Gert Sibande District Municipality

Please address all correspondence to:

The Municipal Manager

P O Box 1748 ERMELO 2350

Corner Joubert & Oosthuise Street ERMELO 2350



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Mondays to Thursdays 07:30 - 13:00 / 13:30 - 16:00

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OFFICE OF THE MUNICIPAL MANAGER

Enquiries: Ms. MLT Mogakabe (017 801 7000)

Date: 25 February 2025

Our Ref: Govan Mbeki/Sasol Oil (Pty) Ltd/0019/2025/F05

Sasol Oil (Pty) Ltd

PDP Kruger Secunda 2302

Attention: Mr. Hannes Buys

Dear Sir

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

With reference to your application dated 16 February 2024, enclosed, herewith, the Atmospheric Emission Licence No Govan Mbeki/Sasol Oil (Pty) Ltd/0019/2025/F05 dated 25 February 2025 in respect of the Sasol Oil (Pty) Ltd.

Your attention is drawn to the following conditions for licence issue –

- a. Chapter 5, Section 42 of the Act, Issuing of Atmospheric Emission Licence And
- b. Chapter 5, Section 43 of the Act, Content of Provisional Atmospheric Emission Licence, and Atmospheric Emission Licence.

1. SITUATION AND EXTENT OF PLANT

Situation

PDP Kruger, Secunda, Govan Mbeki Local Municipality, Gert Sibande District, Mpumalanga.

Extent

24.05km²

2. NATURE OF PROCESS AND LISTED ACTIVITIES IN TERMS OF SECTION 21

| listed activity | Activity | Application |
|---|---|---|
| ry Storage and Handling of Petroleum Products | Petroleum product storage tanks and product transfer facilities. | All permanent immobile liquid storage tanks larger than 1000 cubic meters cumulative tankage capacity at the site. |
| rals N/A | The production or use in production of organic chemicals not specified elsewhere including acetylene, acetic, maleic or phthalic anhydride or their acids, carbon disulphide, pyridine, formaldehyde, acetaldehyde, acrolein and its derivatives, acrylonitrile, amines and synthetic rubber. The production of organometallic compounds, organic dyes and pigments, surface active agents. The polymerisation or copolymerisation of any unsaturated hydrocarbons substituted hydrocarbons (including vinyl chloride). The manufacture, recovery or purification of acrylic acid or any ester of acrylic acid. The use of toluene diisocyanate or other diisocyanate or other diisocyanate | All installations producing and/or using more than 100 tons per annum of any of the listed compounds. |
| | Petroleum Products | tanks and product transfer facilities. The production or use in production of organic chemicals not specified elsewhere including acetylene, acetic, maleic or phthalic anhydride or their acids, carbon disulphide, pyridine, formaldehyde, acetaldehyde, acrolein and its derivatives, acrylonitrile, amines and synthetic rubber. The production of organometallic compounds, organic dyes and pigments, surface active agents. The polymerisation or copolymerisation of or any unsaturated hydrocarbons substituted hydrocarbons (including vinyl chloride). The manufacture, recovery or purification of acrylic acid or any ester of acrylic acid. The use of toluene di- |

Yours in good governance,

MR. A HABILE MUNICIPAL MANAGER



GERT SIBANDE DISTRICT MUNICIPALITY

NATIONAL ENVIRONMENTAL MANAGEMENT: AIR QUALITY ACT, 2004 (ACT NO. 39 OF 2004) AS AMENDED

Atmospheric Emission License

Sasol South Africa Limited-Secunda Operations Solvents

Is authorized to contin<mark>ue t</mark>he pro<mark>cesses</mark> listed below, with equipment and plant as detailed in the licence conditions of licence no. Mbeki/Sasol South Africa Limited-Secunda Operations Solvents/0017/2025/F04 on the premise known as PDP Kruger Site. Secunda, Govan Mbe<mark>ki Loc</mark>al Municipa<mark>lity, G</mark>ert Sibande District Municipality, Mpumalang<mark>a.</mark>

Category 2 Sub-category 2.1: Combustion Installations; Sub-category 6: Organic Chemical Industry.

LICENSING AUTHORITY

Govan Mbeki/Sasol South Africa Limited - Secunda Operations Solvents/0017/2025/F04

Date: 25 February 2025

Gert Sibande District Municipality

Office hours:

Please address all correspondence to:

The Municipal Manager P O Box 1748 Ermelo 2350

Cnr Joubert & Oosthuise Street

Ermelo 2350



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

I, Mary Lorette Tebogo Mogakabe, in my capacity as License Officer (hereinafter referred to as "the Licensing Authority"), in terms of section 36(1) of the National Environmental Management: Air Quality Act, 2004 (Act 39 of 2004, hereinafter referred to as the "Act"), and as provided for in section 40(1)(a) of the Act, hereby grant an Atmospheric Emission Licence to Sasol Oil (Pty) Ltd ('the Applicant)."

The Atmospheric Emission Licence is issued to **Sasol Oil (Pty) Ltd** in terms of section 42 of the National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004), in respect of Listed Activity **Category 2 Sub-category 2.4: Storage and Handling of Petroleum Products; Sub-category 6: Organic Chemical Industry.**

The Atmospheric Emission Licence has been issued based on information provided in the company's application dated **29 November 2024** and information that became available during processing of the application.

The Atmospheric Emission Licence is valid upon signature for a period not exceeding five (05) years from the date of issue of this licence. The reason for issuing the licence is renewal. 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 ("the holder").

1 ATMOSPHERIC EMISSION LICENCE ADMINISTRATION

| 7 7 THOSE METRIC ENHANCE LIGHT CE 7 TE III | 7 THIS OF THE NO EMISSION ENGLISHMENT TO THE TOTAL THE | | |
|--|--|--|--|
| Name of the Licensing Authority | Gert Sibande District Municipality | | |
| Atmospheric Emission Licence Number | Govan Mbeki/Sasol Oil (Pty) Ltd/0019/2025/F05 | | |
| Atmospheric Emission Licence Issue Date | 25 February 2025 | | |
| Atmospheric Emission Licence Type | Renewal | | |
| Renewal Date | 30 November 2029 | | |
| Expiry date | 25 February 2030 | | |

2 ATMOSPHERIC EMISSION LICENCE HOLDER DETAILS

| Enterprise Name | Sasol South Africa Limited |
|--|---|
| Trading as | Sasol Secunda Energy Tank Farm |
| Enterprise Registration Number (Registration Numbers if Joint Venture) | 1981/007622/07 |
| Registered Address | Sasol Place 50 Katherine Street Sandton Gauteng |
| Postal Address | P.O. Box 5486 Johannesburg 2000 |



| Telephone Number (General) | 017 610 5105 |
|--|------------------------|
| Industry Sector | Petrochemical Products |
| Name of Responsible Person or Emission Control | Mr. Hannes Buys |
| Officer | |
| Telephone Number | 017 619 3512 |
| Cell Phone Number | 082 339 3906 |
| Email Address | Hannes.buys@sasol.com |
| After Hours Contact Details | 082 902 1989 |
| Land Use Zoning as per Town Planning Scheme | Industrial Special |

3. LOCATION AND EXTENT OF PLANT

3.1. Facility Address

| Physical Address of the Premises | PDP Kruger Secunda 2302 | |
|---|------------------------------------|--|
| Description of Site (Erf) | Highveld Ridge, Mpumalanga | |
| Coordinates of Approximate Centre of Operations | Latitude Longitude: | |
| Extent (km²) | 24.05 | |
| Elevation Above Mean Sea Level (m) | 1 597 | |
| Province | Mpumalanga | |
| Metropolitan/District Municipality | Gert Sibande District Municipality | |
| Local Municipality | Govan Mbeki Local Municipality | |
| Designated Priority Area | Highveld Priority Area | |

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

- Secunda residential and commercial
- Embalenhle residential and commercial
- Farming activities





Figure 1: Secunda Operations satellite image

4. GENERAL CONDITIONS

4.1. Process and ownership changes

- (a) 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 always properly maintained, and operated.
- (b) 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. The investigation, assessment, and communication of potential impact of such an activity must follow the 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) as amended.
- (c) Any changes in processes or production increases, by the licence holder, will require prior written approval from the licensing authority.
- (d) Any changes or increase to the type and quantities of input materials and products, or to production equipment and treatment facilities will require prior written approval from the licensing authority.
- (e) 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 thirty (30) working days after the change of ownership.
- (f) The licence holder must immediately on cessation or decommissioning of the listed activity inform, in writing the licensing authority.
- (g) The licence holder must notify the Licensing Authority in writing and submit the closure and rehabilitation plan three (3) months prior to the decommissioning of the facility.

4.2. General duty of care

(a) 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 as amended including Part II Section 3 of Gert Sibande District Municipal Air Quality by-laws.

- (b) 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 as amended.
- (c) 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 as amended including Part III Section 3 of Gert Sibande District Municipal Air Quality by-laws.

4.3. Sampling and/or analysis requirements

- (a) Measurement, calculation and /or sampling and analysis shall be carried out in accordance with any nationally or internationally acceptable standard in line with Annexure A of NEMAQA as amended.
- (b) Methods other than those contained in Annexure A of NEMAQA as amended may be used with the written consent of the National Air Quality Officer.
- (c) In seeking the written consent referred to in paragraph (b), an applicant must provide the National Air Quality Officer with any information that supports the equivalence of the method other than those listed in Annexure A of NEMAQA as amended.
- (d) The licence holder is responsible for quality assurance of methods and performance. Where the holder of the licence uses internal or external laboratories for sampling or analysis, only accredited laboratories by the national accreditation body shall be used. The certified copy of accreditation of the internal or external laboratory must be submitted to the Licensing Authority on annual basis.
- (e) The licence holder must provide the Licensing Authority on request with raw data obtained during sampling and or analysis including proof of agreed methodology used to reach the results submitted for compliance.

4.4. General requirements for licence holder

- (a) The licence holder must conduct an induction on air quality management issues including compliance with the conditions of this licence to 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.
- (b) 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.
- (c) A valid licence must be kept at the premises where the listed activity is undertaken. The licence must be made available to the Environmental Management Inspector / Air Quality Officer or an authorised officer representing the licensing authority who requests to see it.
- (d) The Atmospheric Emission Licence Certificate must be displayed at the premises where the listed activity is undertaken.
- (e) The licence holder must inform, in writing, the licensing authority of any change to its details but not limited to the name of the Emission Control Officer, postal address and/or telephonic details within five (05) working days after such change has been effected.
- (f) The Emission Control Officer or facility representative must attend the Highveld Priority Area Implementation Task Team or Air Quality Stakeholder Forum Meetings bi-annually.
- (g) The licence holder must report and submit annual emission report for the preceding year in terms of GNR 283 in Government Gazette 38633 of 02 April 2015 and GNR 4493 in Government Gazette 50284 of 08 March 2024 (National Atmospheric Emission Inventory System Reporting Regulations).
- (h) The licence holder must hold an environmental/air quality consultation meeting with interested and affected parties as well the community surrounding Sasol Secunda bi-annually to give feedback on the progesses, projects conducted by

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the facility as well as compliance status in relation to air quality management. The licence holder must submit written proof of such consultation to the licensing authority bi-annually.

4.5. Statutory obligations

The licence holder must comply with the obligations as set out in Chapter 5 of NEMAQA (Act No. 39 of 2004) as amended, National Environmental Management Act, 1998 (Act No. 108 of 1998) as amended, including Gert Sibande District Municipal Air Quality Management by-laws.

5 NATURE OF PROCESS

5.1. Process Description

5.1.1. Bulk petroleum and chemicals storage facility

Secunda Tank farm Operations (STO), a division of Sasol Oil (Ply) Ltd, operates a facility for storage, transfer and blending of various liquid petroleum products and chemicals. The facility has approximately 200 aboveground storage tanks of various sizes and designs. The tank farm includes dome roof tanks, cone roof tanks, external floating roof tanks, and cryogenic storage and pressure spheres. Different final and intermediate products are stored and handled, ranging from heavy oils to light end volatile products. The facility also blends various final fuel products to meet market specifications.

There are several sumps in the STO battery limit. These sumps are connected to the underground gravity drainage system and are used for the catchment of relatively small amounts of petroleum and chemical discharges during routine operations.

5.1.2. Loading and offloading facilities

There are loading and off-loading areas (road and rail) in STO. These facilities are mostly used for the handling of processed materials. Some of these are currently not in use. There are several additive drums in STO typically small compared to other storage tanks. These additives are used as part of the fuels blending process to meet market specifications. Each of these drums have an associated off-loading area where additives are off-loaded/decanted into the permanent storage drums.

5.1.3. Flares

The main factory and ammonia flare system is a pressure relief collection system that prevents the formation of an explosive mixture under any relief scenario that is intended to protect process equipment in a safe manner and to purge inert containing off gas.

| Flare | Description | Products predominantly flared |
|--|--|--|
| Four Main Factory Flares | Flares for gas combustion with liquid seals at base and designed for steam assisted smokeless flaring. | A mixture of hydrogen, carbon monoxide, methane, ethane, propane, butane, ethylene, propylene, C5 to C6 hydrocarbons |
| Two Ammonia Flares | Flares for gas combustion of ammonia, propylene, propane, and butane from pressurized storage tanks, typically resulting from tank breathing. Off-gasses from propane, butane and ammonia loading operations are also routed here. | propylene. |
| Non-acidic Chemical Burner (NAC) | It is a ground burner facility used for combustion of excess amounts of liquid non- acidic chemicals from the solvents value chain. | |
| Evergreen Flare | It is a ground burner facility used for combustion of excess amounts of liquid fuels and chemicals. | Off specification intermediate fuel components and solvents. |

5.2. Listed Activities

| Listed Activity Number | Category of Listed Activity | Sub-category of the listed activity | Description of the Listed Activity | Application | Secunda Soil Processes |
|------------------------------|----------------------------------|--|---|--|-----------------------------------|
| 2.4 | Petroleum Industry | Storage and Handling of Petroleum Products | Petroleum product storage tanks and product transfer facilities. | All permanent immobile liquid storage tanks larger than 1000 cubic meters cumulative tankage capacity at the site. | Petroleum Storage Tanks |
| 6 | Organic Chemicals Industry | N/A | The production or use in production of organic chemicals not specified elsewhere including acetylene, acetic, maleic or phthalic anhydride or their acids, carbon disulphide, pyridine, formaldehyde, acetaldehyde, acrolein and its derivatives, acrylonitrile, amines and synthetic rubber. The production of organometallic compounds, organic dyes and pigments, surface active agents. The polymerisation or copolymerisation of any unsaturated hydrocarbons substituted hydrocarbons (including vinyl chloride). The manufacture, recovery or purification of acrylic acid or any ester of acrylic acid. The use of toluene di-isocyanate or other di-isocyanate or comparable volatility or recovery of pyridine. | and/or using more than 100 tons per annum of any of the listed compounds. | Organic Chemical Storage Tanks |



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5.3. Unit process or processes

| Unit process | Function of unit process | Batch or continuous process | Operating hours | Operating days per year |
|----------------------------|--|-----------------------------|-----------------|-------------------------|
| Flares | | | | |
| Four main factory flares | Flares for gas combustion with liquid seals at base and designed for steam assisted smokeless flaring. | Continuous | 24 | 365 |
| Two ammonia flares | Flares for gas combustion of ammonia, propylene, propane and butane from pressurized storage tanks, typically resulting from tank breathing. Off-gases from propane, butane and ammonia loading operations are also routed to the flare. | Continuous | 24 | 365 |
| Non-acidic chemical burner | It is a ground burner facility used for combustion of excess amounts of liquid non-acidic chemicals form the solvents value chain. | Batch | As required | As required |
| Evergreen flare | It is a ground burner facility used for combustion of excess amounts of liquid fuels and chemicals. | Batch | As required | As required |
| Storage Tanks | | | | |
| U56 | Storage of intermediate components, final products and blending. | Continuous | 24 | 365 |
| U256 | Storage of intermediate components and final products. | Continuous | 24 | 365 |
| U57/257 | Storage and blending of liquefied petroleum gasses, ammonia refrigeration and storage. | Continuous | 24 | 365 |
| Loading Facility | | | | |
| U57/257 | Dispatch and receiving liquefied petroleum gasses and other commodities. | Continuous | 24 | 365 |

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5.4. Graphical Process Information

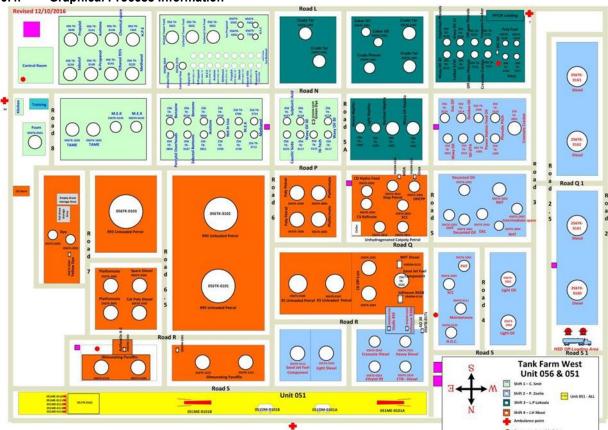


Figure 2: Tank Farm West (U056) and Flares (U051)

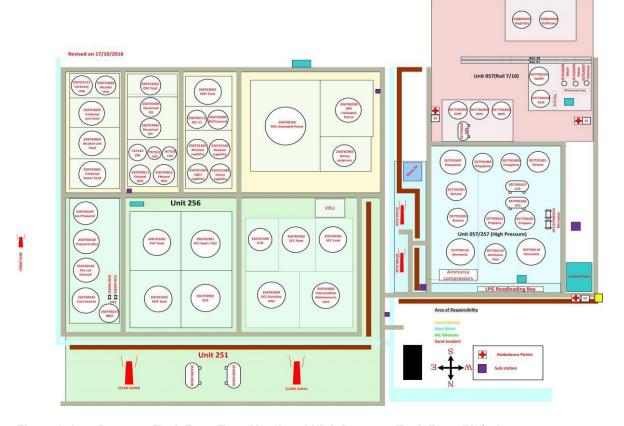


Figure 3: Low Pressure Tank Farm East (U256) and High-Pressure Tank Farm (U2/57)

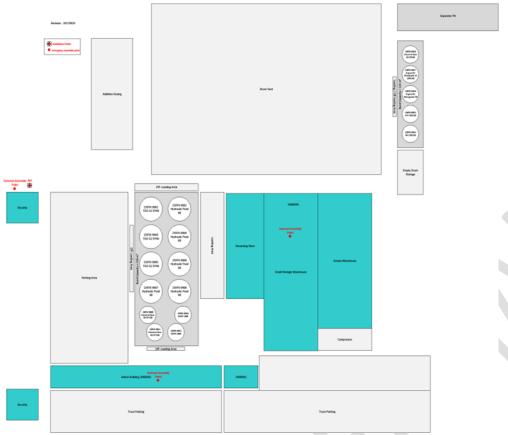


Figure 4: Sasol Oil Depot (U2/59)

RAW MATERIAL AND PRODUCTS

6. 6.1. Raw material

| Material type | Maximum Operational Consumption Units (quantity/period) Rate |
|--|--|
| Flares | |
| Four Main Flares | |
| A mixture of hydrogen, carbon monoxide, methane, | |
| ethane, propane, butane, Ethylene, Propylene, C5 | requirements per flare. |
| to C6 hydrocarbons. | |
| Ammonia | |
| Ammonia, propane, butane and propylene. | In line with maximum and safety Tons per hour |
| | requirements per flare. |
| Non-acidic chemical burner | |
| Mixture of solvents containing mostly water, | In line with maximum and safety Tons per hour |
| alcohols and ketones. | requirements per flare. |
| Evergreen flares | |
| Off specification intermediate fuel | In line with maximum and safety Tons per hour |
| components and solvents. | requirements per flare. |
| Storage of petroleum and organic chemicals | |
| U056/256 tank farm west and east. | Varying Cubic meters per hour |
| U057/257 high pressure tank farm. | Varying Cubic meters per hour |

| Process materials and additives | | |
|---------------------------------|---------|-----------------------|
| Benzene | Varying | Cubic meters per hour |
| Caustic | Varying | Cubic meters per hour |
| Dipe | Varying | Cubic meters per hour |
| Methanol | Varying | Cubic meters per hour |
| Sulphuric acid | Varying | Cubic meters per hour |
| OLI 9000 | Varying | Cubic meters per hour |
| Infeneum R388 | Varying | Cubic meters per hour |
| Stadus 450 | Varying | Cubic meters per hour |
| EHN | Varying | Cubic meters per hour |
| Green dye | Varying | Cubic meters per hour |
| Yellow dye | Varying | Cubic meters per hour |
| MDA | Varying | Cubic meters per hour |
| OTX | Varying | Cubic meters per hour |
| Authentix | Varying | Cubic meters per hour |
| Scentinel | Varying | Cubic meters per hour |
| DCI-4A | Varying | Cubic meters per hour |

6.2 Production rates

| Production name | Maximum Production Rate | Units (quantity/period) |
|-----------------|-------------------------|-------------------------|
| None | | |

6.3. Material used in energy sources

| Energy Source | Maximum Consumption Rate | Units (quantity/period) | |
|------------------|--------------------------|--------------------------------|--|
| Four main flares | | | |
| Fuel gas | 48 | Cubic meters (normal) per hour | |
| Steam | 92 | Tons per hour | |
| Electricity | 62 | Kilowatt hour per day | |



6.4. Sources of atmospheric emission6.4.1. Point Source Parameters

| Point source 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) | Gas exit temperature (°C) | Gas volumetric flow (m³/h) | Gas exit velocity (m/s) | Emission hours | Type emission | of |
|-------------------|-------------|----------------------------------|-----------------------------------|------------------------------------|--|--|---------------------------|----------------------------------|-------------------------------|-------------------|------------------|----|
| None | | | | | | | | | | | | |

6.4.2. Area Source Parameters

6.4.2.1. Petroleum Products and Intermediates

| Unique ID | Source name | Latitude (decimal degrees) | Longitude (decimal degrees) | Height of Release Above Ground (m) | Length of Area (m) | Width of Area (m) | Emission hours | Type of emission |
|-----------|-------------|----------------------------|-----------------------------------|---------------------------------------|--------------------|-------------------|-------------------|------------------|
| EU0003 | 056TK1402 | | | 10.00 | N/A | N/A | 24 | Intermittent |
| EU0004 | 256TK9301 | | | 20.45 | N/A | N/A | 24 | Intermittent |
| EU0005 | 56TK0107 | | | 14.25 | N/A | N/A | 24 | Intermittent |
| EU0008 | 256TK3301 | | | 14.35 | N/A | N/A | 24 | Intermittent |
| EU0010 | 56TK3301 | | | 14.35 | N/A | N/A | 24 | Intermittent |
| EU0027 | 56TK3201 | | | 14.63 | N/A | N/A | 24 | Intermittent |
| EU0032 | 256TK3202 | | | 14.63 | N/A | N/A | 24 | Intermittent |
| EU0033 | 256TK3201 | | | 14.63 | N/A | N/A | 24 | Intermittent |
| EU0034 | 56TK0130 | | | 10.00 | N/A | N/A | 24 | Intermittent |
| EU0046 | 256TK1401 | | | 10.00 | N/A | N/A | 24 | Intermittent |
| EU0047 | 256TK1402 | | | 10.00 | N/A | N/A | 24 | Intermittent |
| EU0048 | 256TK2902 | | | 14.35 | N/A | N/A | 24 | Intermittent |
| EU0049 | 256TK3401 | | | 11.88 | N/A | N/A | 24 | Intermittent |
| EU0050 | 256TK3402 | | | 11.88 | N/A | N/A | 24 | Intermittent |
| EU0051 | 256TK9302 | | | 20.45 | N/A | N/A | 24 | Intermittent |
| EU0052 | 56TK0113 | | | 14.35 | N/A | N/A | 24 | Intermittent |

| EU0053 | 56TK0121 | 9.00 | N/A | N/A | 24 | Intermittent |
|--------|-----------|-------|-----|-----|----|--------------|
| EU0054 | 56TK0122 | 9.00 | N/A | N/A | 24 | Intermittent |
| EU0055 | 56TK0214 | 8.00 | N/A | N/A | 24 | Intermittent |
| EU0056 | 56TK1401 | 10.00 | N/A | N/A | 24 | Intermittent |
| EU0057 | 56TK1601 | 9.60 | N/A | N/A | 24 | Intermittent |
| EU0058 | 56TK2901 | 14.35 | N/A | N/A | 24 | Intermittent |
| EU0059 | 56TK2902 | 14.35 | N/A | N/A | 24 | Intermittent |
| EU0060 | 56TK3202 | 14.63 | N/A | N/A | 24 | Intermittent |
| EU0061 | 56TK3401 | 11.88 | N/A | N/A | 24 | Intermittent |
| EU0062 | 56TK3402 | 11.88 | N/A | N/A | 24 | Intermittent |
| EU0063 | 56TK3901 | 12.80 | N/A | N/A | 24 | Intermittent |
| EU0064 | 56TK3902 | 12.80 | N/A | N/A | 24 | Intermittent |
| EU0065 | 56TK2903 | 12.00 | N/A | N/A | 24 | Intermittent |
| EU0066 | 56TK3501 | 14.35 | N/A | N/A | 24 | Intermittent |
| EU0067 | 256TK3001 | 14.75 | N/A | N/A | 24 | Intermittent |
| EU0001 | 256TK2811 | 11.12 | N/A | N/A | 24 | Intermittent |
| EU0068 | 256TK2812 | 11.12 | N/A | N/A | 24 | Intermittent |
| EU0069 | 56TK3305 | 9.50 | N/A | N/A | 24 | Intermittent |
| EU0070 | 256TK3320 | 11.88 | N/A | N/A | 24 | Intermittent |
| EU0071 | 56TK3321 | 12.18 | N/A | N/A | 24 | Intermittent |
| EU0072 | 56TK3322 | 12.18 | N/A | N/A | 24 | Intermittent |
| EU0073 | 56TK3308 | 9.50 | N/A | N/A | 24 | Intermittent |
| EU0074 | 56TK3309 | 9.50 | N/A | N/A | 24 | Intermittent |
| EU0075 | 56TK1508 | 9.00 | N/A | N/A | 24 | Intermittent |
| EU0076 | 256TK1508 | 9.00 | N/A | N/A | 24 | Intermittent |
| EU0077 | 56TK1505 | 8.00 | N/A | N/A | 24 | Intermittent |
| EU0078 | 256TK1505 | 8.00 | N/A | N/A | 24 | Intermittent |
| EU0079 | 56TK1414 | 7.00 | N/A | N/A | 24 | Intermittent |

| EU0080 | 56TK1501 | 11.90 | N/A | N/A | 24 | Intermittent |
|--------|------------|-------|-----|-----|----|--------------|
| EU0081 | 56TK1502 | 11.90 | N/A | N/A | 24 | Intermittent |
| EU0082 | 256TK1501 | 11.88 | N/A | N/A | 24 | Intermittent |
| EU0083 | 256TK1502 | 11.88 | N/A | N/A | 24 | Intermittent |
| EU0084 | 56TK3005 | 14.25 | N/A | N/A | 24 | Intermittent |
| EU0085 | 56TK3006 | 14.25 | N/A | N/A | 24 | Intermittent |
| EU0086 | 256TK3005 | 15.67 | N/A | N/A | 24 | Intermittent |
| EU0087 | 256TK3006 | 15.67 | N/A | N/A | 24 | Intermittent |
| EU0088 | 56TK3521 | 11.98 | N/A | N/A | 24 | Intermittent |
| EU0089 | 256TK2801 | 11.88 | N/A | N/A | 24 | Intermittent |
| EU0090 | 256TK2901 | 14.35 | N/A | N/A | 24 | Intermittent |
| EU0091 | 256TK2904 | 14.75 | N/A | N/A | 24 | Intermittent |
| EU0092 | 56TK3304 | 20.10 | N/A | N/A | 24 | Intermittent |
| EU0093 | 256TK3852 | 20.20 | N/A | N/A | 24 | Intermittent |
| EU0094 | 256TK3002 | 9.60 | N/A | N/A | 24 | Intermittent |
| EU0095 | 56TK0101 | 11.90 | N/A | N/A | 24 | Intermittent |
| EU0096 | 56TK0102 | 11.90 | N/A | N/A | 24 | Intermittent |
| EU0097 | 56TK0103 | 11.70 | N/A | N/A | 24 | Intermittent |
| EU0098 | 56TK0105 | 21.4 | N/A | N/A | 24 | Intermittent |
| EU0099 | 56TK0106 | 14.3 | N/A | N/A | 24 | Intermittent |
| EU0100 | 256TK0104 | 15.85 | N/A | N/A | 24 | Intermittent |
| EU0101 | 256TK0108 | 14.81 | N/A | N/A | 24 | Intermittent |
| EU0102 | 56TK3010 | 9.50 | N/A | N/A | 24 | Intermittent |
| EU0103 | 56TK0109 | 12.20 | N/A | N/A | 24 | Intermittent |
| EU0104 | 56TK0110 | 12.20 | N/A | N/A | 24 | Intermittent |
| EU0106 | 56TK0112 | 14.40 | N/A | N/A | 24 | Intermittent |
| EU0112 | 057TKB901* | 13.17 | N/A | N/A | 24 | Intermittent |
| EU0113 | 057TKB906 | 16.00 | N/A | N/A | 24 | Intermittent |



| EU0114 | 056TK0114 | 10.00 | N/A | N/A | 24 | Intermittent |
|--------|-----------|-------|-----|-----|----|--------------|
| EU0115 | 056TK0115 | 4.80 | N/A | N/A | 24 | Intermittent |
| EU0116 | 056TK0117 | 6.40 | N/A | N/A | 24 | Intermittent |
| EU0117 | 056TK0118 | 6.40 | N/A | N/A | 24 | Intermittent |
| EU0118 | 056TK0125 | 10.00 | N/A | N/A | 24 | Intermittent |
| EU0119 | 056TK0126 | 10.00 | N/A | N/A | 24 | Intermittent |
| EU0120 | 056TK0129 | 10.00 | N/A | N/A | 24 | Intermittent |
| EU0121 | 056TK0133 | 8.00 | N/A | N/A | 24 | Intermittent |
| EU0122 | 056TK0134 | 8.00 | N/A | N/A | 24 | Intermittent |
| EU0123 | 056TK0139 | 10.00 | N/A | N/A | 24 | Intermittent |
| EU0124 | 056TK1405 | 10.00 | N/A | N/A | 24 | Intermittent |
| EU0125 | 056TK1406 | 10.00 | N/A | N/A | 24 | Intermittent |
| EU0126 | 056TK1409 | 10.40 | N/A | N/A | 24 | Intermittent |
| EU0127 | 056TK1410 | 10.40 | N/A | N/A | 24 | Intermittent |
| EU0128 | 056TK1413 | 7.00 | N/A | N/A | 24 | Intermittent |
| EU0129 | 056TK1417 | 8.80 | N/A | N/A | 24 | Intermittent |
| EU0130 | 056TK1418 | 8.80 | N/A | N/A | 24 | Intermittent |
| EU0131 | 056TK1602 | 14.20 | N/A | N/A | 24 | Intermittent |
| EU0132 | 056TK1603 | 13.70 | N/A | N/A | 24 | Intermittent |
| EU0133 | 056TK2810 | 9.50 | N/A | N/A | 24 | Intermittent |
| EU0134 | 056TK3002 | 9.60 | N/A | N/A | 24 | Intermittent |
| EU0135 | 056TK3004 | 4.85 | N/A | N/A | 24 | Intermittent |
| EU0136 | 056TK3320 | 12.91 | N/A | N/A | 24 | Intermittent |
| EU0137 | 056TK3502 | 9.60 | N/A | N/A | 24 | Intermittent |
| EU0138 | 056TK3503 | 14.40 | N/A | N/A | 24 | Intermittent |
| EU0139 | 056TK3504 | 14.40 | N/A | N/A | 24 | Intermittent |
| EU0140 | 056TK3520 | 14.35 | N/A | N/A | 24 | Intermittent |
| EU0141 | 056TK3903 | 12.80 | N/A | N/A | 24 | Intermittent |

| EU0142 | 057TK0101 | 17.50 | N/A | N/A | 24 | Intermittent |
|--------|-----------|-------|-----|-----|----|--------------|
| EU0143 | 057TK0106 | 14.43 | N/A | N/A | 24 | Intermittent |
| EU0144 | 057TK0107 | 14.43 | N/A | N/A | 24 | Intermittent |
| EU0145 | 057TK0110 | 22.28 | N/A | N/A | 24 | Intermittent |
| EU0146 | 057TK0115 | 9.85 | N/A | N/A | 24 | Intermittent |
| EU0147 | 057TK0201 | 8.53 | N/A | N/A | 24 | Intermittent |
| EU0148 | 057TK0202 | 12.97 | N/A | N/A | 24 | Intermittent |
| EU0149 | 057TK0203 | 12.19 | N/A | N/A | 24 | Intermittent |
| EU0150 | 057TK0204 | 12.19 | N/A | N/A | 24 | Intermittent |
| EU0151 | 057TK2401 | 12.11 | N/A | N/A | 24 | Intermittent |
| EU0152 | 05TK2405 | 9.22 | N/A | N/A | 24 | Intermittent |
| EU0153 | 057TK3201 | 15.89 | N/A | N/A | 24 | Intermittent |
| EU0154 | 256TK0117 | 6.40 | N/A | N/A | 24 | Intermittent |
| EU0155 | 256TK0118 | 6.00 | N/A | N/A | 24 | Intermittent |
| EU0156 | 256TK0145 | 11.98 | N/A | N/A | 24 | Intermittent |
| EU0157 | 256TK0160 | 14.35 | N/A | N/A | 24 | Intermittent |
| EU0158 | 256TK0161 | 14.35 | N/A | N/A | 24 | Intermittent |
| EU0159 | 256TK1062 | 14.35 | N/A | N/A | 24 | Intermittent |
| EU0160 | 256TK0163 | 14.35 | N/A | N/A | 24 | Intermittent |
| EU0161 | 256TK1509 | 47.60 | N/A | N/A | 24 | Intermittent |
| EU0162 | 256TK2903 | 14.40 | N/A | N/A | 24 | Intermittent |
| EU0163 | 256TK3004 | 4.85 | N/A | N/A | 24 | Intermittent |
| EU0164 | 256TK3501 | 14.35 | N/A | N/A | 24 | Intermittent |
| EU0165 | 256TK3502 | 9.60 | N/A | N/A | 24 | Intermittent |
| EU0166 | 257TK0101 | 17.50 | N/A | N/A | 24 | Intermittent |
| EU0167 | 257TK0110 | 22.28 | N/A | N/A | 24 | Intermittent |
| EU0168 | 257TK2405 | 9.22 | N/A | N/A | 24 | Intermittent |
| EU0169 | 257TK2407 | 14.60 | N/A | N/A | 24 | Intermittent |

| EU0170 | 257TK3201 | 15.89 | N/A | N/A | 24 | Intermittent |
|--------|------------|-------|-----|-----|----|--------------|
| EU0171 | 259TK9911 | 20.00 | N/A | N/A | 24 | Intermittent |
| EU0172 | 259TK9912 | 20.00 | N/A | N/A | 24 | Intermittent |
| EU0173 | 259TK9909 | 20.00 | N/A | N/A | 24 | Intermittent |
| EU0174 | 259TK9910 | 20.00 | N/A | N/A | 24 | Intermittent |
| EU0175 | 259TK9907 | 20.00 | N/A | N/A | 24 | Intermittent |
| EU0176 | 259TK9908 | 20.00 | N/A | N/A | 24 | Intermittent |
| EU0177 | 259TK9905 | 20.00 | N/A | N/A | 24 | Intermittent |
| EU0178 | 259TK9906 | 20.00 | N/A | N/A | 24 | Intermittent |
| EU0179 | 259TK9903 | 20.00 | N/A | N/A | 24 | Intermittent |
| EU0180 | 259TK9904 | 20.00 | N/A | N/A | 24 | Intermittent |
| EU0181 | 259TK9901 | 20.00 | N/A | N/A | 24 | Intermittent |
| EU0182 | 259TK9902 | 20.00 | N/A | N/A | 24 | Intermittent |
| EU0183 | 259TK9918 | 5.00 | N/A | N/A | 24 | Intermittent |
| EU0184 | 259TK9917 | 5.00 | N/A | N/A | 24 | Intermittent |
| EU0185 | 259TK9916 | 5.00 | N/A | N/A | 24 | Intermittent |
| EU0186 | 259TK9915 | 5.00 | N/A | N/A | 24 | Intermittent |
| EU0187 | 259TK9914 | 5.00 | N/A | N/A | 24 | Intermittent |
| EU0188 | 056TK0201 | 5.00 | N/A | N/A | 24 | Intermittent |
| EU0189 | 056TK0202 | 5.00 | N/A | N/A | 24 | Intermittent |
| EU0190 | 256TK0115 | 4.83 | N/A | N/A | 24 | Intermittent |
| EU0191 | 256TK0217 | 6.05 | N/A | N/A | 24 | Intermittent |
| EU0192 | 56TK0225 | 7.40 | N/A | N/A | 24 | Intermittent |
| EU0193 | 56TK0227 | 5.00 | N/A | N/A | 24 | Intermittent |
| EU0194 | 57TK0228** | 4.00 | N/A | N/A | 24 | Intermittent |
| EU0195 | 57TK0226 | 12.19 | N/A | N/A | 24 | Intermittent |
| EU0196 | 056TK-0172 | 10 | N/A | N/A | 24 | Intermittent |
| EU0197 | 056TK-0173 | 10 | N/A | N/A | 24 | Intermittent |



| EU0198 | 056TK-0175A*** | 19.7 | N/A | N/A | 24 | Intermittent |
|--------|----------------|-------|-----|-----|----|--------------|
| EU0199 | 056TK-0175B*** | 19.7 | N/A | N/A | 24 | Intermittent |
| EU0200 | 056TK-0176*** | 16.4 | N/A | N/A | 24 | Intermittent |
| EU0201 | 056TK-0177A*** | 18.15 | N/A | N/A | 24 | Intermittent |
| EU0202 | 056TK-0177B*** | 18.15 | N/A | N/A | 24 | Intermittent |
| EU0203 | 056TK-3522 | 12.5 | N/A | N/A | 24 | Intermittent |

^{*57}TKB906 is not in operation

6.4.2.2. Organic chemical storage tanks

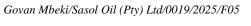
| Unique ID | Source name | Latitude (decimal | Longitude | Height of | Length of Area (m) | Width of Area | Emission hours | Type of |
|-----------|-------------|-------------------|-----------|---------------|--------------------|---------------|-----------------------|--------------|
| | | degrees) | (decimal | Release Above | | (m) | | emission |
| | | | degrees) | Ground (m) | | | | |
| EU006 | 56TK0216 | | | 7.23 | N/A | N/A | 24 | Intermittent |
| EU007 | 256TK3812 | | | 7.23 | N/A | N/A | 24 | Intermittent |
| EU009 | 56TK3812 | | | 7.23 | N/A | N/A | 24 | Intermittent |
| EU0011 | 56TK3721 | | | 7.23 | N/A | N/A | 24 | Intermittent |
| EU0012 | 256TK3721 | | | 7.23 | N/A | N/A | 24 | Intermittent |
| EU0013 | 256TK0148 | | | 11.88 | N/A | N/A | 24 | Intermittent |
| EU0014 | 256TK3601 | | | 11.88 | N/A | N/A | 24 | Intermittent |
| EU0015 | 256TK3602 | | | 9.60 | N/A | N/A | 24 | Intermittent |
| EU0016 | 256TK3706 | | | 7.23 | N/A | N/A | 24 | Intermittent |
| EU0017 | 256TK3811 | | | 7.23 | N/A | N/A | 24 | Intermittent |
| EU0018 | 256TK3851 | | | 6.40 | N/A | N/A | 24 | Intermittent |
| EU0019 | 256TK3705 | | | 7.23 | N/A | N/A | 24 | Intermittent |
| EU0020 | 56TK7301 | | | 9.60 | N/A | N/A | 24 | Intermittent |
| EU0021 | 56TK3706 | | | 7.23 | N/A | N/A | 24 | Intermittent |



^{**57}TK-0228 has been taken out for long repairs

^{***}Clean Fuels 2 tanks to be commissioned September 2025

| EU0022 | 56TK7302 | - | 9.60 | N/A | N/A | 24 | Intermittent |
|--------|-----------|---|-------|-----|-----|----|--------------|
| EU0023 | 56TK3601 | - | 11.88 | N/A | N/A | 24 | Intermittent |
| EU0024 | 56TK3603 | _ | 11.88 | N/A | N/A | 24 | Intermittent |
| EU0025 | 256TK3850 | _ | 6.40 | N/A | N/A | 24 | Intermittent |
| EU0026 | 56TK3602 | _ | 9.60 | N/A | N/A | 24 | Intermittent |
| EU0028 | 56TK7303 | _ | 12.80 | N/A | N/A | 24 | Intermittent |
| EU0029 | 56TK3811 | - | 7.23 | N/A | N/A | 24 | Intermittent |
| EU0030 | 56TK3705 | - | 7.23 | N/A | N/A | 24 | Intermittent |
| EU0031 | 256TK0143 | - | 11.98 | N/A | N/A | 24 | Intermittent |
| EU0035 | 56TK0143 | | 11.98 | N/A | N/A | 24 | Intermittent |
| EU0036 | 56TK0146 | - | 11.98 | N/A | N/A | 24 | Intermittent |
| EU0037 | 56TK0203 | - | 11.98 | N/A | N/A | 24 | Intermittent |
| EU0038 | 56TK3709 | - | 4.85 | N/A | N/A | 24 | Intermittent |
| EU0039 | 56TK3710 | - | 4.85 | N/A | N/A | 24 | Intermittent |
| U0040 | 56TK3713 | - | 4.85 | N/A | N/A | 24 | Intermittent |
| EU0041 | 56TK3714 | | 4.85 | N/A | N/A | 24 | Intermittent |
| EU0042 | 56TK3835 | - | 11.98 | N/A | N/A | 24 | Intermittent |
| :U0043 | 256TK3713 | | 4.85 | N/A | N/A | 24 | Intermittent |
| :U0044 | 256TK3714 | - | 4.85 | N/A | N/A | 24 | Intermittent |
| EU0045 | 256TK3835 | - | 11.98 | N/A | N/A | 24 | Intermittent |
| :U0105 | 256TK0216 | | 7.23 | N/A | N/A | 24 | Intermittent |
| U0192 | 056TK0141 | | 11.95 | N/A | N/A | 24 | Intermittent |
| :U0193 | 056TK0145 | | 11.98 | N/A | N/A | 24 | Intermittent |
| :U0194 | 056TK0148 | | 9.50 | N/A | N/A | 24 | Intermittent |





| EU0195 | 056TK0150 | | 9.60 | N/A | N/A | 24 | Intermittent |
|--------|------------|--------------|-------|-----|-----|----|--------------|
| EU0196 | 056TK0166 | | 9.60 | N/A | N/A | 24 | Intermittent |
| EU0197 | 056TK0167 | | 9.60 | N/A | N/A | 24 | Intermittent |
| EU0198 | 056TK0168 | _ | 9.60 | N/A | N/A | 24 | Intermittent |
| EU0199 | 056TK0020 | | 11.88 | N/A | N/A | 24 | Intermittent |
| EU0200 | 056TK0301 | | 4.76 | N/A | N/A | 24 | Intermittent |
| EU0201 | 056TK0302 | _ | 4.76 | N/A | N/A | 24 | Intermittent |
| EU0202 | 056TK3804 | _ | 11.98 | N/A | N/A | 24 | Intermittent |
| EU2023 | 056TK3815 | | 4.85 | N/A | N/A | 24 | Intermittent |
| EU0204 | 056TK3816 | _ | 4.85 | N/A | N/A | 24 | Intermittent |
| EU0205 | 056TK3819 | | 4.85 | N/A | N/A | 24 | Intermittent |
| EU0206 | 056TK3820 | _ | 4.85 | N/A | N/A | 24 | Intermittent |
| EU0207 | 056TK3821 | _ | 6.00 | N/A | N/A | 24 | Intermittent |
| EU0208 | 056TK3822 | | 6.00 | N/A | N/A | 24 | Intermittent |
| EU0209 | 056TK3836 | , | 8.30 | N/A | N/A | 24 | Intermittent |
| EU0210 | 056TK3837 | | 8.30 | N/A | N/A | 24 | Intermittent |
| EU0211 | 056TK3838 | | 14.36 | N/A | N/A | 24 | Intermittent |
| EU0212 | 256TK0146 | | 11.98 | N/A | N/A | 24 | Intermittent |
| EU0213 | 256TK0149 | | 11.88 | N/A | N/A | 24 | Intermittent |
| EU0214 | 256TK3603 | | 11.88 | N/A | N/A | 24 | Intermittent |
| EU0215 | 256TK3709* | | 4.85 | N/A | N/A | 24 | Intermittent |
| EU0216 | 256TK3710* | _ | 4.85 | N/A | N/A | 24 | Intermittent |
| EU0217 | 256TK7310 | | 7.32 | N/A | N/A | 24 | Intermittent |
| EU0218 | 256TK7311 | | 7.32 | N/A | N/A | 24 | Intermittent |
| EU0219 | 256TK7312 | | 10.00 | N/A | N/A | 24 | Intermittent |

^{*}Not in operation



6.4.2.3. Flares

| Unique | Source name | Latitude (decimal | Longitude | Height of Release Above | Length of Area | Width of Area | Emission | Type of |
|--------|---|-------------------|-------------------|-------------------------|----------------|---------------|----------|--------------|
| ID | | degrees) | (decimal degrees) | Ground (m) | (m) | (m) | hours | emissions |
| 01 | Main flare (056ME0101A) | | | 100 | N/A | N/A | 24 | Intermittent |
| 02 | Main flare (056ME0101B) | | | 100 | N/A | N/A | 24 | Intermittent |
| 03 | Main flare (256ME0101A) | | | 100 | N/A | N/A | 24 | Intermittent |
| 04 | Main flare (256ME0101B) | | | 100 | N/A | N/A | 24 | Intermittent |
| 05 | Ammonia flare (057ME-0110) | | | 20 | N/A | N/A | 24 | Intermittent |
| 06 | Ammonia flare (057ME0110) | | | 20 | N/A | N/A | 24 | Intermittent |
| 07 | Non-acidic chemical burner (051ME0110-0114) | | | 2 | N/A | N/A | 24 | Intermittent |
| 08 | Evergreen flare (256ME0108) | | | 2 | N/A | N/A | 24 | Intermittent |

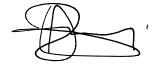
7. APPLIANCES AND MEASURES TO PREVENT AIR POLLUTION

7.1. Appliances and control measures

| | Appliances | | | | Abatement Equipment Control Technology | | | | | | |
|--------------------|------------|---------------|---------------|-----------------------|---|---------------|---------|-----|-------|---------|-------------------------------|
| Unique Stack ID | • | | Serial Number | Equipment Manufacture | quipment Equipment Equipment Date Significant Name and Technology | | | | | Control | Minimum Utilization (%) |
| EU0095 | 056TK-0101 | Floating Roof | 056TK-0101 | Unknown | Floating Roof | Floating Roof | Unknown | N/A | 45180 | 95 | EU0095 |



| EU0096 | 056TK-0102 | Floating Roof | 056TK-0102 | Unknown | Floating Roof | Floating Roof | Unknown | N/A | 45180 | 95 | EU0096 |
|--------|------------|---------------|------------|---------|---------------|---------------------------|---------|-----|-------|----|--------|
| EU0097 | 056TK-0103 | Floating Roof | 056TK-0103 | Unknown | Floating Roof | Floating Roof | Unknown | N/A | 45180 | 95 | EU0097 |
| EU0098 | 056TK-0105 | Floating Roof | 056TK-0105 | Unknown | Floating Roof | Floating Roof | Unknown | N/A | 9699 | 95 | EU0098 |
| EU0099 | 056TK-0106 | Floating Roof | 056TK-0106 | Unknown | Floating Roof | Floating Roof | Unknown | N/A | 16676 | 95 | EU0099 |
| EU0144 | 056TK-0107 | Floating Roof | 056TK-0107 | Unknown | Floating Roof | Floating Roof | Unknown | N/A | 16676 | 95 | EU0144 |
| EU0080 | 056TK-1501 | Floating Roof | 056TK-1501 | Unknown | Floating Roof | External Floating Roof | Unknown | N/A | 2694 | 95 | EU0080 |
| EU0081 | 056TK-1502 | Floating Roof | 056TK-1502 | Unknown | Floating Roof | External Floating Roof | Unknown | N/A | 2694 | 95 | 100 |
| EU0077 | 056TK-1505 | Floating Roof | 056TK-1505 | Unknown | Floating Roof | External Floating Roof | Unknown | N/A | 628 | 95 | 100 |
| EU0084 | 056TK-3005 | Floating Roof | 056TK-3005 | Unknown | Floating Roof | External Floating Roof | Unknown | N/A | 6522 | 95 | 100 |
| EU0085 | 056TK-3006 | Floating Roof | 056TK-3006 | Unknown | Floating Roof | External Floating Roof | Unknown | N/A | 6522 | 95 | 100 |
| EU0102 | 056TK-3010 | Floating Roof | 056TK-3010 | Unknown | Floating Roof | External Floating Roof | Unknown | N/A | 1532 | 95 | 100 |
| EU0069 | 056TK-3305 | Floating Roof | 056TK-3305 | Unknown | Floating Roof | External Floating Roof | Unknown | N/A | 3275 | 95 | 100 |



| EU0073 | 056TK-3308 | Floating Roof | 056TK-3308 | Unknown | Floating Roof | External Floating Roof | Unknown | N/A | 8524 | 95 | 100 |
|--------|------------|--|------------|---------|--|--|---------|-----|-------|----|-----|
| EU0074 | 056TK-3309 | Floating Roof | 056TK-3309 | Unknown | Floating Roof | External Floating Roof | Unknown | N/A | 8524 | 95 | 100 |
| EU0001 | 256TK-2811 | Floating Roof | 256TK-2811 | Unknown | Floating Roof | External Floating Roof | Unknown | N/A | 2005 | 95 | 100 |
| EU0068 | 256TK-2812 | Floating Roof | 256TK-2812 | Unknown | Floating Roof | External Floating Roof | Unknown | N/A | 2005 | 95 | 100 |
| EU0086 | 256TK-3005 | Floating Roof | 256TK-3005 | Unknown | Floating Roof | External Floating Roof | Unknown | N/A | 7171 | 95 | 100 |
| EU0087 | 256TK-3006 | Floating Roof | 256TK-3006 | Unknown | Floating Roof | External Floating Roof | Unknown | N/A | 7171 | 95 | 100 |
| EU0100 | 256TK-0104 | Floating Roof | 256TK-0104 | Unknown | Floating Roof | External Floating Roof | Unknown | N/A | 45180 | 95 | 100 |
| EU0101 | 256TK-0108 | Floating Roof | 256TK-0108 | Unknown | Floating Roof | External Floating Roof | Unknown | N/A | 19245 | 95 | 100 |
| EU0082 | 256TK-1501 | Floating Roof | 256TK-1501 | Unknown | Floating Roof | External Floating Roof | Unknown | N/A | 2857 | 95 | 100 |
| EU0083 | 256TK-1502 | Floating Roof | 256TK-1502 | Unknown | Floating Roof | External Floating Roof | Unknown | N/A | 2857 | 95 | 100 |
| EU0078 | 256TK-1505 | Floating Roof | 256TK-1505 | Unknown | Floating Roof | External Floating Roof | Unknown | N/A | 659 | 95 | 100 |
| EU0090 | 256TK-2901 | Fixed Roof with internal floating roof | 256TK-2901 | Unknown | Fixed Roof with internal floating roof | Fixed Roof with internal floating roof | Unknown | N/A | 24787 | 95 | 100 |



| EU0091 | 256TK-2904 | Fixed Roof with internal floating roof | 256TK-2904 | Unknown | Fixed Roof with internal floating roof | Fixed Roof with internal floating roof | Unknown | N/A | 24620 | 95 | 100 |
|--------|-------------|--|-------------|---------|--|--|-------------------|-----|---------|----|-----|
| EU0161 | 256TK-1509 | Fixed Roof with internal floating roof | 256TK-1509 | Unknown | Fixed Roof with internal floating roof | Fixed Roof with internal floating roof | Unknown | N/A | 13411 | 95 | 100 |
| EU0162 | 056TK-0175A | Fixed Roof with internal floating roof | 056TK-0175A | Unknown | Fixed Roof with internal floating roof | Internal floating roof | September 2025 | N/A | Unknown | 95 | 100 |
| EU0163 | 056TK-0175B | Fixed Roof with internal floating roof | 056TK-0175B | Unknown | Fixed Roof with internal floating roof | Internal floating roof | September 2025 | N/A | Unknown | 95 | 100 |
| EU0164 | 056TK-0176 | Fixed Roof with internal floating roof | 056TK-0176 | Unknown | Fixed Roof with internal floating roof | Internal floating roof | September 2025 | N/A | Unknown | 95 | 100 |

7.2. Area Source – maximum emission rates (under normal working conditions) Petroleum Storage Tanks (Sub-category 2.4) and Organic Chemical Storage Tanks (Category 6)

The following special arrangements shall apply:

- (a) The following special 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: Leak detection and repair (LDAR) program must be reviewed, updated, and submitted to the Licensing Authority for approval three (03) months after the licence is issued.
- (b) The following special and special arrangements shall apply for control of TVOC's 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 | All permanent immobile liquid storage facilities at a single site with a combined storage capacity of greater than 1000 cubic meters | | | | |
|---|--|--|--|--|--|
| True vapour 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 per Type 2 and 3 | | | | |
| Type 2: Above 14kPa and up to 91 kPa with a throughput of less than 50 000 m³ per annum | Fixed roof tank with pressure vacuum vents fitted as a minimum to prevent 'breathing' losses or as per Type 3 | | | | |



| of greater than 50 000 m ³ per annum | (a) External floating roof tank with primary rim seal and secondary rim seal for tank with diameter greater than 20m, or fixed roof tank with internal floating deck / roof fitted with primary seal, or fixed roof tank with vapour recovery system. (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 pressurized 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 the LDAR programme.

7.3. Area 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 |
|------------------------------|-------------------------------------|--|---|--|---|
| Storage Tanks | All regulated storage tanks | Implementation of fugitive emissions monitoring and management plan. | Immediately | Quarterly reports to the Licensing Authority on the implementation of the fugitive emissions monitoring and management plan. | |
| Flares | All regulated flares | Implementation of fugitive emissions monitoring and management plan. | Immediately | Quarterly reports to the Licensing Authority on the implementation of the fugitive emissions monitoring and management plan. | In line with Sasol Oil approved site fugitive emissions monitoring and management plan. |

7.4. Routine reporting and record-keeping

7.4.1. Complaints register

The licence holder must maintain complaints register at its premises, and such register must be made available for inspections. The complaints register must include the following information: the name of the complainant, 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 licensing authority in a summarised format on the total number of complaints logged. The complaints must be reported in the following format:

- a) Root cause analysis.
- b) Calculation of impacts / emissions associated with incidents and dispersion modelling of pollutants, where applicable.
- c) Measures implemented or to be implemented to prevent recurrence; and
- d) 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.

7.4.2. Annual reporting

The licence holder must complete and submit to the licensing authority an annual report after the facility annual financial year, 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 sixty (60) days after the end of each reporting period. The annual report must include, amongst others the following:

- a) The name, description, and licence reference number of the plant as reflected in the Atmospheric Emission Licence.
- b) The name and address of the accredited measurement service provider that carried out or verified the emission test, including the test report produced by the accredited measurement.
- c) The date and time on which emission test was carried out.
- d) A declaration by the licence holder to the effect that normal operating conditions were maintained during the emission tests.
- e) Pollutant emissions trend for listed activity.
- f) External Atmospheric Emission Licence compliance audit report.
- g) Major upgrades projects (i.e. abatement equipment or process equipment).
- h) Complaints received and action taken to address complains received.
- i) Proof of annual reporting of greenhouse gas emissions to the National Department in accordance with the National Greenhouse Gas Emission Reporting Regulations Government Gazette No. 40762 of 03 April 2017.
- j) Compliance status to statutory obligation (4.5) including any other issued authorisations.

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

| Source Name | Code | 1 | Waste Type | 1 | Effluent | Hazardous Present | Components | Method of Disposal |
|----------------|------|---|---------------|---|----------|----------------------|------------|--------------------|
| N/A | | | | | | | | |



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

Failure to comply with the 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 Chapter 7 Section 52 of NEMAQA (Act No. 39 of 2004), including any penalties contained in the Gert Sibande District Municipality By-laws.

10. APPEAL OF LICENCE

- 10.1 The Licence Holder must notify every registered interested and affected party, in writing and within ten (10) working days of receiving the District's decision.
- 10.2 The notification referred to in 10.1. must
 - 10.2.1 Inform the registered interested and affected parties of the appeal procedure provided for in Chapter 7 Part 3 Section 62 of Municipal Systems Act, 2000 (Act No. 32 of 2000), as amended.
 - 10.2.2 Advise the interested and affected parties that a copy of the Atmospheric Emission Licence and reasons for the decision will be furnished on request.
 - 10.2.3 An appeal against the decision must be lodged in terms of Chapter 7 Part 3 Section 62 of Municipal Systems Act, 2000 (Act No. 32 of 2000), from the date of issue of this Atmospheric Emission Licence, with:

Municipal Manager, PO Box 1748, Ermelo 2350 Fax No. 017-811 1207.

And

10.3. Specify the date on which the Atmospheric Emission Licence was issued.

11. REVIEW OF ATMOSPHERIC EMISSION LICENCE

In terms of NEMAQA (Act No. 39 of 2004) as amended, this Atmospheric Emission Licence is valid for five (05) years from date of issue of this licence.

