



NATCOS JOINT VENTURE FACILITY
PPL.sf.F3/18/2006

**THE ALLOCATION MECHANISM AND REQUIREMENTS FOR
ACCESS TO THE NATCOS WHITE PRODUCT STORAGE TANKS**

Last updated July 2016
Next update July 2017



1. BACKGROUND

Sasol Oil (Pty) Ltd (Registration number: 1981/007622/07, herein referred to as “Sasol Oil”) and Total South Africa (Pty) Ltd (Registration number: 1954/03325/07, herein referred to as “TSA”) jointly lease land from Transnet National Ports Authority (TNPA) for white product (petrol and diesel) storage at Fynnlands, Durban, South Africa (“The Natcos White Product Facilities”).

The Natcos White Product Facilities are being managed, for and on behalf of Sasol Oil and TSA (herein collectively referred to as “the Licensees”), by an unincorporated joint venture created by the Licensees tasked solely with the management and operation of the Natcos White Product Facilities (“Natcos”). Natcos is independently managed by the incorporated joint venture, National Petroleum Refiners (Pty) Ltd (herein referred to as “Natref”), the shareholders of which are the Licensees.

Natcos (and Natref) have operating responsibility for the Natcos White Product Facilities, but no management responsibility, both Licensees retain control of the assets and products that move through the Natcos White Product Facilities. The Licensees plan their own transfers into and out of the Natcos White Product Facilities. However, in order to ensure that the Natcos White Product Facilities stay within available capacity constraints, the Licensees and the employees of Natref tasked with the management and operation of the Natcos White Product Facilities (“Natcos White Product Facilities Management”) meet at a set frequency to coordinate the movement of product into and out of The Natcos White Product Facilities.

2. WHITE PRODUCT TANKS

Tanks background and layout

There are four tanks at the Natcos White Product Facilities which are allocated to white products. Of the four tanks, two are dedicated to diesel and two to petrol. Currently “diesel 10” is stored in the diesel tanks, while ULP (unleaded petrol) 95 is stored in the petrol tanks (“Product”).

Although the facility is operated under a single license, Natcos operates the facility as two virtual facilities, with each of the Licensees granted capacity in the facility in relation to their “Participation Ratio” in the Natcos White Product Facilities. Currently this Participation Ratio is: Sasol Oil: 63.64% and TSA: 36.36%.

Appendix 2 provides an overview of the Natcos white product operations and limitations.



Natcos White Product Facilities

- 1) Diesel tanks: F41108 (max capacity 32,568.6 m³, working capacity 30,000 m³) and F41110 (max capacity 32,568.6 m³, working capacity 30,000 m³).
- 2) Unleaded petrol tanks: F41111 (max capacity 32,568.6 m³, working capacity 29,400m³) and F41112 (max capacity 31,081.9 m³, working capacity 25,600m³)
- 3) A 12 inch, 250 meter unidirectional pipeline from Natcos White Product Facilities (petrol and diesel) to the Transnet pump station. The throughput capacity from Natcos to Transnet is 550 m³/hr.

3. PROCESS FOR APPLICATION

Process to be followed by third parties (“Prospective Applicants”) when requesting access to Natcos

3.1. Format of Application

The application for request for access to capacity at The Natcos White Product Facilities must be in the form of a written letter.

3.2. Information to be included in the Application

The information to be included in the application must contain:

- Full name of the third party (“Prospective Applicant”), registration number and contact details of the company applying for capacity/ a proportion of Sasol Oil’s 63.64% (“Capacity”).
- Period and duration for which utilisation is required.
- Type and volume of petroleum product that the request is for.

3.3. Applications should be addressed to either (or both) licence holders:

- Sasol Oil (Pty) Ltd:

Manager: Distribution Support

Physical Address: 50 Katherine Street, Sandton, 2196

Postal Address: PO Box 5456, Johannesburg, 2000



- Total South Africa (Pty) Ltd:

Business Support Manager Logistics

Physical Address: Total South Africa, 3 Biermann Avenue, Rosebank

Postal Address: PO Box 579, Saxonwold, 2132

Please note that any application to request access to the Natcos White Product Facilities to Natcos White Product Facilities Management will be referred back to both Licensees.

3.4. Further correspondence can be made telephonically to either of the Licensees:

- Sasol Oil (Pty) Ltd: +27(0)10 344 5567
- Total South Africa (Pty) Ltd: +27(0)11 778 2000

3.5. Documents required by licensor in terms of vetting of Prospective Applicants (see 4.4. below).

3.6. Sasol Oil response to the application will be provided as follows:

- within 5 working days to confirm receipt of application.
- within 21 working days to provide a response to the application.

4. TARIFF SCHEDULE

The current NERSA (National Energy Regulator of South Africa) approved tariff for white product at Natcos is 21.17 SA c/l and is valid until June 2017.



5. REQUIREMENTS FOR ACCESS TO NATCOS FACILITY

5.1. Allocation of uncommitted capacity

Both Licensees use the Natcos White Product Facilities as an import terminal, where a large ship (brought in by either Licensee) is discharged into the Natcos White Product Facilities and then moved to different facilities within South Africa from Natcos.

The available capacity shows frequent changes as products are imported and dispatched from the Natcos White Product Facilities. Available capacity is therefore determined by both the volume available and the duration for which the capacity will be available.

The period for which the capacity will be available is important as the Licensees continuously fill up their available capacity and then transfer it out of the Natcos White Product Facilities. Capacity will be made available to Prospective Applicants on a first come, first serve basis, should a third party successfully apply for Capacity ("Successful Applicant"), the specific volume and duration of storage required by the Successful Applicant will be negotiated on a case by case basis.

The product will only be accepted if there is available capacity. The availability of Capacity is determined during the planning process. The Licensees 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. In addition, maintenance at the Natcos White Product Facilities will impact the availability of Capacity and as such is built into the six month plan.

5.2. Timelines for Application

Any Successful Applicant 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 following planning process will be required:

- M+6¹: Indication of capacity requirements and import plan.
- M+3: Indicative receipt and despatch plans (including indicative eta's (expected time of arrival) for ships, etc.).
- M+1: Firm receipt and despatch plans.

¹ M + n indicates the number of months in advance that specific information is required, e.g. if M = January then M + 6 (n=6) = July will mean six months in advance, and M + 1 = February will be next month.

The Successful Applicant must supply this information to the relevant Licensee that it has an agreement with, before the 15th of month M, so that the latter may collate these into a daily stock rights progression and feasibility report for the Natcos facility.

If the Successful Applicant does not meet the planning requirements (e.g. due to unplanned transfers, etc.), The Natcos White Product Facilities Management is not obliged to accept such Product.

5.3. “Use it or lose it” principle

Due to the nature of the operation of the Natcos White Product Facilities, available Capacity is not a constant and may or may not be available at any one time. It is therefore important to note that if a Successful Applicant requests Capacity and it is available, then this Capacity will only be available for the volume and period as planned for. If the Successful Applicant cannot utilise the Capacity as and when agreed, this opportunity will lapse and the Successful Applicant will need to go through the whole process again (use it or lose it principle).

5.4. Vetting of Applicants

5.4.1.1. Requirements for Applications

The Prospective Applicant must prove the capacity to procure, handle and distribute petroleum products for own direct benefit, and must comply with, but not limited to, the following criteria:

- ✚ Prospective Applicant must be registered as a Wholesaler of Petroleum Product as set out in the Petroleum Products Act 120 of 1977 (as amended).
- ✚ Prospective Applicant must be in a position to prove financial stability and the licensees will verify the details provided.
- ✚ Prospective Applicants must prove their B-BBEE status as per the Generic B-BBEE code which coexists with the Liquid Fuels Charter
- ✚ Prospective Applicant must be willing and able to submit the information to the licensees as stipulated under the Licence Conditions as imposed by NERSA.



Preference will be given to historically disadvantaged South Africans, who meet the criteria.

5.4.1.2. *Pre conditions required*

The Prospective Applicant should have the necessary licenses, permits, etc. required to import the Product (i.e. meet all regulatory requirements).

Third party access will only be allowed if the Prospective Applicant has all the contracts in place for the import and transfer of the Product to a different facility within the available capacity window. The Prospective Applicant must prove the capacity, as well as the contractual capacity, to remove the petroleum products being stored, to ensure stock rotation.

The Prospective Applicant must prove the reliability of supply of petroleum products from source.

5.5. **Quality and technical specifications**

Only Product that meets the quality specifications as specified from time to time by the Licensees for all Product at the Natcos Facilities will be allowed in the tanks. The initial specifications as agreed by the Licensees are shown in Appendix 1.

However, due to the high risk associated with the storage and cross-pump of Product via the depot and co-mingling the Product with either of the Licensees' Product, the following measures are also required for diesel imported into the Natcos White Product Facilities for the duration of any agreement which the Successful Applicant concludes with either of the Licensees:

- Conductivity @ 20°C – Product shall be treated with Stadis 450 prior to discharge into the Natcos White Product Facilities and it must adhere to the minimum spec of 100 pS/m but not greater than 600 pS/m, typical conductivity is 200pS/m
- Flash point: Although the minimum requirement is 62 °C, a flash point of above 65 °C is preferred from a sourcing perspective

For petrol, the following additional measures are required:

- No ethanol and or methanol are allowed as part of the petrol blending components.
- Petrol must not be dyed.



Any Successful Applicant must provide Product that complies with the SANS1590 quality standard, submitting full documentation from the source of supply in reference to the quality of Product, must be willing to provide samples for Natcos White Product Facilities Management internal testing before pumping to the storage tanks and provided Product must be fungible with the Product currently being stored and handled in the Natcos White Product Facilities being applied for.

The Natcos White Product Facilities Management are not obliged to receive into or store in the Natcos White Product Facilities any Product, unless an independent quality certificate can be produced to prove that the Product meets the agreed minimum specifications.

Should any Successful Applicant transfer Product to the tanks, and the tanks are analysed to be off-specification subsequent to the transfer, the Successful Applicant will be responsible to return the Product in the tanks to the quality it was before the transfer, either by replacing the contents, or by blending additional components that return the tank to being within specification.

5.5.1. Logistical Requirements

The Natcos White Product Facilities only serve as an import terminal and as such does not have any loading/offloading gantries for either road or rail. Any Product that the Successful Applicant needs to store at the Natcos Facilities needs to be imported via ship or transferred from another storage facility. In addition, product transferred from the Natcos White Product Facilities can only be transferred via pipeline.

5.5.2. Vetting of ships (guideline)

Both the Licensees shall each subject the vessels to their own vetting procedures.

The following criteria are offered as guidance only to acceptability of vessels by the Licensees.

- ✚ Age of vessel: The Age of vessels not to exceed 20 years.
- ✚ Flag of vessel: The following Flag States are unacceptable: Korea DPR, Albania, Tonga, Honduras, Comoros, Georgia, Slovakia, Bolivia, Syrian Arab Republic, Cambodia, Algeria, Lebanon
- ✚ Crew Matrix: Unacceptable if the Captain & C/O or C/E & 1/E have joined at the same time.
 - Aggregated time with company < 2 years
 - Aggregated time in rank < 5 years



Aggregated tanker experience < 10 years

In exceptional circumstances, the Licensees may accept a vessel that does not meet the crew matrix criteria or is on its maiden voyage, but only when proof can be given that the vessel was approved by ExxonMobil, Shell, Chevron or BP in the last 6 months.

If the vessel has been inspected and found unacceptable by TSA, Sasol Oil, ExxonMobil, Shell, Chevron, BP, PetroSA or any other charter party operating in South Africa or the vessel has had a fatality, then it will not be acceptable.

5.6. Accounting and reporting

In order to minimise storage costs, products of similar specification are co-mingled in the Natcos White Product Facilities regardless of ownership. No Prospective and/or Successful Applicant or Licensee may claim entitlement to a dedicated tank.

Ownership of the Product shall at all times continue to vest with the physical owner of the Product and Product ownership will be determined and recorded by specification and volume; and not necessarily by reference to a specific storage tank.

A line flush is required before every injection into Transnet's Multi Product Pipeline. The Successful Applicant is responsible for making the required arrangements to receive the line flush volume at an alternate facility.

5.7. Return of Product

Successful Applicants will receive Product back of a similar nature and meeting the same specifications to that transferred into the tank. However, the Licensees cannot guarantee that it will be the same molecule.

The Product that will be supplied back to a Successful Applicant will be on a volume for volume dry basis, based on an assay.

The volume supplied back to the Successful Applicant will be reconciled and any over or under supply will be billed at the applicable rate or it can be rectified supplying or receiving additional volumes.



Product will only be returned to a Successful Applicant at Natcos, not at Natref or any other facility operated and/or owned by the Licensees.

5.8. Gains and Losses

During every month-end, the Natcos White Product Facilities Management will report on Product levels so that the reports indicate Product levels per storage tank. The Product levels may or may not be the same as the virtual Product recorded on the Management Information System. The variance between physical and virtual stock may result in Gains or Losses per Product.

Gains and Losses in respect of a Product pool will be apportioned between all product owners on a *pro-rata* basis; and determined by each party's total usage for the relevant accounting period. The total usage per period is determined from the total volume transferred (or moved) through the storage tanks in the period.

Product ownership rights of Product that cannot be practically recovered within the facility (i.e. dead stock in tanks and Product in dedicated pipelines) will be allocated to the licensees.

Product in non-dedicated pipelines will be negotiated with Successful Applicants on a case by case basis and will depend on whether a transfer through such a pipeline is specifically for the Successful Applicant or is part of "normal" operations.

5.9. Access to other parties

Successful Applicants may appoint independent surveyors but such appointments must be done in consultation with the Natcos Facilities Management in order to ensure compliance with SHERQ requirements.

The costs of all such appointments shall be for the Successful Applicant. .

5.10. Non Adherence

Should the Successful Applicant not adhere to this allocation mechanism, the following remedies will apply:

- ✚ common law remedies will apply where appropriate;
- ✚ if the Successful Applicant exceeds their portion of the allocated ullage for a period exceeding that agreed, such third party must:



- rectify the situation as soon as possible; and
- in addition, accept accountability for all holding costs (e.g. tank rental, etc.) on a *pro-rata basis*, calculated based on the magnitude by which the Participation Ratio has been exceeded.
- accept all direct costs associated with the impact on licensee ullage constraints, e.g. demurrage costs.

✚ Consequential losses, e.g. loss of market, etc. are excluded.

5.11. Safety Health and Environment

The Licensees accept responsibility for the Product from where it is discharged off the vessel (hence at the ship flange) until the point it is injected into the pipeline from Natcos (exit valve of the transfer pump). The Licensees do not accept responsibility for any incidents that impact the environment (e.g. spillages at ship) or the safety and health of any people that occur outside of these transfer points. Hence, the Successful Applicant is responsible for all incidents outside of these boundaries, including, but not limited to, clean-up of any spilled product and rehabilitation of contaminated earth.

5.12. Confidentiality

During the planning process and operation of the Natcos White Product Facilities, information will be shared that may be deemed confidential. Accordingly, no party may disclose confidential information pertaining to another party, without written consent of the owner of the confidential information. Confidential information shall include, but not be limited to the details of agreements between the Successful Applicant and either of the Licensees, the information handed over during the course of negotiations, as well as the details of planning volumes, operating procedures, etc.

5.13. Adherence to Applicable Laws and Rules

Any Successful Applicant warrants that it is and will always be in compliance with all laws and policies applicable to the import and distribution of Products, including, but not limited to, all South African Revenue Service (SARS), Department of Energy (DoE), Nersa (National Energy Regulator of South Africa) and Department of Trade and Industry (DTI) requirements.

In addition, any Successful Applicant indemnifies and holds harmless the Licensees to any claims, etc. arising out of such non-compliance.



Any Successful Applicant must at all times adhere to Natcos White Product Facilities Management SHEQ (Safety, Health, Environmental and Quality) rules.

APPENDIX 1: Common quality specification for one Diesel grade and one ULP Petrol product

Figure 1: Specification for Diesel 10 grade product

Property	Units	Test Method		Import requirement	Notes
		ASTM	Other		
Appearance at ,max		D4176*	Caltex Haze CMM 76	2	
Colour, max		D1500	IP196	3	
Density @ 20°C ,min	kg/m ³	D4052* D1298		816	
Ash Content, max	% m/m	D482*	IP4 ISO6245	0,01	
Cetane Number, min		D613a* D6890 D7668 D7170a	IP41 ISO 5165 EN 15195 IP498	51	
Carbon Residue, Rams bottom on 10% residue), max	% m/m	D4530*	ISO 10370	0,2	
CFPP - Winter, 1 st Mar - 30 Sept, max - Summer, 1 Oct - 14 Mar, max	° C ° C	D 6371-	IP 309* EN 116	-4 +3	
Cloud point- Winter, 1 st Mar - 30 Sept, max	° C	D2500* D 5772	IP219 EN23015 ISO3015	+4	
Conductivity @ 20 ° C,	pS/m	D2624*	IP274	100 - 600	1
Corrosion, Copper Strip, 3 hrs @ 100°C, rating	Rating	D130*	IP154 ISO 2160	Class 1	
Distillation 90 % vol. Recovery, max	° C	D86*	IP 123 ISO 3405	362	
Low sulphur diesel 10ppm max	mg/kg	D2622 D5453* D4294	IP336	10	
Flash point,(PM closed cup), min	° C	D93*	IP 34 ISO 2719	62	
Strong Acid Number, max	mg KOH/g	D974 D664*		nil	
Acid Number, max	mg KOH/g	D974 D664*	IP139 IP177	0,25	
Kinematic Viscosity @ 40 ° C	mm ² /s	D445* D7042	IP 71 ISO 3104	2,0 - 5,3	
Water Content, Karl Fischer, max	mg/kg	D4377 D6304* D4377	IP356 IP74 ISO12937	200	
Lubricity (HFRR) corrected wear scar diameter (Lubricity improver must have latest British Standard multi product pipeline approval),max	µm		ISO12156-1* IP 450	400	



Property	Units	Test Method		Import requirement	Notes
		ASTM	Other		
Oxidation Stability, max	mg/100ml	D2274*	IP388 ISO12205	2,0	
Total Contamination, max	mg/kg		IP440* EN12156	12	
Fatty Acid Methyl Ester (FAME) content, max	vol%	D7371 D7806	EN 14078* IP 585, IP590 IP583, IP 599	0.05	

Note: * = This is the referee test method and shall be used in the case of a dispute regarding the determination of specific property.

NOTES:

1. Minimum conductivity of 150 – 200 pS/m at load port is recommended in order to achieve a minimum conductivity of 100pS/m at disport.

Figure 2: Specification for ULP 95 grade product

Property	Units	Limit	Method	Import Requirement	Note
Appearance			SABS 1598: 2014 Edition 3 Requirements 4.1.2	Clear and free from visible water, sediment and suspended matter	
Colour			Visual	Un-dyed	
Density @ 20°C	kg/l	min	D1298/D4052*/IP160/IP365/ISO3675 / ISO12185	0,710	
		max		0,785	
Octane Number, Research		min	D2699*/IP237	95.0	
Octane Number, Motor		min	D2700*/IP236	85.0	
Lead Content	mg/l	max	D5059/D3237*/D3341/IP270/IP228/IP362/IP352	3	1
Gum, Existent	mg/100ml	max	D381/IP131	4	
Gum, Potential (2.5 hrs @ 100 Deg C)	mg/100ml	max	D381*/IP131/ISO6246	4	
Induction Period @ 100 Deg/C	mins	min	D525*/IP40/ISO7536	360	
Distillation corrected to 101,325 kPA a. Initial Boiling point (IBP) b. Temperature, Deg C for • 10% vol • 50% vol • 50% vol • 90% vol c. FBP d. Residue e. Evaporated to 70 Deg/C	Deg C Deg C Deg C Deg C Deg C % v/v % v/v	max min max max max max -	D86*/IP123/ISO3405	Report 65 77 115 185 210 2,0 -	
Reid vapour pressure/DVPE **	kPa	min max	D323/D5191*	45 75	4
Vapour Lock Index (VLI = 10RVP+(7xE70)		See Table 2	Calculation		
Total Acidity	mg KOH/g	max	D3242*/D664/IP354	0.025	
Sulphur Content	ppm	max	D4294/IP336 D5453*/D3120	500	
Doctor test Or Mercaptans	mass%	max max	IP30 D32270*	Negative 0.0015	2
Cu Corrosion (3hr @ 50 Deg/C)	rating	max	D130*/IP154	1	
Aromatics content	% v/v % v/v		D5880/D5443* D1319	50	
Benzene content	% v/v	max	D5880/D5443*/D3606/D6730/EN 12177 / ISO22854	3	
Oxygen content	mass%	max	D4815*/ EN1601/ EN13132/ ISO022854	2.8	3

Property	Units	Limit	Method	Import Requirement	Note
C3 and lower Alcohols	% v/v	max	EN1601/EN1332/D4815*/ISO22854	0.2	3
Butane content	mass%	max	GC	4.0	
Metallic additives	mg/l	max	D3831*	1	4

Note = * this is the referee test method and shall be used in the case of a dispute regarding the determination of a specific property.

NOTES:

1. Applicable at loading point
2. Negative doctor test will be acceptable, positive results must, however, be accompanied by a Mercaptan concentration as per ASTM D 3227.
3. Oxygenates added must be specified in the quality certificate by type of oxygenate and concentration added to the base gasoline.
4. **ASTM D5191 is a DVPE test method and NOT RVP.
5. No intentional addition of metallic based additives and phosphorus is allowed in unleaded petrol, Addition of silicon or silicon containing component(s) to all grades of petrol is prohibited.

**Table 2: Vapour Lock Index (VLI) limits effective date progression
Inland FVI,**

			Oct 2016	Oct 2017	Oct 2018	Oct 2019
Summer, 1 Oct to 31 March (inclusive)	RVP + 0,7*E70	max	930	950	970	990
Winter, 1 April to 30 Sept (inclusive)		max	1000	1020	1040	1050

APPENDIX 2: Natcos operations overview

