

**SASOL OIL (PTY) LTD AND BP SOUTHERN AFRICA (PTY) LTD -  
ALRODE STORAGE FACILITY TARIFF APPLICATION FOR THE PERIOD  
1 JULY 2019 TO 30 JUNE 2020**

Submitted by:

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## EXECUTIVE SUMMARY

1. Sasol Oil submits this Tariff Application to NERSA for setting or approval of the storage tariff in terms of Section 4(f) of the Petroleum Pipelines Act, 2003 (Act No.60 of 2003) ("the Act").
2. The tariff application is for the white product tanks at the Alrode storage facility in Gauteng for the period 1 July 2019 to 30 June 2020.
3. This Tariff Application was prepared in accordance with the Tariff methodology for the approval of tariffs for petroleum loading facilities and petroleum storage facilities (24 August 2017 4<sup>th</sup> edition) ("the tariff methodology").
4. Sasol Oil has followed the tariff methodology as prescribed and the components of the Allowable Revenue formula under the rate of return methodology are listed below:

$$AR = (RAB \times WACC) + E + D + C + T$$

where:

*AR* = Allowable Revenue

*RAB* = Regulated Asset Base

*WACC* = Weighted Average Cost of Capital

*E* = Expenses: operating and maintenance expenses for the tariff period under review

*D* = Depreciation and amortisation of inflation write up: the charge for the tariff period under review

*C* = 'Claw back' adjustment: to correct for differences between actuals and forecasts in formula elements from a preceding tariff period in relation to the actual estimates for that tariff period

*T* = Tax: estimated tax expense for the tariff period under review

Component	1 July '19 – 30 June '20
Regulatory Asset Base (RAB)	██████████
WACC	██████
RAB x WACC	██████████
+ Operating Expenses	██████████
+ Taxation	██████████
+ Depreciation and amortisation	██████████
+ Clawback	-
<b>= AR</b>	██████████

**Table A: Allowable Revue**

5. The tariff is determined by dividing the Allowable Revenue (AR) by the projected volume for the applicable period.

	Component	1 July '19 – 30 June '20
Alrode Storage	AR (R)	[REDACTED]
	Volume (L)	[REDACTED]
	Tariff (c/L)	12.54

**Table B: Tariff Rate**

6. Sasol Oil hereby applies to NERSA for approval of the tariff of 12.54 cents per litre for the period 1 July 2019 to 30 June 2020.

## Terms and Abbreviations

AR	Allowable Revenue
BFP	Basic fuel price
CAM	Cost Allocation Manual
CAPM	Capital Asset Pricing Model
CPI	Consumer Price Index
Petroleum Pipelines Act	Petroleum Pipelines Act, 2003 (Act No. 60 of 2003)
MRP	Market Risk Premium
NERSA	National Energy Regulator of South Africa
RAB	Regulatory Asset Base
RRM	Regulatory Reporting Manual
WACC	Weighted Average Cost of Capital
R	South African Rand

**Sasol Oil (Pty) Ltd and BP Southern Africa (Pty) Ltd - Alrode Storage Facility Tariff Application**  
**For the Period 1 July 2019 to 30 June 2020**

## 1. BACKGROUND

### 1.1 Alrode storage facility:

Sasol Oil (Pty) Ltd (Registration number 1981/007622/07) and BP Southern Africa (Pty) Ltd (Registration number 1924/002602/07), jointly own the operation licence of a petroleum storage facility operation at cnr Garfield Road and Clark St North, Alrode, Gauteng.

On 14 October 2013, the National Energy Regulator of South Africa (Nersa) granted licence PPL.SF.F3/130/2013 to Sasol Oil and BP South Africa. The licence was granted for the storage of petroleum products: Diesel and Petrol.

The licence covers the following 11 tanks and capacities:

Tank ID	Tank Type	Product	Operational Capacity (m <sup>3</sup> )	Design Capacity (m <sup>3</sup> )
3	Fixed Roof	Diesel	306	322
4	Fixed Roof	Diesel	435	504
5	Floating Roof	Petrol	1,200	1,570
6	Fixed Roof	Petrol	1,472	1,570
7	Floating Roof	Petrol	2,200	2,660
8	Floating Roof	Diesel	2,200	2,560
9	Floating Roof	Petrol	4,200	4,820
14	Fixed Roof	Petrol (ULP 93)	7,840	9,896
15	Fixed Roof	Petrol (ULP 95)	7,840	9,896
18	Fixed Roof	Diesel	7,030	7,811
19	Fixed Roof	Diesel	4,150	4,647
Total			38,873	46,256

#### Mode of Operation

There are two types of operation mode which is links the Alrode depot; these are used for moving the following products into the depot

Mode	Intake flow Rate (litres/minute)	Discharge flow rate (litres/minute)
Road Gantry	1,400	2,200
Pipeline	10,000	None



The layout of the storage facility is shown in the approved licence document.

## **1.2 Structure of Application**

Against the backdrop sketched in this chapter, the remainder of the Application is structured in two parts.

- i) Chapter 2 states the legal requirements and rules underlying the Application.
- ii) Chapter 3 shows the composition of the Allowable Revenue to be recovered through the storage tariff.

## 2. BASIS OF APPLICATION

This chapter describes the statutory requirements and regulatory rules applicable to the regulation of the storage tariff.

### 2.1 Legal Framework

#### 2.1.1 *The Petroleum Pipelines Act, 2003 (Act No.60 of 2003) ("the Act")*

In terms of Section 4(f) of the Petroleum Pipelines Act NERSA must set or approve tariffs and charges in the manner prescribed by the regulation.

The Application is made with regards to the following licence:

Alrode storage facility	PPL.SF.F3/130/2013
-------------------------	--------------------

### 2.2 The tariff methodology

The tariff methodology requires applicants to provide information regarding the parameters chosen and assumptions made in the tariff calculation, as well as the detailed calculations.

#### 2.2.1 *Selected Tariff Methodology*

This Application is made in terms of methodology provided for in Section 3 of the tariff methodology. This is Sasol Oils' fourth tariff application and is based on its current view of business conditions.

#### 2.2.2 *Costing Approach*

NERSA notes that its preferred approach for calculating the level of cost-based tariffs is the average accounting cost (or fully allocated cost) approach. This approach is also applied in the Regulatory Reporting Manuals ("RRMs").

NERSA approved the Sasol Oil Cost Allocation Manual ("CAM") in terms of the RRM on 4 February 2013. All storage data submitted in this Application is prepared in terms of the principles outlined in the CAM, and relate to the regulated storage activity only.

### 2.3 Timeframes

#### 2.3.1 *Projection of Financial Data*

The tariff methodology is forward-looking, i.e. based on projected financial indicators for the approval period. This results in the use of forecasted data based on the latest available information on the application date. The mechanism allows for an adjustment for the variance between actual and forecasted data in the following year.

#### 2.3.2 *Tariff Application Period*

The Sasol Oil financial year is from 1 July to 30 June. This Application is made for the period 1 July 2019 to 30 June 2020. There will be one applicable tariff in line with the Sasol financial year ending 30 June 2020.

### 3. ALLOWABLE REVENUE

This chapter demonstrates the calculation of the components of Allowable Revenue under the tariff methodology as set out in Section 3.

#### 3.1 Formula

As prescribed in Section 3.2. of the tariff methodology, the formula for the Allowable Revenue is:

$$AR = (RAB \times WACC) + E + D +/- C + T$$

where:

<i>AR</i>	=	<i>Allowable Revenue</i>
<i>RAB</i>	=	<i>Regulated Asset Base</i>
<i>WACC</i>	=	<i>Weighted Average Cost of Capital</i>
<i>E</i>	=	<i>Expenses: operating and maintenance expenses for the tariff period under review</i>
<i>D</i>	=	<i>Depreciation and amortisation of inflation write up: the charge for the tariff period under review</i>
<i>C</i>	=	<i>'Claw back' adjustment: to correct for differences between actuals and forecasts in formula elements from a preceding tariff period in relation to the actual estimates for that tariff period</i>
<i>T</i>	=	<i>Tax: estimated tax expense for the tariff period under review</i>

#### 3.2 Regulatory Asset Base (RAB)

The value of the regulatory asset base is determined as:

$$RAB = (V - d) + w + dtax$$

where:

<i>V</i>	=	<i>Value of operating property, plant, vehicles and equipment</i>
<i>d</i>	=	<i>Accumulated depreciation and accumulated amortisation of inflation write-up for the period up to the commencement of the period under review</i>
<i>w</i>	=	<i>Net working capital</i>
<i>dtax</i>	=	<i>Deferred tax</i>

The tariff methodology (Section 4.1.9) states that plant, property and equipment under construction is excluded from the RAB.

##### 3.2.1 Property, Plant, Vehicles and Equipment (PPE)

In arriving at the property, plant and equipment, Sasol Oil has used the historical cost approach with the inflationary write up over the useful life of the regulated assets.

##### **Assets to be decommissioned**

There is no planned decommissioning of assets for the tariff period under review.

##### **Assets brought into use in the tariff application period under review**

There is no property, plant, vehicles and equipment expected to be commissioned during the tariff application period.

##### **Indexation (inflation write up)**

The Regulatory Asset Base (RAB) was trended using the applicable forecasted Consumer Price Index (CPI) for the applicable year since commissioning date.

Table 3-1 indicates the calculation of value of property, plant and equipment for the application period under review.

Item	1 July '19 – 30 June '20
Opening value	██████████
Add: Capital additions(2018)	██████████
Add: 2018 new assets inflation write up	██████████
Add: Capital additions(2019)	██████████
Add: 2019 new assets inflation write up	██████████
Less: Depreciation 2019	██████████
Add: Inflation write up 2020	██████████
<b>Total: V - d</b>	██████████

**Table 3-1: Regulated Asset Base excluding working capital**

### 3.2.2 Net Working Capital (w)

The formula for net working capital is given as –

$$w = \text{inventory} + \text{linefill} + \text{receivables} + \text{operating cash} - \text{trade payables}$$

Linefill is valued at the lower of cost or net realisable value. The net realisable value is calculated at the lower of BFP at purchase date or forecasted BFP for application period.

Sasol Oil has assumed a 45-day operating cash and trade payable cycles as well as 30 days of tariff receivables when calculating working capital consistent with previous applications.

Table 3-2 depicts the elements of the working capital calculation for the tariff period.

Item	1 July '19 – 30 June '20
Linefill	██████████
Receivables	██████████
Operating cash	██████████
Less Payables	██████████
<b>Working capital</b>	██████████

**Table 3-2: Net working capital requirements (R)**

### 3.2.3 Summary Regulatory Asset Base

The total Sasol Oil RAB is shown below.

Item	1 July '19 – 30 June '20
V - d	██████████
Add: W	██████████
Less: Deferred tax	██████████
<b>RAB</b>	██████████

**Table 3-3: Regulated Asset Base (R)**

### 3.3 Weighted Average Cost of Capital (WACC)

The WACC for the tariff calculation is a consolidated WACC between Sasol Oil (Pty) Ltd and BP Southern Africa (Pty) Ltd. The detail below reflects Sasol specific WACC.

Sasol Oil utilised the Capital Asset Pricing Model ("CAPM") to determine the cost of capital.

The formula for the weighted average cost of capital is:

$$WACC = (Eq / (Dt + Eq)) \times Ke + (Dt / (Dt + Eq)) \times Kd$$

where

- Eq* = Equity
- Dt* = Debt
- Ke* = Cost of equity
- Kd* = Cost of debt after tax.

#### 3.3.1 Gearing

Sasol Oil assumed the ██████████ for this Application period as the actual gearing is below the prescribed minimum.

#### 3.3.2 Cost of Equity (Ke)

The cost of equity is given by –

$$Ke = r(f) + \beta(e) \times MRP + SSP$$

where

- R(f)* = Risk-free rate of return
- β(e)* = Equity Beta
- MRP* = Market risk premium
- SSP* = Small Stock Premium

#### Beta

The table provided by NERSA pertaining to 30 April 2020; FY20 indicating levered beta values at various levels of gearing was used, applying the ██████████ gearing for FY20, resulting in a beta of ██████.

#### Market Risk Premium

NERSA published the real post tax EMRP applied in the tariff calculation. Sasol Oil is of the view that 5.72% is the most appropriate return equity investors expect in light of the published NERSA data

**Risk Free Rates**

NERSA published real risk free rates for May 2018 which was applied in the tariff calculation for FY20 as it represents the most recent information available at the time of submission.

**Summary of consolidated Ke Cost of Equity**

The cost of equity for 1 July 2019 – 30 June 2020 is summarised below:

Item	Consolidated
r(f)	4.75%
$\beta(e)$	█
MRP	5.72%
Liquidity premium	0.00
Real Ke	█

**Table 3-4: Summary of consolidated Ke**

**3.3.3 Cost of Debt (Kd)**

As per the published guidelines;

The actual cost of interest bearing debt incurred by the licensee must be applied

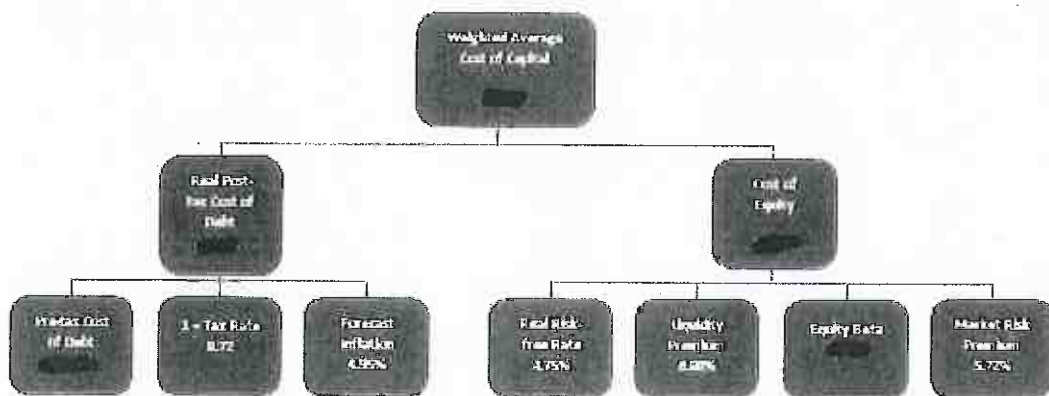
The budgeted cost of interest bearing debt for FY20 was applied which is the weighted average of;

- █ weighting for long-term debt and
- █ weighting for short term debt.

The expected real post-tax cost of debt is █ for the period 1 July 2019 to 30 June 2020.

**3.3.4 Summary consolidated Weighted Average Cost of Capital**

The consolidated WACC is accordingly as follows:



**Figure 1**

**Table 3-5: Consolidated WACC (%)**

**3.4 Efficient Operating and Maintenance Expenses (E)**

Sasol Oil has undertaken several cost saving projects for a number of years. Sasol Oil employs a robust budgeting and procurement process to ensure cost containment. Management has a duty to ensure expenses are efficient and this is included as a key performance indicator in the company's performance

management system. The operating costs of Sasol Oil presented below are representative of a prudent storage facility operator.

Operating costs detailed in the following table were allocated to the storage facility based on the NERSA approved CAM.

**Summary Efficient Operating and Maintenance Expenses**

Item	1 July '19 – 30 June '20
<b>Operating expenses</b>	
Outbound	
Depot	
Corporate costs	
Admin and security	

**Table 3-6: Summary Efficient Operating and Maintenance Expenses (R)**

**3.5 Decommissioning Provision**

In terms of Section 33 (1) (b) of the Petroleum Pipelines Act and Regulation 9 (1) and (4) Sasol Oil is required to adequately provide for the decommissioning of its licensed activity. Sasol Oil must submit the rehabilitation cost provision details to NERSA according to the license conditions for approval prior to inclusion in the tariff calculations. . Sasol Oil engaged with NERSA on the approval of the provision for decommissioning.

**3.6 Tax Expense (T)**

Sasol Oil applied the 'Notional Tax' approach for the treatment of tax expense at the prevailing corporate tax rate as per the tariff methodology.

Component	1 July '19 – 30 June '20
RAB*WACC	
Operating expenses	
Notional tax	
Depreciation	
Amortisation	
Clawback	
AR	
<b>Tax</b>	
Income before tax allowance	
Less operating expense	
Less depreciation ( historic)	
Taxable income before gross up	
Gross up (taxable income/1-t)	
Tax amount	

**Table 3-7: Tax Expense (R)**

### 3.7 Depreciation and Amortisation (D)

Sasol Oil uses straight line depreciation over the useful life of the asset. Amortisation is the write off of the inflation escalation over the remaining useful life of the asset.

Depreciation and inflation amortisation	1 July '19 – 30 June '20
Depreciation	██████████
Amortisation	██████████
Total	██████████

**Table 3-8: Summary Depreciation and Amortisation (R)**

### 3.8 Clawback (C)

There is no clawback in the tariff for FY20 relating to actuals of FY18 as NERSA revoked the new tariff methodology used in FY18 where no clawbacks was allowed in the tariff calculation.

### 3.9 Tariff

The tariff is determined by dividing the Allowable Revenue by the budgeted volumes of the storage products.

#### Tariff

Component	1 July '19 – 30 June '20
RAB (R)	██████████
WACC (%)	██████████
RAB x WACC (R)	██████████
+Expenses (R)	██████████
+Taxation (R)	██████████
+Depreciation and amortisation (R)	██████████
+Clawback (R)	-
<b>=Allowable Revenue (R)</b>	██████████
Volume (L)	██████████
<b>Tariff (c/L)</b>	<b>12.54</b>

**Table 3-9: Allowable Revenue and Tariff**

Based on the foregoing analysis, Sasol Oil applies to NERSA for approval of the tariff of 12.54 cents per litre for the period 1 July 2019 to 30 June 2020.