Updated Final Comments and Response Report

Proposed Liquid Bulk Storage Facility, Eastern Mole, Port of Cape Town, Western Cape

Burgan Cape Terminals (Propriety) Limited

DEA&DP Ref: E12/2/4/2-A2/75-3030/11

October 2014

www.erm.com
Updated Final Comments and Responses Report
This report is the Updated Final Comments and Responses Report compiled after the final public comment period for the Final Environmental Impact Report (FEIR). Table 1 below gives a summary of the key engagement steps in the public participation process of the EIA. Table 2 provides all the comments received during the FEIR comment period and responses for those comments.

**Table D1  Summary of Public Participation Process**

<table>
<thead>
<tr>
<th>Report</th>
<th>Date published for review</th>
<th>Comment period</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Draft Scoping Report</td>
<td>December 2011</td>
<td>December 2011 to 10 February 2012 (40 days)</td>
<td>All comments addressed in Final Scoping Report dated 2 May 2012.</td>
</tr>
<tr>
<td>Final Scoping Report</td>
<td>May 2012</td>
<td>2 May 2012 to 23 May 2012 (21 days)</td>
<td>All comments addressed in Initial Draft EIR dated March 2012.</td>
</tr>
<tr>
<td>Initial Draft EIR</td>
<td>March 2014</td>
<td>25 March to the 5 May 2014 (40 days)</td>
<td>All comments addressed in Draft EIR Revision 2 dated July 2014</td>
</tr>
<tr>
<td>Draft EIR Revision 2</td>
<td>July 2014</td>
<td>11 July to 6 August 2014 (26 days)</td>
<td>Public comment period extension request granted. All comments addressed in FEIR dated August 2014</td>
</tr>
<tr>
<td>FEIR</td>
<td>August 2014</td>
<td>22 August to 26 September 2014 (36 days)</td>
<td>Public comment period extension request granted. All comments addressed in this Updated Final Comments and Response Report dated October 2014</td>
</tr>
<tr>
<td>Meeting with Chevron</td>
<td>23 September 2014</td>
<td></td>
<td>Meeting undertaken as further engagement with Chevron as a key stakeholder.</td>
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</table>
### Table D2  Comments and Responses Received for the FEIR

<table>
<thead>
<tr>
<th>Issues/Comments Received</th>
<th>Commentator(s)</th>
<th>Source</th>
<th>Response from Project Team</th>
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</thead>
<tbody>
<tr>
<td>The section in the Final EIAR on potential impacts of unplanned events has also now included the potential impact on marine fauna. Burgan Oil’s Emergency Response Plan (ERP) is being updated in response to the Quantitative Risk Assessment and will include an oil spill contingency plan, making reference to the Department of Environmental Affairs: Oceans and Coasts oil spill contingency plans and TNPA oil spill emergency response plans, which should address our concerns. Cape Nature additionally recommends that the ERP must include, among other stakeholders, Cape Nature and SANCCOB (Southern African Foundation for the Conservation of Coastal Birds) as key stakeholders to be contacted as soon as possible in the case of an unplanned event occurring which could impact on avifauna. While such an unplanned event could result in a significant impact, Cape Nature is satisfied that the risk is sufficiently low and sufficient measures have been put in place to prevent an event occurring and to react and remediate in such a case. Kindly note that due to the fact that the proposed activity is in close proximity to the sea, it requires an authorisation in terms of National Environmental Act: Integrated Coastal Management Act (NEM: ICMA) (Act No. 28 of 2008). The competent authority to issue an authorisation for the proposed activity is Department of Environmental Affairs Branch: Oceans and Coasts. Please contact Ms. Natasha Baijnath Pillay at 021-819 2456 for further information.</td>
<td>Rhett Smart</td>
<td>Email 07 August 2014</td>
<td>The Emergency Response Plan will be updated to include Cape Nature and SANCCOB (Southern African Foundation for the Conservation of Coastal Birds) as key stakeholders to be contacted as soon as possible in the case of an unplanned event occurring which could impact on avifauna.</td>
</tr>
<tr>
<td>Kindly note that due to the fact that the proposed activity is in close proximity to the sea, it requires an authorisation in terms of National Environmental Act: Integrated Coastal Management Act (NEM: ICMA) (Act No. 28 of 2008). The competent authority to issue an authorisation for the proposed activity is Department of Environmental Affairs Branch: Oceans and Coasts. Please contact Ms. Natasha Baijnath Pillay at 021-819 2456 for further information.</td>
<td>Ms. T. Mmachaka</td>
<td>Letter 8 August 2014</td>
<td>The Department of Environmental Affairs Branch: Oceans and Coasts is currently an active I&amp;AP in the EIA process, and has provided comment on this EIA. Burgan Oil will liaise with the Department of Environmental Affairs Branch: Oceans and Coasts to ascertain any further permit requirements.</td>
</tr>
<tr>
<td>2. We refer to the Final Environmental Impact Report (“FEIR”) dated 22 August 2014 which Environmental Resource Management (“ERM”) made available for comment until 12 September 2014. The purpose of this letter is to seek ERM’s agreement to an extension of time for our client to provide comment on the FEIR, for reasons set out below.</td>
<td>RW Summers Smith.Ndlovu.Summers</td>
<td>Letter 9 September 2014</td>
<td>The stakeholder’s concerns have been previously noted. An extension until the 26 September 2014 was granted and communicated to all I&amp;APs, which was viewed as more than sufficient considering the already extended public participation</td>
</tr>
<tr>
<td>Issues/Comments Received</td>
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<td>3. Publication of the FEIR is part of an environmental impact assessment (&quot;EIA&quot;) process in terms of the National Environmental Management Act No. 107 of 1998 (&quot;NEMA&quot;) and the EIA Regulations promulgated in terms thereof (&quot;the EIA Regulations&quot;), in respect of an application by Burgan Cape Terminals (Pty) Ltd (&quot;Burgan&quot;) for environmental authorisation for the development of an oil and fuel storage and distribution facility (&quot;the proposed Burgan facility&quot;).</td>
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<td>process that this EIA has undertaken.</td>
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<td>4. Our client is a registered interested and affected party in the EIA process.</td>
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<td>5. In terms of NEMA and the EIA Regulations, the FEIR is required to be the conclusion of a thorough, objective and reasoned assessment by ERM of the proposed activity, and must do at least the following: 5.1. identify, predict and evaluate the positive and negative ecological, social and economic impacts associated with the proposed Burgan facility; 5.2. assess the need and desirability of the proposed Burgan facility, and comparatively assess its relative advantages and disadvantages; and 5.3. identify and assess alternatives to the proposed Burgan facility.</td>
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<td>6. Over the course of the EIA process, our client has consistently raised its concerns that the manner of assessment undertaken at various stages of the process did not appear to be set to meet these mandatory requirements.</td>
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<td>7. In particular, it is our considered view that in order for the FEIR to constitute a reasoned opinion as to whether the proposed Burgan facility should or should not be authorised, and if so, what conditions ought to be made in respect of that authorisation, the FEIR must reflect and be based on <em>inter alia</em> the following: 7.1. accurate data sets relating to both supply and demand data for the Cape Town fuel market; 7.2. the likely impact of the proposed Burgan facility on the sustainability of the Chevron refinery (which assessment would require having regard to actual Chevron refinery earnings and/or projected forecasts in refinery earnings); and 7.3. the likely impact on existing infrastructure and supply arrangements in Cape Town more generally.</td>
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<td>8. Most recently, our client provided ERM with a specialist review of the revised Draft EIR by PetroLogistics dated 6 August 2014 (“the PetroLogistics review”).</td>
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<td>9. Our client trusted that the PetroLogistics review would have finally alerted ERM to persistent material deficiencies in the assessment of the impact of the proposed Burgan facility and, therefore, to the need for accurate and additional information.</td>
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<td>10. Instead, it is apparent from the FEIR that it continues to rely primarily on the assessment reflected in the Fuel Sector Specialist Report by Mr. Paul Buley (“the Fuel Sector Report”), dated June 2014.</td>
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<td>11. This is despite the fact that the Fuel Sector Report expressly acknowledges that insufficient information was available to carry out the detailed evaluation requested by our client, and which we have advised our client is legally required.</td>
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<td>12. The Fuel Sector Report is based on preliminary, estimated figures which we are instructed our client provided to Mr. Buley in February 2014 which information was the best data set available at the time. This data illustrated the need for an in-depth assessment based on actual, accurate data sets. Additional data, which includes commercially sensitive information, was offered to ERM and appointed specialists on condition of confidentiality. The offer was not taken up.</td>
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<td>13. The FEIR now asserts that it “has considered relevant impacts and has done so to the level of detail appropriate to satisfy the requirements of the relevant legislation in order to provide adequate information on impacts”. Our client strongly disputes this assertion on the basis that an adequate and accurate assessment of impacts is impossible, or at the very least fundamentally flawed, if such assessment is premised on inaccurate and/or incomplete data.</td>
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14. In the circumstances, our client has been advised to commission PetroLogistics to provide a comprehensive review and assessment of the impact of the proposed Burgan facility on the Chevron refinery and the existing fuel station infrastructure and supply arrangements in Cape Town more generally, based on complete and accurate data sets provided by our client.

15. Our client is of the view that such an assessment is indispensable to a determination of the application for environmental authorisation based on all relevant and necessary information.

16. Our client is furthermore currently obtaining legal advice on the best manner in which to provide the competent authority with its commercially sensitive information while safeguarding its legitimate commercial interests.

17. We received confirmation today that the supplementary PetroLogistics report will only become available on 29 September 2014. Our client anticipates being in a position to provide its comments to the competent authority within five working days thereafter, on 7 October 2014.

18. In the circumstances, the 21 day period for comment on the FEIR by 12 September 2014 has unfortunately proven insufficient. Read with the Guideline on Public Participation, it is clear that the 21 day commenting period approved by the competent authority is to be regarded as the minimum period allotted for comment.

19. We are accordingly instructed to request, as we hereby do, that ERM agree to an extension of time for our client to provide its comment on the FEIR to the competent authority by no later than 7 October 2014.

20. In view of the importance of the issues to be addressed in the anticipated PetroLogistics supplementary report, our client’s ongoing engagement with ERM in the EIA process in an effort to ensure that all relevant information is taken into account, and the relatively short extension of time sought, we submit that the requested extension is reasonable in the circumstances and furthers the achievement of the objectives of NEMA and the EIA Regulations.
1. The study indicated that baseline characterisation of the terminal was conducted. However, the report does not provide details on the findings. Considering that there is an existing FFS Refiners Fuel Tank Farm adjacent to the terminal along with the Cape Town Bulk Storage facility and the Joint Bunker Services which are potential emitters of volatile organic compounds (VOCs). It is logical that values of existing air pollutants be measured and included in the baseline characterisation. The pollutant values obtained in the baseline characterisation must be considered into the air pollution dispersion model to demonstrate the cumulative impact of VOCs on the receiving environment. It should be noted that background sources are considered an essential element of the total air quality analysis when examining source impacts.

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<td>1. A recent environmental assessment, including in terms of air quality was undertaken by WSP Consultants on the FFS Refiners site. The findings of which have been incorporated in the analysis of potential cumulative impacts on air quality in Section 8.5.2 of the EIR. Findings of the FFS Refiners assessment were: ‘The only current South African ambient standard for hydrocarbons is the annual ambient limit value for benzene, set at 5µg/m³, plus the margin of tolerance (+5µg/m³) (which results in a target figure of 10 µg/m³). The concentrations at the harbour site were well within this threshold at 0.66 and 3.05µg/m³ at the two monitoring locations. The recorded values in the case of benzene show that the site is compliant with the annual ambient Limit Value as proposed in SANS1929:2005. The other VOC results were all considered low and thus do not pose a threat to human health nor to the surrounding environment.’ Therefore given the data recorded for the FFS Refiners site itself indicating a low potential impact on air quality, with the low potential impact on air quality as a result of the Burgan Oil facility and that the Port of Cape Town is already an industrial facility with bulk oil and fuel storage, the addition of the Project is unlikely to have significant cumulative impacts on air quality or human health risks. Additionally, a fence line monitoring programme has been stipulated in the EMPt (Annex K) of the EIR.</td>
<td>Kainos Hove Department of Environmental Affairs and Development Planning: Pollution Management</td>
<td>Fax 10 September 2014</td>
<td>1. The study indicated that baseline characterisation of the terminal was conducted. However, the report does not provide details on the findings. Considering that there is an existing FFS Refiners Fuel Tank Farm adjacent to the terminal along with the Cape Town Bulk Storage facility and the Joint Bunker Services which are potential emitters of volatile organic compounds (VOCs). It is logical that values of existing air pollutants be measured and included in the baseline characterisation. The pollutant values obtained in the baseline characterisation must be considered into the air pollution dispersion model to demonstrate the cumulative impact of VOCs on the receiving environment. It should be noted that background sources are considered an essential element of the total air quality analysis when examining source impacts.</td>
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<td>2. At completion and operation of the project, the installed vapour recovery unit's (VRU) collection efficiency must be verified by conducting measurements after the installation of the VRU unit, in order to confirm the assumed efficiency values. The report on the methodology used and measurements obtained must be submitted to the licensing authority. The frequency of submission of the report will be determined by the licensing authority. The City of Cape Town is the licensing authority for the application for an atmospheric emission licence and will provide final comments.</td>
<td></td>
<td></td>
<td>The EMPr will be updated to include the requirement of the verification of the VRU, with the verification report submissions to the licensing authority.</td>
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<td></td>
<td>J. Leaner</td>
<td>Letter</td>
<td>Noted.</td>
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<tr>
<td></td>
<td>Director: Poll...</td>
<td>12 September 2014</td>
<td>The existing EMPr (Annex K) of the EIR states that bunds will be 110% of the combined maximum volume of the stored materials.</td>
</tr>
<tr>
<td></td>
<td>Management Department of...</td>
<td></td>
<td>The EMPr will be updated to more specifically state these conditions. The EMPr does cater for hazardous waste management generally.</td>
</tr>
<tr>
<td></td>
<td>Environmental Affairs and...</td>
<td></td>
<td>The EMPr and Emergency Response Plan (ERP) will be updated to more specifically state these conditions.</td>
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<td>Planning: Pollution Management</td>
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<td></td>
<td>Management</td>
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<tr>
<td>Duty of care should be exercised in accordance with NEMA section 28 (Act 107 of1998) in order to avoid pollution;</td>
<td>J. Leaner</td>
<td>Letter</td>
<td>Noted.</td>
</tr>
<tr>
<td>As the planned quantity of stored material on site would be in the range of 109 400m³, it is important that all products must be stored in a bunded area with the bund having a volume of 110% to that of the combined maximum volume of the materials;</td>
<td></td>
<td>12 September 2014</td>
<td>The existing EMPr (Annex K) of the EIR states that bunds will be 110% of the combined maximum volume of the stored materials.</td>
</tr>
<tr>
<td>Materials spilled during transfers from tank to storage and decanted to vehicles should be regarded as hazardous waste. Spills must be contained using commercially available absorbent material. The fuel soaked absorbent material must be treated as hazardous waste and disposed to hazardous dump site in line with all regulatory requirements.</td>
<td></td>
<td></td>
<td>The EMPr will be updated to more specifically state these conditions. The EMPr does cater for hazardous waste management generally.</td>
</tr>
<tr>
<td>Containment and clean-up of incidents and the remediation of affected areas must commence immediately in accordance with NEMA Section 30 (1) (a) (National Environmental Management Act of 1998 (Act No. 1 07 of 1998)).</td>
<td></td>
<td></td>
<td>The EMPr and Emergency Response Plan (ERP) will be updated to more specifically state these conditions.</td>
</tr>
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<td>All spills of product into the soil or water courses used during the Construction or Operational phase must be reported to all relevant authorities, including D: PM, within 14 days. This requirement is in terms of Section 30 (1 0) of the National Environmental Management Act, No. 107 of 1998 (NEMA) and Section 20 (3) of the National Water Act No. 36 of 1998 (NWA) that pertains to the control of emergency incidents and should include the reporting;</td>
<td></td>
<td></td>
<td>The EMPr will be updated to more specifically state these conditions.</td>
</tr>
<tr>
<td>An leak detection system should be implemented to reduce the risk of pollution of leakages from pipelines;</td>
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<td></td>
<td>A leak detection system will be installed to reduce the risk of pollution from pipeline leakages, see Chapter 4 of the EIR.</td>
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<tr>
<td>From the contamination site report, it was ascertained that the soil is very permeable and hence contamination of the sea through interflow is possible should any spillages occur. Continuous ground water monitoring should therefore be done as mentioned in the EMP. The frequency of monitoring should be made clear in the EMP.</td>
<td></td>
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<td>As mentioned ground water monitoring is stated in the EMPr, with associated frequency.</td>
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<tr>
<td>Waste Management</td>
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<td>Material that was not used during the construction phase must be recycled or re-used</td>
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<td>The EMPr currently stipulated recycling and re-use requirements where possible and the required Waste Management Plan subplan will be updated to specifically include this requirement.</td>
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<tr>
<td>All hazardous waste must be stored in a demarcated area and disposed of using professional waste disposal contractors. All documents relating to volumes and type of waste must be kept on site for inspection;</td>
<td></td>
<td></td>
<td>See response above.</td>
</tr>
<tr>
<td>Due to the close proximity of the site to the sea, litter should be managed in such a way that windblown litter does not end up in the sea.</td>
<td></td>
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<td>See response above.</td>
</tr>
<tr>
<td>Water Management</td>
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<tr>
<td>Any storm water must be directed away from the site to prevent contaminated storm water spilling into the ocean.</td>
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<td>There will be a storm water management system used on site with the use of oily water separators as described in Chapter 4 of the FEIR.</td>
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<tr>
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<td>According to the application, a polluted water management system will be put in place. This will include a drainage system, sewer and three oil-water separators. Details pertaining to the maintenance of the system as well as the quality assurance around the discharge from the oil water separator should be made clear in the application.</td>
<td></td>
<td>The EMPr and the required Waste Management Plan as a subplan will specifically provide the details pertaining to the maintenance of the system as well as the quality assurance around the discharge from the oil water separator.</td>
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</tr>
<tr>
<td>The separated oil fraction must be treated as hazardous wastes and must be contained in and stored in an access controlled hazardous waste designated area.</td>
<td></td>
<td>Mr Dimitri Georgeades City of Cape Town: Air Quality Email 12 September 2014</td>
<td>ERM thanks the City of Cape Town: Air Quality for their engagement.</td>
</tr>
<tr>
<td>This Department has scrutinized the Final Environmental Impact Report (FEIR) dated 22 August 2014 sent to the Air Quality Management Department and has been noted the requirements that were submitted with the DEIR comments dated the 31 July 2014 have been included in the Final Environmental Impact Report (FEIR).</td>
<td></td>
<td>Email 26 September 2014</td>
<td>Noted. ERM thanks Cape Nature for its engagement.</td>
</tr>
<tr>
<td>Therefore City of Cape Town: Air Quality Management does not have further comments at this stage.</td>
<td></td>
<td>Email 22 September 2014</td>
<td>ERM thanks the City of Cape Town: Air Quality for its engagement.</td>
</tr>
<tr>
<td>The Executive Director: City Health reserves the right to call for any further requirements should the need arise.</td>
<td></td>
<td>Email 22 September 2014</td>
<td>ERM thanks the City of Cape Town: Air Quality for its engagement.</td>
</tr>
<tr>
<td>Please note that our comments only pertain to the biodiversity related impacts and not to the overall desirability of the proposed development. Cape Nature has reviewed the updated comments and response report and is satisfied that our concerns raised throughout the process have been sufficiently addressed. We do not have any further comment.</td>
<td>Rhett Smart Cape Nature Email 26 September 2014</td>
<td>Email 26 September 2014</td>
<td>ERM thanks Cape Nature for its engagement.</td>
</tr>
<tr>
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<td><strong>Primary Concern with the FEIR</strong></td>
<td>Richard Summers</td>
<td>Letter</td>
<td>As per previous responses in the FEIR Comments and Response Report (Annex D of the FEIR), the EIA process and FEIR has adequately and sufficiently addressed the potential adverse economic impacts associated with the proposed Burgan Oil facility, including potential impacts on the Cape Town refinery.</td>
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<td>The primary concern with the FEIR is that the adverse economic impact of the proposed Burgan facility on the Cape Town refinery has not been assessed in a manner which satisfies the requirements of the EIA Regulations.</td>
<td>Smith Ndlovu Summers</td>
<td>26 September 2014</td>
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<tr>
<td>There is a concern that the FEIR, ESS and FSSR have not been amended to address the flaws identified in the Petrologistics report (August 2014).</td>
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<td>The economic specialist Dr Hugo Van Zyl and the fuel sector industry specialist Mr Paul Buley, undertook an in-depth analysis of the comments made by Chevron and the PetroLogistics Report in August 2014. The ERM specialists however, disagreed with the methodological approach and findings of the PetroLogistics Report (August 2014), and hence the ESS and FSSR findings remain unchanged (see previous responses in the Comments and Responses Report Annex D of the FEIR to this effect).</td>
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<td>Concerns specifically include:</td>
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<td>It is important to note that the Final PetroLogistics Report (September 2014) is not merely an amplification of the PetroLogistics Report August 2014. Data used in the August 2014 report has been changed which affects outcomes of the economic models. Table 1 below provides a comparison of the data used for the various studies undertaken by Petrologistics (on behalf of Chevron) and by Mr Paul Buley as a specialist study for the EIA. (see Table 1 below).</td>
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<td>• The accuracy of the supply and demand analysis</td>
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<td>• The accuracy of the assessment of the nature, extent and severity of impacts on the Cape Town refinery</td>
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<td>• An assessment of the alleged fuel supply logistical capacity constraints</td>
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<td>There is a concern that the Petrologistics Report (August 2014) appears to have been inadequately addressed. Chevron has requested PetroLogistics to amplify the August 2014 report by undertaking a comprehensive assessment of the issues referred to and to analyse the manner in which the FSSR has dealt with these issues (see Final PetroLogistics Report September 2014)</td>
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<tr>
<td><strong>Strategic Importance of the Cape Town Refinery</strong></td>
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<td></td>
<td>ERM thanks Chevron for providing the Econex Report. Please note that the authors of the ESS Dr Hugo van Zyl and Prof Anthony Leiman undertook the ESS with a full understanding of the information regarding the Chevron refinery that is contained in the Econex Report. Furthermore, Dr Hugo Van Zyl has undertaken an in-depth review of the Econex report. As stated previously in the FEIR Comments and Responses Report (Annex D of the FEIR), and recognized by Chevron, the Econex report focuses exclusively on quantifying the impacts of Chevron spending in the economy on items such as salaries, suppliers etc. It is important to bear in mind that it does not assess all the economic impacts associated with the Chevron refinery focusing, as it does, on expenditure driven impacts. The report therefore essentially provides additional contextual detail focusing on the positive impacts of Chevron expenditure. However, it does not provide a particularly meaningful contribution to assessment of the impacts of the proposed Burgan project as the positive impacts associated with the Chevron Refinery are clearly already recognized in the Economic Specialist Study and are relatively self-evident. Indeed, it is in recognition of the importance of Chevron’s contribution to the economy that the Economic Specialist Study devotes significant attention to the assessment of impacts on Chevron. In this regard, the Fuels Sector Specialist Report concluded that the proposed Burgan project would most likely given the scenarios assessed not entail a threat to the viability of Chevron’s operations. Without such a threat, there would also be no significant potential knock-on socio-economic impacts thereby obviating their further quantification.</td>
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</table>

There is a concern that the EIA process has not taken adequate cognisance of the strategic importance of the Cape Town refinery. To this end Chevron submitted the Econex report entitles “The Economic Impact of Chevron South Africa’s Chevref Refinery” dated May 2014 (the Econex report). There is a concern that ERM has not taken cognisance of this report.
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<tr>
<td>Insufficient and/or Incorrect Information</td>
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<td>While ERM recognizes Chevron’s concern and appreciates the submission of the Final PetroLogistics report, ERM specialist has identified some key concerns and issues regarding the data supplied and analysis used in the Final PetroLogistics report. The concerns relate primarily to the following aspects:</td>
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<tr>
<td>Underpinning the Supply and Demand Analysis</td>
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<td>- Data sets provided by Chevron and used by the Petrologistics Report;</td>
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<td></td>
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<td>- Stated Utilisation Factor used in the Petrologistics Report;</td>
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<td>- PetroLogistics Methodology in Deriving Supply and Demand Differences;</td>
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<td>- Link between Jet Fuel and Diesel Fuel;</td>
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<td>- Diesel500 Data Inconsistency; and</td>
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<td>- Missing Petrol50 Data.</td>
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Data set Comparison:
Chevron has raised the concern regarding supply and demand data sets, stating that the FSSR report has been based on an incorrect data set, and that the two PetroLogistics Reports have been based on a more accurate data set.

Table 3 below provides a comparison of the data sets ERM has considered. Generally, it can be seen that the data used in the FSSR report (Paul Buley (PJB) Model) is similar to the data provided by Chevron. Therefore differences in outcomes/conclusions of the various studies result from how this data is interpreted and used rather than the actual data itself.

It is important to note that the data initially supplied by Chevron in February 2014 has been changed with an additional set of data supplied by Chevron in September 2014.

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There is a concern that the EAP has failed to provide sufficient and/or correct information underpinning the supply and demand analysis. Chevron contends that the data used by the FSSR (studies undertaken between 2006 and 2009) are outdated and inappropriate for determining supply and demand projections. It is noted that the data originally supplied to Mr Paul Buley by Chevron was the best set of data available at the time. Chevron has subsequently felt that the supply and demand analysis in the FSSR is incorrect, and undertook to hire their own specialist, PetroLogistics, to use 2013 production data to derive a supply and demand analysis.

A set of 2013 production data has been subsequently made available to ERM. The supply and demand analysis undertaken by PetroLogistics has been amplified and is set out in section 3 of the attached PetroLogistics report dated 26 September 2014.
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<tr>
<td><strong>Stated Utilisation Factor:</strong></td>
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<td>The sustainable production from a refinery is what a refinery can reasonably expect to achieve over a period of time, e.g., 30 days. There is a benchmarking factor which takes all the limiting aspects of refinery production (such as shutdowns, slowdowns, prolonged startup, mechanical/power failure) into consideration called the Utilisation Factor (%), which is applied to the sustainable production. The Utilisation % is a measure of how well the refinery is meeting its theoretical capacity of production. The lower the Utilisation Factor, the lower the volumes of product produced that can be supplied to the market.</td>
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<td>The calculations in the PetroLogistics report are based on a 93% Utilisation Factor, which appears to be very high, thus overstating the possible supply the refinery can achieve over any given period.</td>
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<td>The ‘Peer Group’ of refineries in which the Chevron refinery is placed shows that a Utilisation Factor of between 85.3% to 78.7% would place a refinery in the top third of performers. In Mr Paul Buley’s experience South African refineries are not historically present in this top third of performers, but more realistically lower i.e. they typically have a lower Utilisation Factor.</td>
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<td>Further to this, in the Chevron ‘2013 Supplement to the Annual Report’ (Chevron, 2013) the stated nameplate capacity of the Cape Town Chevron refinery is 110 thousand barrels per day, with the following stated actual production levels: 2013: 78 thousand barrels per day = 70.9% Utilisation Factor 2012: 79 thousand barrels per day = 71.8% Utilisation Factor 2011: 77 thousand barrels per day = 70.0% Utilisation Factor 2010: 70 thousand barrels per day = 63.6% Utilisation Factor 2009: 72 thousand barrels per day = 65.5% Utilisation Factor Given that on Chevron's own version, its Utilisation Factor has never been more than 71.8%, it is unclear on what basis the PetroLogistics Report stated 93% Utilisation Factor (22% higher than its best performance in the last 5 years), which if too high would have the result of inflating the PetroLogistics stated supply data provided (ie the level at which the Chevron refinery can service the market demand). If the same models are run with a 85% Utilisation Factor the potential for the Chevron Refinery to supply the demand is significantly decreased, thus suggesting that the potential effect of the Project on the Chevron refinery is significantly decreased.</td>
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<tr>
<td><strong>PetroLogistics Methodology in Deriving Supply and Demand Differences:</strong></td>
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<td><strong>Response from Project Team</strong></td>
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<td>ERM specialist is concerned with the methodology used to derive the supply and demand differences. In the PetroLogistics report the supply of a refined product is given in barrels per STREAM day, while the demand for the refined product is given in barrels per CALENDAR day. ERM specialist disagrees with the rationale of this methodology, as different unit measures have been used to quantify the supply and the demand. The effect of this is that decreased supply due to shutdowns, maintenance or malfunction is not taken into consideration thereby inflating the relative supply of the Chevron refinery.</td>
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<td>In Table 7 (page 14) of the Final PetroLogistics report the row short/long reads 3.8/3.0/(2.5)/0.9, while it should read 1.7/1.1/(2.8)/0.3. Further to this, if market growth is then applied the stated surpluses of product (long) rapidly move to shortages (short), in which case imports are required to meet market demand.</td>
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<td>The resultant PetroLogistics import/export balance is derived from the annual market demand less the annual refinery supply, and these have been modelled on the PetroLogistics demand and supply figures derived from the above stated methodology, which ERM is concerned about.</td>
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<tr>
<td><strong>Link between Jet Fuel and Diesel Fuel:</strong></td>
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<td>The PetroLogistics report states that the Chevron refinery has excess Jet Fuel processing capacity, which may be the case. However, the Jet Fuel comes out of the Diesel Fuel pool (ie to produce more Jet Fuel one decreases the Diesel Fuel production). This is not taken into account in the PetroLogistics report and the derived supply and demands balances.</td>
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<tr>
<td><strong>Diesel500 Data Inconsistency:</strong></td>
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<td>The Diesel500 data in the set of 2013 production data provided to ERM by Chevron does not align with the Diesel500 data used in the PetroLogistics report (see Table 1 below).</td>
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<td><strong>Missing Petrol50 Data:</strong></td>
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<td>The PetroLogistics report does not take into account how the Petrol50 data informs the supply and demand balance. ERM has on more than one occasion requested data regarding Petrol50, unfortunately none has been provided to date. The FSSR models do take into account the Petrol50 demand and supply data. In conclusion, ERM’s specialists have a concern that Chevron supply data may have been overestimated and the market demand underestimated.</td>
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<td>Insufficient Detail Regarding the Proposed Operational Business Model and the Extent of the Facility’s reliance on Imports</td>
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<td>As previously stated in the Comments and Responses Report Annex D of the FEIR, Burgan’s oil storage and distribution terminal will provide oil storage and distribution services to customers (oil marketers) in Western Cape. The terminal will have access to receive refined oil via pipeline from the Chevron refinery and sea going vessels (including from the Durban refineries, Enref and Sapref) and will distribute it via road trucks. Oil marketers in Cape Town currently purchase refined oil products from Chevron’s refinery and distribute them to their respective retail/wholesale outlets. Due to shortages of supply from the Chevron refinery from time to time, the oil marketers also import their required fuel through the Chevron refinery. Burgan does not know what the business models of its customers, the oil marketers, will be. In response to comments made by Chevron in response to the draft EIA (which comments were not specifically raised earlier in the EIA process) Burgan commissioned an independent study on the oil market supply and demand in Western Cape to analyse the current and future of the oil business in detail. The report in summary indicates: a) Oil imports have increased due to shortage of supply and forecasts that the imports by oil marketers will increase due to increase in demand. b) Unfavorable economics of importation make it cheaper for oil marketers to purchase from Chevron’s refinery unless there is insufficient volume of refined petroleum products available locally. The FEIR adequately covers the business model of the Applicant.</td>
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<td>The FEIR states that the estimated maximum throughput of the facility will be 805,000m³/yr, as previously responded. This throughput is based on Burgan Oil internal operational health and safety requirements and operational factors of the facility. ERM has on numerous occasions questioned the Burgan Oil as the Applicant that this is the correct throughput volume being applied for in the environmental permit. Note that should an Environmental Authorisation be granted to Burgan Oil, this Environmental Authorisation will be premised on the limit of the maximum throughput of 805,000m³/yr. Furthermore, any volume of potential imports will be governed by a NERSA licence, and this licence will restrict the volume of any imports, in the context of the broader fuel industry in South Africa.</td>
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<tr>
<td><strong>Significant Impact on the Cape Town Refinery</strong></td>
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<td>The FSSR undertaken by Mr Paul Buley and responses contained in the FEIR adequately and sufficiently identify and assess the potential economic impact on the Cape Town refinery. The FEIR also takes cognisance of the scenario of shutting-in production at the Cape Town refinery, and this has been assessed and analysed by Mr Paul Buley. It is important to take note of the marginal analysis undertaken in the Final PetroLogistics report.</td>
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<td>It has also been pointed out that there are legislative controls in place to prevent the importing of fuel of the kind which the refinery has; the legislation does not permit the importation of fuels where the refinery has those available. As outlined in section 3.7 of the ESS, it is also important to bear in mind that the applicant will need to make a licence application to NERSA in order to be granted permission to establish the facility. As per its mandate, NERSA will then undertake an evaluation of the facility which includes the consideration of factors related to ‘need and desirability’ and policy compatibility. These include whether the facility (taking cognisance of its size, purpose and location) is economically justifiable and appropriate within the overall petroleum industry context.”</td>
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<td>The PetroLogistics report quantifies the financial loss associated with the impact of shutting-in refinery production at approximately US$24million per year, which is sufficiently approximate to Mr Paul Buley’s amount of US$22million per year as discussed in the FEIR Comments and Responses Report. Chevron asserts that this financial loss will compromise the viability of the refinery.</td>
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Chevron is concerned that the import capability of the proposed Burgan facility will significantly impact on the viability of the Cape Town refinery.

Chevron contend that the FSSR study undertaken by Mr Paul Buley is flawed in the following respects:

- It assumes (incorrectly) that any surplus product (displaced by the import of product into the Burgan terminal) would be shipped up the coast by Chevron. This is not Chevron’s preferred operating model.
- The FSSR incorrectly quantifies shipping costs by underestimating the cost of displacing product and the associated impact on the refinery.
- The FSSR has not evaluated and assessed the impact of shutting-in production at the Cape Town refinery.

The PetroLogistics report quantifies the financial loss associated with the impact of shutting-in refinery production at approximately US$24million per year, which is sufficiently approximate to Mr Paul Buley’s amount of US$22million per year as discussed in the FEIR Comments and Responses Report. Chevron asserts that this financial loss will compromise the viability of the refinery.
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<td><strong>PetroLogistics Marginal Analysis:</strong></td>
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<td>In terms of the economic analysis contained in the Final PetroLogistics Report (September 2014), from pg 22 – 27 provides an analysis of the shutting-in of production. It should be noted that Mr Paul Buley’s amount of US$22million/year representing approximately 20% of the Cape Town fuel market (805,000m³/year throughput as stated as the estimated maximum throughput of the facility), is stated as being aligned with the PetroLogistics amount of US$24million/year. Furthermore, PetroLogistics stated expected operating costs of the Cape Town refinery are between US$80million/year – US$100million/year, also in alignment with Mr Paul Buley’s stated expected operating costs of US$100million/year for the Cape Town refinery.</td>
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<td>The Final PetroLogistics report states that the 20% market share (805,000m³/year) equates to 14 thousand barrels on a calendar day (tbcd), and that ‘the refinery profitability (basis net refinery margin) would be significantly reduced’. Note that at this point the PetroLogistics report does not state that the Cape Town refinery would be unsustainable and shut down as a result of the 20% market share loss. It states that the ‘profitability’ of the Cape Town refinery would be affected.</td>
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<td>The Final PetroLogistics report goes on further to state that full production at the Chevron refinery equates to 68 tbcd, and that the break-even point for the Chevron refinery is 43 tbcd. Therefore, 68 tbcd - 14 tbcd (20% market loss under worst case shutting-in scenario) = 54 tbcd, which is still above the break-even point of 43 tbcd i.e the Chevron refinery is still profitable.</td>
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</table>
The Final PetroLogistics report states that the 'deduction is that profitability at full production of 68 tbcd would be US$42 million per annum, reduced by 57% i.e. by US$24 million when shut-in.' Therefore, under the worst case scenario the Chevron refinery still remains profitable by US$18 million. Even if the model is 50% off, and one halves the profit margin, the Chevron refinery is still profitable by US$9 million.

The PetroLogistics report states further 'Whatever the actual profitability of Chevron this scenario and its impact would be seriously detrimental to the Cape Town refinery and the RSA economy (RSA Inc)' The profitability of the Chevron refinery is in fact a key issue as it relates to the break-even point and sustainability of the Chevron refinery, which the EIA process has undertaken to understand and assess potential economic impacts to the Chevron refinery. Note that a drop in 'profitability' of the Chevron refinery does not directly impact the broader South African economy and fails to take into account any positive impacts Burgan's facility might have for the economy.

In conclusion on this aspect the Final PetroLogistics report states under a heading of 'The impact on Cape Town refinery of unrestrained imports into Cape Town in contradiction of government policy:' (page 49)….that 'the shutting in of 20% of Cape Town refinery's production would be unsustainable and would threaten the viability of the refinery….This 20% is the number which the FEIR would claim as the worst case, but the configuration of the planned Burgan terminal could permit more than double that amount.' It is important to note that as the FEIR discusses in detail the proposed Burgan facility is not in contradiction with government policy. Additionally, it has been established and clearly stated that the maximum throughput under application is 805,000m3/year.

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<td>The Final PetroLogistics report states that the 'deduction is that profitability at full production of 68 tbcd would be US$42 million per annum, reduced by 57% i.e. by US$24 million when shut-in.' Therefore, under the worst case scenario the Chevron refinery still remains profitable by US$18 million. Even if the model is 50% off, and one halves the profit margin, the Chevron refinery is still profitable by US$9 million. The PetroLogistics report states further 'Whatever the actual profitability of Chevron this scenario and its impact would be seriously detrimental to the Cape Town refinery and the RSA economy (RSA Inc)' The profitability of the Chevron refinery is in fact a key issue as it relates to the break-even point and sustainability of the Chevron refinery, which the EIA process has undertaken to understand and assess potential economic impacts to the Chevron refinery. Note that a drop in 'profitability' of the Chevron refinery does not directly impact the broader South African economy and fails to take into account any positive impacts Burgan's facility might have for the economy. In conclusion on this aspect the Final PetroLogistics report states under a heading of 'The impact on Cape Town refinery of unrestrained imports into Cape Town in contradiction of government policy:' (page 49)….that 'the shutting in of 20% of Cape Town refinery's production would be unsustainable and would threaten the viability of the refinery….This 20% is the number which the FEIR would claim as the worst case, but the configuration of the planned Burgan terminal could permit more than double that amount.' It is important to note that as the FEIR discusses in detail the proposed Burgan facility is not in contradiction with government policy. Additionally, it has been established and clearly stated that the maximum throughput under application is 805,000m3/year.</td>
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<td>Considering that the worst case loss of 20% of market share would still leave the Chevron refinery profitable as shown in the final PetroLogistics report itself, ERM specialist stands by the findings of the FEIR that a 20% loss of market share would not make the Chevron refinery unsustainable as suggested.</td>
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### Clean Fuels 2

Chevron is concerned with the intention of the Burgan terminal to satisfy the projected demand for Clean Fuels 2 prior to governmental certainty and the associated upgrades of the Cape Town refinery, which may potentially threaten the infrastructural investment required to upgrade the refinery.

The Burgan Oil facility would enable the importation of Clean Fuels 2. This importation, as governed by NERSA, would only be able to take place after there is governmental certainty.

Furthermore, regardless of what product is potentially imported, the estimated maximum throughput of 805,000m³ of product per year is being applied for, the potential impact on the Cape Town refinery has been adequately addressed by the FEIR.

It is outside the scope of this EIA to forecast or predict the outcomes of the required upgrades to the Cape Town refinery to produce Clean Fuels 2. As Chevron has stated and also sees the potential need to import Clean Fuels 2, the Burgan Oil facility does not prevent Chevron from undertaking such imports.

It is equally important to note that the supply and use of Clean Fuels 2 would constitute a positive environmental impact, which speaks to the need and desirability of the capability of the importation of such a product if required.

### Mandate of the Environmental Authorities under NEMA

There is a concern that the manner in which ERM and the Economic Specialists have fundamentally misconstrued the nature and scope of the EIA process and the mandate of the competent authorities assessing the application for environmental authorisation.

ERM has undertaken the EIA process according to and in aspects of public participation exceeded the requirements of NEMA and the EIA Regulations.

The EIA process has been adequate and sufficient to set before the decision-making authority, in this case the Western Cape Department of Environmental Affairs and development planning (DEADP), the information required for informed decision-making.
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<tr>
<td>Infrastructural Constraints and policy</td>
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<td>The motivation of the need and desirability of the proposed Burgan Oil facility (as discussed in Chapter 5 of the FEIR) does not solely rely on a motivation in terms of strategic stocks.</td>
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<td>Imperatives around Strategic Stocks</td>
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<td>Chevron raises the concern of the extent to which infrastructural constraints and policy imperatives around strategic stocks could be relied upon as a determining factor in motivation of the application.</td>
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<td>Deficient Enquiry into Need and Desirability</td>
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<td>Chapter 5 of the EIR sufficiently and adequately addresses and interrogates the need and desirability of the proposed Burgan Oil facility.</td>
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<td>There is a concern that the Need and Desirability analysis is deficient and that there is a lack of consideration of policy imperatives to support and protect local refining production ahead of imports.</td>
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<td>Furthermore, the relevant policies pertaining to this EIA have been sufficiently and adequately considered throughout this EIA process, including policy that seeks to protect local refining production ahead of imports.</td>
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<tr>
<td>Over Reliance on the Promotion of Competition to the Exclusion of a Credible Impact Assessment</td>
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<td>As stated previously in the Comments and Responses Report Annex D of the FEIR, the ESS states that “While it is recognised that greater competition is not desirable in every situation, it is generally accepted that the onus is on those who argue against competition to, (1) comprehensively prove the merits of their case and (2) show that a given course of action or policy intervention to restrict competition would better serve to limit the negative impacts or unintended consequences of a development. Notwithstanding the unique structure of the petroleum industry, attempts to restrict competition thus need to be treated with caution both conceptually and with reference to the mechanism through which competition is to be restricted, if at all.” It cannot therefore be concluded that the ESS “espouses only the perceived benefits of competition” or is unreasonably biased toward competition. The ESS recognises the perils of restricting competition without good reason (and the legislation governing competition in the South Africa).</td>
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<td><strong>Inadequate Assessment of Alternatives</strong></td>
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<td>In keeping with legislated requirements, the EIA confines itself to the assessment of feasible and reasonable alternatives. As stated various alternatives have been addressed (see Chapter 4 of the FEIR). The EIR adequately and sufficiently assesses the feasible alternatives.</td>
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<td>Chevron is concerned about the inadequacy of the assessment of alternatives, as they pertain to the site location alternatives, site layout alternatives, technology alternatives and the No-go alternative.</td>
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<td><strong>Traffic Impacts</strong></td>
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<td>As stated previously the Traffic Specialist Report was undertaken with knowledge of the Project as described in Chapter 4 of the EIR. Further to this, again it is stated that the estimated maximum throughput of the facility is 805,000m$^3$ per year, which falls under the 75 truck per day traffic volume which equates to 821,000m$^3$ per year throughput. Therefore, the traffic impact assessment is adequate in assessing the potential impact from increased traffic as a result of the proposed facility’s operations.</td>
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<td>There is a concern regarding the adequacy of the Traffic Impact Assessment Report. There is a concern that the stated 75 trucks per day traffic volume, which equates to 821,000m$^3$ per year if done 7 days per week does not match the potential larger volume of as high as 2000,000m$^3$ per year volume throughput.</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
### Issues/Comments Received

**Fuel Retailers Case:** If the DoE, tasked with considering applications for import licences, restricts the licencing of imports at the Burgan facility to prevent a situation in which there will be an oversupply of fuel into the Cape Town market, then this could affect (in the absence of information to the contrary) the viability of the Burgan facility. If the DoE licences imports in respect of the Burgan facility ahead of market demand, regardless of the situation in which this will result in an oversupply, then this will adversely affect the viability of the Cape Town refinery. It is this precise situation that the Court in Fuel Retailers sought to avoid, remarking that it is the object of the EIA process to identify and predict the actual or potential impact on socio-economic conditions to ensure that the earth does not become “a graveyard for commercially failed developments”. Accordingly, it was for this reason in the Fuel Retailers case that the Court held that the impact of a proposed development on the feasibility of other developments would have to be carefully assessed.

Reference is made in the comments to the Fuel Retailers judgement (Fuel Retailers Association of Southern Africa v Director-General: Environmental Management, Department of Agriculture, Conservation and Environment, Mpumalanga Province and Others 2007 (6) SA 4 (CC)). An interpretation of the meaning of the judgement is put forward and parallels are drawn with the Burgan Oil EIA to which we would like to respond.

Firstly, it is important to bear in mind that in the Fuel Retailers case the court found that “there is no suggestion that either the town-planning authorities or the environmental authorities applied their minds to the impact of the proposed filling station on socio-economic conditions” (Paragraph 97). The authorities therefore took a “narrow view of their obligations” (Paragraph 97). The court found that officials did not consider need and desirability at all and did not consider or ensure the assessment of socio-economic impacts at all. This is clearly not the case in the Burgan Oil EIA. An economic specialist study has been conducted which assesses a number impacts and includes specialist inputs from a fuel sector specialist dealing with the impact of the facility on existing operations among other things.

Secondly, in the Fuel Retailers case, it is emphasised in the comment that the Constitutional Court wanted to ensure that socio-economic impact are considered in order that the earth does not become “a graveyard for commercially failed developments” (Paragraph 80). However, one cannot read that part of the judgment in isolation or to use it illegitimately as a justification to protect existing businesses against competition. The Court makes it clear that “What must be stressed here is that the objective of considering the impact of a proposed development on existing ones is not to stamp out competition” (Paragraph 78).
<table>
<thead>
<tr>
<th>Issues/Comments Received</th>
<th>Commentator(s)</th>
<th>Source</th>
<th>Response from Project Team</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>With regard to mitigation and the need for co-operative governance, the judgment essentially restricts itself to finding that decision-making was not adequately informed. In our view, the requirements of the judgment and the relevant principles of NEMA, indicate the need for better consideration of impact but also, importantly, the need for co-operative governance particularly around more complex governance challenges, which is what this EIA, that will be placed before both the DEADF and NERSA (both competent authorities in this proposed development) seeks to achieve.</td>
</tr>
</tbody>
</table>
Table 3: Data Set Comparison

| Source: Paul Buley, October 2014 |

<table>
<thead>
<tr>
<th></th>
<th>Provided</th>
<th>Derived</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mkt demand</td>
<td></td>
<td></td>
<td>Cal day</td>
</tr>
<tr>
<td>Megaz500</td>
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<td>1731</td>
<td>1855/1635</td>
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<td>Megaz50</td>
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<td>0</td>
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<tr>
<td>Jet</td>
<td>456/543</td>
<td>915</td>
<td>429</td>
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<tr>
<td>Diesel500</td>
<td>1277</td>
<td>1413</td>
<td>1211/1454</td>
</tr>
<tr>
<td>Diesel50</td>
<td>163</td>
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<td>494</td>
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<tr>
<td>Total diesel</td>
<td>1440</td>
<td>1576</td>
<td>1576</td>
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<tr>
<td></td>
<td>Excludes Eskom diesel</td>
<td></td>
<td>Includes Eskom diesel</td>
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<tr>
<td>Retail supply</td>
<td></td>
<td>Stream day</td>
<td>Cal day</td>
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<td>Jet</td>
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<td>449</td>
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<tr>
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</tr>
<tr>
<td>Diesel50</td>
<td>0</td>
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<tr>
<td>Diesel + Jet</td>
<td>2081</td>
<td>2154</td>
<td>2154</td>
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<tr>
<td>Total white oil</td>
<td>Ex/Im (+/-)</td>
<td>Cal day</td>
<td>Cal day</td>
</tr>
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<td>396</td>
</tr>
<tr>
<td>Diesel50</td>
<td></td>
<td>-163</td>
<td>-163</td>
</tr>
</tbody>
</table>

Source: Paul Buley, October 2014
Tougheeda Aspeling

From: Neil Yelland <NeilY@ffs.co.za>
Sent: 05 August 2014 09:06 AM
To: ERM South Africa EIA Mailbox
Cc: Dave Sands; Mona Naicker
Subject: FFS Refiners comments on DEIRv2 re Burgan Oil Storage depot on Eastern Mole

Good Day Tougheeda, FFS have the following questions that we seek clarity on:

Firstly please note – our company is called FFS Refiners (Pty) Ltd and NOT Fuel Firing Systems as the report states.

A. The document states: “Burgan Oil has recently signed a contract for the terminal to be supplied by an above ground 10 inch pipeline, approximately 900m in length, operating at about 6 bar pressure (the pipeline is designed for a pressure of 15 bar) connected to the main import pipeline servicing the Joint Bunkering Services (JBS) from the Chevron Refinery. The terminal can also be supplied by ship from the Eastern Mole Berth 2 located adjacent to the FFS site. While the jetty will be operated by Burgan Oil, all fire protection for the jetty will be the responsibility of TNPA.”

1. Kindly advise whether or not the proposed path of the 10” line will interfere with the maintenance requirements of the FFS 20” line. If so, what is Burgan’s proposed plan of action to mitigate against such interference?
2. The above statement implies that Burgan will be operating the EM2 berth – do they mean they will operate it for their own vessels as FFS currently does or will Burgan be doing the operation for all discharges?

B. The DEIR states that TNPA have relaxed the Transnet code for tank spacing and have agreed to Burgan building to SANS10089, thereby increasing the tank farm capacity to 118 000 m³. On what grounds did Transnet grant the relaxation without compromising the original intention of the Transnet code?

C. The document states: “These two trial pits are located on the inside edge of the two Burgan Oil land portions, adjacent to the FFS Refiners site, suggesting a possible relationship between the FFS Refiners facility and the MAHs in the soil.”

FFS Refiners strongly objects to such careless conclusions being drawn without consultation for a site that has been reclaimed through used rubble material. We wish to place on record that FFS Refiners have not operated on the land occupied by Burgan and have a spotless record in terms of spills and environmental compliance at its Cape Town Harbour Tank Farm facility.

D. The air quality impact assessment did not use FFS Refiners as an “on-site sensitive receptor”.

E. MHI Kindly forward the specific report detailing the effects of MHI events on the storage tanks in FFS’s diesel storage facility as well as its employees.

F. MHI - It appears that the MHI has not taken into consideration the new FFS tank farm to the NE of the current diesel storage facility. Kindly confirm or revise.

G. Social disturbance – The report indicates petty theft to local enterprises. The local enterprises implied are FFS Refiners. As a hydrocarbons storage depot on the Eastern Mole, we abide by strict security codes. We therefore do not find Burgan’s commitment in mitigation of this risk sufficient and request Burgan to submit an acceptable security arrangement for review.

Neil Yelland
Dear Tougheeda

Final Environmental Impact Report for the Proposed Burgan Cape Terminals Liquid Bulk Storage Facility, Eastern Mole, Port of Cape Town, Cape Town
(DEA&DP ref. no.: E12/2/4/2-A2/75-3030/11)

CapeNature would like to thank you for the opportunity to comment on the proposed development and would like to make the following comments. Please note that our comments only pertain to the biodiversity related impacts and not to the overall desirability of the proposed development.

CapeNature comments on the Draft Environmental Impact Assessment Report (EIAR) included reference to the lack of description and assessment of potential impacts on marine biota. The Final EIAR has included a description of potentially affected marine biota, in particular the avifauna.

The section in the Final EIAR on potential impacts of unplanned events has also now included the potential impact on marine fauna. Burgan Oil's Emergency Response Plan (ERP) is being updated in response to the Quantitative Risk Assessment and will include an oil spill contingency plan, making reference to the Department of Environmental Affairs: Oceans and Coasts oil spill contingency plans and TNPA oil spill emergency response plans, which should address our concerns.

CapeNature additionally recommends that the ERP must include, among other stakeholders, CapeNature and SANCCOB (Southern African Foundation for the Conservation of Coastal Birds) as key stakeholders to be contacted as soon as possible in the case of an unplanned event occurring which could impact on avifauna.

While such an unplanned event could result in a significant impact, CapeNature is satisfied that the risk is sufficiently low and sufficient measures have been put in place to prevent an event occurring and to react and remediate in such a case.

CapeNature reserves the right to revise initial comments and request further information based on any additional information that may be received.
Yours sincerely

Rhett Smart
For: Manager (Scientific Services)

cc. Melanese Schippers, Department of Environmental Affairs and Development Planning
Environmental Resources Management
Postnet Suite 90
Private Bag X12
TOKAI
7966

Attention: Tougheeda Aspeling

RE: DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE PROPOSED LIQUID BULK STORAGE FACILITY, EASTERN MOLE, PORT OF CAPE TOWN.

This letter has reference to your Draft Environmental Impact Report (DEIR) with DEA &DP reference number E12/2/4/2-A2/75-3030/11 dated July 2014 submitted to this office for comments on the above activity (ies).

Kindly note that due to the fact that the proposed activity is in close proximity to the sea, it requires an authorization in terms of National Environmental Act: Integrated Coastal Management Act (NEM: ICMA) (Act No. 28 of 2008). The competent authority to issue an authorization for the proposed activity is Department of Environmental Affairs Branch: Oceans and Coasts. Please contact Ms. Natasha Baijnath Pillay at 021-819 2456 for further information.

Please do not hesitate to contact the above official should there be any queries.

Yours faithfully,

[Signature]

CHIEF DIRECTOR: WESTERN CAPE
DATE: 8 August 2014
Hi Tougheeda

My office address is
Chevron House
Century Boulevard
021 4037094

Regards

Fadley Valley
OE HES Specialist Coastal
fvalley@chevron.com

Chevron House Cape Town
+27 21 4037094

---

Hi Fadley

The report is very big. I can send you a CD if you like. I think that will be the best way.

If you want me to send the CD please provide me with your address and contact number so that we can courier it to you.

Hope to hear from you soon.

Regards

Tougheeda Aspeling
Stakeholder Engagement Consultant

ERM Southern Africa (Pty) Ltd
2nd Floor | Great Westerford | 240 Main Road | Rondebosch | 7700 | Cape Town | South Africa
T +27 21 681 5400 | F 086 5404 072 | M +27 84 2066187
E Tougheeda.Aspeling@erm.com | W www.erm.com

The world’s leading sustainability consultancy
Hi Tougheeda

Will it be possible for you to email me the EIR. I cannot download the document from the link below.

Sukran
Fadley

Dear All

Kindly view the Final Environmental Impact Report for the proposed terminal. This report will be forwarded to DEA for authorisation. Your comments is very critical as they may have direct impact on your existing impact.

Kindly forward this to relevant personnel in your organisation that may have inputs on this that may influence the decision either positively or negatively.

Regards

Bongani Dilima
Assistant Environmental Manager
Port of Cape Town
Transnet National Ports Authority

021 4492736  083 460 3261
086 749 6757  Bongani.Dilima@transnet.net
www.transnet.net

Dear Stakeholder

The Final Environmental Impact Report (FEIR) for the proposed Burgan Cape Terminals Fuel Storage Terminal, Distribution Facility and Associated Infrastructure, Eastern Mole, Port of Cape Town is available for comment for a 21 day period from 22 August 2014 until 12 September 2014.
The FEIR will be made available on the project website http://www.erm.com/burganoil or on request.

We look forward to your continued participation and should you have any questions, need more information or wish to comment, please contact Tougheeda Aspeling at Tel: (021) 681 5400, Fax: 086 5404 072 or email: burganoil@erm.com.

Yours sincerely

Tougheeda Aspeling
Stakeholder Engagement Consultant

ERM Southern Africa (Pty) Ltd
2nd Floor | Great Westerford | 240 Main Road | Rondebosch | 7700 | Cape Town | South Africa
T +27 21 681 5400 | F 086 5404 072 | M +27 84 2066187
E Tougheeda.Aspeling@erm.com | W www.erm.com

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Please visit ERM's web site: http://www.erm.com

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Please visit ERM's web site: http://www.erm.com
Dear Sir/Madam

*RE:* PROPOSED FUEL STORAGE AND DISTRIBUTION FACILITY, EASTERN MOLE, PORT OF CAPE TOWN – REQUEST FOR EXTENSION OF COMMENTING PERIOD ON THE FINAL ENVIRONMENTAL IMPACT REPORT DATED AUGUST 2014

1. We act for Chevron South Africa (Pty) Ltd.

2. We refer to the Final Environmental Impact Report (“FEIR”) dated 22 August 2014 which Environmental Resource Management (“ERM”) made available for comment until 12 September 2014. The purpose of this letter is to seek ERM’s agreement to an extension of time for our client to provide comment on the FEIR, for reasons set out below.

3. Publication of the FEIR is part of an environmental impact assessment (“EIA”) process in terms of the National Environmental Management Act No. 107 of 1998 (“NEMA”) and the EIA Regulations promulgated in terms thereof (“the EIA Regulations”), in respect of an application by Burgan Cape Terminals (Pty) Ltd (“Burgan”) for environmental authorisation for the development of an oil and fuel storage and distribution facility (“the proposed Burgan facility”).

4. Our client is a registered interested and affected party in the EIA process.

5. In terms of NEMA and the EIA Regulations, the FEIR is required to be the conclusion of a thorough, objective and reasoned assessment by ERM of the proposed activity, and must do at least the following:

   5.1. identify, predict and evaluate the positive and negative ecological, social and economic impacts associated with the proposed Burgan facility;

   5.2. assess the need and desirability of the proposed Burgan facility, and comparatively assess its relative advantages and disadvantages; and

   5.3. identify and assess alternatives to the proposed Burgan facility.

Urgent
6. Over the course of the EIA process, our client has consistently raised its concerns that the manner of assessment undertaken at various stages of the process did not appear to be set to meet these mandatory requirements.

7. In particular, it is our considered view that in order for the FEIR to constitute a reasoned opinion as to whether the proposed Burgan facility should or should not be authorised, and if so, what conditions ought to be made in respect of that authorisation, the FEIR must reflect and be based on *inter alia* the following:

7.1. accurate data sets relating to both supply and demand data for the Cape Town fuel market;

7.2. the likely impact of the proposed Burgan facility on the sustainability of the Chevron refinery (which assessment would require having regard to actual Chevron refinery earnings and/or projected forecasts in refinery earnings); and

7.3. the likely impact on existing infrastructure and supply arrangements in Cape Town more generally.

8. Most recently, our client provided ERM with a specialist review of the revised Draft EIR by PetroLogistics dated 6 August 2014 ("the PetroLogistics review").

9. Our client trusted that the PetroLogistics review would have finally alerted ERM to persistent material deficiencies in the assessment of the impact of the proposed Burgan facility and, therefore, to the need for accurate and additional information.

10. Instead, it is apparent from the FEIR that it continues to rely primarily on the assessment reflected in the Fuel Sector Specialist Report by Mr. Paul Buley ("the Fuel Sector Report"), dated June 2014.

11. This is despite the fact that the Fuel Sector Report expressly acknowledges that insufficient information was available to carry out the detailed evaluation requested by our client,¹ and which we have advised our client is legally required.

12. The Fuel Sector Report is based on preliminary, estimated figures which we are instructed our client provided to Mr. Buley in February 2014 which information was the best data set available at the time. This data illustrated the need for an in-depth assessment based on actual, accurate data sets. Additional data, which includes commercially sensitive information, was offered to ERM and appointed specialists on condition of confidentiality. The offer was not taken up.

13. The FEIR now asserts that it "has considered relevant impacts and has done so to the level of detail appropriate to satisfy the requirements of the relevant legislation in order to provide adequate information on impacts".² Our client strongly disputes this assertion on the basis that an adequate and accurate assessment of impacts is impossible, or at the very least fundamentally flawed, if such assessment is premised on inaccurate and/or incomplete data.

14. In the circumstances, our client has been advised to commission PetroLogistics to provide a comprehensive review and assessment of the impact of the proposed Burgan facility on the Chevron refinery and the existing fuel station infrastructure and supply arrangements in Cape Town more generally, based on complete and accurate data sets provided by our client.

---

² Comments and Responses Report: page 45.
15. Our client is of the view that such an assessment is indispensable to a determination of the application for environmental authorisation based on all relevant and necessary information.

16. Our client is furthermore currently obtaining legal advice on the best manner in which to provide the competent authority with its commercially sensitive information while safeguarding its legitimate commercial interests.

17. We received confirmation today that the supplementary PetroLogistics report will only become available on 29 September 2014. Our client anticipates being in a position to provide its comments to the competent authority within five working days thereafter, on 7 October 2014.

18. In the circumstances, the 21 day period for comment on the FEIR by 12 September 2014 has unfortunately proven insufficient. Read with the Guideline on Public Participation,\(^3\) it is clear that the 21 day commenting period approved by the competent authority is to be regarded as the minimum period allotted for comment.

19. We are accordingly instructed to request, as we hereby do, that ERM agree to an extension of time for our client to provide its comment on the FEIR to the competent authority by no later than 7 October 2014.

20. In view of the importance of the issues to be addressed in the anticipated PetroLogistics supplementary report, our client’s ongoing engagement with ERM in the EIA process in an effort to ensure that all relevant information is taken into account, and the relatively short extension of time sought, we submit that the requested extension is reasonable in the circumstances and furthers the achievement of the objectives of NEMA and the EIA Regulations.

We look forward to your favourable response at your earliest convenience.

Yours faithfully,

SMITH NDLOVU & SUMMERS

Per:

R.W. SUMMERS

---

RE: COMMENTS ON THE FINAL ENVIRONMENTAL IMPACT ASSESSMENT REPORT (FEIAR) FOR THE PROPOSED DEVELOPMENT OF OIL AND FUEL STORAGE AND DISTRIBUTION FACILITY AT THE PORT OF CAPE TOWN’S EASTERN MOLE, WESTERN CAPE.

The Final Environmental Impact Report for the proposed development of oil and fuel storage and distribution facility at the Port of Cape Town’s eastern mole refers.

The Directorate: Pollution Management (D: PM) carefully reviewed the above-mentioned application and has the following comments, in addition to the comments contained in the D: PM’s letter dated 8 May 2014:

1. The study indicated that baseline characterisation of the terminal was conducted. However, the report does not provide details on the findings. Considering that there is an existing FFS Refiners Fuel Tank Farm adjacent to the terminal along with the Cape Town Bulk Storage facility and the Joint Bunker Services which are potential emitters of volatile organic compounds (VOCs), it is logical that values of existing air pollutants be measured and included in the baseline characterisation. The pollutant values obtained in the baseline characterisation must be considered into the air pollution dispersion model to demonstrate the cumulative impact of VOCs on the receiving environment. It should be noted that background sources are considered an essential element of the total air quality analysis when examining source impacts.
2. At completion and operation of the project, the installed vapour recovery unit’s (VRU) collection efficiency must be verified by conducting measurements after the installation of the VRU unit, in order to confirm the assumed efficiency values. The report on the methodology used and measurements obtained must be submitted to the licensing authority. The frequency of submission of the report will be determined by the licensing authority.

The City of Cape Town is the licensing authority for the application for an atmospheric emission licence and will provide final comments.

Should you have any queries regarding this correspondence, please contact Kainos Hove on telephone number: (021) 483 8319 or by email: Kainos.Hove@westerncape.gov.za.

Yours faithfully,

[Signature]

Joy Leaner (PhD)
Director: Pollution Management
Date: 09/09/2014

cc: Ian Gildenhuys (CoCT) Email: Ian.Gildenhuys@capetown.gov.za

Fax: 021 590 162
POLLUTION MANAGEMENT

DEA&DP REFERENCE: E12/2/4/2-A2/75-3030/11
ENQUIRIES: E. Roux

Environmental Resource Management Services
Postnet Suite 90
Private Bag X12
Tokai
7966
Tel.: 021 681 5400
Fax: 021 686 0736
e-mail: burganol@erm.com

Attention: Tougheeda Aspling

COMMENTS: FINAL ENVIRONMENTAL IMPACT REPORT (FEIR) FOR THE PROPOSED BURGAN OIL LIQUID BULK STORAGE FACILITY, EASTERN MOLE, PORT OF CAPE TOWN, WESTERN CAPE.

The above-mentioned documentation received by the Directorate: Pollution Management (D: PM) refers.

1. Operational Management

a) Duty of care should be exercised in accordance with NEMA section 28 (Act 107 of 1998) in order to avoid pollution;

b) As the planned quantity of stored material on site would be in the range of 109 400m³, it is important that all products must be stored in a bunded area with the bund having a volume of 110% to that of the combined maximum volume of the materials;

c) Materials spilled during transfers from tank to storage and decanted to vehicles should be regarded as hazardous waste. Spills must be contained using commercially available absorbent material. The fuel soaked absorbent material must be treated as hazardous waste and disposed to hazardous dump site in line with all regulatory requirements.

d) Containment and clean-up of incidents and the remediation of affected areas must commence immediately in accordance with NEMA Section 30 (1) (a) (National Environmental Management Act of 1998 (Act No. 107 of 1998)).
e) All spills of product into the soil or water courses used during the Construction or Operational phase must be reported to all relevant authorities, including D: PM, within 14 days. This requirement is in terms of Section 30 (10) of the National Environmental Management Act, No. 107 of 1998 (NEMA) and Section 20 (3) of the National Water Act, No. 36 of 1998 (NWA) that pertains to the control of emergency incidents and should include the reporting;

f) An leak detection system should be implemented to reduce the risk of pollution of leakages from pipelines;

g) From the contamination site report, it was ascertained that the soil is very permeable and hence contamination of the sea through interflow is possible should any spillages occur. Continuous ground water monitoring should therefore be done as mentioned in the EMP. The frequency of monitoring should be made clear in the EMP.

2. Waste Management

a) Material that was not used during the construction phase must be recycled or re-used;

b) All hazardous waste must be stored in a demarcated area and disposed of using professional waste disposal contractors. All documents relating to volumes and type of waste must be kept on site for inspection;

c) Due to the close proximity of the site to the sea, litter should be managed in such a way that windblown litter does not end up in the sea.

3. Water Management

a) Any storm water must be directed away from the site to prevent contaminated storm water spilling into the ocean.

b) According to the application, a polluted water management system will be put in place. This will included a drainage system, sewer and three oil-water separators. Details pertaining to the maintenance of the system as well as the quality assurance around the discharge from the oil water separator should be made clear in the application
c) The separated oil fraction must be treated as hazardous wastes and must be contained in and stored in an access controlled hazardous waste designated area.

Please contact Etienne Roux at the contact details indicated, should you have any enquiries regarding these comments.

Yours faithfully,

J. Leaner (PhD)
Director: Pollution Management
Date: 12 September 2014
Attention: Mr Dimitri Georgeades

Head: Environmental and Heritage Management- Table Bay District
Email: Dimitri.Georgeades@capetown.gov.za

AIR QUALITY MANAGEMENT COMMENTS ON THE FINAL ENVIRONMENTAL IMPACT REPORT FOR PROPOSED BURGAN CAPE TERMINALS FUEL STORAGE TERMINAL, EASTERN MOLE, PORT OF CAPE TOWN

This Department has scrutinised the Final Environmental Impact Report (FEIR) dated 22 August 2014 sent to the Air Quality Management Department and has been noted the requirements that were submitted with the DEIR comments dated the 31 July 2014 have been included in the Final Environmental Impact Report (FEIR).

Therefore City of Cape Town: Air Quality Management does not have further comments at this stage. However,

The Executive Director: City Health reserves the right to call for any further requirements should the need arise.

For further information please contact Ms Phumela Hoza at (021) 590 5200 or by e-mail: Phumela.hoza@capetown.gov.za

[Signature]

for EXECUTIVE DIRECTOR: CITY HEALTH
Dear Tougheeda

Amended Final Environmental Impact Report for the Proposed Burgan Cape Terminals Liquid Bulk Storage Facility, Eastern Mole, Port of Cape Town, Cape Town
(DEA&DP ref. no.: E12/2/4/2-A2/75-3030/11)

CapeNature would like to thank you for the opportunity to comment on the proposed development and would like to make the following comments. Please note that our comments only pertain to the biodiversity related impacts and not to the overall desirability of the proposed development.

CapeNature has reviewed the updated comments and response report and is satisfied that our concerns raised throughout the process have been sufficiently addressed. We do not have any further comment.

CapeNature reserves the right to revise initial comments and request further information based on any additional information that may be received.

Yours sincerely

Rhett Smart
For: Manager (Scientific Services)

cc. Melanese Schippers, Department of Environmental Affairs and Development Planning
FFS refiners comment/question:

1. Will the additional slops storage facility include correct bunding for the existing slops tank as currently if this tank is storing products as listed it would be an environmental risk to the entire area as it is not bunded?

Neil Yelland
General Manager - Operations
FFS Refiners (Pty) Ltd
Phone +27 31 459-5300
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Dear Sir/Madam

**RE:** PROPOSED FUEL STORAGE AND DISTRIBUTION FACILITY, EASTERN MOLE, PORT OF CAPE TOWN – COMMENTS ON THE FINAL ENVIRONMENTAL IMPACT REPORT DATED AUGUST 2014 (DEADP REF: E12/2/4/2-A2/75-3030/11)

1. **Introduction**

1.1. We act for Chevron South Africa (Pty) Ltd (“Chevron”).

1.2. This letter contains comments, on behalf of our client, on the *Final Environmental Impact Report* dated August 2014 (the “FEIR”) prepared by ERM on behalf of Burgan Cape Terminals (Pty) Ltd (“Burgan”) for the “Proposed Liquid Bulk Storage Facility” in terms of the EIA Regulations promulgated under the National Environmental Management Act 107 of 1998 (“NEMA”).
1.3. This letter of comments must be read together with the report titled “Independent Assessment of the Burgan Cape Terminals Project” dated 26 September 2014 and prepared by PetroLogistics.

**Primary concern with the FEIR**

1.4. At the outset, it must be emphasised that Chevron’s primary and fundamental concern with the EIA process for the proposed project, is that the adverse economic impact of the proposed Burgan facility on the Cape Town refinery has not been assessed in a manner which satisfies the requirements of the EIA Regulations. The failure to undertake this assessment has resulted in a flawed assessment of the potential socio-economic impacts associated with the project.

1.5. This fundamental concern has been raised by Chevron repeatedly throughout the public participation process. As further elaborated in these comments, this concern has not been addressed adequately for the purposes of the EIA Regulations.

1.6. Given the fact that our client’s concerns were motivated in detail in the context of the comments on the revised DEIR, and substantiated by the production of dedicated fuel sector specialist input prepared by PetroLogistics (dated August 2014), it is concerning that the FEIR, ESS, and FSSR have not been amended to address the flaws identified in the PetroLogistics report (August 2014). Chevron expresses the following position in relation to ERM’s approach in responding to the concerns raised in connection with the revised DEIR:

1.6.1. ERM responses in the Comments and Response Report are generally indicative of a lack of meaningful engagement with Chevron’s primary concern that the impacts associated with the proposed terminal have not been assessed. Concerns were specifically raised in connection with the revised DEIR regarding:

1.6.1.1. The accuracy of the supply and demand analysis;

1.6.1.2. the accuracy of the assessment of the nature, extent and severity of impacts on the Cape Town refinery; and

1.6.1.3. an assessment of the alleged fuel supply logistical capacity constraints.
1.6.2. On the whole, the Comments and Responses Report responds to the above concerns with the facile response that “Chevron’s concerns have been noted”.1

1.6.3. Alternatively, ERM simply restates in the Comments and Responses Report the pre-existing position regarding the inputs obtained from Burgan’s liquid fuels sector specialist (Mr. Paul Buley) and defends the nature of the assessment undertaken to date without responding to the nature of the concern raised.2

1.6.4. Of specific concern is that ERM defends the level of assessment undertaken without grappling with the manner in which Chevron’s concern was substantiated by the PetroLogistics Report dated August 2014. It is for example not clear on what basis ERM concludes that Chevron did “not provide specifics or detail as to how, why or in what specific respects the analysis of the FSSR is flawed”.3 The concerns identified in the comments on the revised DEIR were substantiated in the PetroLogistics report (August 2014) that Chevron commissioned in order to contextualise its concerns regarding the impact on the refinery and the accuracy of the analysis in the FSSR.

1.6.5. This initial PetroLogistics report was provided to ERM under cover of our letter dated 6 August 2014 in connection with our comments on the revised DEIR. Notwithstanding this fact, the concerns and the issues raised in the PetroLogistics Report (August 2014) appear to have been glossed over or, at best, only dealt with superficially by ERM (and then only in the context of the Comments and Response Report).

1.6.6. What is clear from this is that despite Chevron’s attempt to motivate and contextualise its concerns, including with regard to specialist input, there has been no substantive change to the EIA reports or the impact assessment methodology and approach.

1.7. The purpose of these comments is to highlight and further substantiate Chevron’s concern that the adverse economic impact of the proposed Burgan facility on the

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1 Comments and Response Report: page 47.
3 Comments and Response Report: page 49.
Cape Town refinery has not been assessed, and there has been a persistent failure to address this potential impact.

1.8. In the circumstances, and due to the fact that the flaws in the FSSR identified in the PetroLogistics Report (August 2014) have not been engaged with meaningfully, Chevron has been left with no alternative but to request PetroLogistics to amplify the August 2014 report by undertaking a comprehensive assessment of the issues referred to at paragraph 1.6.1 above and to analyse the manner in which the FSSR has dealt with these issues (PetroLogistics Report (September 2014)). It is Chevron’s concern that the operation of the terminal could eliminate the refinery’s earnings on the basis that the import of product is likely to cause refinery production to be displaced or shut-in. Either potential scenario will cause severe economic hardship for the refinery and potentially threaten the viability of its operations.

**Strategic importance of the Cape Town refinery**

1.9. Equally important in connection with the EIA process is the appropriate understanding of the role played by the Cape Town refinery in connection with the fuel sector in the Western Cape and the economy. To this end, Chevron submitted a report prepared by Econex, entitled “The Economic Impact of Chevron South Africa’s Chevref Refinery” dated May 2014 (the Econex report). There is no indication that ERM have taken cognisance of the contents of this report or the manner in which it impacts on an assessment of this project.

1.10. The Cape Town refinery plays a critically important role in the economy. In order to ensure that this fact is duly taken into account in the decision-making process it is critical to ensure that the significance of the Cape Town refinery is properly understood and that the nature, extent and severity of any potential impact on the refinery’s operations be considered in the EIA process. The Cape Town refinery can be described as a key strategic asset in the fuel sector and important source of revenue for the South African economy. This is underscored by the following facts:

1.10.1. It is estimated that the Cape Town refinery and its direct suppliers produced goods and services to the value of R 70.2 billion during 2013.4
1.10.2. The economy-wide value of production stimulated by the Cape Town refinery amounted to R 95 billion in 2013.⁵

1.10.3. The Cape Town refinery employs approximately 505 people directly. In addition to this it is estimated that the Cape Town refinery sustains another 13 018 employment opportunities (comprising first round suppliers, i.e. suppliers and/or entities whose viability and livelihood depend (largely or entirely) on the Cape Town refinery).⁶

1.10.4. The indirect and induced impacts of the Cape Town refinery raises its overall employment contribution to 56 915, or 0.4% of total employment in the country.⁷

1.10.5. During 2013, the National Treasury derived R 21 billion in tax revenue from the Cape Town refinery in terms of direct taxes alone (fuel levy and excise duties). Adding the personal income tax of its employees increases Chevron’s tax contribution to R 21.1 billion for 2013. The tax revenues from the indirect and induced impacts of the Cape Town refinery raise the tax contribution of the Cape Town refinery to an estimated R 28.5 billion in 2013.⁸

2. In addition to Chevron’s primary concern regarding the wholesale failure to assess the impact of the proposed facility on the Cape Town refinery (with the associated failure to assess consequential socio-economic impacts on the economy as a whole), a host of subsidiary, but equally relevant, concerns with the efficacy of the EIA process have been raised by Chevron. These concerns are substantiated herein in addition to Chevron’s primary concern. In order to contextualise Chevron’s concerns, this document shall summarise ERM’s response to Chevron’s concerns, and shall provide a succinct analysis of Chevron’s position in relation to ERM’s response (if any).

⁴ Econex Report, page 3.
3. **Insufficient and/or incorrect information underpinning the supply and demand analysis**

Chevron has raised concerns regarding the failure by the EAP to provide sufficient and/or correct information underpinning the supply and demand analysis, which analysis is critical to determining the nature and extent of the impact of the proposed Burgan facility on the Cape Town refinery.  

3.1. **Burgan’s response:**

3.1.1. According to ERM, Mr. Paul Buley as the author of the Fuel Sector Specialist Report (“FSSR”) has considered the data provided by Chevron in the PetroLogistics Report (August 2014) and “challenges its integrity based on numerous authorities’ forecasts and views that are not aligned with its projection”.  

3.1.2. The basis for the FSSR’s supply and demand analysis is a reliance upon studies undertaken between 2006 and 2009 on the South African supply and demand balances. According to the FSSR, the analysis of Chevron’s position “needs to be seen in the light of forecasts where demand growth, refining margins and exchange rates are purely assumptions of the future and have a 50% probability of being higher or lower than forecast”.  

3.2. **Chevron’s position:**

3.2.1. Whilst it is clear from the most recent iteration of the Comments and Responses Report that Mr. Buley challenges the data relied on by Chevron in the PetroLogistics Report (August 2014), there is no engagement with the figures in the PetroLogistics Report of 8 August 2014 by ERM, or the authors of the ESS and the FSSR. The comments made by ERM in the Comments and Responses Report in defending the analysis in the FSSR do not contribute to the accuracy of the overall supply and demand analysis.
3.2.2. Studies undertaken between 2006 and 2009 on supply and demand balances - and relied upon by the author of the FSSR - are an outdated basis for determining supply and demand projections. The entire FSSR method is based on “approximated quantitative analysis”\textsuperscript{13} The FSSR qualifies the accuracy of any assessment of the impact on the Cape Town refinery in light of the vagaries of forecasts. In terms of this, the FSSR forecasts relating to demand growth, refinery margins and exchange rates are all based on assumptions and, according to the author of the FSSR only have a 50% probability of accuracy. It is Chevron’s position that a 50% probability of accuracy is simply not adequate from a forecasting perspective in order to assess the impact of the Burgan facility on the Cape Town refinery. The data originally provided to Mr. Buley by Chevron was the best set of data available at the time. It was only upon seeing the gross errors in the supply and demand analysis contemplated in the FSSR that Chevron realised the clear need to correct the basis for the underlying assumptions relied upon by the FSSR and the data that informed the author’s analysis. It was considered that the most prudent mechanism for achieving that would be for Chevron to commission its own fuel sector specialist who could then have regard to the relevant production data in 2013 from the Cape Town refinery and be able to substantiate and verify the veracity of that production data through a modelling exercise. That was one of the key purposes behind the involvement of PetroLogistics facilitating this analysis.

3.2.3. The ongoing concern regarding the accuracy of the supply and demand analysis in the FSSR, coupled with the fact that the supply and demand analysis contemplated in the PetroLogistics Report (August 2014) have not resulted in any further iteration of the supply and demand analysis by Mr. Paul Buley underlies the need for both sets of specialists (Burgan’s and Chevron’s) to be relying on an accurate data set relating to 2013 production figures as well as the forecast market growth rates. This data set has totally been made available to Burgan by Chevron to enable its EIA consultants to undertake a more accurate assessment of the supply and demand balance.

\textsuperscript{13} FSSR, page 2.
3.2.4. The supply and demand analysis undertaken by PetroLogistics has been amplified and is set out in section 3 of the attached PetroLogistics Report dated 26 September 2014.

4. **Insufficient detail regarding the proposed operational business model and the extent of the facility’s reliance on imports**

Chevron has previously highlighted its concerns regarding the lack of detail in respect of the Burgan facility’s proposed operational business model and the extent to which the facility will rely on imports.\(^{14}\)

4.1. **Burgan’s response:**

4.1.1. According to the FEIR, “the maximum throughput of the facility under safe operating conditions, estimated by Burgan Oil, is approximately 805,000m\(^3\)/yr”.\(^{15}\) Similarly, the Economic Specialist Study (Annexure I to the FEIR) (“ESS”) relies upon the fact that “the maximum throughput of the facility” is approximately 805,000m\(^3\)/yr.\(^{16}\)

4.1.2. According to ERM, Burgan has signed long-term oil storage and throughput contracts with two customers which represent 50% of the terminal’s operational capacity.\(^{17}\) ERM assures Chevron that the larger of the two customers (“the anchor tenant”) currently purchases all of its oil demand from Chevron and “has indicated the need to continue to purchase from Chevron instead of importing unless necessary”.\(^{18}\) According to ERM, the second customer is a small scale oil marketer who “currently purchases its demand from the existing major oil marketers”.\(^{19}\)

4.1.3. Apart from the above assurances, it is Burgan’s position that it “does not know what the business models of its customers, the oil marketers, will be”.\(^{20}\) Insofar as

\(^{14}\) See paragraph 8 of our letter dated 6 August 2014.
\(^{15}\) FEIR, page 8-40. Own underlining.
\(^{16}\) ESS, page 32.
\(^{17}\) Comments and Responses Report: page 71.
\(^{18}\) Comments and Responses Report: page 56.
\(^{19}\) Comments and Responses Report: page 71.
\(^{20}\) Comments and Responses Report: page 55.
these customers may import product, ERM contends that “the potential significance of the impact on the Chevron Refinery from the importation of fuel products has been assessed in detail in the ESS and FSSR and integrated into the Final EIR in Section 8.2.6”.21

4.1.4. Whilst Burgan maintains that it does not know what the business models of its customers will be, the FSSR describes the ‘most likely’ scenario as one in which the anchor tenant sources product from the Cape Town refinery and the remaining ullage is taken up by the storage of strategic stocks and imports of petrol50 and diesel50. The FSSR relies upon this assumption as the basis for justifying the conclusion that the impact of the facility on the Cape Town refinery will be “negligible”.22

4.2. **Chevron’s position:**

4.2.1. The basis upon which the maximum throughput capacity of the facility has been “quantified”23 by Burgan at 805,000m³/yr and “verified by ERM”24 is not clear. Nowhere are calculations to this effect provided. Given the significant potential for the facility to achieve a throughput capacity well in excess of 805,000m³/yr (as set out in the PetroLogistics Report (September 2014)), this “quantification” and “verification” must be explained in detail.

4.2.2. Chevron has, in its comments on the revised DEIR submitted to ERM and dated 6 August 2014, highlighted the numerous references in the EIA documentation evidencing the link between the construction of the terminal and the ultimate use thereof for the importation of product into the Cape Town market.

4.2.3. In further support hereof, the FEIR and ESS contain the following references to the import potential of the terminal:

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21 Comments and Responses Report: page 54.
22 FSSR, page 11.
23 Comments and Responses Report: page 54.
24 ESS, page 32.
4.2.3.1. “It seems likely that competition will be increased since the Project would introduce new import, storage and distribution facilities to Cape Town”.

4.2.3.2. “Under such a scenario, if continued robust demand Clean Fuels 2 compliant petrol and diesel is to be satisfied, there will be an increased requirement to import these fuels”.

4.2.3.3. “The Project will bring increased fuel storage infrastructure, and allow for fuel importation thereby increasing the security of supply to the Western Cape”.

4.2.3.4. “The location does favour the proposed land use, as the Port of Cape Town is a strategic location for the import, export and storage of bulk fuel”.

4.2.3.5. “This would include the facilitation of direct imports to Cape Town instead of having to first import larger shipments into Durban, then break bulking them for further shipment in smaller quantities to Cape Town thereby increasing logistics costs”.

4.2.3.6. “It would allow for greater flexibility in storage, importation and further distribution”.

4.2.3.7. “…it is important to understand that the facility would provide the infrastructure that would facilitate or allow for fuel imports in competition with Chevron’s local production”.

4.2.3.8. “It seems likely that competition will be increased since the project would introduce new import, storage and distribution facilities to Cape Town”.

26 FEIR, page 2-21.
27 FEIR, page 5-9.
28 FEIR, page 5-11.
29 FEIR, page 8-36.
30 FEIR, page 8-37.
31 FEIR, page 8-40.
32 ESS, page 25.
4.2.3.9. “...if continued robust demand Clean Fuels 2 compliant petrol and diesel is to be satisfied, there will be an increased requirement to import these fuels. This process could be facilitated by the infrastructure that would be provided by the proposed Burgan facility (Buley, 2014).”

4.2.3.10. “…It would allow for greater flexibility in storage, importation and further distribution at times and in circumstances where this is desirable (and is in keeping with relevant fuel industry regulations). This would include the facilitation of direct imports to Cape Town instead of having to first import larger shipments into Durban, then break bulking them for further shipment in smaller quantities to Cape Town thereby increasing logistics costs.”

4.2.3.11. “…In this regard it is important to bear in mind that the proposed Burgan Oil facility would be multi-purpose in nature and could be used for the storage and distribution of both locally produced fuels and imported fuels”. (Emphasis supplied.)

4.2.4. The FEIR correctly identifies that it is the potential for the Burgan terminal to be utilised for importing product which is the primary basis of Chevron’s concerns. This concern is driven not by the concern that the import of product is the exclusive prerogative of Chevron (this is not our client’s position) but rather that the import of bulk volumes of product gives rise to the potential for significant adverse economic impacts on the Cape Town refinery (for the reasons substantiated herein and in the PetroLogistics Report dated September 2014).

4.2.5. It is Chevron’s position that the Burgan facility will give rise to the potential for significant volumes of product to be imported into the Cape Town supply area in a manner that will place the refinery in economic hardship. Significant imports are likely for the following reasons:

4.2.5.1. According to Burgan’s application to the National Energy Regulator of South Africa (“NERSA”) for a construction and operating licence in terms of the Petroleum Pipelines Act 60 of 2003 (“the NERSA Application”) the

35 ESS, page 31.
Burgan Terminal will be capable of receiving imports via tanker ships in the order of 50,000 m$^3$ at a time.

4.2.5.2. The NERSA Application describes the purpose of the terminal in the following terms: (1) to break the Cape Town refinery’s import and supply monopoly; and (2) to provide import access to fuel retailers which is independent of existing fuel supply infrastructure in Cape Town.

4.2.5.3. Although Burgan have apparently secured an anchor tenant for 50% of the terminal’s storage capacity, Burgan have not stated what the significant volume of excess capacity of the terminal (approx. 58 000 m$^3$) will be utilised for. Although, ERM have indicated that strategic stocks would be a possible use for the excess capacity of the terminal, it is unlikely that the excess capacity will be utilised for this purpose since the national government policy on strategic stocks has not been finalised and is in draft stage. Furthermore, parties responsible for holding strategic stock may find alternative and more economical solutions for this purpose, such as the existing storage facilities within the Cape Town supply area which could be utilised for achieving strategic stock objectives.

4.2.5.4. The extent to which Burgan will rely on strategic stocks storage as an ongoing operational model is considered an unlikely outcome for the reasons stated in the PetroLogistics Report (September 2014).

4.2.5.5. Since Burgan is in the business of renting storage for petroleum products and facilitating the import thereof, Burgan will in all likelihood rent out excess capacity to increase its return on capital invested. Even if Burgan suggest that its business model is not premised on the import of product (despite the clearly expressed intent that this will be the case), Chevron is concerned that a basic economic modelling exercise reveals that Burgan will be strongly incentivised to turn the terminal to use for import purposes. This conclusion is supported by the clear intention – referred to above to utilise the terminal for trade and import purposes.

4.2.5.6. Given the scale of the proposed terminal and the potential for the throughput capability of the infrastructure to achieve well in excess of the stated 805 MI per annum, Chevron is concerned about the real likelihood
that the terminal will be utilised to import product into Cape Town ahead of a proven and sustained market-short and/or ahead of upgrades to local refining capability, which upgrades are currently the subject of negotiations with Government.

4.2.5.7. As indicated in the PetroLogistics Report (September 2014), the supply and demand balance for the Cape Town area indicates that the Cape Town refinery production is able to satisfy projected growth in demand for gasoline and diesel for the foreseeable future. Even assuming that the supply and demand balance relied upon by Chevron is incorrect, and assuming that the 690 Ml of imports identified in the FSSR were indeed required in 2017 (which is disputed by the PetroLogistics Report (September 2014)), the point remains that the scale of the terminal infrastructure proposed, and the product throughput operations that the terminal could support would still be a serious concern to Chevron. This is because the terminal as currently designed could support imports in the region of 2.8 million m³ per annum. This is significantly higher than the stated throughput capacity stipulated by Burgan, and supposedly “verified” by ERM. In the absence of the reasons why Burgan proposes building a terminal with such obvious additional capacity in excess of what would reasonably be required for the Cape Town supply area, Chevron maintains that this is a legitimate and real concern and the associated impacts need to be investigated and assessed.

4.2.6. Based on the above, Chevron disputes the FSSR’s “most likely” scenario where the anchor tenant will source product from the Cape Town refinery and the remaining ullage will be used primarily for the storage of strategic stocks and imports of petrol50 and diesel50.

4.2.7. There is insufficient information in the FEIR to discount the fact that the use of the terminal for the bulk import of product – with associated economic hardship for the Cape Town refinery will not be a realistic scenario associated with the terminal’s operations.
5. **Significant impact on the Cape Town refinery**

Chevron has historically raised the concern that the import capability of the proposed Burgan facility will significantly impact on the viability of the Cape Town refinery.³⁶

5.1. **Burgan’s response:**

5.1.1. The approach initially adopted in the ESS was to discount any impact on the refinery.³⁷ The ESS now bases its conclusion that “risks to the continued viability of the Chevron Refinery should be negligible for the most likely scenario and low for the worst case scenario with mitigation”.³⁸ This conclusion is based on the analysis contained in the FSSR.³⁹ The FEIR similarly bases its conclusions regarding potential impacts on the Cape Town refinery on the conclusions reached in the FSSR, noting that “the Fuels Sector Specialist Report provides the primary assessment of impacts on the continued viability of the Chevron Refinery (see Buley, 2014 in Annex I)”⁴⁰.

5.1.2. The FSSR is therefore the primary basis upon which impacts on the refinery have been considered. The FSSR considers the impact of the Burgan facility on the Cape Town refinery in two instances, by using a ‘worst case’ and ‘most likely’ scenario.

5.1.3. In the FSSR’s ‘worst case’ scenario, in which the tenants of the Burgan facility focus solely on the importation of fuels through the facility, it is estimated that this will have a negative impact on the Cape Town refinery amounting to an estimated loss of $5.8 million per year or $0.21 per barrel of crude oil in 2020 following the conversion of the refinery to Clean Fuels 2 (and an estimated loss for the refinery which the FSSR quantifies as $1.4 million or $0.05 per barrel of crude in 2017).

5.1.4. This assessment of the ‘worst case scenario’ in the FSSR is based on the following assumptions:

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³⁶ See paragraphs 24.5.2, 31 and 43 of our letter dated 6 August 2014.
³⁷ See paragraph 4.5.2 of the ESS attached to the DEIR dated March 2014.
³⁸ ESS, page 40.
³⁹ ESS, executive summary.
5.1.4.1. There being a market short of 690MI of product in 2017, requiring that this volume of product would be required to be imported.

5.1.4.2. The 805MI total import capability provided by Burgan would displace the 690MI of imports.

5.1.4.3. Chevron would export an additional 115MI (805MI – 690MI) up the coast. The additional cost would be $1.4 million or $0.05 per barrel of crude.

5.1.4.4. Following the conversion of the refinery to Clean Fuels 2 in 2020 there would be a requirement to import 349MI of product. Based on the 805MI import capability, 456MI (805MI – 349MI) of product would need to be exported by Chevron up the coast. The shipping cost of the exported product would be $5.8 million or $0.21 per barrel of crude.

5.1.5. The FSSR discounts any significant adverse impact on the Cape Town refinery in terms of the ‘worst case scenario’ for the following three reasons:

5.1.5.1. Refineries have been and will continue to be exposed to market forces which show margin variability in excess of $ 6 per barrel of crude oil in a one month period. The uncertainty in demand growth and gross margin place the potential impact of the Burgan facility on the refinery “in perspective”. Variations in US cents are insignificant when compared to other variations in US dollars.  

5.1.5.2. The impact of the Burgan facility on the Cape Town refinery can be addressed by cost cutting and revenue enhancement initiatives.

5.1.5.3. It is highly probable that tenants using the Burgan facility would chose to buy product from the refinery as opposed to importing product through the terminal.

5.1.6. For those reasons, the FSSR concludes that the worst case scenario is considered highly unlikely.

40 FEIR, page 8-40.
41 FSSR, page 10.
5.1.7. The FSSR’s findings in connection with what it describes as the ‘most likely scenario’ are that the impact of the Burgan facility on the Cape Town refinery will be negligible. This finding in the FSSR is based on the following:

5.1.7.1. Burgan will provide more than 50% of its storage facility to an anchor tenant and it is most likely that the anchor tenant would source petrol500 and diesel500 from the Cape Town refinery.

5.1.7.2. Should the facility also be used as a storage facility for strategic stocks and imports of petrol50 and diesel50, then it is highly unlikely that this will have any negative impact on Chevron.42

5.1.8. Nowhere in the FSSR has the impact of shutting in the refinery production been evaluated, or quantified. The Comments and Response Report however indicates that Mr. Buley has calculated that the “financial loss for shutting in Chevron Refinery’s crude rate from 27.9 to 21.7 million barrels per year to reduce production by 805 Mtpa is about $22 million per year”.43

5.1.9. The ESS, “as per the findings of the fuels sector specialist…” maintains that “…it is not anticipated that the refinery would be forced to shut down as a direct result of the Burgan project”.44 This conclusion regarding closure is based largely on the FSSR’s flawed supply and demand analysis. The PetroLogistics Report (September 2014) clearly identifies that the impact of shutting-in production at the Cape Town refinery has not been assessed in the FEIR, ESS or FSSR. As a result of this failure to assess the impact of shutting-in production (which is confirmed as a possible scenario in the PetroLogistics Report) conclusions that the risks to the Cape Town refinery occasioned by the project can be mitigated by “manageable cost cutting and/or profit reduction”45 are not justified, the reason being that conclusions regarding mitigation measures can never be sustained without an appropriate understanding of the impacts to be mitigated. Whilst it may be ERM’s position that socio-economic impacts have been assessed to an

42 FSSR, page 11.
43 Comments and Responses Report: page 50.
44 ESS, page 32-33.
45 ESS, page 33.
“appropriate level”; this simply cannot be so if a possible (and likely) impact, such as shutting-in production, has not been assessed. Given the flawed basis for the assumptions regarding adverse impacts (for they are no more than assumptions given that it is common cause that the impact of shutting-in production has not been assessed), the authors of the ESS are required to justify the conclusion that any adverse socio-economic risk is avoided or minimised through “manageable cost cutting and/or profit reduction”. Furthermore, the basis upon which adverse socio-economic impacts are limited to “slightly less expenditure on sub-contractors and/or suppliers or limited reductions in staff” is not substantiated by any analysis. To suggest that “much will depend on market conditions and the willingness of Chevron to adapt and manage potential changes” is meaningless and an unfair statement.

5.2. **Chevron's position:**

5.2.1. The accuracy of the analysis of the impact of importing product on the Cape Town refinery is entirely dependent on the efficacy of the assessment undertaken by Mr. Buley in the FSSR.

5.2.2. The methodology adopted in the FSSR entails an analysis of the impact of importing the total throughput capacity of 805 Mlpa (as quantified by the applicant) and to deduct the import requirements that the Cape Town refinery would need to satisfy market demand from the time that the terminal becomes operational.

5.2.3. The approach adopted and applied by Mr. Buley in the FSSR in connection with quantifying the impacts is flawed on the following two bases:

5.2.3.1. The supply and demand balance relied upon by the FSSR is incorrect. The (more accurate) projection of the supply and demand balance by PetroLogistics (September 2014) undermines the conclusion in the FSSR that there would be a legitimate short of 690Mlpa in 2017. The supply and demand projection in the PetroLogistics Report is based on 2013 actual production figures whereas the projection contained in the FSSR appears

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46 Comments and Responses Report: page 5.
47 ESS, page 33.
to be based on earlier (and unspecified) base-year for demand and an estimate for production which, according to PetroLogistics, is less than the recently-achieved performance of the Cape Town refinery.

5.2.3.2. The FSSR assumes that the market short (if any) would be “captured” as throughput by the Burgan terminal. This assumption ignores the further additional enquiry into which companies or oil marketers “owned” the particular short. For example, if the short in question belonged to, for example Engen, BP, or Chevron, then that Oil Company would not want to incur the additional cost of Burgan’s fees and would rather import directly in terms of existing import infrastructure and the capability thereof, which PetroLogistics indicates is more than capable of dealing with the need to import such volumes.

5.2.4. Irrespective of the arguments, the threat for further (i.e. additional) imports through the Burgan terminal would still exist and would potentially affect the Cape Town refinery. The alternative scenarios envisaged in the FSSR do not provide certainty that bulk imports of product is not an equally realistic operational model of the terminal.

5.2.5. Although the FSSR identifies that the impact on Cape Town refinery can be calculated in two ways, PetroLogistics disputes that these methods are mutually exclusive and that each method is equally capable of achieving the most direct and applicable result. With regard to the anticipated consequences for the refinery in the scenario where Chevron decides to export product up the coast, this analysis is flawed for the simple reason that the decision to shut-in or ship-out product has nothing to do with the fixed costs of the refinery (as suggested by Mr. Buley in the FSSR) but rather has everything to do with the marginal economics of running the last barrels of crude through the refinery.

5.2.6. Whatever the prevailing optimal operating plan is for the Cape Town refinery will be determined by Chevron in terms of and in accordance with market conditions. PetroLogistics have advised that whatever Mr. Hugo van Zyl might have been told in relation to shipping-out being the preferred method when engagements were had with Chevron, this cannot be assumed to operate as an ongoing

48 ESS, page 33.
optimal operating plan for the refinery. The reasons for this were explained in the PetroLogistics Report dated August 2014. The obvious inference is that the EIA consultants have not had appropriate regard to the content of that report in the preparation of the FEIR.

5.2.7. PetroLogistics advises that in order to understand any potential impacts on the Cape Town refinery it is absolutely critical to undertake the exercise of estimating impacts on the Chevron refinery in terms of both scenarios of shipping-out production and shutting-in production. The PetroLogistics Report (September 2014) confirms that the analysis of shutting-in production was simply not undertaken in the FSSR and this is a critical and material flaw in the efficacy of that study in quantifying the impact on the Chevron refinery.

5.2.8. The PetroLogistics calculation of the financial loss due to the reduced throughput in the August 2014 report was undertaken in an attempt to illustrate in good faith the flaws in the methodology employed in the FSSR. Specifically, the PetroLogistics Report explained the value of the approach in connection with modelling based on Dubai crude for the purposes of quantifying the financial impact of shutting in production. Again, this was undertaken in good faith on the basis that no such equivalent attempt had been made by the EIA consultants to grapple with this impact. In fact that impact had been excluded altogether from the methodology.49

5.2.9. The fact that Mr. Buley disagrees50 with the PetroLogistics calculation of the financial loss due to the reduced throughput is therefore immaterial as the analysis and conclusions in the FSSR are deficient. What the Comments and Response Report produced by ERM serves to highlight however is that both PetroLogistics and Mr. Buley have apparently quantified that the cost of shutting in production at the refinery is quantified at over US$20 million per annum. The only reference to this is in the Comments and Response Report and there is no indication that this issue has been appropriately dealt with (for the reasons outlined herein) in the FSSR, the ESS or the FEIR. This is a critical flaw in the EIA process and the full attendant impact of shutting-in production at the refinery (with an over US$20 million per annum impact on earnings) must be quantified.

49 FSSR, page 1.
50 Comments and Responses Report: page 52.
and be evaluated, considered and assessed in compliance with the EIA Regulations. The reasons for that are clearly elucidated in the PetroLogistics Report (September 2014).

5.2.10. Chevron has various reservations about the method of relying on the crude rate when the critical issue relevant to the EIA process should rather be the production capacity of clean fuels by the Chevron refinery and the potential ability of the Burgan terminal to effectively shut-in the production of those clean fuels through the bulk import of petroleum products. For this reason it is absolutely critical that both Mr. Buley and PetroLogistics have regard to the actual production capability of the refinery based on the appropriate production data. The need for this is acknowledged and the relevant data has been made available to Burgan care of its attorneys (Cliffe Dekker Hofmeyr).

5.2.11. Insofar as the FSSR appears to be relying on a lack of capacity (on the part of the refinery) to satisfy market demand with reference to an application Chevron is supposed to have submitted to increase its production capacity from 100,000 to 115,000 bpsd allegation that is completely inaccurate. Chevron is in the process of converting its primary operating licence (historically granted to it in terms of the Atmospheric Pollution Prevention Act to the requisite atmospheric emission licence in terms of the National Environmental Management: Air Quality Act). Insofar as the production capacity of the refinery is concerned that licence conversion does not seek to enhance Chevron’s production capacity, for whatever reason. Historically the refinery has always operated in terms of an historical cap of 100,000 bpcd which is to be distinguished from its capability on a stream day basis. This approach is consistent with Chevron’s historical operations and does not evidence an application for increase in production capacity, as is suggested by ERM.51

5.2.12. For the reasons stated in the PetroLogistics Report (September 2014), the approach relied upon by Mr. Paul Buley is fundamentally flawed in that:

5.2.12.1. It assumes (incorrectly) that any surplus product (displaced by the import of product into the Burgan terminal) would be shipped up the coast by Chevron. This is not Chevron’s preferred operating model.

51 Comments and Responses Report: page 51.
5.2.12.2. The FSSR incorrectly quantifies shipping costs by underestimating the cost of displacing product and the associated impact on the refinery.

5.2.12.3. The FSSR has not evaluated and assessed the impact of shutting-in production at the Cape Town refinery.

5.2.13. Notwithstanding the fact that the FSSR has failed to assess the impact of shutting-in production, the Comments and Responses Report includes the comment that:

“Paul Buley’s calculated financial loss for shutting in Chevron Refinery’s crude rate from 27.9 to 21.7 million barrels per year to reduce the production by 805 Mlpa is about $22 million per year”.52

5.2.14. The amount of $22 million per year is sufficiently proximate to the calculations undertaken by PetroLogistics in quantifying the impact on the Cape Town refinery. See the PetroLogistics Report which quantifies the financial loss associated with the impact of shutting-in refinery production at approximately US$24 million. In relation to the refinery earnings the amount identified in the Comments and Responses Report is significant and Chevron asserts that this consequence will compromise the viability of the refinery. This information is sufficient to warrant a comprehensive impact assessment of the economic impact on the refinery and the associated socio-economic impacts associated with the scenario where the refinery’s viability is threatened and the facility is forced to close.

5.2.15. Given the materiality of this potential impact and the potential intensity and severity of the impact associated with the impact of shutting-in refinery production, there is no legitimate basis for ERM to be claiming that impacts have been assessed to the level of detail required in order to enable the competent authority to discharge its mandate in terms of NEMA.

52 Comments and Responses Report: page 50.
6. **Clean Fuels 2**

Chevron has expressed concern regarding the intention of the Burgan terminal to satisfy the projected demand for Clean Fuels 2 prior to governmental certainty and the associated upgrades of the Milnerton refinery, which may potentially threaten the infrastructural investment required to upgrade the refinery.\(^{53}\)

6.1. **Burgan’s position:**

6.1.1. The ESS states that in the scenario where there is ongoing demand for Clean Fuels 2 (CF2) products there will be an increased requirement to import such fuels. The ESS indicates that the process of importing such fuels could be facilitated by the infrastructure that would be provided by the proposed Burgan facility.\(^{54}\)

6.2. **Chevron’s position:**

6.2.1. Chevron is cognisant of the imperative in the National Development Plan (“NDP”) to ensure that existing fuel refineries be upgraded to ensure that they meet the new standards contemplated in CF2. The statement in the ESS that \textit{“local refining capacity necessitates imports”}\(^{55}\) is an oversimplification of the status quo. It is acknowledged that Chevron does not have the capacity at present to produce sufficient quantities of CF2 to meet market demand.

6.2.2. However, the precise ability of the refinery to meet the demand for CF2 must be considered against the backdrop of an accurate supply and demand analysis and an associated accurate projection on forecast growth in CF2. That also must be contemplated in terms of ability of the existing fuel supply infrastructure and logistics capability in the Cape Town supply area to accommodate the need for import of clean fuels as identified in the NDP.\(^{56}\) Chevron is aligned with the Burgan position in that regard but disputes the fact that this analysis justifies the conclusion that this capability is only achieved through the construction of a new

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\(^{53}\) See paragraphs 23 and 56 of our letter dated 6 August 2014.

\(^{54}\) ESS, page 26.

\(^{55}\) ESS, page 26.

terminal facility. It is also acknowledged that the new facility might be able to complement the need for the continued import of refined product in a situation where the refinery is unable to produce same until such time as the upgrade in question occurs.

6.2.3. It is equally important to take cognisance of the fact that the NDP recognises the need to allow the importing of a “share of refined product until the country reaches a stage where it can absorb the output of either a new refinery or a major upgrade of an existing refinery”.57 The reference to a share of refined product is critically important as it presupposes that this (i.e. importing product) should not displace the current import capability of the logistical supply mechanisms. For the reasons outlined in the PetroLogistics Report (September 2014), the current logistical and infrastructural supply capability of fuel supply infrastructure in Cape Town is more than adequate to achieve and match the need for ongoing imports of clean fuels even at the forecast demand growth of 10% posseted by the FSSR (which PetroLogistics contends is unreasonably high).

6.2.4. If the Burgan facility facilitates the objective of providing CF2 to match continued robust demand without regard to the existing import capability of logistical supply mechanisms then the impact of this on the refinery must be assessed.

6.2.5. Although the Cape Town refinery does not currently have the capability to produce the required CF2 in the volumes required by the market, the current infrastructure capability is more than capable of accommodating the import of product. This fact notwithstanding, it is clearly contemplated that the import of clean fuels is a significant component of the possible operational model of the terminal and for that reason alone it is necessary to contemplate the potential impact of allowing the import of clean fuels 2 ahead of current import capability and ahead of the pending refinery upgrade. This scenario clearly carries with it the potential to forestall or preclude the option of upgrading the Cape Town refinery notwithstanding the fact that negotiations between Chevron and national Government are ongoing and at a sensitive stage. The effect of precluding the potential for Chevron to upgrade the refinery by virtue of the operation of the

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57 NDP, page 174.
Burgan terminal is a potential consequence that needs to be investigated thoroughly.

7. Mandate of the environmental authorities under NEMA

Concerns have historically been raised by Chevron regarding the manner in which ERM and the Economic Specialists have fundamentally misconstrued the nature and scope of the EIA process and the mandate of the competent authorities assessing the applications for environmental authorisation.58

7.1. Burgan’s response:

7.1.1. Previously ERM adopted the position that any concerns raised by Chevron in connection with the import of product (and the impacts associated therewith) fell to be regulated by DoE and not the competent authority in terms of NEMA. In the latest iteration of the Comments and Responses Report, ERM expresses its revised position in relation to this concern, stating that it “does not dispute that state authorities charged with environmental management and energy generation and distribution have concurrently (sic) jurisdiction over the authorisations needed to construct and operate an oil terminal”.59

7.1.2. ERM has acknowledged that the impacts associated with the importation of fuel must be considered within the scope of the EIA process and claims, in this regard, that “the identified impacts from the importation of fuel product are assessed in detail in the ESS and the EIR”.60 It is ERM’s position that it has not sought to avoid the consideration of all project-related impacts and that the potential impacts of both the construction and operation of the facility as a storage facility have been identified and assessed in detail, “including and specifically those potentially resulting from the importation of fuel”.61

7.1.3. ERM has further stated that whilst Burgan will own and operate the facility and Burgan’s clients may import fuel, it “recognises that there are potential impacts

58 See paragraph 17 of our letter dated 5 May 2014.
60 Comments and Responses Report: page 67.
(including for Chevron) as a result of that construction and has assessed these in some detail.\textsuperscript{62}

7.1.4. It is ERM's position that the FEIR does not contend that Burgan would have no responsibility, but rather that "any mitigation with respect to fuel imports would require the involvement of the institutions tasked with the regulation of fuel imports".\textsuperscript{63}

7.2. \textbf{Chevron's position:}

7.2.1. Whilst ERM have acknowledged that an assessment of the impact of the proposed facility on the Cape Town refinery cannot be deferred to DoE, the EIA documentation has failed to adequately assess this impact in that the impact of shutting-in production at the Cape Town refinery has not been assessed. The FSSR only deals with the impact on Chevron of the Cape Town refinery having to transport product up the coast to Durban as a result of imported product being brought into the Cape Town market by the Burgan facility. It is only in the Comments and Response Report that the remark is made that "\textit{Paul Buley's calculated financial loss for shutting in Chevron Refinery's crude rate from 27.9 to 21.7 million barrels per year to reduce the production by 805 Mtpa is about $22 million per year}".\textsuperscript{64}

7.2.2. As set out in the PetroLogistics Report (September 2014), shutting-in production must be considered as a possible outcome and it cannot be assumed that Chevron will transport displaced product up the coast to Durban. The reasons for this include:

7.2.2.1. The cost of bridging product from in-tank Cape Town to in-tank Durban is understated in the FSSR.

7.2.2.2. The decision to shut-in or ship-out product has nothing to do with the fixed costs of the refinery (as suggested by Mr. Buley in the FSSR) but rather

\textsuperscript{62} Comments and Responses Report: page 66.
\textsuperscript{63} Comments and Responses Report: page 67.
\textsuperscript{64} Comments and Responses Report: page 50.
has to do with the marginal economics of running the last barrels of crude through the refinery.

7.2.2.3. Whatever the prevailing optimal operating plan is for the Cape Town refinery will change in accordance with market conditions.

7.2.3. Despite ERM’s assurances that the “the FSSR undertakes an economic assessment to the detailed level required to provide a comprehensive understanding of the impacts associated with the project”, ERM's failure to assess the impact of shutting-in production at the Cape Town refinery lends itself to the conclusion that ERM cannot claim that: (1) economic impacts have been assessed; (2) that the assessment is to the level of detail required; or (3) that the EIA documentation provides a comprehensive understanding of project related impacts.

7.2.4. Given the lack of detailed information on the possible operational models of this “multi-purpose” facility, and notwithstanding the fact that tenants for approximately 50% of the total tank capacity have allegedly been secured, there is nothing concrete in the FEIR, ESS or FSSR which suggests that the facility will not be utilised for significant imports.

7.2.5. While the ESS correctly identifies that it is this potential for the Burgan terminal to be utilised for importing product which is the primary basis of Chevron’s concern, coupled with the associated concern that the importation of product will impact on Chevron’s operations, the ESS has focused on the role to be played by the DoE in “mitigating” this impact, as opposed to comprehensively considering the nature of this impact the severity of this impact.

7.2.6. In this regard it is Chevron’s position that the impact of displacing the Cape Town refinery’s production up the coast has not been accurately quantified (as shown in the PetroLogistics Report (September 2014)) and the impact of shutting-in production at the Cape Town refinery has not been assessed at all. The impact of shutting-in production, which on Mr. Buley’s own version is calculated at an approximate loss of $22 million per year, will threaten the viability of the Cape

65 Comments and Responses Report: page 47.

66 ESS, page 33.
Town refinery by eliminating the refinery's earnings. This threat to viability is apparent when regard is had to the Cape Town refinery's actual earnings (which data has been offered to ERM under cover of agreement on a confidentiality regime).

7.2.7. Furthermore, whilst PetroLogistics has assessed the impact of shutting-in production at an approximate loss of US$24 million per year (and Mr. Buley at an approximate loss of US$22 million per year), this calculated loss is based on a maximum throughput of 805,000m³/yr as the threshold. As discussed in these comments and in the PetroLogistics Report (September 2014), this throughput is likely to be substantially greater, which in turn would result in an even more severe loss of actual earnings.

7.2.8. According to the ESS, it is the DoE's import licencing regulatory framework that is "the more equitable way of restricting imports should this be found desirable as they [the import restrictions] could be applied to importers using existing facilities and importers using the proposed Burgan facility".67 The issue is not about which of the applicable regulatory frameworks is more "equitable" in regulating imports. The issue is rather about DEADP's mandate in terms of NEMA and how the impacts associated with imports require this issue to be investigated comprehensively in the EIA process rather than being left for determination by the DoE.

7.2.9. ERM's approach, which endorses the methodology adopted by the ESS and FSSR in this regard,68 runs counter to the prescripts of the EIA Regulations and the relationship between impact avoidance and mitigation. The Impact Mitigation Hierarchy tool is instructive in this regard. This tool considers different tiers of impact mitigation. The first tier is impact avoidance; then minimisation if impacts cannot be avoided; and then lastly (where impacts cannot be sufficiently avoided or minimised), compensation (where applicable).69

67 ESS, page 34.
68 FEIR, pages 8-42 and 8-43.
7.2.10. Accordingly, the impacts of a project must first be comprehensively assessed to determine whether or not such impacts can or should be avoided before a consideration of how such impacts can be minimised. Mitigation measures, particularly those to be applied in terms of a discrete licencing procedure, cannot therefore be an appropriate substitute for an assessment in terms of NEMA which must consider the nature, extent and severity of project impacts. For the reasons stipulated herein, this level of assessment of project impacts has not been undertaken in connection with the EIA process.

7.2.11. If the DoE, tasked with considering applications for import licences, restricts the licencing of imports at the Burgan facility to prevent a situation in which there will be an oversupply of fuel into the Cape Town market, then this could affect (in the absence of information to the contrary) the viability of the Burgan facility. If the DoE licences imports in respect of the Burgan facility ahead of market demand, regardless of the situation in which this will result in an oversupply, then this will adversely affect the viability of the Cape Town refinery. It is this precise situation that the Court in *Fuel Retailers* sought to avoid, remarking that it is the object of the EIA process to identify and predict the actual or potential impact on socio-economic conditions to ensure that the earth does not become “a graveyard for commercially failed developments”. Accordingly, it was for this reason in the *Fuel Retailers* case that the Court held that the impact of a proposed development on the feasibility of other developments would have to be carefully assessed.

7.2.12. There is no basis to suggest that the implementation of the regulatory framework for which the DoE is responsible will be a failsafe mechanism for protecting local refinery utilisation and production from imports in the scenario where local refining capacity exists and inbound infrastructure can handle import volumes. There is insufficient information to guarantee that imports will be regulated effectively through the DoE mechanisms alone.

7.2.13. There is a need for the competent authority in terms of NEMA to have regard to this issue insofar as this issue (i.e. the import of petroleum products associated


71 *Fuel Retailers*, at paragraph 80.
with this particular project) gives rise to adverse socio-economic impacts. There is sufficient merit to suggest that an equivalent control mechanism should be contemplated by the competent authority under NEMA if it is shown that there is a legitimate need for this in terms of the NEMA framework. A legitimate need would be established where the failure to control imports to avoid adverse economic impacts or to have proper regard to the impacts associated with imports in such circumstances, would give rise to adverse socio-economic consequences. It is equally important for the NEMA process to ensure that the import of product is therefore restricted to times and circumstances where this is desirable in order to avoid and/or minimise potential adverse socio-economic impacts. It is submitted that this is such a case. The clear and direct potential for economic hardship for the refinery (and the potential socio-economic consequences when the viability of the refinery is threatened) justifies the basis for regulating this activity in terms of NEMA and not relying exclusively on the mandate of other regulatory authorities.

8. **Infrastructural constraints and policy imperatives around strategic stocks**

Chevron has historically communicated its concerns regarding the extent to which infrastructural constraints and policy imperatives around strategic stocks could be relied upon as a determining factor in motivation of the application.  

8.1. **Burgan’s response:**

8.1.1. In response to this concern, ERM contends that the maximum throughput of the facility is clearly stated as 805,000m³ “regardless of the volume allotted for strategic stock”. According to ERM, the impact assessment, specifically the ‘worst case scenario’ (in terms of which Burgan focus solely on the importation of fuels through the facility), has been undertaken on the basis of the maximum throughput and accordingly “the use of the facility for holding strategic stock has not been used in support of an argument that the facility will not result in significant imports. The maximum throughput of the facility has been taken into consideration.”

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72 See paragraph 9 of our letter dated 5 May 2014.
73 Comments and Responses Report: page 73.
74 Comments and Responses Report: page 73.
8.2. **Chevron’s position:**

8.2.1. Contrary to the above statement by ERM, it is clear from the FEIR that significant reliance is placed on the proposed facility satisfying policy imperatives around strategic stocks and infrastructural constraints.\(^{75}\) In this regard, considerable emphasis is placed in the EIA documents on the need to provide security of fuel supply through strategic stocks and how the terminal will satisfy this objective.

8.2.2. Alleged infrastructural constraints are relied upon heavily in both the ESS and the FSSR as a means of motivating the need for the Burgan terminal. The compatibility of the project with policies and plans related to “security of supply, the maintenance of strategic stocks, infrastructural needs, [and] spatial and capacity planning at the Port of Cape Town...”\(^{76}\) is a clear focal point of the conclusion in the ESS and the FEIR’s motivation in support of the need for and desirability of the facility.\(^{77}\)

8.2.3. It is also clear that whilst the ‘worst case’ scenario envisaged by the FSSR is premised on the maximum throughput being utilised for imports, this scenario is dismissed as “highly unlikely”.\(^{78}\) The ‘most likely scenario,’ according to the FSSR, anticipates that the facility will be used for strategic stocks and that product will be sourced from the Cape Town refinery and not imported. On the basis of the ‘most likely scenario’, the impact of the proposed facility on the Cape Town refinery is assessed as “negligible”.\(^{79}\)

8.2.4. Whilst it is accordingly clear that considerable weight is placed on policy imperatives around strategic stocks, it also clear, from a proper consideration of the Draft Strategic Stocks Petroleum Policy and Implementation Plan\(^{80}\) that this

\(^{75}\) FEIR, Chapter 5.

\(^{76}\) ESS, page 40.

\(^{77}\) FEIR, Chapter 5.

\(^{78}\) FSSR, page 11.

\(^{79}\) FSSR, page 11.

reliance (by ERM in motivating the need for the facility) is misplaced for the following reasons:

8.2.4.1. The concept of “strategic stocks” is very particular and covers those stocks which are held indefinitely and released only when the Minister of Energy declares a state of emergency. Strategic stocks are not fuel stocks stored by oil industry stakeholders to be used when there are supply disruptions or short-term supply chain problems.81

8.2.4.2. According to the Draft Strategic Stocks Petroleum Policy, “the release and replenishment of strategic stocks do not involve any sales transactions where price is involved”.82 For government held strategic stocks, it is anticipated in the draft policy that the holding of such stocks would require government investment in storage facilities (or government rental of storage facilities), which costs would be recovered through the imposition of a fuel levy or another mechanism agreed to between the Department of Energy and National Treasury.

8.2.4.3. For industry held strategic stocks, it is anticipated in the draft policy that the costs would be recovered through the regulated fuel pricing mechanism.83 In this heavily regulated environment, it is unclear what financial benefit Burgan would acquire from storing strategic stocks, which renders this use of the facility (as motivated in the EIA documentation) an unlikely one and almost entirely dependent on the finalisation of government policy for its efficacy. Since Burgan is in the business of renting storage for petroleum products, Burgan will in all likelihood rent out excess capacity to increase its return on capital invested. Burgan has not gone so far as to provide an undertaking that strategic stocks would in fact be stored at the facility. The FSSR merely notes that “additional agreements including strategic stock storage will be advanced”.84

8.2.4.4. It is clear from the Draft Strategic Stocks Implementation Plan, that for a facility to be deemed a strategic stocks storage facility it will have to comply

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84 FSSR, page 5.
with certain technical and environmental conditions.\textsuperscript{85} It is not clear from the EIA documentation how the Burgan facility would comply with the required technical and environmental conditions necessary to be deemed a strategic stock storage facility, or how the facility would adapt to comply in the event that these conditions have not yet been determined.

8.2.4.5. The statement in the ESS that “since one of the key features of the Burgan facility is the construction of additional storage, the project is broadly supportive of the draft [strategic stocks petroleum] policy”,\textsuperscript{86} is accordingly meaningless as the construction of storage capacity does not in any way show that such capacity is suited to the holding of strategic stocks.

8.2.5. In the absence of accurate information regarding the proposed operational model of the facility, any motivation which is based on the storage of strategic stocks is speculative. Faced with the regulatory uncertainty regarding industry held strategic stock it is highly unlikely that the terminal will be put to that use. This in turn highlights the potential (more viable) use of the facility for bulk imports. There is simply insufficient information in the EIA documentation to suggest that the holding of strategic stocks would in fact occur at the facility.

8.2.6. It is also clear that whilst considerable weight is placed on current infrastructural constraints in motivating the need for the project, this reliance is also misplaced. As further detailed in the PetroLogistics Report (September 2014), the current inbound logistics of supply into Cape Town are adequate and opportunities exist to further enhance this position at a comparatively modest cost.

9. **Deficient enquiry into need and desirability**

Chevron has historically stated it concerns regarding the failure of the EAP to consider policy imperatives to support and protect local refining production ahead of imports.\textsuperscript{87}

\textsuperscript{85} Draft Strategic Stocks Petroleum Policy and Implementation Plan, page 28.
\textsuperscript{86} ESS, page 24-25.
\textsuperscript{87} See paragraph 17.6 of our letter dated 6 August 2014. See also paragraph 30 of our letter dated 5 May 2014.
9.1. **Burgan’s response:**

9.1.1. ERM’s position in response to this concern is that “an assessment of need and desirability in relation to all identified project impacts has been undertaken in Chapter 9 at the conclusion of the EIA where the overall benefits and costs of all identified impacts are assessed and considered in the overall context of need and desirability of the Project”.  

9.1.2. ERM’s position is that the FEIR has taken into consideration the relevant policies governing the fuel sector in South Africa in its analysis of “need and desirability”, and that such policies include those which seek “to regulate importation and protect local refining of fuel products”. However, it is ERM’s position that the DoE is the key regulatory authority that governs imports through an import licencing process and that the DoE “tends to only grant permission to import once it can be confirmed that stock is not available locally”. Accordingly, it is ERM’s position that, “in determining need and desirability the policy governing imports and protecting local refining, adjudicated on a case by case basis by the DoE, must also be put in context with policy developed to protect the security of supply for South Africa, and Cape Town”.

9.2. **Chevron’s position:**

9.2.1. Chapter 9 of the FEIR is titled “Conclusions and Recommendations”. While the perceived impacts of the proposed development are broadly summarised in Chapter 9, there is no comprehensive comparative assessment of the relative advantages and disadvantages of the development. A comparative assessment is a critically important component of assessing the relative benefits and impacts of the project. It cannot therefore be said that need and desirability has been

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88 Comments and Responses Report: page 60.
89 Comments and Responses Report: page 60.
90 Comments and Responses Report: page 60.
91 Comments and Responses Report: page 60.
considered in relation to each identified impact, as is required by the EIA Regulations.\textsuperscript{92}

9.2.2. While the revised DEIR introduced a dedicated chapter (chapter 5) titled "Need and Desirability", chapter 5 of the revised DEIR (which has not been amended with the publication of the FEIR) is largely a summary of policies, with the conclusion that the project "is in line with the relevant IDP, SDF, EMF and PDP".\textsuperscript{93} No useful distinction is drawn between the national and regional context in the discussion of this policy framework, and how this is affected by the context of the Cape Town area in the fuel sector.

9.2.3. Given that a significant portion of the FEIR (and ESS) is dedicated to motivating the need and desirability of the facility on the basis that it will improve security of supply and the associated need to enhance flexibility in fuel supply logistical arrangements, it is imperative that these assertions be tested in terms of an appropriate understanding of whether (1) there is a legitimate and justifiable need for improved security of supply, strategic stocks, and logistics flexibility; and (2) whether the Burgan facility can claim any real benefits in this regard.

9.2.4. In this regard, Chevron has already indicated that the reliance (in the EIA documentation) on policy objectives concerning improved security of supply and enhanced fuel supply logistical arrangements is misplaced (see paragraph 8 above).

9.2.5. Whilst the Department of Environmental Affairs and Development Planning’s Need and Desirability Guideline states that applicable policy is a relevant consideration, it requires that, in addition to the policy context, the merits of the application must be assessed at project level in the EIA process. The Need and Desirability Guideline is also clear in its stipulation that “whether a proposed activity will be in line with or deviate from the plan, framework or strategy per se is not the issue, but rather the ecological, social and economic impacts that will result because of the alignment or deviation”.\textsuperscript{94} This requires a two part

\begin{footnotesize}
\begin{enumerate}
\item FEIR, pages 5-9.
\item DEA&DP Need and Desirability Guideline, page 9. Own underlining.
\end{enumerate}
\end{footnotesize}
assessment, namely that policy compatibility be tested and that the EAP undertake an assessment of how the alignment or deviation from policy will result in *inter alia* social and economic impacts. It is the resultant impacts that are of crucial concern to the enquiry into need and desirability. The FEIR and ESS has failed to engage in this level of assessment.

9.2.6. As such, the policy framework relied upon in the EIA documents should provide only the strategic context for the consideration of need and desirability. The policy context should not be construed as determinative of the net societal welfare of a particular project. As motivated herein, the reliance on the policy context in the exclusion of a credible impact assessment negates the efficacy of the enquiry into need and desirability as reported in the FEIR.

9.2.7. The appropriateness of ERM’s comments on the regulation of importation and the protection of local refining of fuel product by the DoE has already been discussed at 7 above. Whilst the ESS has noted that “one key area where compatibility [with policy] is unclear is in respect of the promotion of local petroleum production over imports where possible”, the ESS has not assessed how the deviation from policy will result in adverse social and economic impacts. The construction of the Burgan terminal essentially pre-empts high-level government decision-making on the role of refineries in the fuel supply market. The impacts of doing so have not been assessed for the reasons motivated in this document.

9.2.8. The failure to evaluate and assess the adverse social and economic effects of the proposed development has compromised the enquiry into the need and desirability of the facility. While ERM maintains that “all relevant potential socio-economic impacts have been assessed in detail in this EIA process, including and specifically those potentially resulting from the importation of fuel”, it has been shown in these comments and the PetroLogistics Report (September 2014) that, at least in respect of the potential impact of the Cape Town refinery shutting-in production (which has been shown to be a likely scenario which will affect the viability of the refinery), the EIA documentation has completely failed to assess this impact. This potential impact will result in significant adverse effects, not only for Chevron, but also for the economy as a whole.

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95 ESS, page 27.
9.2.9. The importation of product ahead of a market-short and ahead of regulatory decisions on government policy regarding Clean Fuels 2 will have a negative impact on Chevron and could result in the refiner’s viability being compromised, which will result in significant indirect adverse social and economic impacts for the economy. This realisation has a significant impact on the perceived need for and desirability of the Burgan facility. The enquiry into need and desirability can only legitimately be undertaken against a credible supply and demand analysis (which informs whether this is the right time for a facility of this nature) and a credible impact assessment (which informs the net social welfare of the project).

10. **Over reliance on the promotion of competition to the exclusion of a credible impact assessment**

Chevron has raised concerns regarding the overwhelming bias in the impact assessment towards the promotion of competition as opposed to a considered assessment and identification of all potential consequences of the project.\(^{97}\)

10.1. **Burgan’s response:**

10.1.1. It is ERM’s position that the ESS recognises “the perils of restricting competition without good reason”.\(^{98}\) In this regard ERM maintains that “it is generally accepted that the onus is on those who argue against competition to, (1) comprehensively prove the merits of their case and (2) show that a given course of action or policy intervention to restrict competition would better serve to limit the negative impacts or unintended consequences of a development”.\(^{99}\) ERM concludes that “notwithstanding the unique structure of the petroleum industry, attempts to restrict competition thus need to be treated with caution…”\(^{100}\)

10.1.2. ERM’s position is that the ESS has considered competition carefully and objectively and has concluded that the project has merit in terms of increasing

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\(^{96}\) Comments and Responses Report: page 68.

\(^{97}\) See paragraph 17.7 of our letter dated 6 August 2014.

\(^{98}\) Comments and Responses Report: page 61.


\(^{100}\) Comments and Responses Report: page 61 [Own underlining].
opportunities for competition.\textsuperscript{101} Whilst ERM acknowledges that this conclusion contributed to the overall assessment of the need and desirability of the project, it asserts that the ESS and FSSR “goes out of its way” to assess all relevant impacts and that undue attention is not devoted to the “unthinking promotion of competition”.\textsuperscript{102}

10.2. **Chevron’s position:**

10.2.1. The ESS notes that the Minister of Trade and Industry in 2009 announced a special designation of the petroleum industry given its strategic importance and contribution to economic stability, and acknowledges that there is an exemption in place for the fuel industry from current competition legislation until end 2015.

10.2.2. Having acknowledged the above, the ESS considers the promotion of competition as “one of the basic tenets of market driven economies”\textsuperscript{103} in isolation of the specific petroleum industry context. Under the heading “Increased Opportunities for Competition” the ESS quotes the objectives of the Competition Act, assuming that “it is generally accepted that the onus is on those who argue against competition to, (1) comprehensively prove the merits of their case and (2) show that a given course of action or policy intervention to restrict competition would better serve to limit the negative impacts or unintended consequences of a development”.\textsuperscript{104}

10.2.3. The ESS criticises the lack of competitive fuel storage facilities, commenting that the arrangement whereby Chevron’s competitors have to use infrastructure owned by Chevron when importing fuels “cannot be considered ideal from a competition perspective”.\textsuperscript{105} Whilst the ESS concedes that, given the administered prices, decreased costs would not necessarily be passed onto the consumer, it dismisses this concession on the unsubstantiated assumption that

\textsuperscript{101} Comments and Responses Report: page 61.
\textsuperscript{102} Comments and Responses Report: page 61.
\textsuperscript{103} ESS, page 29.
\textsuperscript{104} ESS, page 30.
\textsuperscript{105} ESS, page 30.
“potential changes in the level of competition allowed in the industry may allow for this eventually”.\textsuperscript{106}

10.2.4. The ESS does not interrogate the reasons why competition in the fuel industry is considered undesirable by the regulators, and does not interrogate whether the proposed facility is aligned or at odds with the regulators’ decisions in this regard. Accordingly, any reliance on the benefits of competition (which reliance is evident throughout the EIA documentation) is meaningless if not interrogated with reference to the specific fuel industry context.

10.2.5. It is further submitted that any reliance on the benefits of enhanced competition that the terminal provides will be considered in terms of a comparative assessment of the relative advantages and disadvantages of the facility (including all potential socio-economic consequences). For the reasons motivated herein, this level of detailed assessment has been compromised due to the failure to undertake a credible assessment of impacts on the refinery (and the associated socio-economic consequences for the economy if the viability of the refinery’s operations is threatened).

11. Inadequate assessment of alternatives

Chevron has continuously raised concerns regarding the inadequacy of the assessment of alternatives to the project in the EIA documentation.\textsuperscript{107}

11.1. Burgan response:

11.1.1. It is ERM’s position that a “number of alternatives” have been assessed. These alternatives include “site location alternatives, site layout alternatives, technology alternatives and the No-go alternative”.\textsuperscript{108}

11.1.2. It is ERM’s position that the revised DEIR (and consequently the FEIR, which has not been amended in regard to the issue of alternatives) adequately and sufficiently addresses the question of alternatives and that the “no-go” alternative

\textsuperscript{106} ESS, page 30.
\textsuperscript{107} See paragraph 20 in our letter dated 23 May 2012. See also paragraph 45 of our letter dated 5 May 2014 and paragraph 17.8 of our letter dated 6 August 2014.
\textsuperscript{108} Comments and Responses Report: page 8.
has been adequately considered against the outcomes of the impact assessment in Chapter 9.\textsuperscript{109}

11.2. **Chevron’s position:**

11.2.1. Whilst the section on alternatives has undergone amendments in the EIA process, the consideration of alternatives remains inadequate.

11.2.2. The only alternatives considered are “site layout alternatives” and the “no-go alternative”.

11.2.3. While the DEIR explained that “\textit{due to the economic justification behind the development of the Project, and the intended future land use at the Eastern Mole, no site alternatives have been considered},”\textsuperscript{110} the revised DEIR and FEIR indicate that site location alternatives were considered “\textit{early on by the shareholders of the Burgan Oil fuel storage and distribution facility}” but were excluded from further analysis.\textsuperscript{111} Due to the reliance placed on the strategic need for a facility of this nature in the EIA documentation it is critical for I&APs to be provided with the basis upon which these alternatives were excluded from assessment.

11.2.4. With regard to the issue of alternatives, insufficient information is provided in the FEIR as to why this site is optimal from a fuel supply, logistics and infrastructure perspective, and there is no balancing of the relative advantages and disadvantages of the alternatives identified. The consideration of the “no-go alternative” is also insufficient, with the EAP noting merely that “\textit{the opportunity to improve the efficiency in the logistical fuel supply chain would be lost and TNPA would lose the opportunity of maximizing use of this portion of the port}.”\textsuperscript{112}

11.2.5. Whilst it is stated by ERM that the “no-go” alternative has been considered against the outcome of the impact assessment in Chapter 9, there is no evidence of this consideration.

\textsuperscript{109} Comments and Responses Report: page 62.
\textsuperscript{110} DEIR, page 4-32.
\textsuperscript{111} FEIR, page 4-34.
\textsuperscript{112} FEIR, page 4-36.
11.2.6. There is no assessment of the alternatives to a fuel storage and distribution facility and no assessment of whether the objectives of the facility can be more effectively achieved through alternative means.

11.2.7. The PetroLogistics Report (September 2014) questions whether the site location inside the harbour is optimal in terms of achieving efficiency in fuel supply logistics. It is for this reason that the PetroLogistics Report confirms that other alternatives for achieving security of supply and strategic stock reserves are available. Although these are listed in the FEIR, there is no credible analysis of the feasibility of each of these alternatives in achieving the stated objectives of the terminal.

12. Traffic Impacts

12.1. Paragraph 54 of our letter of comments on the revised DEIR indicated that “(f)or the reasons identified in the PetroLogistics Report, clarity is required regarding the volumes that the Burgan terminal has the capacity to both receive and dispatch. In this regard, the Traffic Specialist Report does not reflect the full extent of the potential impact.”

12.2. The FEIR has not dealt with this request for clarity on the concern regarding the efficacy of the traffic impact assessment. The response from ERM to this comment in the Comments and Reponses Report merely indicates that the “Traffic Specialist Report was undertaken with knowledge of the Project as detained in Chapter 4 of the EIR”. This response is meaningless.

12.3. Page 45 of the attached PetroLogistics Report elaborates on the concern with the traffic study in the following terms:

12.3.1. “In one part of the report it says the traffic will apply only while awaiting a pipeline being built, but in another it says that road transport will be part of the normal ongoing operation.”

113 Comments and Responses Report: page 83.
12.3.2. “The throughput analysis was done on the basis of only 75 trucks per day with a 30 000 litre load at five (not six) loading bays. This equates to only 821 Ml per annum if done 7 days per week.”

12.3.3. “It is believed essential that the Traffic Study be revisited to assess the impact of a much larger volume than the 821 Ml per annum, and to sensitise it to as high as the above 2000 Ml per annum that matches the gantry configuration.”

12.4. The efficacy of the assessment of this potential traffic impacts is questioned, and clarity is also required as to why the discrepancy in the number of loading bays contemplated in the EIA does not undermine the accuracy of the assessment.

Yours faithfully,
SMITH NDLOVU & SUMMERS
Per: 

[Signature]

R W SUMMERS
Independent Assessment of the Burgan Cape Terminals Project
Errata

The following errors have been corrected in this publication:

1. Section 1.1, Page 4, Para 2: The volume is 805 Ml not 805,000 Ml
2. Section 1.3, Page 6, Para 4: “…envisaged annual quantum…”
3. Section 5.2, Page 30, Para 1: Reference is made to Section 5.1 not Section 4
4. Section 6.6, Page 41, last Para: FEIR not DEIR
5. Section 6.7, Page 42, Para 4: “…there is no local stock….”
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## Glossary of Terms

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<th>Abbreviation</th>
<th>Definition</th>
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<tr>
<td>ADO</td>
<td>Automotive Diesel (Regular Grade)</td>
</tr>
<tr>
<td>CAGR</td>
<td>Compounded (Annual) Average Growth Rate</td>
</tr>
<tr>
<td>CF2</td>
<td>The second stage of introduction of Cleaner Fuels for RSA</td>
</tr>
<tr>
<td>Clean Product</td>
<td>Gasolines, Kerosenes, Diesels</td>
</tr>
<tr>
<td>Clean Pipeline</td>
<td>Pipeline carrying only Clean Product in Blocked Operation</td>
</tr>
<tr>
<td>FEIR</td>
<td>Final Environmental Impact Report</td>
</tr>
<tr>
<td>DPK</td>
<td>Dual Purpose Kerosene (IK, Jet Fuel)</td>
</tr>
<tr>
<td>ERM</td>
<td>Economic Resources Management</td>
</tr>
<tr>
<td>ESR</td>
<td>Economic Specialist Report</td>
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<tr>
<td>FSSR</td>
<td>Fuel Sector Specialist Report</td>
</tr>
<tr>
<td>IK</td>
<td>Illuminating Kerosene</td>
</tr>
<tr>
<td>OM&amp;S</td>
<td>Oil Movement and Storage (Operations)</td>
</tr>
<tr>
<td>RSA/BLSN</td>
<td>RSA, Botswana, Lesotho, Swaziland, Namibia (Customs Union)</td>
</tr>
<tr>
<td>RSA Inc</td>
<td>The RSA Economy</td>
</tr>
<tr>
<td>S&amp;D</td>
<td>Supply and Demand (Balance)</td>
</tr>
<tr>
<td>S&amp;H</td>
<td>Storage and Handling</td>
</tr>
<tr>
<td>SOS</td>
<td>Security of Supply</td>
</tr>
<tr>
<td>SR</td>
<td>Strategic Reserve (of Petroleum Products)</td>
</tr>
<tr>
<td>tbcd</td>
<td>Thousand barrels per calendar day</td>
</tr>
<tr>
<td>tbsd</td>
<td>Thousand barrels per stream day</td>
</tr>
<tr>
<td>ULSD</td>
<td>Ultra Low Sulphur Diesel (50 ppm by weight sulphur content)</td>
</tr>
<tr>
<td>ULSG</td>
<td>Ultra Low Sulphur Gasoline (50 ppm sulphur)</td>
</tr>
<tr>
<td>VR</td>
<td>Volume-Related (pertaining to refinery operating cost)</td>
</tr>
</tbody>
</table>
1 Executive Summary

1.1 Background

Burgan Cape Terminals (Pty) Ltd (Burgan) plans to build a multi-purpose terminal within the Port of Cape Town for the bulk receipt and storage of petroleum fuels. The facility will also be able to import and distribute these products directly into the Cape Town market by road truck.

The maximum throughput capacity is described as approximately 805 ML per annum although nowhere is the basis for this maximum throughput explained or validated in the Final Environmental Impact Report (FEIR) prepared by Environmental Resources Management (ERM). This Report illustrates that the design capability of the Terminal provides for significantly more ullage capacity than that quantified by ERM.

Chevron is concerned about the potential for the Terminal to promote and facilitate imports of petroleum products into the Cape Town market and that a potential consequence of this will be the shutting in of that vital tranche of capacity which is needed by the Cape Town refinery to retain its economic viability.

There is insufficient information in the EIA documentation to suggest that this consequence will not materialise on the basis that tenants/customers of the Terminal will continue to purchase product from the Cape Town refinery or that the potential throughput capacity will not be used for importing significant volumes of petroleum products. The FEIR merely asserts that the viability of the Cape Town refinery is not or is unlikely to be threatened, because tenants/customers of the Terminal will continue to purchase locally refined fuel from the Cape Town refinery, and imports will only be relied on to meet a proven demand. This is not substantiated in any way.

This is Chevron’s main concern namely that the Burgan Terminal can result in significant imports ahead of a market-short and ahead of constraints in inbound logistics, with an inevitable adverse impact on the Cape Town refinery and on the local economy. The EIA documents confirm that the impact associated with the shutting-in of production at the refinery has not been assessed.

1.2 Work and Method

This report conducts the following discrete appraisals:

1. The derivation of the current and future supply and demand balance for the petroleum product market in Cape Town to investigate whether or not the refinery can meet the market demand for the various products.
2. To assess the need for the Burgan Terminal as a conduit for imports while the refinery is on-line.

3. The impact on the viability of the refinery arising from the shutting-in of production (or displacement of production by sea to other markets) at the levels which the Burgan Terminal in its current configuration has the potential to bring about.

4. The assessment of the current system of logistics infrastructure to support the supply of the full ‘slate’ of the relevant petroleum products into the market when:
   - The refinery is on-line but may need to be supplemented by volumes of imported product through the harbour infrastructure.
   - The refinery is temporarily off-line and imports are required to cover this duration.

5. The assessment of the range of fuel sector policy issues which are potentially applicable to the need for the Burgan Terminal motivated in the FEIR, and it’s Economic Specialist Report (ESR).

6. The assessment of the possible alternative operational models for the Burgan Terminal in the absence of a full description of the intended use of the Terminal.

1.3 Conclusions and Summary
The following major conclusions are drawn from this Report and are highlighted in this Executive Summary:

1. If the production at the Cape Town refinery were insufficient to meet the market demand and the inbound logistics (comprising berths and pipeline from the harbour) to the terminals were constrained, then there would be a security-of-supply (SOS) argument in support of a terminal in the harbour to feed the market (or indeed the most efficient location for infrastructure of this nature would be situated outside the harbour but at the harbour-end of the pipeline, e.g. Paarden Eiland). This Report argues that such conditions do not apply as the overall system of logistics for inbound supply of products, in supplement of the refinery’s production whenever needed, is adequate. Accordingly, there is no valid SOS basis for the Burgan Terminal.

2. The derived supply and demand for the Cape Town market confirms that contrary to the conclusions of the FEIR the ongoing import of products into Cape Town (which the Cape Town refinery can manufacture) is not needed and that this situation will likely prevail for the next 10 years. This Report argues that the Cape Town refinery
and associated inbound logistical supply infrastructure has the capability to cover the forecast market demand.

3. The claims in the FEIR, ESR and Fuel Sector Specialist Report (FSSR), which are that the projected supply and demand balances are such that ongoing imports into the Cape Town market will be required are incorrect and are disputed.

4. The refinery cannot be expected to sustain the commercial impact on its operations of the envisaged annual quantum of US$24 million per annum as a result of shutting-in production (or the quantum of US$18 million by the displacement of this quantum by sea from Cape Town to other markets).

5. If under any scenario the Burgan Terminal is used to back-in production at the refinery then this raises serious concern for the economy occasioned by a threat to the Cape Town refinery’s viability, and this impact has not been assessed in the FEIR, or its ESR or FSSR.

6. There is insufficient information in the FEIR regarding the ultimate use of the Burgan Terminal. Similarly, there is insufficient information to be able to discount the inevitable result or reality that due to its size the Burgan Terminal will have an economic incentive to offer its capacity to facilitate significant imports and that it must rely on this operation for its economic viability.

7. The infrastructure and logistics constraints contemplated in applicable policy documents do not justify the Burgan Terminal as a necessary infrastructural upgrade to serve the Cape Town area. The various instruments of government policy relied upon by the FEIR lend little force to the argument for the need for the Terminal.

8. The benefits that are claimed in the FEIR in terms of these policies for

   a. Enhanced security of supply;
   b. Opportunity for storage of a national strategic reserve;
   c. The facilitation of imports of petroleum products;
   d. Enhanced revenue for the Port (through the Cape Town Port Development Plan); and
   e. Beneficial competition in the oil sector

are if anything marginal and cannot be considered in isolation of the potential severe and demonstrated consequences for the greater Cape Town economy.

Overall Conclusion

This report has sought to demonstrate that there is no need for the Burgan Terminal from the point of view of:

Robert Stewart CEng MIChemE
• The ability of the Cape Town refinery to meet the demand from its own production.

• The capability of the current logistics to deal with imports when they are required from time to time.

• The various government policies concerning the oil industry, including the government policy which gives priority to local production in supplying the market.

Despite the above, Burgan appears to be intent on building a terminal which is designed for a large import stream, and whose economic viability would depend on such imports taking place in addition to the storage and handling services being provided to local marketers.

Should Burgan or its tenants use the Terminal’s facilities to import product in the face of existing local refinery production in the quantities it is capable of, and thus back-in (or divert) the local refinery production, then the economic viability of the refinery will be threatened. The resultant impact on the Cape Town economy will also be negative and this must be factored into the EIA process.
2 Introduction

Burgan Cape Terminals (Pty) Ltd (Burgan) plans to build a terminal within the Port of Cape Town for the bulk receipt and storage of petroleum fuels. The facility will also be able to distribute these products directly into the Cape Town market by road truck.

Burgan’s environmental consultants, ERM (Environmental Resources Management) have released a Final Environmental Impact Report (FEIR) for public comment. The FEIR includes an Economic Specialist Report (ESR) prepared by Independent Economic Researchers and this report in turn includes a Fuel Sector Specialist Report (FSSR).

Chevron as an Interested and Affected Party (IAP) has already provided comments on previous reports released during the EIA process (including scoping reports and drafts of the EIR), and wishes to ensure that the concerns it has raised to date are appropriately contextualised. Specifically, Chevron wishes to validate its primary concern about the serious potential impact on the viability of the Chevron refinery.

To this end, PetroLogistics has been asked by Chevron to provide an independent assessment of the need for, and the potential impact of, the terminal, which will include commentary on the arguments made in motivation of the Burgan terminal in the ESR and the FSSR.

Appendix 1 provides the general experience of PetroLogistics in the oil industry. PetroLogistics has had direct management experience in the economics and the operations of supply of petroleum products into the Cape Town supply area and, as an oil refinery economist, also understands the economics of supply of local refinery production versus that of imported product.

In making this assessment the following specific items of work have been done and are reported on herein.

1. An appraisal of the prevailing and projected supply and demand (S&D) balance for clean fuel products (i.e. gasoline, illuminating kerosene, jet fuel, and diesel fuels) in the Western Cape over the next ten years, with the setting out of assumptions and conclusions about the projected market-demand and the means of meeting that demand.

   This determines if imported product is needed for the Cape Town market or if Cape Town refinery can meet the demand, and if so for what period.

2. An appraisal of the potential for the Burgan project to impact unfavourably on the operation and economics of Cape Town refinery (and thus the Cape Town economy) if imported product were put into the market ahead of Cape Town refinery’s production thus backing-in that production or diverting it to other markets.
3. An appraisal of the operational purpose and the economic rationale and viability of the Burgan terminal bearing in mind the capacity of the existing supply infrastructure that is already available to feed the Western Cape market.

4. An appraisal of the claimed compatibility of the Burgan project with the provisions of various instruments of government policy for the oil industry in order to identify the arguments for and against the need and desirability of the Burgan terminal
3 The Prevailing and Projected S&D for Clean Fuels in the Cape Town Supply Area

An appropriate and comprehensive analysis of the projected S&D balance is a precondition for the efficient and orderly planning of changes to infrastructure that are needed to support the supply of product to meet the market demand.

This section deals with the question of whether or not ongoing imports of product (as opposed to imports for cover of refinery shut-down) are actually needed now or in the near future, as this has a direct bearing on the need for a large storage terminal in the port. PetroLogistics has chosen to focus on the ten-year period from 2013.

The answer will shed light on the appropriateness of the planned configuration of the Burgan Terminal and the vulnerability of the Cape Town refinery (and therefore the Cape Town economy) to unwarranted imports.

The key is to understand the S&D balance over the period and for this particular analysis it is most effective to look at this balance on a day-by-day, month-by-month basis.

In this regard it is first necessary to distinguish between stream-days and calendar-days when talking about the S&D balance. Clearly the market demand applies to every (calendar) day of the year, but the production from a refinery takes place only while the refinery is on-line, i.e. for its stream-days. If a refinery is shut down for maintenance for 25 days of the year then its service factor is 93%, and if its production is 100 units per stream day then its per-calendar-day production is 93 units.

For the analysis at hand it is therefore important to recognize that imports into Cape Town will include those imports that take place for the brief period that Cape Town refinery may be off-line as a result of scheduled maintenance. It is not these imports which concerns Chevron but rather the possibility of ongoing imports that are not needed while the refinery is on-line either because the refinery can produce the product or as in the case of ULSD imports because the imported product is a substitute for a product (ADO) which the refinery can produce. Therefore the analysis that follows is designed to highlight the stream-day S&D analysis.

3.1 The Current RSA Market for Clean Fuels

Up until, and including, 2008 the sales statistics for petroleum fuels were collated by the oil industry on behalf of government and the data was available to interested parties. The data was tabulated at the Magisterial District level and so could be aggregated as required into the relevant geographical areas such as the Cape Town supply area.

Data at this level is no longer readily sourced, if in fact it is available at all, but a study such as the FEIR, relating to the Burgan terminal, would clearly benefit from such data.
being available to oil industry planners and decision makers vested with the responsibility of considering the proposed Burgan facility.

However, certain data at the RSA national level is available from the government and has been quoted by the South Africa Petroleum Industry Association (SAPIA) in its annual reports.

According to this data, the following average annual compound growth rates (ACGR) have applied over the period 2008 to 2012. This provides a base-line appreciation of the levels of growth in the market that can be expected over time.

Table 2: RSA Growth rates for Petroleum Products since 2008

<table>
<thead>
<tr>
<th></th>
<th>Gasoline</th>
<th>Automotive Diesel*</th>
<th>Illuminating Kerosene</th>
<th>Jet Fuel</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1.43%</td>
<td>3.64%</td>
<td>0.23%</td>
<td>(0.09)%</td>
</tr>
</tbody>
</table>

* Diesel demand includes Eskom’s consumption

By comparison the growth rates used in the FSSR for the Cape Town supply area are respectively

- Gasoline at 0.2%
- Jet fuel at 5.0%,
- Diesel (ADO plus ULSD) at 2.5%.

For the year 2013 PetroLogistics has in other recent work estimated that the RSA/BLSN region would have been short of approximately 5 billion litres of clean fuels based on typical production from the RSA refineries and that subject to correction based on the closer look at Cape Town in this current study, Cape Town would have contributed only 5% of this short (250 million litres).

3.2 Estimate of the Cape Town Market for Clean Fuels

An estimate of the 2013 market in the Cape Town supply area can be obtained when refinery production is known, and when the surplus or shortfall for the area is known by virtue of the observed flow of products into and out of Cape Town. An S&D balance for the Cape Town Supply Area for 2013 has been derived and shows the market to be as follows in tbcd.
It appears that the FSSR has not relied on this data for whatever reason and so it would not have as accurate a base-line (most recent actual refinery production and most recent actual market demand) for its projection of the future market from 2013 and the need for product imports.

The FSSR market data is tabled for 2014 onwards. To obtain a comparison with the PetroLogistics data for 2013 the FSSR data for 2014 has simply been back-calculated at the annual growth rate that is assumed by the FSSR.

Table 5: Cape Town Supply Area Demand 2013 (thousand barrels per calendar-day)

<table>
<thead>
<tr>
<th></th>
<th>Gasoline</th>
<th>ADO</th>
<th>ULSD</th>
<th>Total Diesel</th>
<th>Jet Fuel</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSSR (Derived)</td>
<td>29.8</td>
<td>18.7</td>
<td>7.6</td>
<td>26.3</td>
<td>5.2</td>
</tr>
<tr>
<td>PetroLogistics</td>
<td>26.7</td>
<td>24.4</td>
<td>6.7</td>
<td>31.1</td>
<td>7.4</td>
</tr>
</tbody>
</table>

3.3 Production at the Cape Town Chevron Refinery

Chevron has provided PetroLogistics with a set of production figures for the clean fuels during 2013. The production was achieved with the refinery on-line for 93% of the time.

To validate these numbers PetroLogistics has requested and received from Cape Town refinery the mix of crude oil that was processed during 2013 and has modelled the refinery process to calculate the expected yield of products. These calculations have confirmed as being realistic the levels of production claimed by Chevron for gasoline, diesels, and jet fuel, and so continued production at the levels achieved, at least on a stream-day basis, has been assumed for the purpose of testing projections of continuous shortage or length in the Cape Town supply area over the coming ten-year period.

Cape Town refinery does not produce IK, the market for which is only 0.8 tbcd.

Table 3: Cape Town refinery Production in 2013 (thousand barrels per day)

<table>
<thead>
<tr>
<th>Production</th>
<th>Gasoline**</th>
<th>Automotive Diesel</th>
<th>ULSD</th>
<th>Jet Fuel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Per Calendar Day</td>
<td>28.4</td>
<td>25.5</td>
<td>3.9</td>
<td>7.7</td>
</tr>
<tr>
<td>Per Stream Day</td>
<td>30.5</td>
<td>27.4</td>
<td>4.2</td>
<td>8.3</td>
</tr>
</tbody>
</table>
**Gasoline production includes imported blend-stock of approximately 2.0 tbd
(Note: excluded from the above table is the ‘clean’ product, marine gas oil (MGO) which amounted to approximately 3.0 tbd.)

The corresponding stream-day figures are not provided in the FSSR analysis. Instead the FSSR tabulates an annual S&D (in million-litre units) for each of the years 2014 to 2020, in which S&D the Cape Town refinery production is held constant. No service factor is provided but since the specified production is the same for each year it is assumed that some average service factor is implicit in the figures. If the service factor is assumed to be 93%, which is considered by PetroLogistics to be a reasonable planning assumption, then the following comparison can be drawn.

Table 4: Cape Town refinery Production in 2013 (thousand barrels per stream-day)

<table>
<thead>
<tr>
<th>Production</th>
<th>Gasoline</th>
<th>ADO</th>
<th>ULSD</th>
<th>Total Diesel</th>
<th>Jet Fuel</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSSR</td>
<td>29.5</td>
<td>29.9</td>
<td>3.3</td>
<td>33.2</td>
<td>5.3</td>
</tr>
<tr>
<td>PetroLogistics</td>
<td>30.5</td>
<td>27.4</td>
<td>4.2</td>
<td>31.6</td>
<td>8.3</td>
</tr>
</tbody>
</table>

It should be noted that the FSSR numbers are estimates based on studies which were done several years ago, whereas the PetroLogistics numbers are based on actual performance for 2013. PetroLogistics has been told that were it not for the fact that the refinery experienced some upset on its treating-plant during 2013 the above production figure of 4.2 tbsd for ULSD would have been 6.4 tbsd.

3.4 Cape Town S&D Balance for Clean Fuels

On a stream-day basis the above figures would give the following S&D balance for the Cape Town supply area based on the FSSR assumptions for refinery production and for market demand.

Table 6: FSSR Derived Cape Town Stream-Day S&D for 2013

<table>
<thead>
<tr>
<th></th>
<th>Gasoline</th>
<th>ADO</th>
<th>ULSD</th>
<th>Jet Fuel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market (tbcd)</td>
<td>29.8</td>
<td>18.7</td>
<td>7.6</td>
<td>5.2</td>
</tr>
<tr>
<td>Production(tbsd)</td>
<td>29.5</td>
<td>29.9</td>
<td>3.3</td>
<td>5.3</td>
</tr>
<tr>
<td>(Short)/Long</td>
<td>(0.3)</td>
<td>11.2</td>
<td>(4.3)</td>
<td>0.1</td>
</tr>
</tbody>
</table>
The corresponding table using the more recent and therefore more accurate PetroLogistics figures is as follows:

Table 7: PetroLogistics Derived Cape Town Stream-Day S&D for 2013

<table>
<thead>
<tr>
<th></th>
<th>Gasoline</th>
<th>ADO*</th>
<th>ULSD</th>
<th>Jet Fuel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market (tbcd)</td>
<td>26.7</td>
<td>24.4</td>
<td>6.7</td>
<td>7.4</td>
</tr>
<tr>
<td>Production(tbsd)**</td>
<td>30.5</td>
<td>27.4</td>
<td>4.2</td>
<td>8.3</td>
</tr>
<tr>
<td>(Short)/Long</td>
<td>3.8</td>
<td>3.0</td>
<td>(2.5)</td>
<td>0.9</td>
</tr>
</tbody>
</table>

* The feed to Eskom’s diesel-driven generators at Atlantis is included in the diesel sales

** Gasoline production includes imported blend-stock of approximately 2.0 tbcd

In both balances the stream-day length in the combined diesel market is a combination of length in the regular grade offset by a short in the ULSD grade. So in combination there is a surplus of diesel, but Cape Town refinery was not able to meet the full stream-day demand of the ULSD grade in the Cape Town supply area during 2013.

Any short in the market beyond that which Cape Town refinery can manufacture would be shipped to Cape Town by tank-ship and into the market using the existing infrastructure.

### 3.5 Projections of Growth in the Market

The PetroLogistics S&D for 2013 is more acceptable as the basis for projections of the S&D over the next 10 years, simply because PetroLogistics has had access to the more recent data of 2013. The FSSR data for both supply and demand is based on studies undertaken between 2006 and 2009.

#### Gasoline

The PetroLogistics view is that the demand for gasoline in Cape Town appears to have contracted at a CAGR of (0.3)% since 2008 when it was last known by virtue of the Magisterial District sales data referred to above.

Even if it were instead to grow in future at the national average of 1.43% CAGR that has prevailed since 2008 then for constant supply from Cape Town refinery, the current stream-day surplus calculated per the PetroLogistics figures shown above would diminish over a period of 9 to 10 years, thereafter requiring ongoing imports.
However, a closer look at the national growth year by year shows that negative growth of (2.5) % has prevailed since 2011, and therefore positive growth as high as 1.43% in the Cape Town supply area is not a likely forecast. Assuming that is the case then the supply ability of the refinery would extend beyond the conservative forecast of 9 to10 years.

Additionally, growth in the demand for gasoline is generally subdued (and is expected to continue be so) due to structural changes in the market such as

- The switch to diesel engines in privately owned motor cars
- The drive towards smaller more efficient gasoline engines
- Reduced discrentional spend in the hands of private consumers

In world terms the introduction of bio-fuels has also had the effect of reducing demand for crude-oil refined gasoline. This has not yet happened in RSA although policy is moving that way, and when it does, then the cover from refinery production will effectively be extended.

Thus PetroLogistics concludes that the outlook for a significant shift to the need for continuous (stream-day) gasoline imports into Cape Town in the next 10 years is unlikely. Refinery production is adequate for this period on a stream-day basis.

**Jet fuel**

The PetroLogistics view is that the demand for jet fuel in Cape Town also appears to have contracted, from the 2008 level of 8.4 tbcd to the current 7.4 tbcd. The Cape Town refinery has significant unutilised processing capacity to produce jet fuel (it has approximately 12 tbsd total capacity) and so the potential surplus of 0.9 tbsd in 2013 shown in Table 7 can be increased to 4.6 tbsd. The expected Cape Town growth in jet fuel in the immediate future would be modest based on recent history and, in the opinion of PetroLogistics, not as high as the assumed FSSR figure of 5.0%.

Nonetheless, PetroLogistics’ conclusion is that even if the demand for jet fuel were to shift to as high as 5% CAGR, the daily (stream-day) refinery production could cover the market demand for the 10 year outlook period.

**Diesel**

The PetroLogistics view is that the overall demand for automotive diesel (ADO) in Cape Town since 2008 appears to have exceeded the above national average of 3.64%. Based on the known demand in 2008 and the above derived demand, the CAGR for Cape Town between 2008 and 2013 has been 7.9%. This relatively high figure focuses attention on
the consumption of the regular grade of automotive diesel at the Eskom Ankerlig plant in Atlantis and how this consumption affects the regular ADO market.

Despite efforts to obtain official data from Eskom, the consumption at this plant during 2013 is not known at the time of writing. However based on the purpose of the plant being the provision of cover of the daily peak demand of electricity and based on a corresponding service factor of approximately 12%, it is estimated that the above figure for total current demand in the CT supply area could include as much as approximately 360 Ml (6.2 tbcd) consumption by Eskom. This would mean that the non-Eskom demand has grown at a CAGR of 3.25% since 2008, compared to the above national figure of 3.64%.

Now this 2013 consumption by Eskom is expected to begin to fall away when the new Medupi coal-fired power-station comes on line during 2015, and as a result this amount of diesel would begin to become available to cover growth in the balance of the regular automotive diesel market.

Using the PetroLogistics data the following table summarises the Cape Town diesel market demand and the current S&D (based on calendar year 2013) for Cape Town with and without the Ankerlig diesel. The PetroLogistics data is used because as already mentioned the baseline is more recent and therefore more accurate than the FSSR data.

Table 8: Summary of Cape Town S&D Data for Diesel in 2013

<table>
<thead>
<tr>
<th></th>
<th>ULSD</th>
<th>Auto Diesel*</th>
<th>Ankerlig Diesel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market 2013 (tbcd)</td>
<td>6.7</td>
<td>24.4</td>
<td>6.2</td>
</tr>
<tr>
<td>Production 2013 (tbsd)</td>
<td>4.2</td>
<td>27.4</td>
<td></td>
</tr>
<tr>
<td>(Short)/Long 2013 (tbsd)</td>
<td>(2.5)</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>No Ankerlig Consumption</td>
<td></td>
<td>6.2</td>
<td>(6.2)</td>
</tr>
<tr>
<td>Revised (Short)/Long 2013</td>
<td>(2.5)</td>
<td>9.2</td>
<td>-</td>
</tr>
</tbody>
</table>

* The feed to Eskom’s diesel-driven generators is included in the sales figure

If the non-Eskom market for regular diesel is 18.2 tbcd (24.4 minus 6.2) then even at say 3.5% future CAGR in Cape Town the revised surplus of 9.2 tbsd assures that growth is covered by refinery production for a period of more than 10 years.

**ULSD** is a grade of diesel which is a substitute for regular ADO and which therefore displaces ADO from the market on a litre for litre basis.
There is a current demand for this grade in Cape Town which Cape Town refinery only partially supplies although changes are being made to the process configuration in a bid to increase production of ULSD. In fact, as already mentioned, PetroLogistics has been told that were it not for the fact that the refinery experienced some upset on its treating plant during 2013 the above production figure of 4.2 tbsd in Table 7 would have been 6.4 tbsd.

The balance is imported by the marketers who need it and Chevron does no more than facilitate its passage into the system which the system can undoubtedly handle in terms of volume and in terms of segregation. The capacity of the inbound logistics infrastructure is addressed in Section 5 of this report.

But the FSSR raises the issue of the rate of growth in demand for the ULSD which it posits at 10% per annum. This rate would create a total shortfall (stream day plus off-line) in 2018 of 400 Ml (note that the corresponding 2013 shortfall equates to 160 Ml).

Such an exceptional rate of penetration of ULSD into the combined diesel market (ADO+ULSD) will raise concerns which will have to be dealt with by the oil industry governance structures, including consideration of a dampening of the demand for ULSD to ensure that the locally produced regular grade of diesel is put into the market ahead of imported product.

The FSSR itself posits the use of a Demand Management Levy to dampen growth. The assumption of 10% per annum growth of ULSD demand is thus contended to be uncertain and subject to regulatory oversight.

Although an importer of ULSD might argue that he is justified in importing a product required in the market which the refinery cannot produce, in the Cape Town scenario where the regular grade of ADO would be displaced by the ULSD as a substitute grade, attention must be paid to the impact of this substitution on the refinery.

Modest amounts of substitution could be tolerated, perhaps even the amounts tabulated above based on 10% growth in the market. Certainly the existing inbound logistics infrastructure would be able to handle even higher volumes than those tabulated.

But as the importer exploited the opportunity to increase volumes towards complete substitution of the entire market (which the consumer might encourage through his choice and behavior, even despite the introduction of a demand-side levy) then the situation for the refinery would become untenable.

The EIA process (and the oil industry governance structures) will have to recognize that the environmental benefit of allowing growing consumption of ULSD fed by imports for a few years until CF2 comes about, must be balanced by the economic impact on the Cape Town economy of a permanent shut-down of the Cape Town refinery.
PetroLogistics

Summary

PetroLogistics has tested the projection of increasing demand versus Cape Town refinery’s stream-day production (held constant) for the next ten years to determine what levels of CAGR are supported by the current (2013) surpluses and how these levels compare with the growth rate assumed in the FSSR.

Table 9: Projection of Need for Ongoing (Stream-Day) Imports

<table>
<thead>
<tr>
<th>Product</th>
<th>2013 Surplus tbsd</th>
<th>CAGR to consume surplus over 10 years</th>
<th>CAGR assumed by FSSR</th>
<th>Implied Shortfall 2018 tbsd (Ml pa)</th>
<th>Implied Shortfall 2023 tbsd (Ml pa)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gasoline</td>
<td>3.8</td>
<td>1.3%</td>
<td>0.2%</td>
<td>Nil</td>
<td>Nil</td>
</tr>
<tr>
<td>Jet Fuel</td>
<td>4.6</td>
<td>5.0%</td>
<td>5.0%</td>
<td>Nil</td>
<td>Nil</td>
</tr>
<tr>
<td>ADO</td>
<td>9.2</td>
<td>4.2%</td>
<td>&lt; 0%</td>
<td>Nil</td>
<td>Nil</td>
</tr>
<tr>
<td>ULSD</td>
<td>(2.5)</td>
<td>n/a</td>
<td>10%</td>
<td>6.6 (400)</td>
<td>13.2 (780)</td>
</tr>
<tr>
<td>ADO + ULSD</td>
<td>6.7</td>
<td>2.4%</td>
<td>2.5%</td>
<td>Nil</td>
<td>2.5 (140)</td>
</tr>
</tbody>
</table>

In the table the CAGR that would have to prevail in order to consume the 2013 surplus over the ten years can be compared with the CAGR assumed by the FSSR. For example if the FSSR assumption of 0.2% for gasoline turned out to be true then there would still be surplus after ten years because the 0.2% is so much less than the 1.3% that would consume the surplus of 3.8 tbsd.

The table contradicts the S&D analysis in the FSSR whose balances imply that increasing stream-day imports of gasoline and jet fuel are required. The reason for the difference is simply due to the starting assumptions for 2013 demand and for 2013 refinery production. As already stated PetroLogistics has used a more recent base line of data.

PetroLogistics agrees with the FSSR which points out that ULSG (low sulphur gasoline) is unlikely to be needed in Cape Town until the point when Cape Town refinery becomes CF2 compliant, meaning that the ULSG will then be required by regulation.

PetroLogistics and the FSSR both conclude that length is maintained in the S&D for the ADO regular grade of diesel.

In its summary-analysis of the S&D, the FSSR projects that in 2017, when Burgan would be commissioned, the imports into Cape Town would amount to 690 Ml made up of 149
MI of gasoline, 77 MI of jet fuel, and 464 MI of ULSD. The gasoline and jet fuel total is 226 MI.

This conclusion in the FSSR is not accepted. It is inapplicable for the following reasons.

The FSSR does not make the distinction between imports to cover shut-down of the refinery, and continuous imports needed on a stream-day basis.

According to the PetroLogistics S&D analysis there will be no stream day shortage of gasoline or of jet fuel. The amount required as imports if Cape Town refinery were to be off-line for 25 days would be 106 MI and 29 MI respectively for gasoline and jet fuel, a combined total of 135 MI which is a minimal amount in relation to the current capacity of the inbound logistics infrastructure. (See Section 5 of this report)

Even if the ULSD demand is allowed to grow at 10% per annum which per the above commentary is unlikely, the shortfall in 2017 would be 340 MI of which 40 MI would be while the refinery is off line and 300 MI would be spread across the rest of the year, again a small number compared with inbound capacity.

The total imports would then be 475 MI (135 plus 340) of which only 300 MI ULSD would be needed on an ongoing stream-day basis. And this is based on the very uncertain growth rate of 10% per annum for ULSD.

*The conclusion from all of the above analysis is that, apart from a quantum of the ULSD which it would become necessary to limit, for the next 10 years the supply of imported product into the Cape Town market on an ongoing stream-day basis is not necessary and so would either back-in production at Cape Town refinery or displace Cape Town refinery production out of Cape Town.*

*Even if some ongoing stream-day imports were required, the current inbound logistics capacity should be interrogated before concluding that the Burgan terminal is needed to support such imports. This is done in Section 5 of this report.*
4 The Economic Impact of Backing-In or Displacing the Refinery Production

Having established in the previous section that there is unlikely to be any structural shortfall in the Cape Town market for the next 10 years, in this section of the report the economic impact on Cape Town refinery of imports being allowed into Cape Town via the planned Burgan Terminal is addressed in order to inform the broader EIA process.

In assessing the economic impact of turning down Cape Town refinery production as a result of bulk imports and to avoid calling for data on the actual profitability of Cape Town refinery (which is commercially sensitive information) an arm’s length approach has been applied by making reference to market reports about world crude oil and product prices, tank-ship freight, refining gross margins as a function of process configuration, and by devising an acceptable rationale for quantifying the corresponding margins that might prevail for Cape Town refinery.

The Basics of the Economics of Refining

A refinery makes its margin by processing (converting) crude oil into a slate of products. Some of these products (notably those heavy products from the ‘bottom’ of the barrel such as heavy fuel oil fetch a lower price in their markets than the crude oil itself but most of the light clean products such as gasoline and diesel fetch the prices which provide an overall gross margin.

The processing of the crude oil consumes energy, which is usually provided out of the crude oil, and the refinery incurs cash operating costs some of which is volume-related (VR) but the larger portion of which is a fixed cost.

There are many different types of crude oil with different potential product-slates, which slates in turn depend on the complexity of the configuration of the process plant that has been installed. In general refineries are grouped into the following process configurations:

- Topping refineries which cannot process the portion of the crude oil which would result from vacuum distillation, and as a consequence produce a high proportion of heavy fuel oil from the crude oil

- Complex refineries which can process the vacuum-distillate which the crude oil contains, and which consequently produce a lower proportion of heavy fuel oil from the given crude oil

- Residue upgrading refineries which can process the heavy residue of the crude oil and as a result produce little or no heavy fuel oil and a consequential still-higher proportion of clean products
In South Africa all of the crude oil refineries at the coast are complex and the inland crude oil refinery at Sasolburg is an upgrading refinery.

Clearly the gross margins realised at the South Africa oil refineries are a function of the landed cost (including freight from source) of crude oil received at the refinery gate and of the selling prices of the various products in the local (or export) markets. The local selling prices equate in turn to the prices of these products in foreign supply enclaves plus the cost of tank-ship freight from these enclaves to RSA plus landing charges.

However, the worldwide spread (difference) between product prices and crude oil prices, which provides for the basic profitability of the refineries (their gross margins) rises and falls according to the level of surplus refining capacity that prevails in the world system through time.

The Markets

The following graph is provided to illustrate the size and the volatility of gross margin at a refinery over the last five years. It is based on published market-data and shows the gross margin (adjusted only for VR operating costs) of a hypothetical complex refinery in Singapore which processes Dubai crude oil.

Figure 1: Singapore Dubai Complex Margin (less VR Opex), US$ per barrel of crude oil

![Graph showing Singapore Dubai Complex Margin](image)

The average of the above margin for the period is approximately 3.2 US$ per barrel of crude oil.
If the VR cost per barrel of crude is taken to be US$ 0.80 and if this hypothetical refinery has a processing capacity of Dubai crude of 100,000 barrels per day (to approximately match Cape Town refinery) then the gross margin before deduction of any costs would be US$ 0.4 million per day.

If the refinery ran every day of the year then this equates to US$ 146 million per year.

Finally, if total annual cash operating costs for the refinery were US$ 100 million per year then this hypothetical refinery would generate a net profit of US$ 46 million per year. It should be noted however that **this is a potential margin that would only be achieved if the refinery performed to its capability, without loss of yield, without loss of available time on-line, and within budgeted operating expense.**

**Shifts from Singapore to Cape Town**

The above per-barrel margin in the Singapore market is relevant to the exercise of estimating the potential realisable margins for Cape Town refinery over the same period, simply because the price of Dubai crude oil in Singapore and the Singapore product prices are linked to the Arab Gulf (AG) by the cost of tank-ship freight, and the AG prices, plus freight to RSA, would reflect prices in RSA.

Of course it will be expected, and it is true, that several other factors come into play in the achievement of Cape Town refinery’s actual gross margin, not least of which is the fact that Cape Town refinery has not been processing Dubai crude oil.

To provide a rigorous estimate of the Cape Town refinery net profit based on shifts off the above calculation for the hypothetical Singapore refinery, the following items would have to be appraised:

- The relative transport costs from AG to Singapore versus AG to Cape Town for crude oil and for products
- The shift from market-based prices to the formulated BFP prices in Cape Town
- The above-mentioned performance issues (throughput, yield, operating cost)
- The premium which Cape Town refinery must pay for low-sulphur crudes because it is not yet equipped to process 100% of high-sulphur crude such as Dubai crude to meet the RSA product specifications (an RSA CF2 issue)
- The cost of ocean transport from Cape Town to the Eastern Cape for any Cape Town refinery production which is sent there to meet the Chevron market requirement
- The incremental cost of double-handling Cape Town refinery’s crude oil feed in Saldanha Bay and the cost of transporting it by pipeline to Cape Town
• The imbalance of octane demand in the Cape Town market versus Cape Town refinery production, necessitating the purchase of gasoline blend stock

• The relative landed cost of crudes sourced not from the AG but from West Africa

• The relative price fetched in the market for heavy fuel oil, typically much of which has to be exported from RSA refineries to Singapore

PetroLogistics has not appraised these issues but, having an understanding of them, is quite confident in contending that over the last five years, which provided the average margin used in the above calculation for the hypothetical refinery in Singapore, Cape Town refinery would have achieved less profit than the US$ 46 million attributed to the hypothetical refinery.

The Impact of Shutting-In Production

Returning to the exercise at hand, namely assessing the impact on profitability of Cape Town refinery if it is forced to shut in production, it is contended that the margins achieved per the above graph can be used in the following manner.

Firstly the margin per barrel of crude oil will be more usefully converted to the margin per barrel of clean production:

• Assuming the yield of clean product from Dubai crude oil in a complex refinery as being approximately 70% by volume, the average refinery margin per the above graph (which is 3.2 US$ per barrel of crude oil) could be expressed instead as 4.6 US$ per barrel of clean product.

• The volume-related portion of fixed cost that is implied in the above graph would be of the order of 80 US cents per barrel of crude oil, or 1.14 US$ per barrel of clean product, and so the gross margin before any deduction for operating cost would be approximately 5.7 US$ per barrel of product.

From experience in the field of refinery economics PetroLogistics would assume total annual cash operating costs at a refinery like Cape Town refinery to be of the order of 80 to 110 million US$.

Now the recently-achieved and creditable (2013) annual production of clean products at Cape Town refinery is the equivalent of a calendar-day production of the order of 68 tbd and so the total cash operating cost (assume 100 million US$ per annum) can be expressed as 4.03 US$ per barrel of product.

The net margin that could potentially accrue to the refinery can thus be shown in the following table which is constructed with the purpose only of allowing the calculation of the impact of lost production at Cape Town refinery:
Table: 1 Example of Refinery Margin Calculation

<table>
<thead>
<tr>
<th></th>
<th>US$ Per Barrel of Crude</th>
<th>US$ Per Barrel of Product</th>
</tr>
</thead>
<tbody>
<tr>
<td>Margin per Figure 1</td>
<td>3.20</td>
<td>4.57</td>
</tr>
<tr>
<td>VR Op Cost</td>
<td>0.80</td>
<td>1.14</td>
</tr>
<tr>
<td>Gross Margin</td>
<td></td>
<td>5.71</td>
</tr>
<tr>
<td>Cash Op Cost</td>
<td></td>
<td>4.03</td>
</tr>
<tr>
<td>Net Margin</td>
<td></td>
<td>1.68</td>
</tr>
</tbody>
</table>

From this table it can be deduced that if Cape Town refinery production was cut back “by the 805 MI per annum import capability provided by Burgan” (page 9 of the FSSR), i.e. approximately 14 tbc/d or 20% of Cape Town refinery’s full clean-production capacity, then the refinery profitability (basis net refinery margin) would be significantly reduced.

(Note: The basis on which the above figure of 805 MI per year is derived and quantified is nowhere presented in the FEIR, and as will be explained later in this report the concern of Chevron is augmented by the fact that the Burgan terminal as currently configured could be used to import much more than that amount).

The deduction is that profitability at full production of 68 tbc/d would be US$ 42 million per annum, reduced by 57% i.e. by US$ 24 million when shut-in.

Again it is emphasised that this profitability of US$ 42 million represents a potential that would only be achieved if the refinery performed to its capability, without loss of yield, without loss of available time on-line, and in this case within the PetroLogistics estimate of the US$ 100 million budgeted operating expense. It is also the number illustrating profit before depreciation and tax.

Whatever the actual profitability of Chevron this scenario and its impact would be seriously detrimental to the Cape Town refinery and the RSA economy (RSA Inc).

Appreciation of the above arithmetic can be schematically presented in the figure below.
Note the break-even point for profit generation is approximately 43 tbcld.

If instead of cutting back production at the refinery, Chevron were to transport the volume displaced by imports to its market elsewhere in RSA then the cost of that shift should likewise impact on the profitability of the refinery through reduction in the net-back price of this portion of its production.

The cost of transporting clean fuel product by tank-ship from Cape Town to Durban is currently of the order of 3.50 US$ per barrel (compared to the figure of 2.00 US$ per barrel used in the FEIR which is possibly freight-only and omitting of wharfage charges). This shift in operations would be far from optimal for the RSA supply system as a whole bringing unwarranted cost to the overall RSA economy (RSA Inc), and would also bring some additional complexity to the overall supply logistics for Cape Town. Nevertheless, in this case the refinery profitability would be reduced by a lesser amount of 43% i.e. by US$ 18 million per annum.

Using the above model as the basis, the following figure summarises the effect on the relative profitability of the refinery in terms of the reduction in that profitability at various assumed values for the Figure 1 Singapore margin in US$ per barrel of crude when 14 tbcld are either shut in or are diverted to Durban.
If the shut-in of production were higher which this report illustrates could easily be achieved when the planned capacity of the Burgan Terminal is considered, then the corresponding figures would be more severe in terms of impact on the refinery.

The above analysis stands on its own as the impact of shutting in the refinery production, whatever the base-line scenario may be. The FSSR does not include such an assessment. Instead the FSSR has dealt only with the notion of displaced volume, and has confined its quantification of the economic penalty on Cape Town refinery to the highly particular scenario of its own projected S&D balance (which has in any case been contradicted by the analysis in this report).

Thus, in its assessment of the economic impact on the refinery that might be attributed to the Burgan terminal’s operations the FSSR has provided a much less severe description of the impact and estimates it at only US$ 1.4 million per annum in 2017. The primary assumptions leading to this significant understating of impact are as follows:

- As already pointed out the FSSR assesses the impact only in terms of displacing Cape Town refinery production to the Durban market (the FSSR also ignores that as gross margin lowers or as freight costs increase there comes a point at which it is optimal to shut-in rather than ship out).

The FSSR assumes a low penalty for this displacement. As already mentioned, the cost of bridging product from in-tank Cape Town to in-tank Durban is understated in the FSSR, 2.0 $/bbl versus 3.5 $/bbl.
• The FSSR S&D projections are less accurate than those of this report and in fact are inapplicable as a counter to Chevron’s concern.

• The FSSR S&D drew the conclusion that there would be a short of 690 ML per annum in 2017, and then subtracted this amount from the 805 ML throughput which it claims for the Burgan terminal. It then applies the penalty of displacement to Durban on only the balance (805 less 690). The US$ 1.4 million is calculated as (805 – 690) ML times 6,290 (barrels per ML) times 2 $ per barrel freight.

This is a fundamental error in an argument about the effect on Cape Town refinery, because even if there were a short of 690 ML in 2017 (which is disputed on the strength of this report’s supply and demand analysis), the FSSR cannot assume that it would be serviced by the Burgan terminal, as it would depend on which companies ‘owned’ the short.

For instance, if the short belonged to Engen or BP or Chevron (and much of it would belong to Chevron, being the short arising from the routine shut-down of the refinery) then these companies would not want to incur the cost of Burgan’s fees and would import directly as they are capable of doing even now. The threat of further imports via Burgan that would affect Cape Town refinery would therefore remain.

The FSSR downplays the negative effect of the economic shift simply by placing it cosmetically in comparison to background volatility in world refining margins. However the negative shift on the economics of Cape Town refinery, whatever the size, is experienced across all values of gross refining margin.

Post Script: Through intermediate interaction with ERM and the resultant published Comments and Responses table, PetroLogistics has learned that ERM acknowledges that the backing in of 805 ML per annum of refinery clean production will reduce the refinery’s profit by 22 million US$ per annum. This could imply that the above argument supporting the figure of US$ 1.4 million has been superceded. End of Post Script

It should also be noted that Figure 1 indicates that the Singapore marker of refinery margin has been very volatile. The volatility of refining margins in foreign-market enclaves is reason enough to highlight the vulnerability of any refinery.

In further caution about the impact of unnecessary imports into Cape Town, PetroLogistics would point out that in today’s oil industry the investment in new refining capacity is generally not driven solely as a commercial venture of its own. The ‘investors’ more generally have reasons of strategy as their drivers, for example through monetisation of their own crude oil, or in order to secure their own downstream markets for their petroleum products (vertical integration).
Also, governments have commonly commissioned their national oil company to invest in on-shore refineries as a component of security of supply.

**These factors**, along with the quest for economies of scale in the building of very large new refineries for example in the AG area, **are drivers for low worldwide refining margins in the future.**

The question of survival for **existing refineries** is ultimately about the achievement of a sufficient return on costs, and not only about the absolute level of refinery margins in world markets. Existing refineries will survive **inter alia** by maximising the production of the clean high-value products and minimising the cost of transporting products into the market.

**On the above analysis, PetroLogistics contends that with the typical (average) refining margins that have prevailed in the industry over the last five years and, based on observed trends, those expected to prevail in the future, the shutting in of 20% of Cape Town refinery’s production (or its displacement to Durban) due to unwarranted imports would be unsustainable and would threaten the viability of the refinery and thus the Cape Town economy.**
5 Existing Infra-Structure and Supply Arrangements in Cape Town

This section of the report describes the infra-structure that is currently available to support inbound supply of petroleum products to the Cape Town market and a description of its use when the Cape Town refinery is running and when it is off-line.

5.1 Description

The historical supply pattern for Cape Town is that Cape Town refinery has fed the markets of the Cape Town supply area comprising not only its own marketing brand, Caltex, but also those of the other marketers, despite the fact that these other marketers have their own sources of production elsewhere in RSA. Thus in Cape Town these marketers have purchased their needs of finished product from Chevron and, in the other refining centres of Durban and the Inland, Chevron has likewise purchased their needs from other refiners. This reciprocity is rational and is efficient in the lowering of cost for the oil industry system as a whole.

The crude oil supply for Cape Town refinery is mainly landed in VLCC cargoes at Saldanha and makes its way via the SFF storage at Saldanha Bay by pipeline to Milnerton. Crude oil can be received in smaller cargo-sizes via the Cape Town harbour where it would be pumped directly from the ship along a pipeline to the refinery crude oil storage tanks.

Chevron can make its supply-sales to the other marketers directly by road tanker from the Chevron terminal which is immediately adjacent to the refinery. Alternatively it can cross-pump the products through a section of pipeline to Montague Gardens, where BP and Engen each have their own storage and dispatch facilities. Note that this operation of these terminals, which can also receive by pipeline from the harbour, is not mentioned in the ESR but the terminals are an important component of SOS for Cape Town.

Total has a terminal at Paarden Eiland but the terminal is decommissioned for clean fuels service. The option does exist for Total to re-commission this terminal in clean fuels service and re-establish its links to the industry pipeline system.

Three pipelines which are owned by Chevron run from the harbour all the way to Milnerton, respectively in crude oil service, heavy fuel oil service, and clean fuel product service. The ‘clean’ pipeline is a multi-product line which can transport gasoline, kerosene, and diesel in either direction, and which has offtake to the already mentioned BP and Engen terminals at Montague Gardens. Although these pipelines are owned by Chevron the regulator (NERSA) has oversight of their usage.

Within the harbour there is a storage terminal for heavy bunker fuel and marine gas oil to serve the ships that visit Cape Town. This terminal is jointly owned by Engen, BP, and
Chevron and is operated under licence of the Port. It is linked to the refinery and also to the tanker berths in the harbour.

The berths for tank-ships delivering bulk fuels into Cape Town or taking product out of Cape Town are positioned in the so-called Tanker Basin. However as explained in the FEIR the Burgan Terminal would be built on the Eastern Mole jetty and the currently isolated two additional tanker berths servicing the Eastern Mole could be commissioned to integrate with the same service that the Tanker Basin provides. Of course if the number of berths were a constraint in the current inbound supply chain then this integration could take place without the construction of the Burgan terminal.

The last significant piece of infrastructure that must be mentioned is the vast SFF tank-farm at Milnerton which was built to store a strategic stock of crude oil. The tank-farm is linked to the Chevron crude oil pipeline system and can thus be fed from Saldanha or from the Cape Town harbour. Only a small number of the 39 large-capacity storage tanks are currently in operational service for crude oil. Conversion of some of the other tanks to clean fuel service is commonly accepted as an option for the storage of strategic reserve stock, with benefits as explained elsewhere in this report, but this is not mentioned in the ESR.

In the absence of regulatory requirement, there is no government-mandated strategic inventory held in Cape Town.

5.2 Usage

Cape Town refinery has historically covered the Cape Town market demand, (refer to the detail in Section 5.1 above) but it no longer produces the relatively small amount of illuminating kerosene (IK) that is needed, and it also does not produce the full amount of ultra-low-sulphur diesel (ULSD) that Cape Town currently demands. Under normal circumstances when the refinery is on-line the basic pattern is as follows:

1. Crude oil is transported to the refinery from Saldanha and occasionally this supply is supplemented by supply from the Cape Town harbour

2. A supply of IK and ULSD is delivered by tank-ship into Cape Town and transported in the clean pipeline either to the Chevron storage at the refinery or to the BP or Engen terminals at Montague Gardens

3. A relatively small amount of imported high-octane gasoline blend-stock is delivered by tank-ship into Cape Town and transported, also in the clean pipeline, into the refinery

4. A supply of gasoline and diesel is delivered by pipeline directly from the refinery to the BP and Engen terminals at Montague Gardens
5. Heavy fuel oil and some (clean) marine gas oil is pumped from the refinery to the harbour either for delivery into the bunker terminal or directly onto ships for export.

6. To the extent that the refinery consciously produces more gasoline, jet fuel, or diesel than is needed in Cape Town then that product adds to the incoming IK and ULSD demand for clean pipeline capacity in order that the surplus can be loaded directly onto tank-ships for delivery elsewhere.

7. Jet fuel is produced and stored at the refinery for delivery by road truck to the Cape Town International Airport (CTIA).

In contrast, when the refinery is off-line the flow of products may be simplified in that the demand for clean fuels can all be met by the in-flow of product delivered by tank-ship and transported by pipeline directly to the various storage and dispatch terminals.

If necessary, the capacity of the clean pipeline can handle this large inflow. In practice the system would build some inventory ahead of a planned shutdown to help cover the market demand. Nonetheless from the point of view of security of supply ideally the pipeline infrastructure should be required to cover demand without reliance on a stock-pile and this aspect is addressed as follows.

The clean pipeline has a capacity of approximately 0.6 ML per hour or 5300 ML per year at 100% service factor, compared with the current market for clean fuels of around 4 000 ML. With a service factor of 90% the slack capacity would last for ten years based on the FSSR assumptions of growth in the market.

During 2013 the capacity usage of the clean pipeline, used in both directions amounted in total to only 1446 ML with ample spare capacity available.

Even if the ULSD grade of diesel were to displace regular diesel the total Cape Town supply area demand of which is 1850 ML, to the extent of 50%, then the in-bound pipeline operation could handle this without the Burgan Terminal. The refinery would nonetheless suffer from being shut-in by this volume.

To the extent that the Burgan terminal would allow a shift of demand from the Milnerton-end of the pipeline to the Cape Town-end of the pipeline, then this would off-load the pipeline in the case where the refinery were off-line and the full Cape Town demand was being imported. However, while there is slack capacity in the pipeline, this benefit cannot be claimed as a needed SOS component.

It should be emphasized that to the extent that the other marketing companies rely on Chevron for logistics and for product-supply in Cape Town, Chevron is likewise reliant on them in the other supply enclaves. This fact militates against the exploitation of logistical constraints in a competitor’s ability to compete. This reciprocity is rational and is efficient in the lowering of cost for the oil industry supply system as a whole.
From the point of view of Shell, Total, and Sasol, it is acknowledged that the current system and ownership of the infrastructure implies that they are reliant on hospitality arrangements with other players for the storage and handling of their product however that product may be sourced. The Burgan terminal could provide them with a measure of independence if they require it. But equally, this independence could be achieved by building a terminal anywhere in Cape Town with linkage to the trunk pipeline, for example on the Total Paarden Eiland site or in a new terminal in the Milnerton area.

The above first-pass description of inbound supply arrangements in Cape Town would indicate that the logistics infra-structure is adequate and that from this point of view there is no need at this point in time for the Burgan Terminal inside the harbour.
6  The Benefits of the Burgan Terminal with Regard to Government Policy

This section of the report appraises the claims made in the FEIR about the extent of support which is found in government policy for the Burgan terminal.

6.1  Background

In late 2005 due to set of circumstances relating to the need for all of the RSA refineries to take shutdowns in order to prepare themselves for the introduction of more stringent quality specifications for gasoline and automotive diesel that were to take effect on 1st January 2006 there were some serious and high-profile interruptions of supply to the markets. A commission of enquiry was set up (The Moerane Commission) to investigate the causes of the interruptions and the general capability of the supply infrastructure to service the country’s requirements of it.

As a result of the Commission’s report a study by a select group of experts, the Fuel Supply Strategic Task Team (FSSTT) was carried out. This study resulted in a set of recommendations, some of which demanded urgent improvement to the infrastructure others of which required attention be given to formulation and implementation of appropriate policy.

It might be noted that an important consequence of the events of late 2005 was that the decision-makers were galvanized and inter alia a serious and needed boost was given to the Transnet NMPP pipeline project.

ERM claims in the FEIR that the Burgan terminal will provide tangible benefits in terms of its consonance with much of the government and para-government policy and guidelines which followed the Moerane Commission of Enquiry. In particular ERM claims that the Burgan terminal is compatible with the following policy documents:

- The Draft Strategic Stocks Policy and Implementation Plan of 2013
- The Development Plan for the Port of Cape Town per the Transnet 30 Year Development Plan of 2013
- The National Development Plan of 2012
- Competition Policy with Respect to the Petroleum Industry
- Guidelines on Imports and Exports (Nov 2006)

PetroLogistics has made an assessment of these claims given the fact that the alleged compatibility with fuel sector policy forms an important foundation (in the FEIR) for
assessing the need and desirability of the Burgan terminal. Contextualizing the relevance of the policies relied upon by ERM is critical to a considered appraisal of the terminal’s fit with policy.

6.2 The Energy Security Master Plan

For anyone knowledgeable about the infrastructural supply issues pertaining to the oil industry in 2005 and in the present, a reading of the ESMP would confirm that the major concerns were (and still are) those relating to the port of Durban and the corridor between Durban and the Inland. The ESMP has very little direct bearing on Cape Town’s fuel supply logistics.

The only clear reference to Cape Town comes in section 8.2.3 of the ESMP with the statement that “The need for increased imports has placed strain on both the Durban and Cape Town harbours and related facilities.” The narrative in this section then goes on to engage exclusively with the problems in Durban.

In more general comment about Port Capacity Constraints in section 9.1.2, the ESMP says:

- The use of back-of-port petroleum tanks for anything other than offloading and loading (by pipeline) and ‘bulking’ for pipeline packing must be prohibited and access and tariff-setting issues be referred to the Regulator
- Oil companies must be obliged to correct the current constrained port offloading and loading situation and make the necessary investments or allow an independent party to effect those changes

It is contended that these comments were aimed at the congestion in Durban, but for the task at hand, an assessment should nonetheless be made as to whether or not the criticism in the ESMP that was levelled at the ports would currently also apply to Cape Town.

In making an assessment of the current capability of the inbound supply logistics for Cape Town in the context of the ESMP, the following should be considered:

- The description of the supply system and its usage as provided in section 5 above
- A listing of specific improvements that have been made in Cape Town’s supply logistics since 2007 which includes the following:
Improvement that has been made by Chevron to the system for inbound logistics of finished products both when the refinery is on-line and when it is off-line.

- Additional ullage commissioned at Cape Town refinery
- Improved oil movement and storage (OM&S) operations within the refinery and interfacing with the logistics outside the refinery
- Improvements in Cape Town refinery’s cross-pumping operations to other oil companies (automation of the “goose-neck” pipeline intersection)
- Chevron’s ongoing appraisal of the ability to convert the HFO pipeline or the crude oil pipeline for receipt of imported diesel in an extended emergency.
- Improvements in line-ups at the tanker berths

Improvements that have been made to the system by other oil companies

- Additional ullage that has been commissioned at BP and at Engen
- Installation of a second (duplicate) pipeline spur from the trunk pipeline to the BP terminal and the Engen terminal

The opinion of the users of the system who are dependent on its capabilities.

In Section 4.3 of the ESR under the heading of Improved Security of Supply, the statement is made that the Burgan terminal would facilitate direct imports into Cape Town without first landing the product at other RSA ports. However, it should be noted that this can already be done and does happen when the refinery is shut down. As already explained, there is slack capacity in the pipeline.

It is nowhere evident in the FEIR or the ESR that any assessment of existing import capability has been undertaken. This should form part of any appraisal into the need for improved security of supply. Despite the obvious relevance of this enquiry to the investigation into the Cape Town fuel supply logistics and constraints (which must include an assessment of the specific capability of the existing pipeline system) this has not been done.

The specific security of supply (SOS) benefits deriving from the Burgan terminal that the FEIR puts forward are as follows along with commentary.

1. A harbour incident involving a vessel at either of the existing berths in the Tanker Basin:
The commissioning of the berths in the Eastern Mole can proceed if needed and thus be included in the system without the building of the Burgan terminal.

2. A refinery incident causing extended interruption in production:

The system can handle this scenario as explained elsewhere in this report and especially so if the planned strategic reserve of product (SR) were to be located in Milnerton Tank Farm.

3. Damage to or failure of the white oil pipeline:

The SR at Milnerton would likewise cover this eventuality.

Additionally, based on previously experienced and observed capability and performance of Transnet Pipelines in such scenarios, such an event would nonetheless be expected to be of short duration.

4. An urgent demand for feed from Eskom:

The requirement for the Eskom generators to run at 100% for a significant duration (as opposed to peak-shaving the demand for electricity) is respectfully argued to be an unlikely event which Eskom would avoid if it possibly could, because of the huge cost of running them. However in circumstances where an inordinate increase in demand might occur, it is acknowledged that the Burgan terminal, depending on its contractual obligations could add flexibility to the overall response.

5. Making low sulphur gasoline and diesel available until CF2:

The current inbound logistics already handles imports of ULSD and based on the capacity of the pipeline and the ullage available at the various existing tank farms, could handle significantly more. It is thus not clear what quantum of such imports the FSSR contemplates when asserting that the Burgan terminal offers a solution and an SOS benefit.

6. Providing ullage for the SR:

This is addressed generally in various other sections of this report.

An important recommendation was made in the ESMP which should be highlighted in any assessment of the claimed benefits of the Burgan terminal with regard to government policy:

- The ESMP unambiguously stresses the promotion of local refining capacity as a national strategic policy imperative, with a tool to achieving this being the re-endorsement of the policy of limiting imports where local production is available.
On these considerations, it is contended that the current inbound logistics of supply into Cape Town are adequate and that contrary to the ESR’s assertion, the ESMP does not form a valid policy support base for the argument that the Burgan facility is a required intervention.

In support of the claim that the inbound logistics are inadequate, the proponent should be required to provide a far more detailed justification of its contention that there is merit to this claim and to explain how the case for the Burgan terminal is bolstered by the requirements of the ESMP. The investigation undertaken by ERM does not support the argument that the inbound logistics are inadequate. There is simply an insufficient analysis in the FEIR of existing supply capability to be able to endorse this view. PetroLogistics’ own appraisal indicates the contrary conclusion i.e. that the current inbound logistics of supply into Cape Town are adequate.

6.3 The Draft Strategic Stocks Policy

The ESMP, although recommending that contingency stocks should be a component of the plan for security of supply, put the issue in abeyance because that aspect would be covered by a separate government initiative.

The Draft Strategic Stocks Policy and implementation plan was in fact that initiative and, when finalised, the security of supply (SOS) of Cape Town most certainly will be strengthened. As yet the holding of strategic stock has not been implemented but if it had been then the Cape Town market would be further protected by it. And if, as is deemed sensible, the SR is located in the Milnerton area because that is where Cape Town refinery’s storage, the SFF Milnerton tank-farm, and the two other important storage terminals are situated, the claim that the Burgan terminal adds to security of supply would actually be weakened.

The FEIR contends that the Burgan terminal does broadly support the impending SR policy through the additional storage which the terminal will provide. This would be true only if a discrete portion of the ullage in the new terminal were to be commissioned, or contracted, for strategic stock and used by a ‘responsible party’ to store a portion of that party’s mandatory stock holding. In terms of the draft policy, such stock would effectively be held ‘under lock and key’. The mere fact of providing a storage terminal does not validate the ERM motivation. It is the use to which that storage will be put which is critical to assessing whether or not providing SR is a legitimate claimed benefit in the FEIR.

Whether or not the business of Burgan is in fact to include the holding of SR under such stringent conditions has not been disclosed in the FEIR or the ESR. There is insufficient information regarding the ullage that will be set aside for SR or how that mechanism will be achieved. In the absence of a clearly formulated endorsement in government policy
of the need to compensate private industry stakeholders for holding stocks in reserve, it is most unlikely that this claimed benefit will materialize. Any reliance on this alleged benefit is speculative.

However, in general, the following should be noted:

1. SR stored in the harbour cannot be the best usage option from the point of view of the Port’s objective of earning harbour fees and cargo dues.

2. The Milnerton SFF Tank Farm would be better suited for this purpose because:
   a. The quantum would be 150 ML (14 days cover of the market)
   b. Large tanks already exist (30 ML)
   c. The product would have to be held ‘under lock and key’
   d. Milnerton tank-farm is managed by SFF, which is the designated custodian of the SR by policy
   e. The location of Milnerton would allow the SR to cover both interruptions in operation of the Cape Town refinery and interruptions of the transfer operations from the harbour

Thus whether or not Burgan can claim a benefit in terms of this aspect of policy is unclear at this stage, and it will in any case depend on the decision of the responsible party (i.e. government on the one hand, and the major oil companies on the other, in joint consultation) as to where they wish to store in Cape Town, given the options available. There is ample existing alternative storage for the purpose of storing SR and so the Burgan terminal is not a necessary intervention.

6.4 The NDP

The National Development Plan is sensible and pragmatic in its conclusions about the option of building import volumes to the required level before investing in new (green-field) refining capacity, on the understanding that there is always a need to cover refinery shutdowns using the import facilities.

Likewise, investment in the capability to import (such as the Burgan terminal) ahead of the time when these imports are needed would be wasteful and an inefficient use of resources which would be sub-optimal in terms of the industry objectives envisaged in the Petroleum Products Act. Against that backdrop, it is argued that the NDP does not yet bolster the particular case for Burgan in Cape Town because imports of the required quantity, when needed, can already take place through the existing infra-structure.
Section 5 of this report describes how the current import capability is adequate to serve current and projected market demand in the fuel sector market for the Cape Town supply area.

The NDP also calls for the establishment of the SR for security of supply. This issue has already been dealt with in the above sub-section.

6.5 Competition Policy

The promotion of competition generally is for the benefit of the end-consumer, is legislated for, and is supported by the oil industry. However, as demonstrated by the special dispensation given to the industry, the general application of the legislation and the goal of transformation in the sector have not been easy to accomplish, *inter alia* because the industry is of national strategic importance and thus continues to be regulated.

In its Sections 4.2.4 and 4 the ESR addresses the notion and resultant benefits of competition in the oil industry. When discussing the benefits of competition in the oil industry one should be clear about the sector (portion of the supply chain) under review and the identification of the beneficiaries of the competition.

This report seeks to clarify the meaning and the benefits of competition in the oil industry in the context of the various aspects that the Burgan project brings into focus. But it should be noted that *from the point of view of government policy and legislation competition is ultimately about behavior which should benefit the end-consumer.*

It is suggested that the matter at hand i.e. *competition per se* should be addressed in three sectors (or strata) of the value chain pertaining to the oil sector which sectors mirror the regulatory framework that prevails.

- The Supply Sector roughly equates in the value chain to the BFP *price* of product, which is a formulated price that is supposed to reflect the cost of imported product that is landed and ready in-tank to be forwarded through the primary and secondary distribution systems, or else dispatched directly into the markets adjacent to the ports.

- The Primary Distribution Sector reflects the *cost* of the provision of infrastructure for bulk movement of product through the ports and onwards into the markets

- The Wholesale Sector lies within the segment of the value chain that is down-stream of the BFP *price* marker.
Within the Supply Sector as defined, unbridled competition is clearly not the intention of government policy. The deliberations in the development of the ESMP for liquid fuels and the resultant policy reflect the national importance and the strategic imperatives relating to the sector, thus the requirement that locally produced product should be put to bed in the market ahead of imported product. The benefits of competition claimed by the Burgan project for the Cape Town market should be understood in this light.

Within the Primary Distribution Sector it is a matter of fact that the benefits of economies of scale are intended to be passed through to the consumer through legislation that has established a Regulator who can ensure that these benefits are not appropriated by monopolies. The Regulator operates in lieu of competition that might otherwise be wasteful or might fail. From the point of view of the Burgan project and the costs it would pass through to the consumer, it is argued that because of the regulatory process already in place there are no incremental benefits accruing to the end-consumer.

The Wholesale Sector is the one area within the overall RSA regulatory framework where competition can be meaningful, providing steps are taken to level the playing fields for new wholesaler entrants through the assurance of access to (preferably independent) infrastructure. That the Burgan terminal and others like it could facilitate this transformation cannot be denied. If an entity can procure product on the same terms as his competitor, then he will compete and succeed in the market by virtue of his provision of a service which his customers value. But imports of product are not a pre-condition for this transformation to take place.

*In claiming that the Burgan project promotes competition, it is insufficient for the FEIR to challenge the objector to prove otherwise. ERM needs to describe and argue by what mechanism the ultimate consumer will undoubtedly benefit as a result of the Burgan terminal. There is no indication that ERM have demonstrated an understanding of how competition operates within the fuel sector and how the market is regulated in order to ensure the benefits for the end consumer. The conclusion in the FEIR that this benefit will accrue is not justified based on the level of information in the FEIR.*

### 6.6 Port Development Plan

Clearly the Port of Cape Town is supportive of the Burgan project since it originally invited requests for proposals to build such a terminal.

However, given the Chevron concerns about the project it is important that this report does generate questions about the possibilities of alternative options for the Port.
1. According to the FEIR the do-nothing alternative would leave the Port at a loss but this presupposes that there is no other use for the land, when the Eastern Mole has been generally ear-marked for bulk liquid.

2. In Durban, the oil industry has been advised over the years that the use of port land for bulk petroleum products should only apply where the product is being transported over the wharf (in or out) and where the transport mode is by pipeline. As stated in the ESMP “the use of back-of-port petroleum tanks for anything other than offloading, loading and ‘bulking’ for pipeline packing must be prohibited”. This understandably makes sense and would reduce road (and rail) traffic to only that essential level which is associated with low-volume (and ideally, high-value) cargo. For Cape Town, the Burgan project with its potential high road traffic seems to contradict this principle.

3. If Burgan were to turn over its ullage for storage of SR, thus usage would not support the generation of port charges and wharfage fees (cargo dues) for TNPA.

4. The Port presumably acknowledges the possible consequences of the government’s policy with regard to limiting imports when refinery production can instead supply the market. The question arises as to whether or not an S&D study for Cape Town was undertaken in support of the decision to request proposals for the terminal.

5. Likewise the Port presumably recognizes that where the storage is used to receive deliveries from the Chevron refinery (not across the wharf) and only for removal by road traffic through the port to the Cape Town market, this will not generate port charges and wharfage fees and will simply consume the capacity for the port to sustain road traffic that might be needed by other entities bringing or taking product across the wharf?

6. Finally, the anticipated use of the terminal for direct imports may have a negative effect on other ports, such as Nqura whose planned terminal will be ideally suited to receive imports for trans-shipment of ‘combi-cargoes’ into East London, Mossel Bay, Walvis Bay, or into Cape Town through the existing pipeline, whenever that becomes necessary. There would likewise be an impact on Saldanha if crude oil throughput at that port is reduced.

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There are sound logistical and business considerations that could be used to argue against the location of the Burgan terminal inside the harbour as opposed to siting it outside. The FEIR does not address this possibility, relying only on the fact that the Port Development Plan has endorsed the project.
6.7 The Import/Export Guidelines

The ESMP has already been referenced as unambiguously stressing the promotion of local refining capacity ahead of reliance on imports, and an important means of achieving this is the re-endorsement of a policy of limiting imports where local production is available.

The government’s Guidelines on Imports and Exports, published in 2007 has been the instrument by which the guidelines could be given effect.

However the rules that are used to test the motivation for approval of an import licence cannot be, and are not, effective in covering the many different situations that can prevail.

The basis upon which the EIA documents suggest that this is a water tight framework is contested as the level of detail required to be put up by an applicant for a licence is not regulated in the necessary level of detail. Despite assurances to the contrary, there is nothing in the Guidelines or the PPA which would serve to confirm that the DOE tends to only grant permission to import once it is established that there is no local stock or refining capacity available.

The ESR specialist report (page 19) indicates that a person applying for an import licence is obliged to first enquire whether local producers have stock available. But there is no clear reference to that requirement being specifically regulated for. The precise manner in which this issue of available supply or refining capacity is required to be interrogated is by no means clear from the regulatory framework.

The conclusion to be drawn is that the current import permit system cannot be infallibly relied upon to protect the interests of the Cape Town refinery in the face of unwarranted imports of products which the refinery can produce or of products which can substitute for the products that the refinery can produce.
7 Detailed Assessment of the Purpose of the Burgan Terminal

7.1 Preamble

The ESR does not specify fully the business model for the terminal other than to say it is multi-purpose and that Burgan have an oil-major anchor tenant for a portion of its capacity. Even the use to which the anchor tenant will put that capacity is unclear. Also for business reasons Burgan is not able to disclose the intentions of Burgan’s other targeted clients.

Section 4.1.1 of the ESR (Private Costs and Benefits) simply says that “The available information gives no reason to anticipate financial failure that would argue against the project”. But this information should be provided, or at least sufficient of it to properly appraise the cost/benefit claims and the impact of the project.

The cost versus benefits of the project is thus not explicitly presented, but it ought to be, and in a manner which addresses the points made in this report.

There is a lack of information in the ESR concerning the operational purposes of the terminal. The operations model is needed in order to interrogate what alternatives are available, which is a fundamental requirement of the EIA process.

Approximately 118 million litres (MI) of storage is planned (mainly for gasoline and for diesel) with links to the Cape Town pipeline system and with truck loading gantries capable of dispatching of the order of 2000 MI per year into the market, subject to authorisation of the associated traffic.

The hardware has the potential to by far exceed the 805 MI per year that the ESR insists is the maximum expected throughput of the terminal, but nowhere in the FEIR is there an explanation of how this figure of 805 MI per year is derived. Similarly, nowhere is the maximum potential throughput of the terminal dealt with appropriately. It is simply not possible to quantify the expectant range of impacts based on the inadequacies of the supporting documents.

Nonetheless, from the contents of the ESR, it would seem that the following operational models are possible, either separately or in combination.

1. Receipt of imported product (directly or indirectly via other RSA ports) for delivery by pipeline to Cape Town refinery or to the other terminals that are operated by the oil companies in Cape Town.

2. As above but for delivery by road truck directly from the port into the Cape Town market
3. Receipt of product by pipeline from Cape Town refinery for export by tank-ship out of Cape Town

4. As above but for delivery by road truck directly into the Cape Town market

5. Storage of reserve stock to be held either by the RSA oil refiners and wholesalers or by government, in both cases as a consequence of government legislation

6. Receipt of imported product for onward trans-shipment to other ports

7.2 Need and Desirability: Assessment of the Business Model

In this section of the report the description of the Burgan terminal itself and its possible business/operating models are scrutinized to contextualize Chevron’s concerns against the backdrop of aspects of the project where the information is inadequate (as indicated elsewhere in the report).

The justification for use in the various identified services for the terminal are tested along with the benefits that are claimed in the FEIR in terms of contribution to improved inbound logistics against what is already in place, and in terms of what the various instruments of government policy requires.

As already mentioned the ESR does not specify exactly the purpose of the terminal and for business reasons the ESR is not able to disclose the intentions of Burgan’s targeted clients. It is understood that these clients have not yet committed. There is a lack of information in the FEIR concerning the business model and the operational purpose of the terminal.

However in section 4.19.1 of the FEIR describing previous locations investigated for a Burgan investment (Durban, Richards Bay, Saldanha Bay) a reasonable conclusion is that the importation of product has always been a prime component of the Burgan business plan. There is a strong supposition to be made that a key aspect of the operational model will be to use the terminal for import purposes.

According to the FEIR the Burgan terminal will comprise 118 MI of storage for gasoline and diesel, and so based on discharging one 50 MI tank-ship cargo per week it would be able to receive 2600 MI per annum.

It will have a gantry with 6 loading bays (ESR Section 1.2.2) capable of dispatching 2000 MI of these products per annum. This latter amount is based on 2 trucks per hour at each loading bay receiving 30 000 litres, and a service factor of only 63%.
The Traffic Specialist Report (TSR) has some conflicting statements in it concerning the use of the gantry.

1. In one part of the report it says the traffic will apply only while awaiting a pipeline being built, but in another it says that road transport will be part of the normal ongoing operation.

2. The last paragraph of Section 2 of the TSR seems to be incomplete.

3. The throughput analysis was done on the basis of only 75 trucks per day with a 30 000 litre load at five (not six) loading bays. This equates to only 821 Ml per annum if done 7 days per week.

The very important question arises as to the limit that will in fact apply to the amount of traffic that would be allowed in the port and on the approach and exit roads. The traffic assessment was done on the basis of a maximum of 120 trucks in a 24 hour period.

It is believed essential that the Traffic Study be revisited to assess the impact of a much larger volume than the 821 Ml per annum, and to sensitise it to as high as the above 2000 Ml per annum that matches the gantry configuration.

An anchor tenant (or group of tenants) with 20% of the Cape Town market for gasoline and diesel would likely match the 821 Ml per annum, it being approximately 20% of the Cape Town market for the combined gasoline and diesel service. But if this is the only use then the 118 Ml storage is way in excess of that reasonably required for this purpose. Similarly the gantry capacity seems too large. The reason why significant additional capacity (more than that reasonably required to achieve the 820 Ml per annum) is being provided for is not clear from the FEIR.

The anchor tenant (or group of tenants) would need only of the order of 45 Ml of storage if he received his product from Cape Town refinery. This would allow him to receive weekly receipts from the refinery and to retain a relatively large safety stock of 14 days’ cover. Only if the tenant designed his replenishment operations as imports off a medium size (MR) tank-ship would he require more ullage.

Chevron’s concern is that the surplus capability can be used by a supplier to import ongoing volumes of product ahead of the timeline when that modus is needed, and that these imports will back-in production at the refinery or else force a displacement of that production to Durban, either of which is sub-optimal for the broader economy.

A likely third party might be a supplier who imports with the specific purpose of accessing the market directly through the Burgan gantry (vertical integration) in competition with supply to the market by existing marketers using product from Cape Town refinery. It must be emphasised that in the fullness of time such market-access in Cape Town as elsewhere is to be expected as part of the transformation which general
policy supports, but in the meantime, for Cape Town, it is not supported by policy which gives preference to the refinery’s production.

To recap the earlier list, it would seem that the following operational models are possible, either separately or in combination. The advantages and disadvantages of each are listed.

1. Receipt of imported product (directly or indirectly via other RSA ports) for delivery by pipeline to Cape Town refinery or to the other terminals that are operated by the oil companies in Cape Town.

   a. The viability of the terminal as designed would be in question in the medium term if Burgan’s clients were not allowed to import on an ongoing basis

   b. The existing system can already import cargoes directly into CT by pipeline if needed, and in addition more flexibility will exist in the system when combi-cargoes (multiple products) can be trans-shipped from TNPA’s planned terminal at Nqura

   c. Existing players who have their own facilities would want to avoid ‘double-handling’, i.e. incurring associated fees to be paid to Burgan

   d. Transformation would be achieved in the Storage and Handling (S&H) business

   e. The ullage is too large for this purpose on its own, with MR-sized vessels dropping cargoes of only 50 Ml

2. As above but for delivery by road truck directly into the Cape Town market

   a. The viability of the terminal as designed would be in question in the medium term if Burgan’s clients were not allowed to import on an ongoing basis

   b. Although the pipeline is not capacity-constrained, the pipeline operation would be offloaded in the situation where the whole of the Cape Town demand were to be imported

   c. Depending on which parties use the facility, small wholesalers could have an alternative source of product

   d. Ambiguity exists regarding the planned gantry capacity and its usage. Road traffic in the port would greatly increase depriving other future ventures of the capability of the port to handle increased traffic.

   e. The ullage is too large for this purpose on its own
f. There is a particular opportunity for an alternative stand-by channel of supply of jet fuel to CTIA, perhaps as DPK (dual purpose kerosene) in conjunction with IK, but this is not included in the Burgan plan.

3. Receipt of product by pipeline from Cape Town refinery for export by tank-ship out of Cape Town

a. The terminal could facilitate savings on tank-ship demurrage and simplify the pipeline-scheduling task but on their own and because of the relatively small volumes involved such benefits would not justify investment in storage tanks in the harbour

b. Burgan would be dependent on Chevron as its client

c. The ullage is too large for this purpose on its own

4. As above but for delivery by road truck directly into the Cape Town market

a. This implies that the user would be buying product from Chevron

b. In this scenario a significant quantum of demand, whose supply is currently met by delivery in the Milnerton/MG area, is effectively shifted to the other end of the pipeline. This implies a new level of complexity in the scheduling of bi-directional operation of the pipeline.

c. It is an alternative option for marketers who do not own a terminal (as do BP and Engen), instead of paying a service-fee for delivery of product (handling) at the Chevron gantry in Milnerton, or at the gantries owned by Engen and BP at Montague Gardens.

d. It could facilitate the aggregation of volume by a group of small marketers into quantities that would benefit from economies of scale but the level of S&H charges that would apply to the use of the new terminal would be likely to work against this option

e. Ambiguity exists regarding the planned gantry capacity and its usage. Road traffic in the port would greatly increase depriving other future ventures of the capability of the port to handle increased traffic.

f. It would not generate revenue from port charges and wharfage fees for the Port

g. The ullage is too large for this purpose on its own
5. Allocation of the storage capacity to storage of reserve stock (SR) to be held either by the oil refiners of RSA or by government, in both cases as a consequence of government legislation

   a. This is not the best option from the point of view of the Port’s economics as no revenue is generated from ongoing harbour and wharfage charges

   b. The SFF Milnerton Tank Farm storage would be better suited for this purpose

      i. The full quantum of cover for Cape Town would currently be 150 Ml (14 days cover of the market) and growing

      ii. Large tanks already exist at Milnerton TF 30 Ml

      iii. The product would have to be held ‘under lock and key’

      iv. Milnerton tank-farm is managed by SFF, the designated custodian of the SR in terms of the current policy

      v. The location of Milnerton would allow the SR to cover interruptions in operation of the Cape Town refinery and of the transfer operations from the harbour

6. Receipt of imported product for onward trans-shipment to other ports

   a. This is an unlikely model in the face of the available alternatives such as Nqura which is designed for large (LR) tankships

_The inevitable conclusion of this section of the report is that the full use of the Burgan terminal per the configuration described in the FEIR is not known and so its potential economic viability cannot be confirmed. This is a major concern to Chevron given the potential for it to be used for significant imports which would back-in production at Cape Town refinery._
8 Conclusions and Summary

The conclusions of this report fall into three headings.

The impact on Cape Town refinery of unrestrained imports into Cape Town in contradiction of government policy:

1. Apart from the IK which Chevron does not produce, and the ULSD which is not fully covered by Cape Town refinery, a supply of imported product (that Cape Town refinery is capable of producing) would either back-in production at Cape Town refinery or displace Cape Town refinery production out of Cape Town.

2. The S&D analysis conducted by PetroLogistics concludes that for the next ten years imports of the products that the Cape Town refinery produces are not needed while the refinery is on line.

3. Based on the typical refining margins that have prevailed in the industry over the last five years, and those expected to prevail in the future, the shutting in of 20% of Cape Town refinery’s production would be unsustainable and would threaten the viability of the refinery. Alternatively the displacement of production out of Cape Town would likewise threaten Cape Town refinery. This 20% is the number which the FEIR would claim as the worst case, but the configuration of the planned Burgan terminal could permit more than double that amount.

The need for the terminal based on the adequacy of existing infrastructure and the application and relevance of government policy:

1. The ESR contention is that the inbound logistics infra-structure for Cape Town is inadequate, but it has failed to provide conclusive argument of this.

2. Justification in terms of consonance with government policy is not convincing.

3. It is contended that the current inbound logistics of supply into Cape Town are adequate.

4. In claiming the contrary ERM should be requested to provide a far more detailed justification that the case for the Burgan terminal is bolstered by the requirements of the ESMP.

5. In time, when the SR has been established, SOS will be significantly enhanced. The SR is not yet legislated but when it is required to be in place there is adequate existing storage available for it at the receiving-end of the pipeline in the Milnerton area. In this location the SR then protects the market not only against interruptions in production at the refinery, but also against interruptions in the logistics of supply from the harbour.
6. To the extent that the Burgan terminal, as it is currently planned, can add to the effectiveness of the overall inbound supply arrangements, the benefits are believed to be not substantial enough to interest existing players and thus justify the project by only this means. The provision of facilities for IK and for jet fuel as DPK would however be an exception.

This statement discounts the interest that existing marketers not having their own dispatch facilities might have in the terminal, but this is not a policy matter.

7. The Wholesale Sector is the one area within the overall RSA regulatory framework where competition can be meaningful, and it cannot be denied that the Burgan terminal, and others like it, could facilitate this transformation. However, this benefit does not need a terminal inside the harbour in order to be realised. Nor are imports of product a pre-condition for this transformation to take place.

The viability of the terminal based on its various potential uses to its clients:

1. Burgan’s and indeed TNPA’s possible business models along with their decision to support such a terminal raise questions. The Burgan business plan is not fully described and there is insufficient information in the ESR to enable an assessment of the viability of the project and therefore a comprehensive evaluation of alternatives to it which is required in terms of the EIA process. However, the terminal’s various potential purposes have been assessed.

2. It must be emphasized that the current policy of government restricts imports when sufficient local production is available, and the Cape Town refinery in its current process configuration is able to cover the Cape Town market.

The terminal therefore should not be able to rely on such throughput for revenue now nor for ten years. Import permits for Cape Town would not generally be made available, but would only be issued from time to time as the particular need arises.

Notwithstanding this constraint on imports, the one type of user who would not be relying on improved logistics to justify participation but would be exploiting the commercial opportunity that the terminal could present is a new entrant trader-importer of product.

Although it could be argued that there is place for such players in the Durban enclave where the refineries cannot meet the demand, the time has not yet arrived in Cape Town. But based on the planned configuration of the Burgan terminal there would be a strong incentive for Burgan to promote this type of business. In this regard the basis of the stated maximum throughput of 805 million litres per year has been queried as being far too small, and without explanation as to its derivation.
3. With regard to use for storage of SR, whether or not Burgan can claim a benefit in terms of this aspect of government policy is unclear at this stage. Certainly this use would not serve the traditional economic model of the port, which is to see product loaded from or into ships across the wharf.

4. Any use of the terminal that does not generate traditional revenue for the port (through port charges and cargo dues) must be challenged as it can be argued that such activities should better be located elsewhere.

5. The Traffic Study should be revisited to investigate the maximum acceptable traffic that should be permitted.

Overall Summary

This report has sought to demonstrate that there is no need for the Burgan Terminal from the point of view of:

- The ability of Cape Town refinery to meet the demand from its own production and the government policy which gives priority to local production in supplying the local market.

- The capability of the current logistics to deal with imports when they are required from time to time.

- The various policy issues which the country’s governance of the oil industry addresses.

In spite of the above, Burgan appear to be intent on building a Terminal which is designed for a large import stream, and whose economic viability would depend on such imports taking place in addition to the S&H services being provided to local marketers.

Should Burgan or its tenants use the facilities to import product in the face of local refinery production in the quantities anticipated, and thus back-in (or divert) the local refinery production, then the economic viability of the refinery will be threatened.
The MEC: Department of Environmental Affairs and Development Planning

Attention: Ms. M. Schippers
Per email: Melanese.Schippers@westerncape.gov.za

6 October 2014

Copied to:
DLA Cliffe Dekker Hofmeyr Inc.

Attention: Ms. Terry Winstanley
Per email: terry.winstanley@dlacdh.com

Dear Sir/Madam

RE: PROPOSED FUEL STORAGE AND DISTRIBUTION FACILITY, EASTERN MOLE, PORT OF CAPE TOWN – DEADP REF: E12/2/4/2-A2/75-3030/11

1. We act for Chevron South Africa (Pty) Ltd (‘our client’).

2. On 26 September 2014 we submitted our client’s comment on the Final Environmental Impact Report (‘FEIR’) for the abovementioned application. The FEIR was made available for comment by ERM Southern Africa (Pty) Ltd (‘ERM’) on behalf of the applicant, Burgan Cape Terminals (Pty) Ltd (‘Burgan’).

3. At paragraph 7.2.6 of our comment, we referred to the threat posed to the Cape Town refinery by Burgan’s proposed facility, which we submit is apparent once regard is had to the Cape Town refinery’s actual earnings. We further referred to the fact that such data has been offered to ERM under cover of agreement on a confidentiality regime that would safeguard our client’s commercially sensitive data. No agreement could be reached with ERM regarding the confidential submission of such data.

4. On the same day as submitting our client’s comment on the FEIR, we accordingly addressed a letter to Burgan’s legal representatives in an attempt to reach agreement on a confidentiality regime in terms of which our client can supplement its comment on the FEIR directly with commercially sensitive information.

5. Burgan’s representatives have sought an extension of time to consider our client’s proposal until Friday 10 October 2014. As our client is anxious to ensure that the relevant decision-makers are in possession of all considerations relevant to the application, and is further of the view that an agreed confidentiality regime will facilitate proper and efficient decision-making, it has agreed to the extension.
6. All reasonable effort is being made by the parties to arrive at a mutually satisfactory solution. We wish to place on record that we shall submit our client's proposal regarding the submission of its confidentially sensitive data expeditiously upon being appraised of Burgan's position.

Yours faithfully,

SMITH NDLOVU & SUMMERS

Per:

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