Fezile Dabi
District Municipality

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Atmospheric Emissions Licence Holder: NATREF (PTY) LTD.

Atmospheric Emissions Licence Reference Number: FDDM-MET-2013-17

ATMOSPHERIC EMISSIONS LICENCE ISSUED IN TERMS OF SECTION 40 OF THE NATIONAL ENVIRONMENTAL MANAGEMENT: AIR QUALITY ACT, 2004, (ACT NO. 39 OF 2004)

This Atmospheric Emissions Licence issued to **National Petroleum Refiners of South Africa (Pty) Ltd** in terms of section 40(1)(a) (as read with Section 47) of the National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004) ("the Act"), in respect of following Listed Activities:

- Subcategory 1.2: Liquid fuel combustion installations
- Subcategory 1.4: Gas combustion installations
- Subcategory 2.1: Combustion Installations
- Subcategory 2.2: Catalytic Cracking Units
- Subcategory 2.3: Sulphur Recovery Units
- Subcategory 2.4: Storage and Handling of Petroleum Products
- Subcategory 7.2: Production of acids

The Atmospheric Emissions Licence is issued on the basis of information provided in Natref's application dated 28 March 2013 and information that became available during processing of the application.

The Atmospheric Emissions Licence is valid until 31 March 2019.

The reason for issuance of the current licence is conversion of Atmospheric Pollution Prevention Act-Registration Certificate into Air Quality Act-Atmospheric Emissions Licence.

The Atmospheric Emissions Licence is issued subject to the conditions and requirements set out below which form part of the Atmospheric Emissions Licence and which are binding on the holder of the Atmospheric Emissions Licence, Natref hereinafter referred to as the ("the licence holder").

1. ATMOSPHERIC EMISSIONS LICENCE ADMINISTRATION

Name of the Licensing Authority	Fezile Dabi District Municipality
Atmospheric Emissions Licence Number	FDDM-MET-2013-17

Atmospheric Emissions Licence Issue Date	Date of signature by AQO
Atmospheric Emissions Licence Type	Atmospheric Emission Licence
Review Date, not later than	31 March 2019

2. ATMOSPHERIC EMISSIONS LICENCE HOLDER DETAILS

Enterprise Name	National Petroleum Refiners of South Africa (Pty) Ltd.
Trading as	NATREF
Enterprise Registration Number (Registration Numbers if Joint Venture)	Company
Registered Address	Northern Industries, Jan Haak Road, Sasolburg
Postal Address	P.O Box 234, Sasolburg, 1947
Telephone Number (General)	016 - 940 9111
Industry Sector	Petroleum Refinery
Name of Responsible Officer	Jean-Pierre Poncin (Refinery General Manager)
Name of Emission Control Officer	Carl Scholtz (SHERQ Manager)
Telephone Number	016 - 940 2596
Cell Phone Number	083 630 4619
Fax Number	016 940 2503
Email Address	carl.scholtz@natref.com
After Hours Contact Details	0836304619
Land Use Zoning as per Town Planning Scheme	Industrial

3. SITUATION AND EXTENT OF PLANT

3.1 Location and extent of the plant

Physical Address of the Premises	Northern Industries, Jan Haak Road, Sasolburg
Description of Site (Erf)	N/A
Coordinates of Approximate Centre of Operations	North-south: S26°48'21.46" East-west: E27°51'26.87"
Extent	2.037 km²

Elevation Above Mean Sea Level (m)	1498m
Province	Free State
District Municipality	Fezile Dabi District Municipality
Local Municipality	Metsimaholo Local Municipality
Designated Priority Area	Vaal Triangle Airshed Priority Area (VTAPA)

3.2 Description of Surrounding Land Use within 5 km radius

A description of the surrounding land use within a 5 km radius, specifically noting the names and proximity of residential and commercial areas in relation to the site of the works.

- North of Natref: Agriculture (Currently limited to horse, cattle & crop farming activities). Boundary of Vaalpark residential area is 2.5 km North of Natref
- South of Natref: Open land owned by Sasol with Zamdela Township 8 km South of Natref.
- East of Natref: Industrial Area occupied by Safripol, SÜD Chemie, Sascrete and Omnia. These industries are all within a 1-km radius of Natref with open agricultural farm land 2 to 5 km further East.
- West of Natref: There is partially occupied Light Industrial Area with a truck stop on the south west. The closest residential home is in Sasolburg which is 2 km west of Natref main stack.

Figure 1: Aerial photograph of the area around the Natref facility

4. GENERAL CONDITIONS

4.1. Process and ownership changes

The holder of the atmospheric emissions licence must ensure that all unit processes and apparatus used for the purpose of undertaking the listed activity in question, and all appliances and mitigation measures for preventing or reducing atmospheric emissions, are at all times properly maintained and operated.

Building, plant or site works related to the listed activity or activities used by the licence holder shall be extended, altered or added subject to the applicable requirements for an environmental authorisation from the competent authority as per the provisions of the National Environmental Management Act 1998 (Act No. 107 of 1998) (NEMA), as amended read with the Environmental Impact Assessment Regulations thereunder. The investigation, assessment and communication of potential impact of such an activity must follow the required assessment procedure as prescribed in the Environmental Impact Assessment Regulations published in terms of section 24(5) of the National Environmental Management Act.

Any changes in processes or production increases which may have an impact on atmospheric emissions, by the licence holder, will require prior approval by the licensing authority.

Any changes to the type and quantities of input materials and products, or to production equipment and treatment facilities which may have an impact on atmospheric emissions will require prior written approval by the licensing authority.

The licence holder must, in writing, inform the licensing authority of any change of ownership of the enterprise. The licensing authority must be informed within 30 (thirty) days after the change of ownership.

The licence holder must immediately on cessation or decommissioning of the listed activity inform, in writing, the licensing authority.

4.2. General duty of care

The holder of the licence must, when undertaking the listed activity, adhere to the duty of care obligations as set out in section 28 of the NEMA.

The licence holder must undertake the necessary measures to minimize or contain the atmospheric emissions. The measures are set out in section 28(3) of the NEMA.

Failure to comply with the above condition is a breach of the duty of care, and the licence holder will be subject to the sanctions set out in section 28 of the NEMA.

4.3. Sampling and/or analysis requirements

Measurement, calculation and/or sampling and analysis shall be carried out in accordance with any nationally or internationally acceptable standard. A different method may be acceptable to the licensing authority as long as it has been consulted , been provided with the documentation necessary to confirm the equivalent test reliability, quality and equivalence of analyses and has agreed to such method.

The licence holder is responsible for quality assurance of methods and performance. Where the holder of the licence uses external laboratories for sampling or analysis, accredited laboratories shall be used.

4.4. General requirements for licence holder

The licence holder is responsible for ensuring compliance with the conditions of this licence by any person acting on his, her or its behalf, including but not limited to, an employee, agent, sub-contractor or person rendering a service to the holder of the licence.

The licence does not relieve the licence holder to comply with any other statutory requirements that may be applicable to the carrying on of the listed activity.

A copy of the licence must be kept at the premises where the listed activity is undertaken. The licence must be made available to the environmental management inspector representing the licensing authority who requests to see it.

The licence holder must inform, in writing, the licensing authority of any change to its details including the name of the emissions control officer, postal address and/or telephonic details.

4.5. Statutory obligations

The licence holder must comply with the obligations as set out in Chapter 5 of the Act.

4.6. Annual payment of atmospheric emissions licence processing fee

The licence holder must, for the period of validity of the licence, pay the processing fee annually to the licensing authority. Alternatively the licence holder can pay the emissions licence processing fee once off.

4.7 Variation of Atmospheric Emissions Licence

The Air Quality Officer reserves the right to by notice, in writing, set and adjust the emissions limit value or standards after consultation with the holder.

4.8 Non- Compliance with Conditions

If the holder fails to comply with the conditions or requirements of this Atmospheric Emissions License, the Air Quality Officer may by notice in writing call upon such a holder to comply with such conditions or requirement within a reasonable period specified in the notice, and in the event of failure on the part of such holder to comply with the said conditions or requirement within the period so specified, the Air Quality Officer may cancel the Atmospheric Emissions License or suspend the operation thereof for such period as he or she may deem fit.

5. NATURE OF PROCESS

5.1. Process description

General

NATREF serves a market that has a limited requirement for heavy fuel oil products. The refinery therefore has a process configuration that allows significant conversion of the bottom-of-the-barrel crude to white products, e.g. sulphur, Liquid Petroleum Gas, gasoline, jet fuel, diesel, fuel oil and bitumen. With its inland location and due to the abundance of coal, the refinery's market for heavy fuel oil was quite limited. As a result, it was designed to get the most out of crude oil and equipped with state-of-the-art technology. The refinery uses the bottoms up-grading

refining process using medium gravity crude oil and giving the refinery the capability of producing 20 percent more white product than coastal refineries that have market outlets for heavy fuel oil. Conversion of vacuum residue to white products (diesel, petrol, jet fuel and LPG) was a necessity from the start. Thus, in addition to a conventional fluid catalytic cracking (FCC) unit, the refinery was equipped with a Distillate Hydro Cracker (DHC) and black oil Reduced Crude Desulphurisation (RCD) Unit.

1 Crude Distillation Unit (CDU) - [redacted]

The Crude Distillation Unit comprises 4 distillation columns, i.e. the Crude Preflash Column [redacted] the Crude distillation Column [redacted] the Debutaniser Column [redacted] and the Splitter Column [redacted]

Raw Crude Oil (incorporating all fractions from LPG Gas, i.e. C_3, C_4 gas, Light and Heavy Naphtha, Kerosene, Diesel, Gas Oils, Vacuum Gas Oils and Vacuum Residues) is fed into the unit. The Oil feed is heated and at various stages within the plant, different products are fractionated from the feed stream. LPG Gas and Light Naphtha are the first to be separated in the Crude Preflash Column. Within the Crude Distillation Column itself, Heavy Naphtha is recovered at the top, Kerosene at the 2nd product draw tray, Light Diesel at the 3rd product draw tray, Heavy Diesel at the 4th product draw tray and Atmospheric Gas Oil at the 5th product draw tray. The remainder, Atmospheric Residue, is fed through to the Vacuum Distillation Unit. The nameplate design feed of the CDU is 720 m^3/h however; this is dependent on the type of Crude fed to the unit.

2 Vacuum Distillation Unit

The Vacuum Distillation Unit comprises the Vacuum Preflash Column [redacted] and the Vacuum Column [redacted], where both columns operate under vacuum conditions ([redacted] respectively). Atmospheric Residue is initially fed to the Vacuum Preflash Column where Vacuum Heavy Diesel and Gas Oil are recovered.

Most of the remaining product, Vacuum Preflash Bottoms, is heated further and fed to the Vacuum Column where Medium Vacuum Gas Oil (MVGO), Heavy Vacuum Gas Oil (HVGO) and Slop Wax are recovered. Approximately 12% of the feed is recovered as Vacuum Preflash Bottoms.

The LPG, Light Naphtha and Heavy Naphtha are fed through to the Debutaniser where the LPG (C3's and C4's) are removed. This stream is sent to the LPG Merox for Sulphur Compound Removal.

The Light and Heavy Naphtha fractions are split in the Splitter Column. Light Naphtha (LSR) is sent through the LSR Mericat for conversion of mercaptan compounds (sulphur compounds with a strong odour) to disulphides (low smell).

The Heavy Naphtha is routed to the Naphtha Unifiner and Platformer.

Kerosene is routed through the Kero Meroxes for mercaptan conversion and removal of water. It is then routed to final product tanks.

Light Diesel can be routed to Diesel Unifiner or blended into final product.

Heavy Diesel is routed through the Diesel Unifiner in order to reduce the concentration of sulphur.

AGO is route to Distillate Hydrocracker (DHC) for cracking and sulphur removal.
Vacuum Heavy Diesel is routed to the Diesel Unifiner in order to reduce the concentration of sulphur.

Gas Oil and MVGO are routed to the Diesel Unifiner in order to reduce the concentration of sulphur.

HVGO is normally routed to the FCC for cracking.

VR is routed to RCD for metals, nitrogen and some sulphur removal and part cracking.

3 **The LSR Mericat** [redacted]

The LSR Mericat is used to convert the mercaptans in the LSR (light Naphtha)

4 **Kero Merox** [redacted]

The Kero Merox is used to convert mercaptans present in Kerosene into disulphides. [redacted]

5 **Bitumen Blower** [redacted]

The Bitumen blower is used to change the penetration grade of Bitumen feed (VR) to a new desired penetration grade.

6 **Sour Water Stripper (SWS) -** [redacted]

The Sour Water Stripper (SRS) is used to remove H_2S and NH_3 from different process waters produced as by-products within the refinery. [redacted]

7 **Fluid Catalyst Cracking (FCC) -** [redacted]

The Natref FCC is a resid-type cracker, whereby the predominant part of the FCC feed is resid material, i.e. RCD products (HFL + CFL) and RCD's feed is AR + VR (atmospheric residue + vacuum residue). [redacted]

The resid material is converted to various products in the reactor. Predominant reactions are cracking reactions whereby paraffins are converted to shorter paraffin's and olefins. The various products that are produced from the reactor undergo separation and processing via the main column and Gascon unit. The products from the FCC are the following:

- Tailgas to Fuelgas System
- LPG to Alkylation Unit
- LFCC to Petrol Blending
- LCO to Diesel Unifiner or Fuel Oil
- Slurry to Fuel Oil or Sasol Carbo Tar for the production of anode coke.

8 **Platformer** [redacted]

The Naphtha Unifiner and Platformer units are designed to upgrade low octane naphtha into high octane motor fuels.
In the complete unit, two different processes are incorporated, Unifying and Platforming.

8.1 **Naphtha Unifiner**

The main purpose of the Naphtha Unifiner is to remove or convert components in the naphtha stock which will have a deleterious effect on the reforming over platinum containing catalyst, thereby contributing to better catalyst performance as well as prolonging the Platformer catalyst life.
Unifining is a hydrogenation process (hydrogen consuming) employing a catalyst [redacted]

8.2 Platformer Unit

Platforming is a catalytic reforming process employing a select [redacted] catalyst, to convert low quality and straight run naphtha in the presence of hydrogen, into high octane motor fuel.
Octane improvement, the main function of the platforming process is brought about by the chemical re-arrangement of the low octane molecules into hydrocarbon components of a high octane value.

9 Diesel Unifiner [redacted]

Diesel unifining is a catalytic refining process employing an ultralow-sulphur diesel (ULSD) [redacted] catalyst [redacted], together with a hydrogen rich gas to:

- decompose sulphur, nitrogen, oxygen compounds
- to remove metallic compounds found in the hydrocarbon fractions and
- to provide hydrogen saturation of olefinic compounds found in the feedstock.

Diesel unifiner is mainly employed to refine high sulphur diesel product to low sulphur.
The charge stock improvements are attended to with little or no volume yield loss.
Feed to the unit can be from either or all of the following to obtain saleable diesel oil on the consumer market:

- Atmospheric gas oil from the crude distillation unit
- Diesel oil from the crude distillation unit
- Light cycle oil (a diesel fraction) from the main column of the FCC (Fluid catalytic cracking unit) can be blended with AGO or diesel as a valuable diesel blending component. Because of the high sulphur content and the unsaturated nature of the light cycle oil and with the high heat of reaction in the reactor accompanying the use of LCO, it is advisable to use LCO only as a feedstock to the diesel unifiner.

Feed to the diesel unifiner can also be straight run kerosene from the CDU ex storage to make aviation, power or illumination kerosene. Kerosene is only charged to the unit on its own.

The diesel unifiner catalyst employed is the same as that employed in the naphtha unifiner and the reaction processes are similar in activity and results.
One important fact which should be understood at the outset is that the gas streams associated with the diesel unifiner contain high concentrations of hydrogen sulphide (H_2S) an extremely toxic and hazardous gas.

The gas stream which contains a high concentration of H_2S is routed to the Amine section which absorbs the H_2S from the gas then recycled back to the reactor with the hydrocarbon. The H_2S rich amine is then routed to the Amine unit where the H_2S is stripped off and routed to Sulphur Unit.

10 Reduced Crude Desulphurisation (RCD) - [redacted]

The Reduced Crude Desulphurisation (RCD) process is a catalytic hydrogenation process, which upgrades the heavy petroleum fractions by removing contaminants (sulphur, metals, etc.). Feed to the RCD unit can be obtained from the following sources:

- VR and AR from storage
- AR as rundown from CDU

Hydrogen rich recycle gas is heated in the reactor charge heater and is combined with the residue feed which then enters the guard reactor. The reactor system consists of 4 reactors and five catalyst beds. The first two reactors are

responsible for demetalization. The third reactor contains transition catalyst for both demetalization and sulphur removal. The final reactor consists of two catalyst beds which remove sulphur and reduce Conradson carbon.

After the reactor section, the product enters a fractionation section. Here the liquid and vapour streams pass through a series of flash drums to obtain the following:

- Recycle gas which is scrubbed and sent to the recycle gas compressor. Make-up hydrogen is also fed into the recycle gas loop.
- Off gas which is sent to the Amine treatment unit
- Cold flash liquid which can be routed to the FCC
- Hot flash liquid which is the main feed source of the FCC.
- Sour water which is sent to the wastewater stripper.

11 Distillate Hydro Cracker (DHC) – [redacted]

Fresh feed to the Distillate Hydro Cracker (DHC) is brought into the unit from storage or directly from the CDU. After the feed is filtered it passes into the surge drum. The high pressure feed pump [redacted] takes suction from the feed surge drum. Its discharge combines with the net recycle gas and make-up hydrogen.

[redacted]

[redacted] The DHC fractionator produces a liquid overhead product (sent to the naphtha splitter E-17006), kerosene and diesel as side-draw products and DHC bottoms (routed to FCC feed).
The naphtha splitter produces a light naphtha ("LSR" - routed to petrol blending via a merox unit) and heavy naphtha ("naphtha" - routed to the Platformer unit and/or Naphtha Unifiner).

12 HF Alkylation [redacted]

The aim of the alkylation unit is to produce high octane motor fuel. The HF alkylation unit receives its feed supply of olefinic material from the Olefin depropaniser to the alkylation reactor system while isomerate from the butamer unit

and saturated feed from other refinery sources bypass the reaction process and is charged directly to the iso-stripper.
The normal butane in these olefin-free streams is enriched with iso-butane in the iso-stripper, the iso-butane being used along with the olefinic material from storage as feed to the alkylation reactor.

Commercially, alkylation processes usually take place in the presence of a strongly acidic catalyst such as hydrofluoric acid, sulphuric acid, phosphoric acid or aluminium chloride. In Natref however, hydrofluoric acid (HF) is used.

In addition to the alkylate produced, normal butane used as a feed to the butamer and propane as a marketable product is also produced.

13 Butamer [redacted]

The butamer unit is designed to convert normal butane feed into an isomerate product, rich in isobutene. This is accomplished by catalytic isomerisation in which the normal butane feed along with a hydrogen gas recycle is passed through two fixed bed reactors in series.

[redacted]

14 Olefin Depropaniser and PPU4 [redacted]

This section consists of the olefin depropaniser and the PPU4 units.

14.1 Olefin Depropaniser

The olefin depropaniser receives its olefinic feed from sphere [redacted] The purpose of this unit is to separate the C3's (propane and propylene) from the C4's (butanes). The overheads of this unit (C3's) are sent to the PPU4 and a portion of this stream [redacted] is sent to the alkylation unit. The bottoms of the olefin depropaniser are sent to the alkylation unit.

14.2 PPU4

This unit receives the C3's (mixture of propane and propylene) from the olefin depropaniser overheads. The feed is passed through a C2/C3 splitter where the light ends (C2's) are sent to the fuel gas. The C3's are then sent to the C3=/C3- (propylene/propane) splitter where the propylene is separated from the propane. The overheads of the C3=/C3- splitter is propylene and this is sent to [redacted] the alkylation unit (when the propylene is offspec [redacted].
The bottom of the C3=/C3- splitter has 3 routings:

- [redacted] - this is propane in the vapour phase
- Fuel gas - this is propane in the vapour phase
- Alkylation unit - this is propane in the liquid phase

15 Amine Treating [redacted]

15.1 No. 1 Amine unit:

The Sat gas and unsat gas form all the different producers (DHC/FCC etc) are routed to this unit; the amine unit is used for stripping off the H_2S from the Sat / Unsat Gas, using MEA. The H_2S-rich stripped gas is routed to the Sulphur unit.
The first priority routing for the Sat gas is as feed to the Hydrogen unit (via a caustic wash column which removes any remaining H_2S).
The remaining Sat Gas and Unsat gas is then routed to the refinery fuel gas pool.

15.2 No. 2 Amine unit:

This unit works on the same principle as the No1 Amine unit, however the feed to the unit is only from the RCD. The unit strips off any H_2S in the gas, and the H_2S -free gas is recycled to the RCD. The H_2S -rich gas is also routed as feed to the Sulphur plant.

16 Reformer [redacted]

The objective of the unit is to produce hydrogen (at a certain minimum H_2 purity level), for consumption by consumers (DHC/RCD/DU/Butamer).

[redacted]

17 Sulphur Recovery

This section consists of the Claus Sulphur Recovery Unit.

17.1 Claus unit [redacted]

The purpose of the Sulphur Recovery Unit is to convert H_2S rich gas received from the Amine Units and the Sour Water Stripper Offgas to elemental sulphur. The H_2S rich gas is passed through a combustion chamber in a reductive atmosphere with oxygen. The temperature in the combustion chamber is kept at high levels in order to destroy the ammonia impurities entering the plant together with the feed.

A portion of the H_2S rich gas is converted to SO_2 to achieve a 2:1 H_2S:SO_2 ratio. This ratio is required to ensure maximum conversion to elemental sulphur in the reactors of the Unit. Through a series of condensers, the 2-stage Claus reactors and a control system linked to a tail gas analyser, the plant is able to achieve average recovery efficiencies of 96% when process conditions are within normal parameters.

The Offgas is combusted through a tail gas incinerator where all the remaining H_2S is converted to SO_2 before being released to atmosphere through the main stack. During emergency situations or low feed availability, the H_2S rich gas is routed to [redacted] B24001, B24002 and the Sour Water Stripper Offgas is routed to B12002 [redacted] Any excess gas is flared through the No. 3 flare system.

The liquid sulphur is drained into the sulphur pit where temperature is maintained at ±140°C using steam coils and tracing in the lines. The liquid sulphur is then transferred once per day to the dispatch tank from where it is dispatched as such at ±140°C to external customers.

18 Storage Facilities

The storage facilities consists of intermediate storage and final storage tanks.

Intermediate and final products may be stored inside fixed roof or floating roof tanks depending on the size of the tank, vapour pressure of the product and the service of the tank. Intermediate product may be used for further processing or for blending into final product from where it may be dispatched via road, rail or pipeline.

Floating roof tanks with a diameter of greater than 20 m are equipped with primary and secondary seals to minimise fugitive emissions.

5.2. LISTED ACTIVITY

Listed Activities, as published in terms of Section 21 of the AQA, authorised to be conducted at the premises by the licence holder:

Category of Listed Activity	Sub-category of the Listed Activity	Listed Activity Name	Description of the Listed Activity
1	1.2	Combustion installations	Liquid fuel combustion installations
1	1.4	Combustion installations	Gas combustion installations
2	2.1	Petroleum Industry	Combustion Installations
2	2.2	Petroleum Industry	Catalytic Cracking Units
2	2.3	Petroleum Industry	Sulphur Recovery Units
2	2.4	Petroleum Industry	Storage and Handling of Petroleum Products.
7	7.2	Inorganic Chemical industry	Production of acids*

* Use of HF acid as Catalyst in the Alkylation process

5.3. UNIT PROCESS OR PROCESSES

List of all unit processes associated with the listed activities to be undertaken at the site of work.

Unit Process	Unit Process Function	Batch or Continuous Process
Crude Distillation Unit	Atmospheric distillation of crude oil	Continuous

Vacuum Distillation Unit	Vacuum distillation is distillation at conditions where the pressure above the liquid mixture to be distilled is reduced to less than its vapour pressure (usually less than atmospheric) causing evaporation of the least volatile liquid(s) (those with the highest boiling points) at lower temperature and hence more energy efficient distillation.	Continuous
Fluidised Catalytic Cracker Unit	The Fluid Catalytic Cracking processes allow for the production of "light" products such as liquid petroleum gas and gasoline from heavier crude oil distillation fractions such as gas oil and residues. Fluid Catalytic Cracking produces a high yield of gasoline and liquid petroleum gas.	Continuous
Merox	Merox treatment is mercaptan oxidation. It is a proprietary catalytic chemical process developed by UOP (Universal Oil Products) and used to remove mercaptans from LPG, Propane, Butane, Kerosene and petrol components by converting the mercaptans to liquid hydrocarbon disulphides.	Continuous
Distillate Hydro Cracker	The Distillate Hydro-cracker Unit catalytically cracks vacuum distillate (lube oil type components) into petrol jet fuel and diesel under a hydrogen partial pressure of [redacted] and a temperature of [redacted]	Continuous
Diesel Unifiner	The purpose of this unit is to remove sulphur from diesel to reduce the sulphur dioxide (SO_2) emissions that result from using those fuels in automotive vehicles, aircraft and rail road locomotives and other forms of fuel combustion.	Continuous
Naphtha Unifiner / Platformer	The Naphtha Unifiner removes sulphur and nitrogen compounds and saturate olefins in the light naphtha. The Unifiner uses the hydrogen from platformate to remove the undesirable compounds and supplies the feed to the Platformer. The platforming unit converts the low octane naphtha from Unifiner to high octane reformate by conversion of straight chain compounds into cyclic compounds.	Continuous
Reduced Crude Desulphurisation	The Reduced Crude Desulphurisation unit operates at elevated temperature [redacted] and pressure [redacted]. The unit catalytically hydro-desulphurises, demetalises and cracks vacuum residue (road tar and heavy fuel oil) into feedstock that can be treated in the fluid catalytic cracking unit where LPG, petrol, kerosene and diesel are produced.	Continuous
Hydrogen Plant and Hydrogen Membrane	At high temperatures [redacted] and in the presence of a metal-based catalyst [redacted] steam reacts with methane to yield carbon monoxide and hydrogen.	Continuous
PPU4	The PPU4 Unit separates propane (sold as a final product) from propylene. The propylene is sold as a feedstock to neighboring industry Safripol.	Continuous
Bitumen Blower	In order to produce bitumen that will soften at a higher temperature than an equivalent penetration Bitumen, severe air blowing is required. The product is therefore also known as 'air-blown' or 'oxidised' bitumen. Typically the blower feedstock	Batch

	has a lower initial boiling point than other bitumen grades.	
Sour Water Stripper	The Sour Water Stripper is used to force both Hydrogen Sulphide and Ammonia out of the water phase into a gas phase. Sulphur is recovered from the gas phase "Acid Gas" in the Claus Sulphur Recovery Unit.	Continuous
Amine Scrubbing and Sulphur Recovery Unit	Hydrogen sulphide present in gas streams is separated by means of selective chemical absorption in the Amine unit and sent to the Sulphur Recovery Unit (SRU) for conversion into elemental sulphur. The resultant "sweet gas" is used as Refinery Fuel Gas. Waste Water Stripper Off gas is also routed to the SRU. The acid gas, rich in H_2S, is passed through a combustion chamber at 1380°C to combust ammonia impurities and to convert H_2S to liquid sulphur.	Continuous
Alkylation Unit	Alkylation is a process that combines olefins with iso-butane using a catalyst, HF acid in this case, to produce alkylate. Alkylate is highly flammable and is blended into petrol to boost its octane. The unit operates in tandem with the Butamer Unit that produces iso-butane as feed for the Alkylation Unit.	Continuous
Crude, Intermediate, Final Product Tanks, Spheres and Bullets	Storage of raw materials, intermediate and final products used and produced in the refinery.	Continuous
Road and Rail Loading Facilities	Facilities for loading road tankers and rail tankers with LPG, Petrol, Diesel, Jet Fuel, Fuel Oil, Slurry and Bitumen.	Batch
Stacks	Natref has one main stack at 145m.	Continuous
Flares	Flares are used a safety devices to manage abnormal operating conditions and start up and shut down the refinery safely.	Batch

5.4. HOURS OF OPERATIONS

Unit Process	Operating Hours	Days of Operation per Year
Crude Distillation Unit	24-hours/day	365 days/year
Vacuum Distillation Unit	24-hours/day	365 days/year
Fluidised Catalytic Cracker Unit	24-hours/day	365 days/year
Merox	24-hours/day	365 days/year
Distillate Hydro Cracker	24-hours/day	365 days/year
Diesel Unifiner	24-hours/day	365 days/year
Naphtha Unifiner / Platformer	24-hours/day	365 days/year
Reduced Crude Desulphurisation	24-hours/day	335 days/year

Hydrogen Plant and Hydrogen Membrane	24-hours/day	365 days/year
PPU4	24-hours/day	365 days/year
Bitumen Blower	24-hours/day	365 days/year
Sour Water Stripper	24-hours/day	365 days/year
Amine Scrubbing and Sulphur Recovery Unit	24-hours/day	365 days/year
Alkylation Unit	24-hours/day	365 days/year
Crude, Intermediate, Final Product Tanks, Spheres and Bullets	24-hours/day	365 days/year
Road and Rail Loading Facilities	24-hours/day	365 days/year
Stacks	24-hours/day	365 days/year
Flares	24-hours/day	365 days/year

5.5. GRAPHICAL PROCESS INFORMATION

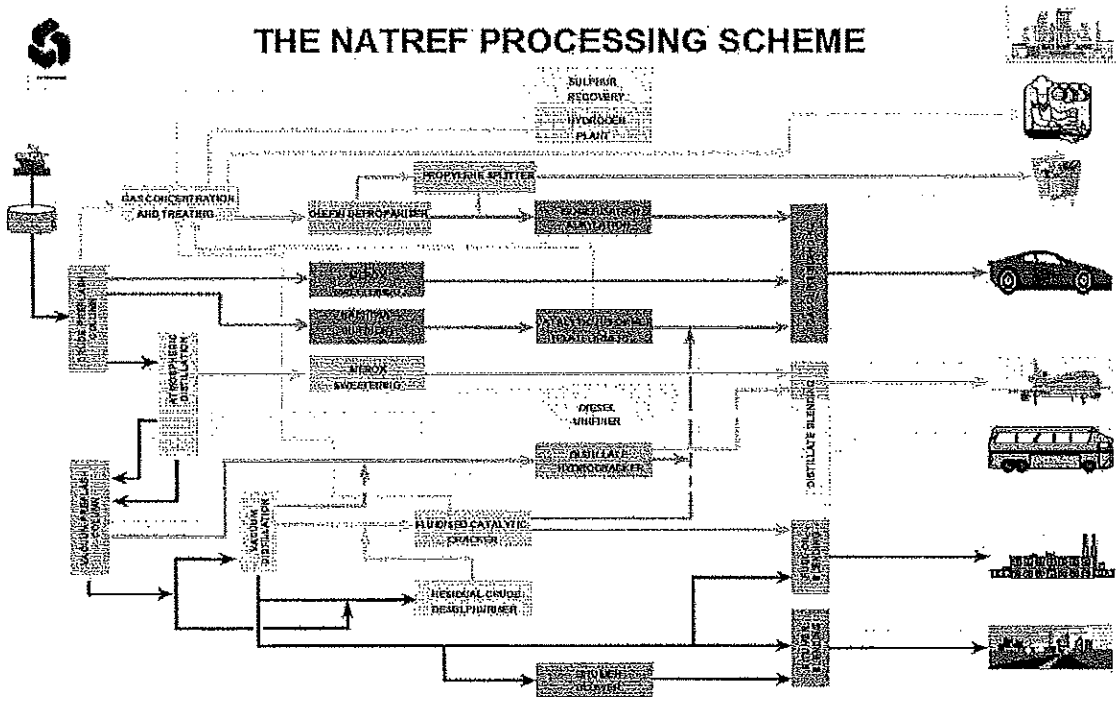

Figure 2: Natref summary process flow diagram:

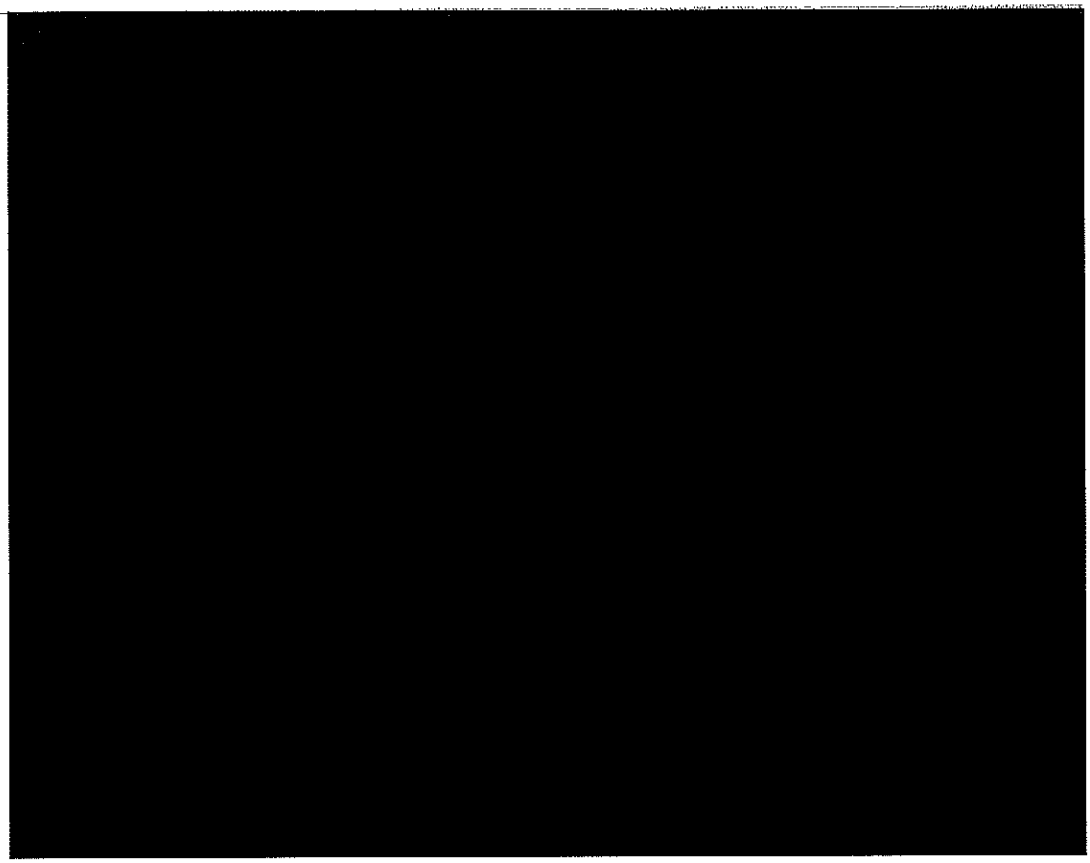

Figure 3: Natref Site Layout.

6. RAW MATERIALS AND PRODUCTS

6.1. Raw materials used

Raw Material Type	Maximum Permitted Consumption Rate (Quantity)	Design Consumption Rate (Quantity)	Units (quantity/period)
Crude Oil	6 307 200 m3/year	720 m3/h	As indicated

6.2. PRODUCTION RATES

Product Name	Maximum Permitted Production Capacity (Quantity)	Design Production Capacity (Quantity)	Units (quantity/period)
Petrol (All Grades)	[redacted]	[redacted]	m^3/year
Diesel (All Grades)	[redacted]	[redacted]	m^3/year

Jet Fuel (incl Paraffin)	[redacted]	[redacted]	m³/year
Bitumen (All Grades)	[redacted]	[redacted]	m³/year

BY-PRODUCTS			
By-Product Name	**Maximum Production Capacity Permitted (Quantity)**	**Design Production Capacity (Quantity)**	**Units (Quantity/Period)**
Fuel Oil (All Grades)	[redacted]	[redacted]	m³/year
LPG			m³/year
Propylene			tons/year
Sulphur			m³/year
Carbon Dioxide			tons/year

6.3. MATERIALS USED IN ENERGY SOURCES

Materials for Energy	Sulphur Content of the Material (%)	Ash Content of Material (%)	Maximum Permitted Consumption Rate (Quantity)	Actual Consumption Rate (Quantity)	Units (Quantity/ Period)
Sasol Residual Gas (tail gas)	-	N/A	[redacted]	[redacted]	ton/year
Natural Gas	-	N/A			ton/year
Fuel Oil	3.8	0.05			ton/year
Fuel Gas	-	N/A			ton/year
Electricity	0	0			MWH/year
Steam	0	0			Ton/year

* Subject to contractual agreement with Sasol ** Subject to contractual agreement with Eskom

6.4. SOURCES OF ATMOSPHERIC EMISSIONS

6.4.1. Point source parameters

Unique Stack ID	Source Name	Latitude (decimal degrees)	Longitude (decimal degrees)	Height of Release Above Ground (m)	Height Above Nearby Building (m)	Diameter at Stack Tip / Vent Exit (m)	Actual Gas Exit Temperature (°C)	Actual Gas Volumetric Flow (m³/hr)	Actual Gas Exit Velocity (m/s)
U-	Refiner	26.48.21.	27.51.28.	145	138	5.5	255	700 000	10

Unique Stack ID	Source Name	Latitude (decimal degrees)	Longitude (decimal degrees)	Height of Release Above Ground (m)	Height Above Nearby Building (m)	Diameter at Stack Tip / Vent Exit (m)	Actual Gas Exit Temperature (°C)	Actual Gas Volumetric Flow (m^3/hr)	Actual Gas Exit Velocity (m/s)
28008	y Main Stack	72 S	26 E						
N12460-285-52"	FCC Stack (when CO boiler is offline)	26.48.18.37 S	27.51.27.46 E	55	47	1.32	710	200 000	30
B-29001	Number 1 Flare	26.48.17.58 S	27.51.39.06 E	67	60	To be confirmed	Not applicable	Flame	147.4 m/s; 0.59 Mach
B-29002	Number 2 Flare	26.48.15.57 S	27.51.40.28 E	67	60	To be confirmed	Not applicable	Flame	258.7 m/s; 0.47 Mach
B-29003	Number 3 Flare	26.48.11.77 S	27.51.34.81 E	110	113	To be confirmed	Not applicable	Flame	121.7 m/s; 0.52 Mach
B14001	NU Fired Heater Stack	26° 48' 25.48"	27° 51' 30.24"	26.51	19.5	1.372	400	22 600	5.03
B14002	NU Fired Heater Stack	26° 48' 25.03"	27° 51' 30.53"	24.559	17.5	1.016	280	9 600	3.29
B14005	NU Fired Heater Stack	26° 48' 24.38"	27° 51' 29.64"	62.0	55	1.866	230	36 900	4.21
B14006	NU Fired Heater Stack	26° 48' 23.92"	27° 51' 31.22"	27.419	20.4	1.676	280	18 300	2.48
B17004	DHC Fired Heater Stack	26° 48' 23.38"	27° 51' 25.27"	20.016	13	0.914	310	To be confirmed	Measurements planned for FY14 after installation of sampling

Unique Stack ID	Source Name	Latitude (decimal degrees)	Longitude (decimal degrees)	Height of Release Above Ground (m)	Height Above Nearby Building (m)	Diameter at Stack Tip / Vent Exit (m)	Actual Gas Exit Temperature (°C)	Actual Gas Volumetric Flow (m³/hr)	Actual Gas Exit Velocity (m/s)
									ports.
B25001	Reformer Stack	26° 48' 22.55"	27° 51' 22.28"	19.150	12	1.518	320	To be confirmed	Measurements planned for FY14 after installation of sampling ports.

6.4.2. Area and/or line source parameters

Unique Area Source ID	Source Name	Source Description	Latitude (decimal degrees) of SW corner	Longitude (decimal degrees) of SW corner	Height of Release Above Ground (m)	Length of Area (m)	Width of Area (m)
N/A	API Area	All fugitive emissions from within the API area	S26° 48' 00,81"	E27° 51 47,40"	0	300	200
N/A	Final product loading and offloading activities	All fugitives emissions from final product loading and offloading activities	[redacted]		2.0	150	145
N/A	South Tank Farm (STF): Intemediate Product Storage	All fugitives emissions from within this tank farm area	[redacted]		14	570	540
N/A	Strategic Fuel Farm (SFF): Final Product Storage	All fugitives emissions from within this tank farm area	[redacted]		14	750	500
N/A	Bitumen loading Area	All fugitives emissions from within this tank farm area	[redacted]		14	200	85

7. APPLIANCES AND MEASURES TO PREVENT AIR POLLUTION

7.1. Appliances and control measures

Appliances				Abatement Equipment Control Technology							
Associated Unique Stack ID	Appliance / Process Equipment Number	Appliance Type / Description	Appliance Serial Number	Abatement Equipment Manufacture Date	Abatement Equipment Name and Model	Abatement Equipment Technology Type	Commission Date	Date of Significant Modification / Upgrade	Design Capacity	Minimum Control Efficiency (%)	Minimum Utilization (%)
U-28008	B11001A	Crude Fired Heater	Not available	Not available	LE-CSGC-10W Low Nox Burners	Callidus Scepter	01/12/2012	Not available	Nox emission basis (3% 02) <70 mg/Nm^3 22 kw (79.2 MJ/hr)	N/A	96%
U-28008	B11001B	Crude Fired Heater	Not available	Not available	LE-CSGC-10W Low Nox Burners	Callidus Scepter	01/12/2012	Not available	Nox emission basis (3% 02) <70 mg/Nm^3 22 kw (79.2 MJ/hr)	N/A	96%
U-28008	E24005/7	Amine Strippers	Not available	Not available	Sulphur Recovery Plant	Lurgi- Fluor Revamp	Not available	Not available	145 ton/day	96%	96%
	E-25001	CO2 Stripper	Not available	Not available	CO_2 Plant	Air Products/ AFROX	Not available	Not available	Not available	N/A	96 %
N12460-285-52"	D12001	FCC Regenerator	Not available	Not available	CO Boiler B28001	Babcock	Not available	Not available	65 t/hr steam	N/A	96 %
B29001	18000	HF Alkylation	Not available	Not available	Relief Gas Scrubber E18012	Elgin Engineering	16/01/1989	Not available	11.17 m^3	N/A	96%

7.2. POINT SOURCE – MINIMUM EMISSIONS STANDARDS (UNDER NORMAL WORKING CONDITIONS)

EMISSION RATES EFFECTIVE IMMEDIATELY							
	Listed Activity No.	Pollutant Name	Maximum Release Rate				Duration of Emissions
			Unit of measure (measured as "Bubble")	Emission Limit	Date to be Achieved By	Average Period	
U28008 Refinery Main Stack	Bubble across all Refinery Combustion Installations	Particulate Matter	mg/Nm³	120	Immediately	Daily	Continuous
		Oxides of Nitrogen	Ton/day	2.8	Immediately	Daily	
		Sulphur Dioxide	Ton/day	32	Immediately	Daily	
		Volatile Organic Compounds	Ton/day	3.1	Immediately	Daily	

Conditions applicable until 31 March 2015:

1. Maximum sulphur content in the combined refinery fuel (fuel gas & fuel oil) will be 2%.
2. Off-gases from the FCC unit will be vented to atmosphere at a height of 145 metres above ground level. Particulate concentration in the main stack off-gases will be less than 120 mg/m³, as measured at 0° C and 101.3 kPa.
3. During plant start-up, shut down and emergency situations the off-gases from the FCC unit will be vented to atmosphere at a height of 55 metres above ground level.
4. When the Claus plant is not in operation, the hydrogen sulphide are incinerated in a standby incinerator to sulphur dioxide and then vented to atmosphere at a height of 145 metres above ground level.
5. All alkylation unit relief valves are connected to a KOH water scrubber.
6. The polymer containing fluoride is burnt in a heavy oil furnace and discharged at 145 metres above ground level.
7. The 28 floating roof tanks containing relative volatile materials are fitted with secondary seals. The rest are all fitted with primary seals. Frequent inspections of seals are done.
8. Of the fixed roof tanks 6 are operated with nitrogen blanketing.
9. Over filling, temperature and pressure alarms are linked to the tank farm management & inventory control system.
10. Scheduled inspection and maintenance are done on relieve valves, bursting discs and flanges to prevent or minimize VOC emissions.

EMISSION RATES EFFECTIVE 1ST April 2015						
Point Source Code	Listed Activity No.	Pollutant Name	Maximum Release Rate			Duration of Emissions
			(mg/Nm³)	Date to be Achieved By	Average Period	
U28008	Subcategory 1.2	Particulate Matter	75	1st April 2015	Daily	Continuous
		Oxides of Nitrogen	1100	1st April 2015	Daily	
		Sulphur Dioxide	3 500	1st April 2015	Daily	
U28008	Subcategory 1.4	Particulate Matter	10	1st April 2015	Daily	Continuous
		Oxides of Nitrogen	300	1st April 2015	Daily	
		Sulphur Dioxide	500	1st April 2015	Daily	
U28008	Subcategory 2.1: Combustion Installations	Particulate Matter	120	1st April 2015	Daily	Continuous
		Oxides of Nitrogen	1700	1st April 2015	Daily	Continuous
		Sulphur Dioxide	1700	1st April 2015	Daily	Continuous
	Subcategory 2.2: Catalytic Cracking Units	Particulate Matter	120	1st April 2015	Daily	Continuous
		Oxides of Nitrogen	550	1st April 2015	Daily	Continuous
		Sulphur Dioxide	3000	1st April 2015	Daily	Continuous
	Subcategory 2.3: Sulphur Recovery Units	Hydrogen Sulphide	Efficiency @ 95% • Availability @ 99%	1st April 2015	****	Continuous
B14001	Subcategory	Particulate	120	1st April 2015	Daily	Continuous

	2.1: Combustion Installations	Matter				
		Oxides of Nitrogen	1700	1st April 2015	Daily	Continuous
		Sulphur Dioxide	1700	1st April 2015	Daily	Continuous
B14002	**Subcategory 2.1:** Combustion Installations	Particulate Matter	120	1st April 2015	Daily	Continuous
		Oxides of Nitrogen	1700	1st April 2015	Daily	Continuous
		Sulphur Dioxide	1700	1st April 2015	Daily	Continuous
B14005	**Subcategory 2.1:** Combustion Installations	Particulate Matter	120	1st April 2015	Daily	Continuous
		Oxides of Nitrogen	1700	1st April 2015	Daily	Continuous
		Sulphur Dioxide	1700	1st April 2015	Daily	Continuous
B14006	**Subcategory 2.1:** Combustion Installations	Particulate Matter	120	1st April 2015	Daily	Continuous
		Oxides of Nitrogen	1700	1st April 2015	Daily	Continuous
		Sulphur Dioxide	1700	1st April 2015	Daily	Continuous
B17004	**Subcategory 2.1:** Combustion Installations	Particulate Matter	120	1st April 2015	Daily	Continuous
		Oxides of Nitrogen	1700	1st April 2015	Daily	Continuous
		Sulphur Dioxide	1700	1st April 2015	Daily	Continuous
B25001	**Subcategory 2.1:** Combustion Installations	Particulate Matter	120	1st April 2015	Daily	Continuous
		Oxides of Nitrogen	1700	1st April 2015	Daily	Continuous
		Sulphur Dioxide	1700	1st April 2015	Daily	Continuous

A bubble of 1.2 kg SO_2/ ton of Crude is applicable to emissions from Subcategory 2.1 and 2.2.

Subcategory 2, 4: Storage and Handling of Petroleum Products

The following transitional arrangement shall apply for the storage and handling of raw materials, intermediate and final products with a vapour pressure greater than 14kPa at operating temperature: -

(a) Leak detection and repair (LDAR) program approved by licensing authority to be instituted, by 01 June 2014.
(b) The following special arrangements shall apply for control of TVOCs from storage of raw materials, intermediate and final products with a vapour pressure of up to 14kPa at operating temperature, except during loading and offloading. (Alternative control measures that can achieve the same or better results may be used) –

(i) Storage vessels for liquids shall be of the following type:

Application True vapour pressure of contents at product storage temperature	All permanent immobile liquid storage facilities at a single site with a combined storage capacity of greater than 1000 cubic meters. Type of tank or vessel
Type1:Up to14kPa	Fixed-roof tank vented to atmosphere, or as per Type 2 and 3
Type 2: Above 14 kPa and up to 91 kPa with a throughput of less than 50000 m^3 per annum	Fixed-roof tank with Pressure Vacuum Vents fitted as a minimum, to prevent "breathing" losses, or as per Type 3
Type 3: Above 14 kPa and up to 91 kPa with a throughput greater than 50'000 m^3 per annum	a) External floating-roof tank with primary rim seal and secondary rim seal for tank with a diameter greater than 20m, or b) fixed-roof tank with internal floating deck / roof fitted with primary seal, or c) fixed-roof tank with vapour recovery system.
Type 4: Above 91 kPa	Pressure vessel

(ii) The roof legs, slotted pipes and/or dipping well on floating roof tanks (except for domed floating roof tanks or internal floating roof tanks) shall have sleeves fitted to minimize emissions.
(iii) Relief valves on pressurised storage should undergo periodic checks for internal leaks. This can be carried out using portable acoustic monitors or if venting to atmosphere with an accessible open end, tested with a hydrocarbon analyser as part of an LDAR programme.

The following special arrangements shall apply for control of TVOCs from the loading and unloading (excluding ships) of raw materials, intermediate and final products with a vapour pressure of greater than 14kPa at handling temperature. Alternative control measures that can achieve the same or better results may be used:

(i) All installations with a throughput of greater than 50'000 m3 per annum of products with a vapour pressure greater than 14 kPa, must be fitted with vapour recovery / destruction units. Emission limits are set out in the table below –

Description;	Vapour Recovery Units		
Application:	All loading/ offloading facilities with a throughput greater than 50 000 m^3		
Substance or mixture of substances		Plant	mg/Nm^3 under normal
Common name	Chemical symbol		
Total volatile organic compounds	N/A	New	150

		Existing	150
Total volatile organic compounds from vapour recovery/destruction units using non-thermal treatment.	N/A	New	40000
		Existing	40 000

For road tanker and rail car loading / offloading facilities where the throughput is less than 50'000 m^3 per annum, and where ambient air quality is, or is likely to be impacted, all liquid products shall be loaded using bottom loading, or equivalent, with the venting pipe connected to a vapour balancing system. Where vapour balancing and / or bottom loading is not possible, a recovery system utilizing adsorption, absorption, condensation or incineration of the remaining VOC's, with a collection efficiency of at least 95%, shall be fitted.

7.3. POINT SOURCE OPERATING CONDITIONS (UNDER START-UP, MAINTENANCE AND SHUT-DOWN CONDITIONS)

The following conditions must be adhered to at minimum during start up, maintenance and shut down conditions:

Should normal start up, maintenance and shutdown conditions exceed a period of 48 hours per plant, Section 30 of the National Environmental Management Act, 1998 (Act No. 107 of 1998), shall apply incident shall be reported, if triggered by the exceedance.

7.4. POINT SOURCE – EMISSIONS MONITORING AND REPORTING REQUIREMENTS

Point Source Code	Emissions Sampling / Monitoring Method	Sampling Frequency	Sampling Duration	Parameters to be measured	Parameters to be reported	Conditions under which monitoring should be stopped	Reporting Frequency
U28008	Periodic	Periodic	As per method	PM, NOx & SO_2	PM, NOx & SO_2	Upon written approval by the Air Quality Officer	Biannually
	Periodic	Annually	As per method	H_2S	H_2S	Upon written approval by the Air Quality Officer	Annually
B14001 B14002 B14005 B14006 B17004 B25001	Periodic	Bi-Annually	As per method	PM, NOx & SO_2	PM, NOx & SO_2	Upon written approval by the Air Quality Officer	Bi-Annually

7.5. AREA AND/OR LINE SOURCE – MANAGEMENT AND MITIGATION MEASURES

Area and/or Line Source Code	Area and/or Line Source Description	Description of Specific Measures	Timeframe for Achieving Required Control Efficiency	Method of Monitoring Measures Effectiveness	Contingency Measures
None					

7.6. ROUTINE REPORTING AND RECORD-KEEPING

Complaints register

The licence holder must maintain a complaints register at its premises, and such register must be made available for inspections. The complaints register must include the following information on the complainant, namely, the name, physical address, telephone number, date and the time when the complaint was registered. The register should also provide space for noise, dust and offensive odours complaints.

Furthermore, the licence holder is to investigate and, monthly, report to the licencing authority in a summarised format on the total number of complaints logged. The complaints must be reported in the following format with each component indicated as may be necessary:

(a) Source code / name;
(b) Root cause analysis;
(c) Calculation of impacts / emissions associated with incidents and dispersion modelling of pollutants, where applicable;
(d) Measures implemented or to be implemented to prevent recurrence; and
(e) Date by which measure will be implemented.

The licensing authority must also be provided with a copy of the complaints register. The record of a complaint must be kept for at least 5 (five) years after the complaint was made.

7.7. ANNUAL REPORTING

The licence holder must complete and submit to the licensing authority an annual report. The report must include information for the year under review (i.e. annual year end of the company). The report must be submitted to the licensing authority not later than 60 (sixty) days after the end of each reporting period. The annual report must include, amongst others, the following items:

(a) Pollutant emissions trend;

(b) Compliance audit report(s);

(c) Major upgrades projects (i.e. abatement equipment or process equipment); and

(d) Greenhouse gas emissions.

The holder of the licence must keep a copy of the annual report for a period of at least 5 (five) years.

8. DISPOSAL OF WASTE AND EFFLUENT ARISING FROM ABATEMENT EQUIPMENT CONTROL TECHNOLOGY

The disposal of any waste and effluent arising from the abatement equipment control technology must comply with the relevant legislation and requirements of the relevant authorities.

Source Code / Name	Waste / Effluent Type	Hazardous Components Present	Method of Disposal
Not applicable			

9. PENALTIES FOR NON-COMPLIANCE WITH LICENSE AND STATUTORY CONDITIONS OR REQUIREMENTS

Failure to comply with any of the licence and relevant statutory conditions and/or requirements is an offence, and licence holder, if convicted, will be subjected to those penalties as set out in section 52 of the AQA.

10. REPORTING OF ABNORMAL RELEASES AND EMERGENCY RESPONSES

The holder must prevent deviations from normal operating conditions that would result in pollution exceeding specified limit values. If any conditions exist that will result in excessive emissions or nuisance, the licence holder must be immediately reported to the Air Quality Officer. If applicable, a section 30 incident must be reported in terms of NEMA and must also be reported to the Air Quality Officer within 24 hours. Where excessive emissions occur, which could cause adverse health and environmental impacts or nuisance, urgent corrective measures must be taken by the holder to contain or minimise the emissions through operational interventions. Remediation, if required shall be carried out to the satisfaction of the licensing authority and/or any other government agencies.

11. APPEAL OF ATMOSPHERIC EMISSIONS LICENCE

11.1 The holder of the authorization must notify every registered interested and affected party, in writing and within five (5) working days of the date of issue, of the holder's receipt of this atmospheric emissions licence.

11.2 The written notification referred to in Condition 11.1 above must –

- 11.2.1 Specify the date on which the atmospheric emissions licence was issued;
- 11.2.2 Inform interested and affected parties of the appeal procedure provided for in Chapter 7 the GN No R543 of 18 June 2010; and
- 11.2.3 Advise interested and affected parties that a copy of the atmospheric emissions licence and reasons for the decision will be furnished on request

11.3 An appeal against the decisions contained in this atmospheric emissions licence must be lodged, in writing with the: Director: Environmental Health and Emergency Services, Fezile Dabi District Municipality, PO Box 10, Sasolburg, 1947, Tel No:016 970 8600, Fax No: 016 973 1582

12. REVIEW

12.1 The authority shall have the right to review the licence continuously within the period as stipulated in clause 1 above or as and when such review is deemed necessary by the Air Quality Officer;

12.2 Such review shall be done as a result of amendments in legislation or by virtue of findings from regular inspections done by the Air Quality Officer;

12.3 The authority shall serve the license holder with a 30(thirty) day notice when such a necessity arises;

12.4 The authority shall under no circumstances be barred by license holder from reviewing the license upon receiving notice of review.