

## **ALLOCATION MECHANISM FOR LICENSE No: PPL.SF.F3/130/2013**

# **THE ALLOCATION MECHANISM AND REQUIREMENTS FOR ACCESS FOR THE SASOL OIL ALRODE DEPOT**

## **1. PREAMBLE**

Sasol Oil (Pty) Ltd (registration number: 1981/007622/07 herein referred to as Sasol Oil) and BP Southern Africa (Pty) Ltd (registration number: 1924/002602/07 herein referred to as BP) owns and operates a fuel storage depot facility situated at Alrode. Sasol Oil operates this facility under NERSA license PPL.SF.F3/130/2013, issued in 2013.

This submission is in response to the regulators letter dated 19 October 2011 regarding compliance in terms of regulation 3 (6) of the regulation issued to the Act and published under Government Notice R342 in the Government Gazette.

## **2. BACKGROUND**

The methodology to determine the capacity utilization for the depot is based on the "Theory of Constraints".

This methodology is based on a principle that, like a chain with its weakest link, in any complex system at any point in time, there is only one aspect of that system that limits its capability. The whole system bottleneck is then defined by that particular constraint.

The Alrode depot was considered to consist of three systems, i.e. Inbound, Storage and Outbound systems.

## **3. ALLOCATION MECHANISM**

### **3.1. ALRODE FACILITY NETWORK SYSTEM**

#### **3.1.1. Inbound System**

The facility has the capacity to receive 4 (ULP93, ULP95, Diesel 10/50 and Diesel 500ppm) products handled via the Transnet Pipeline network at a rate of about 10,000 litres per minute. This is the only mode of transport of replenishing product into the depot.

### 3.1.2. Storage System

The facility has the following aggregate storage capacities for each of the products handled.

Product	Operating Capacity m <sup>3</sup>
ULP 93	17 360
ULP 95	17 360
Diesel 500	4 065
Diesel 10/50	15 510

\*Operating Capacity is tank capacity less dead and safety stock

### 3.1.3. Outbound system

The Alrode depot consists of six loading bays equipped with loading arms in the following configuration

	ULP 93	ULP 95	Diesel 500	Diesel 10/50
Bay 1	x	x	x	x
Bay 2	x	x	x	x
Bay 3	x	x	x	x
Bay 4	x	x	x	x
Bay 5	x	x	x	x
Bay 6	x	x	x	x

The following graph depicts the depot capacity utilization. This is based on the current throughput/demand and an average of 40 000litre/vehicle. The average time to load a vehicle is 30 minutes. The gantry operates 6 days a week, 22 hours per day.

## 4. ALLOCATION OF UNCOMMITTED CAPACITY

### 4.1. "First come, first served" Principle

Sasol Oil will consider applications for accommodation on a first come, first served basis. This implies that all applications from a 3<sup>rd</sup> party that comply to all requirements as stipulated in this document will be approved, if there is still uncommitted capacity available.

### 4.2. "Use it or lose it" principle

In order to ensure the facility capacity is optimized, Sasol Oil will implement monitoring systems to ensure that tenant/s utilize capacity as set out in the agreement. A tenant that defaults on this arrangement by failing to utilize its share of allocated capacity shall forfeit it to a qualifying applicant whose requirement may not have been met due to capacity unavailability.

## 5. QUALITY AND TECHNICAL SPECIFICATIONS

All fuels have to meet the following specifications as set out and amended by Sasol Oil Technical Services.

<b>Product</b>	<b>Petrol, Unleaded, Automotive, Grades 93&amp; 95</b>		
<b>Property</b>	<b>Units</b>	<b>Turbo (R93)</b>	<b>Turbo (R95)</b>
<b>Density @ 20°C</b>	kg/m <sup>3</sup>	700 to 750	700 to 750
<b>Initial Boiling Point</b>	°C	35	35
<b>Final Boiling Point °C</b>	°C	215 max.	215 max.
<b>Lead Content as Pb</b>	g/λ	0,003 max.	0,003 max.
<b>Research Octane Number</b>		93 min.	95 min.
<b>Sulphur Content</b>	% m/m	0,05	0,05
<b>Vapour Pressure @ 37,8°C</b>	kPa	<b>45 to 75</b>	<b>45 to 75</b>
<b>Alcohol Content</b>	% v/v	< 2 %	< 2 %
<b>Ether Content</b>	% v/v	<b>See note below</b>	<b>See note below</b>
<b>Fuel Volatility Index</b>		<b>84 to 89</b>	<b>93 to 100</b>

<b>Product Properties</b>	<b>Diesel 500</b>	
<b>Property</b>	<b>Units</b>	<b>Typical</b>
<b>Density @ 20°C</b>	kg/m <sup>3</sup>	800 to 850
<b>90% Volume Recovery</b>	°C	330 to 362*
<b>Cetane Number</b>		45 to 52*
<b>Flash Point (PMCC)</b>	°C	55 to 70
<b>Cold Filter Plugging Point:</b>	°C	
<b>In Summer</b>		0 to -2
<b>In Winter</b>		-7 to -12
<b>Viscosity @ 40°C</b>	Mm <sup>2</sup> /s	2,2 to 3,3*
<b>Lubricity (HFRR)</b>	microns	<460
<b>Sulphur Content</b>	% m/m	0 to 0,05*
<b>Water Content</b>	Mg/kg	180

<b>Product Properties</b>	<b>Petrol ,Unleaded Automotive ,Grades 93 &amp; 95</b>		
<b>Property</b>	<b>Units</b>	<b>Lead replacement (R93)</b>	<b>Lead Replacement (R95)</b>
<b>Density @ 20°C</b>	kg/m <sup>3</sup>	730 to 750	700 to 740
<b>Initial Boiling Point</b>	°C	35	35
<b>Final Boiling Point °C</b>	°C	210 max	210 max
<b>Lead Content as Pb</b>	g/l	0.003 max	0.003 max
<b>Research Octane Number</b>		93 to 96	95 min
<b>Sulphur Content</b>	% m/m	0.05	0.05
<b>Vapour Pressure @ 37,8°C</b>	kPa	40 to 75	40 to 75
<b>Alcohol Content</b>	% v/v	0 or 8 to 12	0
<b>Ether Content</b>	% v/v	15 max	15 max
<b>Fuel Volatility Index</b>		84 to 89	93 to 100

<b>Product Properties</b>	<b>Diesel 50</b>	
<b>Property</b>	<b>Units</b>	<b>Typical</b>
<b>Density @ 20°C</b>	kg/m <sup>3</sup>	820
<b>90% Volume Recovery</b>	°C	345
<b>Cetane Number</b>		49
<b>Flash Point (PMCC)</b>	°C	58
<b>Cold Filter Plugging Point:</b>	°C	-7
<b>Viscosity @ 40°C</b>	mm <sup>2</sup> /s	2,3
<b>Lubricity (HFRR)</b>	microns	<460
<b>Sulphur Content</b>	% m/m	<0.005
<b>Water Content</b>	mg/kg	100

## **6. ADHERENCE TO APPLICABLE LAWS AND REGULATIONS**

The third party warrants that it is and will always be in compliance with all laws and policies applicable to the distribution and handling of petroleum 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.

The third party must at all times adhere to site HSEQ (Safety, Health, Environmental and Quality) rules.

## 7. TIMELINES FOR APPLICATIONS AND PLANNING

Any third party will need to form part of a 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-6: Indication of ullage requirements and replenishment plan

M-3: Indicative receipt and dispatch plans

M-1: Firm receipt and dispatch plans for month M. The third party must supply this information to the Sasol Oil Supply Chain Planning Management before the 20th of month M, so that the latter may collate these into a daily stock rights progression and feasibility report for the licensees.

The site operator will be responsible for communicating 12 months maintenance schedules that may influence capacity to all tenants. In cases of unplanned interruptions (breakdowns), the operator will communicate to all tenants immediately.

## 8. PROCESS FOR APPLICATION

Contact details

All applications for spare capacity allocation shall be addressed to the following address:

**Attention: Manager Distribution Support**

**Sasol Oil (Pty) Ltd**

**Sasol Place**

**50 Katherine Street**

**Sandton**

**2196**

The applicant must provide the following information on the application:

*Full name, registration number and contact details of the company.*

*Depot(s) and capacity per product required.*

The applicant must also provide confirmation of their capacity to procure, handle and distribute petroleum products and must comply with, but not limited to, the following criteria:

Applicants must be registered as Wholesalers of Petroleum Product as set out in the Petroleum Products Act 120 of 1977 (as amended).

Applicants must be in a position to prove financial stability and Sasol Oil reserves the right to verify the details provided.

Applicants must prove and provide certificates confirming their BEE status as per the Liquid Fuels Charter.

Applicants must be willing and able to submit the information to Sasol Oil as stipulated under the License Conditions as imposed by NERSA.

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

## **9. CUSTODY OF PETROLEUM PRODUCTS**

Sasol Oil as the host, shall manage stock at the depot as such, risk for product losses shall pass from Guest to Host when the product passes the inlet valve at the depot. The volume of product received shall be measured by the mass flow meters at the depot. Dispatch quantities will also be measured via the flow meters at the gantry.

Sasol Oil shall report on the host's product movement and stock balances on a monthly basis.

## **10. TARIFF TO BE CHARGED AT THE DEPOT**

The approved storage and handling tariff is updated on an annual basis and is published on the NERSA website.

## **11. TECHNICAL REQUIREMENTS FOR ACCESS TO STORAGE FACILITY**

Transport contractors/owners delivering and/or uplifting product from a Sasol facility have to first pass a Safety and Quality Assessment System (SQAS) assessment. This process is meant to ensure all fleet operators have management systems in place.

The SQAS questionnaire covers the following areas Management policy (regarding SHERQ)

- Training
- Recruitment
- SHE procedures
- Safety equipment
- Emergency response
- Customer focus
- Operational instructions
- Security
- Risk Management
- Occupational Health
- Preventative Maintenance
- Environmental Protection
- Security
- Site Facilities

### **Assessment process**

In general, the SQAS assessment process consists of the following steps:

Initial SQAS Assessment:

- Evaluation of assessment documentation
- Report (including improvement program) to service provider
- A service provider will obtain approval status if at least 90 % is achieved during the audit. Moreover the service provider must obtain 95% plus on the mandatory section of the questionnaire
- IF a service provider obtains less than 85% during the initial assessment, a site revisit is required after 30 days from the day of last assessment.

The transporter needs to make arrangements for SQAS audit with an independent SQAS auditor. Re-audits are done every two years and can take up 2-3 days.

### **Vehicle Vetting Process**

Individual vehicles for transporters that meet SQAS requirement will also be assessed as per the following checklist: Vehicles that meet the requirements will be issued with a Safe Loading Pass (SLP) which will be valid for a period of 12 months. The SLP is issued per unit for vehicles with trailers.



**SASOL**

**VEHICLE/DRIVER HAZCHEM SAFETY CHECKLIST**

**ROAD TANKERS/ISOTAINERS/FLATBEDS**

**SECTION A: THE DRIVER**

Is the driver in possession of a valid ID document/Passport	Yes	No	N/A
Is the driver's license valid	Yes	No	N/A
Relevant PrDP-G for Goods and D for dangerous goods (SABS0231)	Yes	No	N/A
Is the medical certificate valid (Check expiry date) (SABS0231)	Yes	No	N/A
Is the Hazchem training/Product certificate valid(Check expiry date)	Yes	No	N/A
Certificate of cleanliness/Proof of previous load where applicable (multi-loads only)	Yes	No	N/A
The correct P.P.E	Yes	No	N/A
Delivery documents	Yes	No	N/A
Is there any signs of substance abuse	Yes	No	N/A

**SECTION B: THE VEHICLE**

Tanker clean and no visible leaks	Yes	No	N/A
Truck tractor no oil/water leaks	Yes	No	N/A
Roadworthy certificate valid (COF)	Yes	No	N/A
Operators disc valid	Yes	No	N/A
Fire extinguishers: Hazardous products: 1 x 9 Kg on each vehicle Non-hazardous products:1 x 9Kg for truck tractor Extinguisher must be sealed and have a valid service date (SABS1398)	Yes	No	N/A
Mudguards and mud flaps	Yes	No	N/A
Tyres that comply with the legislation. (Thread at least 1mm over 100% of contact surface, no deep cuts, no lump or bulge, fabric or cord not exposed. (Use thread depth gauge)	Yes	No	N/A
Appropriate Hazchem labels for Hazardous products (Multi-loads only)	Yes	No	N/A

An orange warning diamond on Truck tractor (SABS0231) when transporting dangerous goods	Yes	No	N/A																		
Is battery cover in place	Yes	No	N/A																		
General items required by the Road Traffic Act																					
Reflective tape	Yes	No	N/A																		
Lights and indicators	Yes	No	N/A																		
Rear chevron board	Yes	No	N/A																		
Fuel tank secure and undamaged	Yes	No	N/A																		
<b>SECTION C: EQUIPMENT FOR FLATBEDS</b>																					
Corner plates	Yes	No	N/A																		
Net or canvas	Yes	No	N/A																		
Straps	Yes	No	N/A																		
<b>SECTION D: ACTIONS BEFORE DEPARTURE</b>																					
Checked for leaks	Yes	No	N/A																		
Hazchem and other relevant stickers are in place	Yes	No	N/A																		
Checked for correct Emergency numbers: Operator: _____ Number on truck Specialist: 0800 112 890	Yes	No	N/A																		
Tremcard issued	Yes	No	N/A																		
Check G.M.V not exceeding weight as indicated on loading instruction	Yes	No	N/A																		
Compare seal numbers on documentation against seals	Yes	No	N/A																		
<table border="0"> <tr> <td><b>INSPECTED BY</b></td> <td>NAME</td> <td>_____</td> <td>C/ NO</td> <td>_____</td> <td>DATE</td> <td>_____</td> <td>TIME</td> <td>_____</td> </tr> <tr> <td><b>DRIVER</b></td> <td>NAME</td> <td>_____</td> <td>SIGNATURE</td> <td>_____</td> <td colspan="4"></td> </tr> </table>				<b>INSPECTED BY</b>	NAME	_____	C/ NO	_____	DATE	_____	TIME	_____	<b>DRIVER</b>	NAME	_____	SIGNATURE	_____				
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## **12. Contractual Terms & conditions for payments**

The document outlining the terms and conditions for accessing the uncommitted capacity is available from Sasol on request.