EMP.

National Environmental Management Act Principles

The National Environmental Management Act Principles (set out in Section 2 of the NEMA, which apply to the actions of all organs of state, serve as guidelines by reference to which any organ of state must exercise any function when taking any decision, and which must guide the interpretation, administration and implementation of any other law concerned with the protection or management of the environment), *inter alia*, provides for:

- the effects of decisions on all aspects of the environment to be taken into account;
- the consideration, assessment and evaluation of the social, economic and environmental impacts of activities (disadvantages and benefits), and for decisions to be appropriate in the light of such consideration and assessment;
- the co-ordination and harmonisation of policies, legislation and actions relating to the environment;
- the resolving of actual or potential conflicts of interest between organs of state through conflict resolution procedures; and
- the selection of the best practicable environmental option.

The development will result in both negative and positive impacts.

Negative Impacts include:

- Potential air quality impacts;
- Potential groundwater contamination;
- Potential marine impacts; and
- Health and safety risks.

The Department is satisfied that the negative impacts of significance will be addressed by the conditions contained in this environmental authorisation and the mitigation measures contained in the EMP.

Positive impacts include:

- Socio Economic benefits for the applicant;
- Expected socio economic benefits for the general Cape Town area;
- Expected employment opportunities during the construction and operational phase of the proposed development;
- The proposed development is expected to provide additional fuel security to Cape Town and the Western Cape;

- The proposed development will allow for additional fuel storage infrastructure;
- The proposed development will allow for direct fuel imports to Cape Town; and
- The proposed development will facilitate the storage of cleaner fuels.

In view of the above, the NEMA principles, compliance with the conditions stipulated in this environmental authorisation, and compliance with the EMP, the competent authority is satisfied that the proposed listed activities will not conflict with the general objectives of integrated environmental management stipulated in Chapter 5 of the National Environmental Management Act, 1998 (Act No. 107 of 1998) and that any potentially detrimental environmental impacts resulting from the listed activities can be mitigated to acceptable levels.

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