1.1. LIST OF ACRONYMS

<table>
<thead>
<tr>
<th>No.</th>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>CPI</td>
<td>Consumer Price Index</td>
</tr>
<tr>
<td>2.</td>
<td>MIRTA</td>
<td>Minimum Information Requirements for Tariff</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Applications</td>
</tr>
<tr>
<td>3.</td>
<td>RAB</td>
<td>Regulatory Asset Base</td>
</tr>
<tr>
<td>4.</td>
<td>RRM</td>
<td>Regulatory Reporting Manual</td>
</tr>
<tr>
<td>5.</td>
<td>WACC</td>
<td>Weighted Average Cost of Capital</td>
</tr>
<tr>
<td>6.</td>
<td>CAPM</td>
<td>Capital Asset Pricing Model</td>
</tr>
<tr>
<td>7.</td>
<td>EMRP</td>
<td>Equity Market Risk Premium</td>
</tr>
<tr>
<td>8.</td>
<td>NRV</td>
<td>Nett Replacement Value</td>
</tr>
<tr>
<td>9.</td>
<td>MOT</td>
<td>Method of transport</td>
</tr>
<tr>
<td>10.</td>
<td>OUTBOUND</td>
<td>Depot facilities and secondary storage and</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Distribution</td>
</tr>
<tr>
<td>11.</td>
<td>SASOL OIL</td>
<td>Sasol Oil (Pty) Ltd</td>
</tr>
<tr>
<td>12.</td>
<td>TSA</td>
<td>Total South Africa (Pty) Ltd</td>
</tr>
</tbody>
</table>

1.2. PREAMBLE

Sasol Oil and TSA jointly own the Natcos Airport (Old Durban International) crude oil storage facility and jointly lease land from Transnet National Ports Authority (TNPA) for additional crude oil storage facilities and white product (petrol and diesel) storage at Fynnlands (collectively the Facilities).

The Facilities are being managed, for and on behalf of Sasol Oil and TSA, by Natcos, which is an unincorporated joint venture between Sasol Oil and TSA. Natcos is managed by the incorporated joint venture, National Petroleum Refiners (Pty) Ltd (herein called Natref), the shareholders of which are Sasol Oil and TSA (the shareholders). Natcos (and Natref) has operation responsibility for the Facilities.

On 14 July 2008, the National Energy Regulator of South Africa (Nersa) granted license PPL.sf.F3/18/2006 to Sasol Oil and TSA, operating as Natcos in respect of
the Facilities. The license was granted for the transportation, storage and loading of the following petroleum products: crude oil, diesel and petrol.

Although the Facilities are operated under a single license, Natcos operates the Facilities as two virtual facilities, with each of the shareholders (Sasol Oil and TSA) granted usage in the Facilities in relation to their interest in Natcos. Sasol Oil and TSA respectively currently hold a 63.64% and 36.36% interest in the Facilities.

Due to the manner in which Natcos is operated, it was decided to apply for a consolidated tariff under the Nersa license. This document contains the application as prepared by both Sasol Oil and TSA and will address the tariffs of any third party that wishes to make use of the capacity in the Facilities.

There is no management responsibility and both shareholders retain control of the assets and products that move through the Facilities. The shareholders plan their own transfers of product / crude oil into and out of the Facilities. However, in order to ensure that the Facilities stays within available usage constraints, the shareholders and Natcos meet at a set frequency, to coordinate the movement of product into and out of the Facilities.

The license covers the following equipment:

**Fynnlands site 1**
- Diesel: F41108 (32,568.6 m³) and F41110 (32,568.6 m³)
- Unleaded petrol: F41111 (32,568.6 m³) and F41112 (31,081.9 m³)

**Fynnlands site 2**
- Crude oil: F41101 → The tank was alienated to TNPA.
- Crude oil: F41102 (32,581.8 m³), F41103 (32,558.2 m³) and F41104 (32,593.6 m³)

**Natcos Airport site**
- Next to the old Durban International, herein only referred to as the Airport site.

This site only stores crude oil and contains the following tanks (maximum capacities indicated):

<table>
<thead>
<tr>
<th>Crude Oil</th>
<th>- F40101 (32,514.3 m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- F40102 (32,502.9 m³)</td>
</tr>
<tr>
<td></td>
<td>- F40103 (32,596.7 m³)</td>
</tr>
<tr>
<td></td>
<td>- F40104 (32,436.6 m³)</td>
</tr>
<tr>
<td></td>
<td>- F40105 (32,528.6 m³)</td>
</tr>
<tr>
<td></td>
<td>- F40106 (32,589.9 m³)</td>
</tr>
<tr>
<td></td>
<td>- F40107 (32,494.0 m³)</td>
</tr>
<tr>
<td></td>
<td>- F40108 (32,698.7 m³)</td>
</tr>
<tr>
<td></td>
<td>- F40109 (32,547.6 m³)</td>
</tr>
<tr>
<td></td>
<td>- F40110 (32,535.0 m³)</td>
</tr>
<tr>
<td></td>
<td>- F40111 (32,569.8 m³)</td>
</tr>
<tr>
<td></td>
<td>- F40112 (32,567.4 m³)</td>
</tr>
</tbody>
</table>
The loading facility at Berth 9, with loading arms, is typically operated at 1700 m³/h at a pressure of 5 bar.

The pipelines include:

<table>
<thead>
<tr>
<th>Pipelines</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A 24&quot; 2 km bidirectional pipeline from Fynnlands (F41101 to F41104) to Berth 9. The line is used to move diesel into site 1. The line has a capacity of 1700 m³/hr.</td>
<td></td>
</tr>
<tr>
<td>A 16&quot; 250 m unidirectional pipeline from Fynnlands site 2 (crude) to the Transnet Pipelines (TPL) pump station. The line has a capacity of 845 m³/hr.</td>
<td></td>
</tr>
<tr>
<td>A 12&quot; 250 m unidirectional pipeline from Fynnlands site 1 (petrol and diesel) to the TPL pump station. The line has a capacity of 650 m³/hr. This line is currently rented by TSA, and owned by TPL.</td>
<td></td>
</tr>
<tr>
<td>A 48&quot; 4 km unidirectional pipeline from the SBM to the Natcos Airport site. The line has a capacity of 10 000 m³/hr.</td>
<td></td>
</tr>
<tr>
<td>A 16&quot; 15 km bidirectional pipeline from Natcos Airport site to the Fynnlands site 1. The line is operated at 845 m³/hr.</td>
<td></td>
</tr>
<tr>
<td>An 12, 1.4 km unidirectional pipeline from Berth 9 to Fynnlands site 1 tank farm. The line has a capacity of 1200 m³/hr.</td>
<td></td>
</tr>
</tbody>
</table>
The positioning of the sites in the Durban area is shown below:

Figure 1: Natcos facilities in the Durban area

Figure 2: Natcos Airport site: tank layout
Figure 3: Natcos Fynnlnds site 1 and 2 and Berth 9 within the Durban harbor
1.3. CRUDE OIL TANKS

Tanks background and layout

There are currently 18 tanks at Natcos in crude oil service. These tanks consist of 15 tanks at the Natcos Airport site and 3 tanks at the Fynnlands site 2. In respect of our previous tariff application submitted to Nersa, Fynnlands site 2 had 4 tanks, but one of the tanks at this site (that is tank F41101) was alienated to Transnet in 2010.

The tanks can only receive crude oil from the Single Buoy Mooring (SBM) and can only dispatch crude oil to Natref via the Crude Oil Pipeline (COP). Transfers between the Airport site and Fynnlands site 2 are also possible. There is currently a pipeline that connects Berth 9 with the crude oil tanks at site 1, but this line is currently being used for diesel transfers.

Third party access

This document is not intended to serve as a guideline as to the manner in which third party access will be handled for the Facilities, but third party access is described herein to help provide background for the tariff application.

Natcos currently proposes that third party access will be provided under the following conditions:

- Only crude oil will be allowed in the crude tanks.
- Only crude oil that has been approved for processing in Natref will be accepted.
- Only crude oil of the same type that is currently in the tanks can be accepted.
- Natcos cannot guarantee that the third party will receive the same crude back as there is significant dead space in both the tanks and connecting pipelines.
- The crude oil that will be supplied back to the third party will be on a volume for volume basis, without guarantees of the nature or quality of the crude oil.
- The crude will be assayed, and crude volume will be returned on a dry basis.
- The third party needs to present a plan on how it wants to recover the crude oil. The plan needs to meet the safety, health, environmental and quality standards of Natcos.
- The crude oil will only be accepted if there is available throughput capacity.

Sasol Oil and TSA share the available capacity at Natcos and as such, there is a coordinated six month rolling plan to ensure that the total available capacity is never exceeded.

Any third party will need to form part of this six month rolling plan and will therefore need to present its requirements well in advance.
The notice period should at least be four months, but preferably six months.

The available capacity will be determined by both the volume capacity available of both Sasol’s share and TSA’s share of the capacity, and the period for which the capacity will be available.

The period for which the capacity will be available is important as both Shareholders continuously utilise their available capacity and then transfer the crude oil to Natref.

The third party should have the necessary licenses, permits, etc. required to import crude oil.

The third party must at all times adhere to Natcos’ Safety, Health, Environmental and Quality rules.

Third party access will only be allowed if the third party has all the contracts in place for the import and the transfer of crude oil.

Crude oil will only be returned to a third party at Natcos, not at Natref.

1.4. WHITE PRODUCT TANKS

Tanks background and layout

There are four tanks at Natcos that are dedicated to white products. Of the four tanks, two are dedicated for the storage of diesel and two for petrol. Currently diesel 500 is stored in the diesel tanks, while ULP (unleaded petrol) 95 is stored in the petrol tanks.

The tanks can receive product from Berth 9, as well as Total IVT (Island View Terminal). The pipeline link to IVS (Island View Storage) and Vopak has been decommissioned. The tanks can transfer product to the Crude Oil Pipeline (COP) and Total IVT. The line up to transfer product into the Durban Johannesburg Pipeline (DJP) does exist but is not in use. The pipeline link to receive product from IVS and Vopak has been decommissioned.

Third party access

This document is not intended to serve as a guideline on how third party access will be handled for the Facilities, but third party access is described to help provide background for the tariff application. Please refer to the Sasol website for a full set of guidelines to be applied to Third parties requesting access to the Facilities.

The document currently proposes that third party access will be provided under the following conditions:
- A third party request can be made to either shareholder or to both shareholders independently.
- Only petrol and diesel (herein referred to collectively or separately as product) that meet the quality specifications as specified from time to time by the shareholders for all products at Natcos will be allowed in the tanks.
- Any third party will only be allowed to transfer petrol or diesel to Natcos upon presentation of an independent certificate of analysis.
- Should any third party transfer product to the tanks, and the tanks are analysed to be off-specification subsequent to the transfer. The third party will be responsible to return the product in the tanks to the quality it was before the transfer, either by:

  1. replacing the contents or
  2. blending additional components

- Third parties will receive product back of a similar nature and meeting the same specifications to that transferred into the tank. However, it cannot be guaranteed that it will be the same molecules.
- The product that will be supplied back to the third party will be on a volume for volume dry basis, based on an assay. It will only be accepted if there is available capacity.

Sasol Oil and TSA share the available capacity at Natcos and as such, there is a coordinated six month rolling plan to ensure that the total available capacity is never exceeded.

Any third party will need to form part of this six month rolling plan and therefore will need to present its requirements well in advance. The notice period should at least be four months, but preferably six months.

The available capacity will be determined by both the volume capacity available of Sasolâ€™s or TSAâ€™s share of the capacity (pending which shareholder the request was made to), and the period for which the capacity will be available.

The period for which the capacity will be available is important as Sasol Oil and TSA continuously fills up its available capacity and then transfers it out of Natcos. The facility is utilised as a throughput facility and not a storage facility.

The third party should have the necessary licenses, permits, etc. required to import the product (i.e. meet all regulatory requirements).

The third party must at all times adhere to Natcosâ€™ Safety, Health, Environmental and Quality rules.

Third party access will only be allowed if the third party has all the contracts in place for import and transfer of the product is within the available capacity window.
Product will only be returned to a third party at Natcos, not at Natref or any other facility operated and/or owned by the shareholders (unless agreed otherwise).

1.5. TARIFF METHODOLOGY

The tariff methodology for Petroleum Storage facilities version 2 ï March 2011 was used by Natcos

The following formula was used to calculate the Allowable Revenue:

\[
\text{Allowable Revenue (AR)} = (\text{RAB} \times \text{WACC}) + \text{E} + \text{T} + \text{D} + \text{C}
\]

Where

- **AR** = Allowable Revenue
- **RAB** = Regulatory Asset Base
- **WACC** = Weighted average cost of capital
- **E** = Expenses: maintenance and operating expenses for the tariff period under review
- **T** = Tax: estimated tax expense for the tariff period under review
- **D** = Depreciation and amortization of inflation write up: the charge for the tariff period under review
- **C** = Claw back adjustment (to correct differences between actual and forecasts in formulae elements as well as efficiency gains and volume differences) from a preceding tariff period

The crude oil tanks and the white product tanks have different operating philosophies and it was decided to calculate a separate storage tariff for the crude oil tanks and for the white product tanks.
Weighted average cost of capital (WACC)

The Nersa WACC methodology is as follows:

\[
WACC = Ke \times \left(\frac{E}{Dt + E}\right) + Kd \times \left(\frac{Dt}{Dt + E}\right)
\]

Where:

- \(Ke\) = The cost of equity derived from the Capital Asset Pricing Model
- \(Kd\) = The cost of debt
- \(E\) = Equity
- \(Dt\) = Debt

**WACC conclusion**

We have applied the SBM WACC percentage and the Beta factor was replaced with the NERSA published factor. The SBM WACC was used as a proxy WACC from an agreement between Sasol oil and TSA to avoid disclosure of confidential information.

<table>
<thead>
<tr>
<th>Current submission 2014/2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZAR WACC</td>
</tr>
<tr>
<td>Equity weighting</td>
</tr>
<tr>
<td>Debt weighting</td>
</tr>
<tr>
<td>CPI</td>
</tr>
<tr>
<td>Cost of Debt</td>
</tr>
<tr>
<td>Kd pre tax</td>
</tr>
<tr>
<td>RSA Corporate tax rate</td>
</tr>
<tr>
<td>Cost of Equity</td>
</tr>
<tr>
<td>MRP Real</td>
</tr>
<tr>
<td>Beta</td>
</tr>
<tr>
<td>RF Post tax</td>
</tr>
</tbody>
</table>

Regulatory Asset Base (RAB)

All the tanks that Natcos currently operates have been fully depreciated, with the exception of minor capital improvements that were done recently. However, the
tanks are continuously repaired and maintained to ensure that the tanks continue to have a useful life.

To establish a cost basis for the tank, a valuation of the tank was done by Moody International. This valuation indicated that the tank has a remaining useful life of 21 years. As the tanks and ancillary equipment are all maintained to the same level, the assumption can be made that all the other tanks and ancillary equipment will have a similar useful lifespan.

The valuation from the Moody study is not a good indication of the total capital investment in the site as it only focussed on the tank valuation and did not take other supporting infrastructure (pumps, pipelines, buildings, etc.) into consideration.

The best estimate that Natcos has of the capital investment for all the sites is the current replacement value of the assets under review. The replacement value of the assets is calculated on an annual basis, as parts of the insurance revision.

Attached below is Annexure C for the current replacement value of 2010.

Sasol Oil and TSA considered this valuation to be the most accurate reflection of the capital value of the assets at Natcos as submitted in the previous tariff application. The TOC methodology was not applied with the revalued assets.

The asset base was calculated as follows for 2015:

<table>
<thead>
<tr>
<th></th>
<th>Crude</th>
<th>Final Product</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>RMIL 2014/15</td>
<td>RMIL 2014/15</td>
</tr>
<tr>
<td>Net book value for original assets at insurance value</td>
<td></td>
<td></td>
</tr>
<tr>
<td>New assets amount for WACC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Assets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deferred Tax Liability-Totals</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total RAB</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Remaining life of the original assets: 17 years.

Depreciation: Straight line over remaining life of assets

Deferred tax is based on the company tax rate of 28%. The deferred tax is calculated from the depreciation on the assets over the remaining year lifetime and the wear
and tear allowance over ten years on the estimated replacement cost (to current standard) of the assets.

The regulatory asset base for 2015 includes the depreciation for four years as well as the deduction of deferred tax. New assets capitalised in 2012 and 2013 was calculated on the TOC methodology and included in the RAB.

**Operational expenses (E)**

The total expenses for Natcos that are budgeted in the financial year from July 2014 to June 2015 (i.e. E) are R89.37 million. Corporate and allocated cost combined amounts to R0.84 million. In addition, the expenses were allocated for the crude oil tanks and the white product tanks:

\[
\text{Crude oil tanks: } = \text{R } 63.15 \text{ million} \\
\text{White product tanks: } = \text{R } 27.06 \text{ million}
\]

Rehabilitation cost provision is not included, as Sasol Oil is accessing the impact of the requirement and the approval process that should be followed with Nersa. Therefore the cost will be included in the next tariff application.

**Tax (T)**

The notional tax approach was used for all the tax calculations as per allowed tariff rates in the previous tariff submission.

The tax for Natcos is consolidated into both the Natref and Natcos is not an independent entity but rather forms part of Natref and Sasol Oil’s operations. As such, it is not possible to give the exact tax position for Natcos. However, both Natref and Sasol Oil are registered companies and therefore are subject to a 28% company tax.

Natcos does not own any of the products which it handles for the shareholders and therefore, the product cannot be included in any income that accrues to Natcos. The only income that Natcos can generate is through the use of the facilities. The tax will therefore be based on the allowable income and the total expenses for Natcos.

For each of the products this amounts to:

\[
\text{Crude oil tanks: } T = \text{R } 39.80 \text{ million} \\
\text{White product tanks: } T = \text{R } 10.03 \text{ million}
\]
Claw back (C)

The claw back calculation was based on the actuals for the period that the tariff was approved. Natcos claimed the claw back as a percentage of third party volume versus proposed volumes for final product.

Volume adjustment


Depreciation adjustment

The depreciation adjustment originates from new assets bought in the tariff period approved for the financial year 2013 for both crude oil and white products.

Cost of debt adjustment

Paragraph 10.5 of the Methodology allows for adjustment between the estimated cost of debt in the allowable revenue and the actual cost of debt for the tariff period.

<table>
<thead>
<tr>
<th>Cost of debt clawback</th>
<th>CRUDE</th>
<th>WHITE PRODUCT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Projected</td>
<td>Actual</td>
</tr>
<tr>
<td>Cost of debt (Kd)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total RAB</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Debt</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Equity</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Kd portion of WACC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kd portion of WACC adjustment</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Value of new property adjustment

The new assets bought in the approved tariff period (financial year 2012 and 2013) were for both crude oil and white products.

Expenses adjustment

The expenses included in the tariff application were for the financial year 2011 and the tariff was approved for the financial year 2012 period. The expenses for the actual tariff period were higher due to the different periods of cost.
# CLAWBACK SUMMARY

<table>
<thead>
<tr>
<th></th>
<th>Final Product</th>
<th>Crude</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Volume clawback</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Depreciation clawback</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Cost of Debt clawback</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Value of new property Clawback</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Expenses clawback</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>GA adjustment</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL CLAWBACK</strong></td>
<td>74.64 R MIL</td>
<td>97.47 R MIL</td>
</tr>
<tr>
<td><strong>Third Party volume</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Projected volume</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>CLAWBACK VALUE</strong></td>
<td>0.98</td>
<td></td>
</tr>
</tbody>
</table>

## Calculated tariff: Crude oil tanks

The tariff methodology as proposed by Nersa is given by the following formula:

\[
\text{Allowable Revenue} = (\text{RAB} \times \text{WACC}) + E + T + D + C
\]

Where:

- \( \text{RAB} \) = R \[\text{m} \]
- \( \text{WACC} \) = \[\text{%} \]
- \( E \) = R \[\text{m} \]
- \( T \) = R \[\text{m} \]
- \( D \) = R \[\text{m} \]
- \( C \) = n/a

\[
\Rightarrow \text{Allowable Revenue} = (\text{[Revenue]} \times \text{[Percentage]}) + \text{[Value]} + \text{[Value]} + \text{[Value]} + \text{[Value]}
\]
Natcos budgeted for 2015 that it will transfer ± m3 of crude oil. For the crude throughput to pay back the cost of the assets, a price is therefore required of:

\[
\text{Price} = \frac{\text{R} \, 311.7 \, \text{m}}{5,483,359 \, \text{m}^3}
\]

\[
= \text{R} \, 56.85 / \text{m}^3
\]

\[
= 5.69 \text{ c/l}
\]

The tariff for access to Natcos will be 4.38 c/l/month of crude oil. However, the access will still be dependent on the third party meeting the requirements for access to the facilities.

**Calculated tariff: White product tanks**

The tariff methodology as proposed by Nersa is given by the following formula:

\[
\text{Allowable Revenue} = (\text{RAB} \times \text{WACC}) + E + T + D + C
\]

Where:

\[
\begin{align*}
\text{RAB} &= \text{R} \, 434.13 \, \text{m} \\
\text{WACC} &= 5.68 \% \\
E &= \text{R} \, 27.1 \, \text{m} \\
T &= \text{R} \, 10.0 \, \text{m} \\
D &= \text{R} \, 26.1 \, \text{m} \\
C &= \text{R} \, 1.0 \, \text{m}
\end{align*}
\]

\[
\Rightarrow \text{Allowable Revenue} = (\text{R} \, 434.13 \% \times \text{WACC}) + \text{R} \, 27.1 + \text{R} \, 10.0 + \text{R} \, 26.1 + \text{R} \, 1.0 = \text{R} \, 88.8 \, \text{m}
\]

Natcos budgeted for 2015 that it will transfer ± m3 of white products. For the white product throughput to pay back the cost of the assets, the price is:

\[
\text{Price} = \frac{\text{R} \, 88.8 \, \text{m}}{26,900 \, \text{m}^3}
\]
= R [redacted] /m3
= [redacted] c/l

Volume turnover = 365 \times \frac{4 \times 32,500}{26,900} ~ [redacted] days

Price /month = [redacted] c/l
= 5.62 c/l/month

The tariff for access to Natcos will be 5.62 c/l/month of white product. However, the access will still be dependent on the third party meeting the requirements for access to the facilities.

**Conclusion**

The tariff for 2015 for access to Natcos (subject to terms and conditions) is shown in the next table.

<table>
<thead>
<tr>
<th>Tariff for access to Natcos</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crude oil</td>
</tr>
<tr>
<td>White product (petrol and diesel)</td>
</tr>
</tbody>
</table>


ANNEXURE: Insured value of the Natcos tank farm