



CITY OF EKURHULENI
HEALTH AND SOCIAL DEVELOPMENT DEPARTMENT
ATMOSPHERIC EMISSION LICENCE AS CONTEMPLATED IN SECTION 43 OF THE NATIONAL
ENVIRONMENTAL MANAGEMENT: AIR QUALITY ACT, 2004 (ACT NO. 39 OF 2004) AS AMENDED

Ekurhuleni Air Quality Officer
Health & Social Development Department
P O Box 4
Alberton
1450

ATMOSPHERIC EMISSION LICENCE AS CONTEMPLATED IN SECTION 43 OF THE NATIONAL
ENVIRONMENTAL MANAGEMENT: AIR QUALITY ACT, 2004, (ACT NO. 39 OF 2004) AS AMENDED

This Atmospheric Emission Licence is issued to **Sasol Oil (Pty) Ltd** in terms of section 40(1) (a) of the National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004), in respect of Listed Activity **Sub-Category 2.4: Storage and Handling of Petroleum Products**. The Atmospheric Emission Licence has been issued on the basis of information provided in the company's application dated 04 July 2023 and information that became available on 11 November 2023 during processing of the application.

The Atmospheric Emission Licence is valid until **31 December 2026**.

The reason for the issuance of the current licence is: **Renewal Application**.

The Atmospheric Emission Licence is issued subject to the conditions and requirements set out below which form part of the Atmospheric Emission Licence and which are binding on the holder of the Atmospheric Emission Licence **Sasol Oil (Pty) Ltd**.

Date:

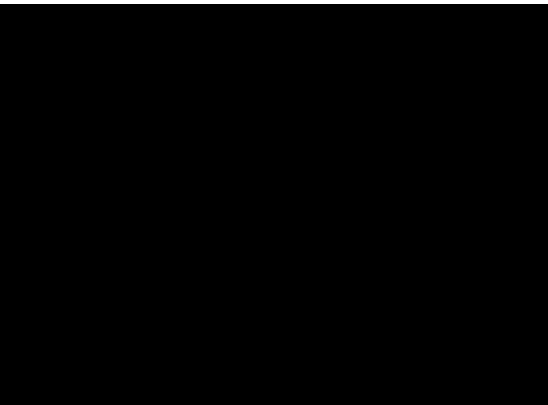
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1. ATMOSPHERIC EMISSION LICENCE ADMINISTRATION

Name of the Licensing Authority	City of Ekurhuleni
Atmospheric Emission Licence Number	14/1/1/7/25/SASOL/ALB (GTEK_001512)
Atmospheric Emission Licence Issue Date	December 2023
Atmospheric Emission Licence Type	Final
Review Date, not later than	30 June 2026

2. ATMOSPHERIC EMISSION LICENCE HOLDER DETAILS

Enterprise Name	Sasol Oil (Pty) Ltd
Trading as	Sasol Oil
Enterprise Registration Number (Registration Numbers if Joint Venture)	1981/007622/07
Registered Address	Sasol Place, 50 Katherine street Sandton
Postal Address	Sasol Place, 50 Katherine street Sandton
Telephone Number (General)	+27 (0)11 889 7600
Industry Sector	Petroleum
Name of Responsible Officer	
Name of Emission Control Officer	
Telephone Number	
Cell Phone Number	
Fax Number	
Email Address	
After Hours Contact Details	
Land Use Zoning as per Town Planning Scheme	2 - Industrial

3. LOCATION AND EXTENT OF PLANT

Physical Address of the Premises	28 Garfield Street Alrode
Description of Site (Erf)	Erf 1601 Alrode
Coordinates of Approximate Centre of Operations	
Extent (km²)	41890 m²
Elevation Above Mean Sea Level (m)	1 570

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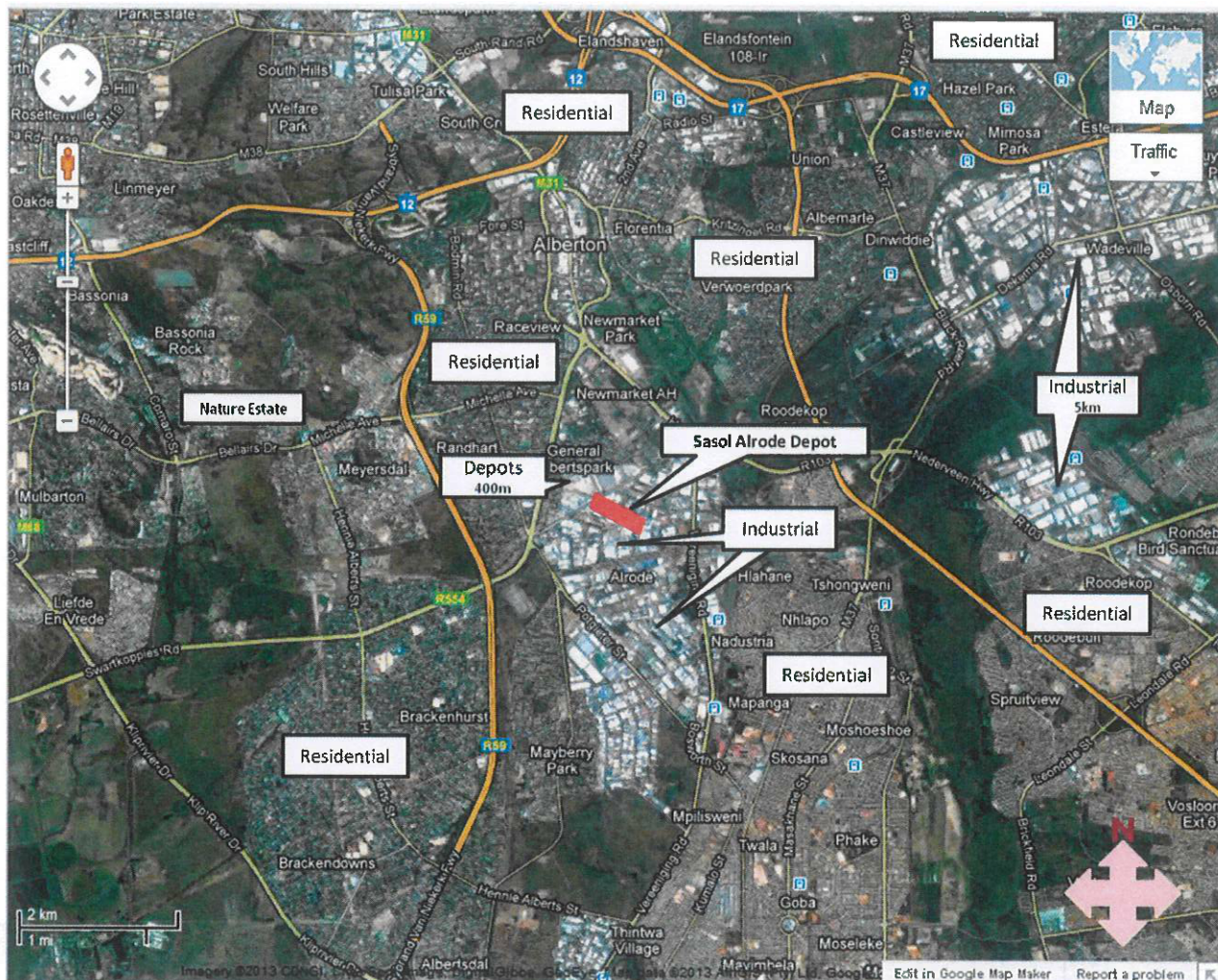
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Province	Gauteng
Metropolitan/District Municipality	City of Ekurhuleni
Local Municipality	N/A
Designated Priority Area	Highveld Priority Area

3.2 Description of surrounding land use (within 5 km radius)

The Alrode area is surrounded by Industrial areas which are gas and petroleum depots. The surrounding communities are New Redruth ,Meyersdal ,Brackenhurst and Thokoza. Which have commercial , residential properties and Heavy industries (zoned Industrial 1).



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4. GENERAL CONDITIONS

4.1. Process and ownership changes

- 4.1.1 The holder of the atmospheric emission 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.
- 4.1.2 No building, plant or site of works related to the listed activity or activities used by the licence holder shall be extended, altered or added to the listed activity without an environmental authorisation from the competent authority.
- 4.1.3 The investigation, assessment and communication of potential impact of such an activity must follow the basic assessment procedure as prescribed in the Environmental Impact Assessment Regulations published in terms of section 24(5) of the National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA), as amended.
- 4.1.4 Any changes in processes or production increases, by the licence holder, will require prior approval by the licensing authority.
- 4.1.5 Any changes to the type and quantities of input materials and products, or to production equipment and treatment facilities will require prior written approval by the licensing authority.
- 4.1.6 The licence holder must, in writing, inform the licensing authority of any change of ownership of the enterprise.
- 4.1.7 The licensing authority must be informed within 30 (thirty) days after the change of ownership.
- 4.1.8 The licence holder must immediately on cessation or decommissioning of the listed activity inform, in writing, inform the licensing authority.

4.2. General duty of care

- 4.2.1 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.
- 4.2.2 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.
- 4.2.3 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

- 4.3.1 Measurement, calculation and/or sampling and analysis shall be carried out in accordance with any nationally or internationally acceptable standard.
- 4.3.2 A different method may be acceptable to the licensing authority as long as it has been consulted and agreed to the satisfactory documentation necessary in confirming the equivalent test reliability, quality and equivalence of analyses.
- 4.3.3 The licence holder is responsible for quality assurance of methods and performance.

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4.3.4 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

4.4.1 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.

4.4.2 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.

4.4.3 A copy of the licence must be kept at the premises where the listed activity is undertaken.

4.4.4 The licence must be made available to the environmental management inspector representing the licensing authority who requests to see it.

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

4.5. Statutory obligations

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

4.6. Annual payment of atmospheric emission licence processing fee

4.6.1 The licence holder must pay the prescribed processing fee to the licensing authority as indicated in the Annexure A of the Regulations Prescribing the Atmospheric Emission Licensing Processing Fee No.250 of 11 March 2016 before or on the date of submission of the application or as directed by the Licensing Authority.

5. NATURE OF PROCESS

5.1. Process description

Sasol's Alrode Depot is a storage and handling facility that operates on a 24-hourly basis and currently stores two (2) grades of petrol, two (2) grades of diesel and fuel additives. The facility receives these fuels via Transnet's Pipelines underground network of pipelines, while the additives are delivered via road tankers. The stored products are then dispatched to the end users by road after loading at the gantry. A vapour recovery unit is utilised for the recovery of the hydrocarbon vapours from the fixed roof petrol tanks and during loading of the tankers at the gantry.

The facility also has an installed firefighting system comprising of a water storage tank, foam tank, diesel and electric pumps and associated piping for distribution of this utility throughout the site.

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5.2. Listed activity or activities

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

Listed Activity Number	Category of Listed Activity	Sub-category of the Listed Activity	Listed Activity Name	Description of the Listed Activity
1	Category 2	Subcategory 2.4	Storage and Handling of Petroleum Products	Petroleum products storage tanks and product transfer facilities.

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
Diesel ,Additive and Petrol Tanks	Storage and handling of petroleum products	Continuous process
Gantry	Transfer of petroleum products	Continuous process

5.4. Hours of operations

Indicate the hours of operation of all unit processes associated with the listed activities at the site of work.

Unit Process	Operating Hours	Days of Operation per Year
All Tanks	24 HOURS	365
Gantry	24 HOURS	365

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5.5. Graphical process information

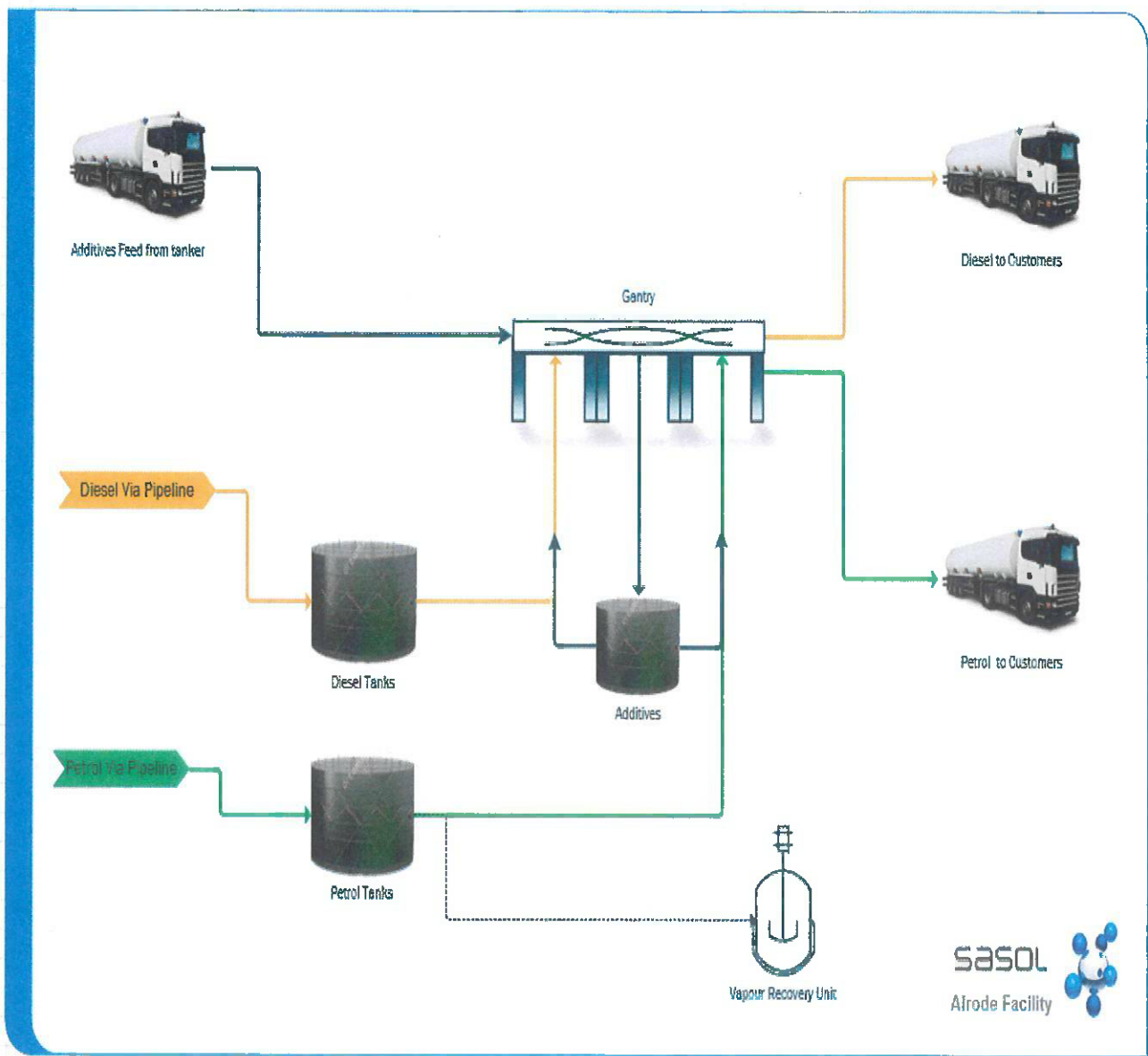


Figure 1: Simplified flow diagram of Alrode depot

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6. RAW MATERIALS AND PRODUCTS

6.1. Raw materials used

NB: No raw materials are used as this is a storage facility and not a production facility.

Regulated Raw Materials		
Raw Material Type	Maximum Permitted Consumption Rate (Quantity)	Units (quantity/period)
N/A	N/A	N/A
Non-regulated Raw Materials		
Raw Material Type	Maximum Permitted Consumption Rate (Quantity)	Units (quantity/period)

6.2. Production rates

NB: The depot is not a production facility, but a storage facility. Production capacity in the table below is actually product throughput (Litres/annum).

Product Name	Maximum Permitted Production Capacity (Quantity)	Units (quantity/period)
Operational tanks		
Petrol (ULP93)	10000000	Litres
Petrol (ULP95)	10000000	Litres
Petrol (ULP93)	8000000	Litres
Petrol (ULP95)	5000000	Litres
Diesel (50ppm)	10000000	Litres
Diesel (50ppm)	3000000	Litres
Petrol slop (ULP 93)	60000	Litres
Diesel slop (50ppm)	60000	Litres
Diesel (50ppm)	23000	Litres
Additive	60000	Litres
Additive	30000	Litres
Empty (not in use)	9000	Litres
BP petrol additive	60000	Litres
Empty (not in use)	30000	Litres
BP diesel additive	30000	Litres
Diesel 10ppm	3000	Litres
Diesel 10ppm	3000	Litres

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6.3. Materials used in energy sources

Materials for Energy Source	Actual Consumption Rate (Quantity)	Units (quantity/period)	Materials Characteristics
Diesel- generator	100% load with fan= 151L/hr	Once a month (10 minutes)	Liquid fuel
Diesel- Fire Engine	100% load with fan= 151L/hr	Once a month (10 minutes)	Liquid fuel

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6.4. Emission Units

6.4.1. Emission Unit - Stack Parameters (Point Source)

EU Code	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)	Emission Hours	Type of Emission (Continuous / Batch)
		South	East								
VRU	Vapour Recovery Unit									24 hrs	Continuous

6.4.2. Emission Unit - Stack Parameters (Area/Line Source)

EU Code	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)	Emission Hours	Type of Emission (Continuous / Intermittent)
		Storage tank Petrol (ULP93)			N/A	N/A	N/A	24Hrs	Continuous
		Storage tank Petrol (ULP95)			N/A	N/A	N/A	24Hrs	Continuous
		Storage tank Petrol (ULP93)			N/A	N/A	N/A	24Hrs	Continuous
		Storage tank Petrol (ULP95)			N/A	N/A	N/A	24Hrs	Continuous
		Storage tank Diesel (50ppm)			N/A	N/A	N/A	24Hrs	Continuous

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	Storage tank Diesel (50ppm)		N/A	N/A	N/A	24Hrs	Continuous
	Storage tank Petrol (ULP95)		N/A	N/A	N/A	24Hrs	Continuous
	Storage tank Diesel (50ppm)		N/A	N/A	N/A	24Hrs	Continuous
	Storage tank Petrol slop (ULP 93)		N/A	N/A	N/A	24Hrs	Continuous
	Storage tank Diesel slop (50ppm)		N/A	N/A	N/A	24Hrs	Continuous
	Storage tank Diesel (50ppm)		N/A	N/A	N/A	24Hrs	Continuous
	Storage tank Additive		N/A	N/A	N/A	24Hrs	Continuous
	Storage tank Additive		N/A	N/A	N/A	24Hrs	Continuous
	Storage tank Spare additive tank		N/A	N/A	N/A	24Hrs	Continuous
	Storage tank BP petrol additive		N/A	N/A	N/A	24Hrs	Continuous
	Storage tank Spare additive tank		N/A	N/A	N/A	24Hrs	Continuous
	Storage tank BP diesel additive		N/A	N/A	N/A	24Hrs	Continuous
	Storage tank Foam		N/A	N/A	N/A	24Hrs	Continuous
	Storage tank Foam		N/A	N/A	N/A	24Hrs	Continuous
Gantry	Gantry with 8 loading and offloading bays						

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7. CONTROL DEVICES, EMISSION UNITS, AND REPORTING GROUPS

7.1. Appliances and control measures

Associated Source Code	Appliances			Abatement Equipment Control Technology							
	Appliance / Process Equipment Number	Appliance Serial Number	Appliance Type / Description	Abatement Equipment Technology Name and Model	Abatement Equipment Technology Manufacture Date	Commission Date	Date of Significant Modification / Upgrade	Technology Type	Design Capacity	Minimum Control Efficiency (%)	Minimum Utilisation (%)
			Tanks Have fixed roofs	Not available	Not available	In Use	Not available	fixed roofs	Not available	98%	98%
			Tanks fitted to the Vapour recovery unit)	Vapour recovery unit available	2013	In use	Not available	fitted to the Vapour recovery unit)	Designed to capture emissions from all petrol tanks and gantry on site amongst other.	98%	98%

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7.2. Emission Units – maximum emission rates (under normal working conditions)

EU Code	Pollutant Name	Maximum Release Rate			Duration of Emissions
		(mg/Nm ³)	Date to be Achieved By	Average Period	
VRU	Volatile Organic Compounds (VOC's)	40 000	Immediately	N/A	24 hrs

Reporting Group – operating requirements

Facility Must Immediately Comply with New Plant Standards.

Special requirements/arrangements:

- (a) The following special arrangement applies for the storage and handling of raw materials, intermediate and final products with a vapour pressure greater than 14kPa at operating temperature— Leak detection and repair (LDAR) program approved by licensing authority must be instituted.
- (b) The License holder is required to conduct Fenceline monitoring for Volatile Organic Compounds around the boundaries of the storage tanks and submit quarterly reports to the Licensing Authority.
- (c) The following special arrangements apply for control of Total Volatile Organic Compounds (TVOCs) from storage of raw materials, intermediate and final products, except during loading and offloading. (Alternative control measures that can achieve the same or better results may be used)—

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

Application	All permanent immobile liquid storage facilities at a single site with a combined storage capacity of greater than 1000 cubic meters.
True vapour pressure of contents at product storage temperature	Type of tank or vessel
Type 1: Up to 14 kPa	Fixed-roof tank vented to atmosphere, or as Type 2 and 3
Type 2: Above 14 kPa up to 91 kPa with a throughput of less than 50 000 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) must have sleeves fitted to minimise emissions.

(ii) Relief valves on pressurised storage must 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.

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(d) The Following special arrangements 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 per annum	
Substance or mixture of substances		Plant status	mg/Nm ³ under normal conditions of 273 Kelvin and 101.3 kPa.
Common name	Chemical symbol		
Total volatile organic compounds from vapour recovery/ destruction units using thermal treatment.	N/A	New	150
		Existing	150
Total volatile organic compounds from vapour recovery/ destruction units using non-thermal treatment.	N/A	New	40 000
		Existing	40 000

- (ii) For road tanker and rail car loading / offloading facilities where the throughput is less than 50'000 m³ per annum, and where ambient air quality is, or is likely to be impacted, all liquid products must 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%, must be fitted."

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7.3. Reporting Group / Emission Unit – maximum emission rates (under start-up, maintenance and shut-down conditions)

RG/EU Code	Pollutant Name	Maximum Release Rate		Average Period (Instantaneous, Hourly, Daily, Monthly, Annually)	Maximum Gas Volumetric Flow (m³/hr)	Maximum Gas Exit Velocity (m/s)	Emission Hours	Permitted Duration of Emissions
		(mg/Nm³)	Date to be Achieved By					

Reporting Group – operating requirements

Should normal maintenance, upset and shut-down conditions exceed a period of 48 hours, Section 30 of the National Environmental Management Act, (Act No. 107 of 1998) shall apply.

7.4. Reporting Group / Emission Unit – emission monitoring and reporting requirements

RG/EU Code	Emission Sampling / Monitoring Method	Sampling Frequency	Sampling Duration	Parameters to be Measured	Parameters to be Reported	Reporting Frequency
VRU	Sampling as per Part 2, Section 5, 6 and 7, GN 893 of 22 November 2013 as amended.	Annually	As required in Part 2 Section 18(b)(v) of GN 893 of 22 November 2013 as amended	Air pollutants listed in section 7.2 of the license.	Air pollutants listed in section 7.2 of the license.	Annually

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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
Tanks [REDACTED]	Petrol Tanks	Vapour Recovery Unit	Immediately	Control system in Control Room	Two columns used interchangeably.
Tanks [REDACTED]	Desel tanks and additive tanks	Fitted with Vacuum Breakers and Over-pressure safety release valves (bursting disc)	Immediately	Control system in Control Room	N/A
Gantry	Gantry	Vapour Recovery Unit	Immediately	Control system in Control Room	Filling of tankers auto stops when VRU not connected

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7.6. Routine reporting and record-keeping

7.6.1 Complaints register

- 7.6.1.1 The licence holder must maintain a complaints register at its premises, and such register must be made available for inspections. Complaints register should be submitted to the Licensing Authority on a monthly basis. (Even when no complaints were lodged with the facility).
- 7.6.1.2 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.
- 7.6.1.3 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.
- 7.6.1.4 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.
- 7.6.1.5 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.

7.6.2 Annual reporting

- 7.6.2.1 The licence holder must complete and submit to the licensing authority an annual report.
- 7.6.2.2 The report must include information for the year under review (i.e. annual year end of the company).
- 7.6.2.3 The report must be submitted to the licensing authority not later than 60 (sixty) days after the end of each reporting period.
- 7.6.2.4 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) Reporting in terms of S43(1)(l) shall be done in accordance with the National Greenhouse Gas Reporting Regulations.
 - (e) The Ekurhuleni Highveld Priority Area Implementation Task Team (ITT) meetings must be attended by Responsible Officer or representative.

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(f) A Continuous Emission Reduction Strategy Report must be submitted to the licensing authority annually.

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

7.6.2.6 Annual National Atmospheric Emission Inventory System (NAEIS) on-line reporting

- Reporting of all your emissions on the on-line NAEIS must be in accordance with the stipulations of the National Atmospheric Emission Reporting Regulations No..R283 of 2 April 2015.

7.7. Investigation

The following investigations are required:

Investigation	Purpose	Completion Date
Investigate the installation of sampling ports on the VRU stack in accordance with US EPA Method 1	To be in-line with sampling protocol prescribed by relevant legislation	Within 3 months of receiving this Atmospheric Emission Licence Proof of completion of Investigation condition must be submitted to the Licensing Authority within the above stipulated period.

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
No waste from abatement equipment control technology	No waste from abatement equipment control technology	No waste from abatement equipment control technology	No waste from abatement equipment control technology

9. PENALTIES FOR NON-COMPLIANCE WITH LICENCE 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.

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