ETHEKWINI MUNICIPALITY
Community Services Cluster
Health Unit

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Ref: AEL023/S3
Enquiries: Lindani Kumalo
Office Tel: 031 311 3749
Email: lindani.kumalo@durban.gov.za
Date: 15 June 2022

This Atmospheric Emission Licence is issued to [redacted] **Natcos - 1 Natcos Road, Prospecton, Durban,** in terms of section **47 (1)** of the National Environmental Management: Air Quality Act, 2004 (Act No.39 of 2004) ("the Act"), in respect of Listed Activity described hereunder:

Category 2:	Petroleum Industry
Sub-category 2.4:	Storage of Petroleum Products
Description:	Petroleum product storage tanks and product transfer facilities, except those used for liquefied petroleum gas.
Application:	All permanent immobile liquid storage facilities at a single site with a combined storage capacity of greater than 1000 cubic meters.

The Atmospheric Emission Licence is issued on the basis of information provided in the company's application dated **30 March 2022** and information that became available during processing of the application.

Licence Holder:	Sasol Oil (Pty) Ltd & Total Energies trading as Natcos
Industry Sector:	Petroleum Industry
Physical Address:	1 Natcos Road, Prospecton, Durban
Validity Period:	1 July 2022 to 30 June 2027

Licensing Officer
eThekwini Municipality
Miss. L. Kumalo

Date: 15 JUNE 2022

PVezi

Acting Air Quality Officer
eThekwini Municipality
Ms. P. Vezi

Date: 15 June 2022

For Enquiries Contact Details: (031) 311 6828 Email: Phumzile.vezi@durban.gov.za

Ref: AEL023/S3
Enquiries: Lindani Kumalo
Office Tel: 031 311 3749

ETHEKWINI MUNICIPALITY

ATMOSPHERIC EMISSION LICENCE IN TERMS OF 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 [redacted] **Natcos - 1 Natcos Road, Prospecton, Durban** in terms of section **47 (1)** of the National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004) ("the Act"), in respect of described hereunder:

Category 2:	Petroleum Industry
Sub-category 2.4:	Storage of Petroleum Products
Description:	Petroleum product storage tanks and product transfer facilities, except those used for liquefied petroleum gas.
Application:	All permanent immobile liquid storage facilities at a single site with a combined storage capacity of greater than 1000 cubic meters.

The Atmospheric Emission Licence is issued on the basis of information provided in the company's application dated **30 March 2022** and information that became available during processing of the application.

The Atmospheric Emission Licence is valid until **30 June 2027**.

The reason for issuing the licence is a **Renewal** of the existing Atmospheric Emission Licence.

The Atmospheric Emission Licence is issued subject to the conditions and requirements set out below and which forms 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

Name of the Licensing Authority	**eThekwini Municipality**
Atmospheric Emission Licence Number	**AEL023/S3**
Atmospheric Emission Licence Issue Date	**1 July 2022**
Atmospheric Emission Licence Type	**Final**
Licence Version Number	**Version 4: Renewal of Existing AEL**
Renewal Date, not later than	**31 January 2027**

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2. ATMOSPHERIC EMISSION LICENCE HOLDER DETAILS

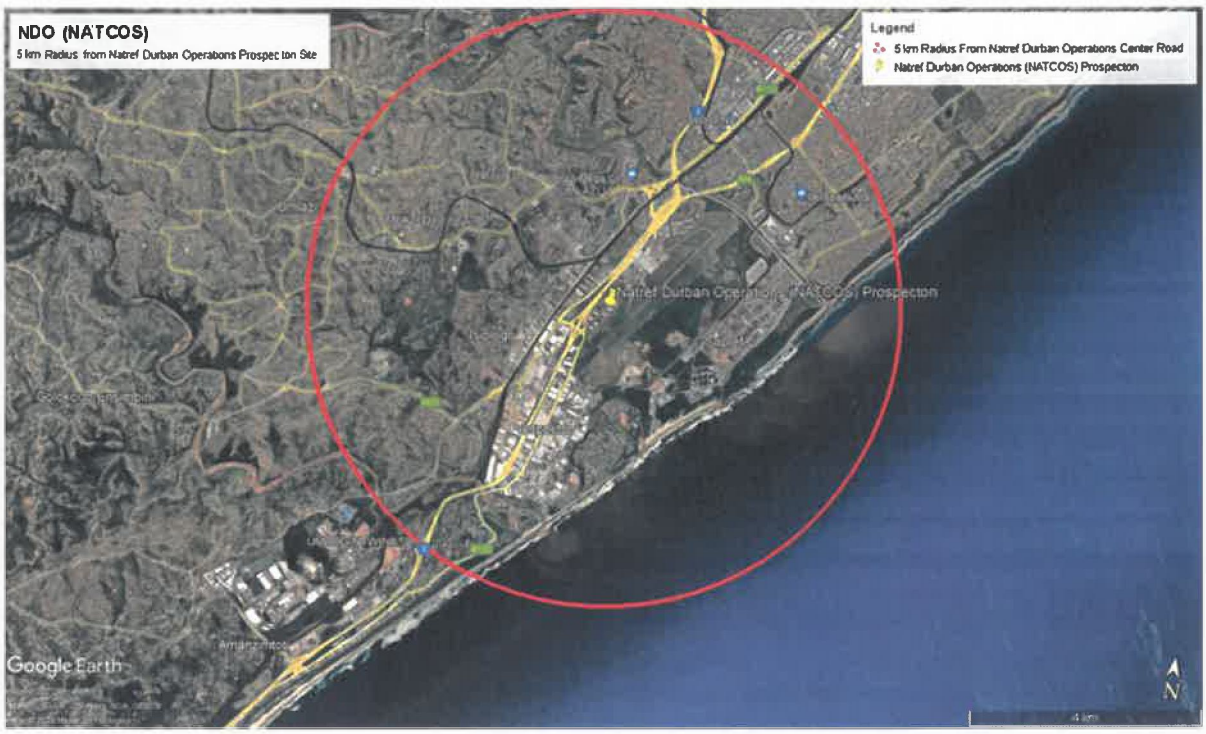
Enterprise Name	**Sasol Oil (Pty) Ltd & Total Energies**
Trading as	**Natcos**
Enterprise Registration Number (Registration Numbers if Joint Venture)	**1981/007622/07**
Registered Address	**1 Natcos Road Prospecton**
Postal Address	**P.O. Box 26200, Isipingo Beach, 4115**
Telephone Number (General)	**0319100 600**
Industry Sector	**Storage and Handling of Petroleum Products**
Name of Responsible Officer	[redacted]
Name of Emission Control Officer	[redacted]
Telephone Number	**016 940 9620**
Cell Phone Number	[redacted]
Email Address	[redacted]
After Hours Contact Details (Telephone Number)	**0319100601**
After Hours Contact Details (Cell Phone Number)	[redacted]
Land Use Zoning as per Town Planning Scheme	**Industrial**

3. LOCATION AND EXTENT OF PLANT

Physical Address of the Premises	**1 Natcos Road, Prospecton, Durban**
Description of Site (Erf)	**Remainder Durban Airport No. 14263, situated at 1 Natcos Road, Prospecton**
Coordinates of Approximate Centre of Operations	**-29.98047748** **30.9386119**
Extent (km^2)	**0.45**
Elevation Above Mean Sea Level (m)	**10**
Province	**Kwa-Zulu Natal**
Metropolitan/District Municipality	**eThekwini Municipality**
Local Municipality	**n/a**
Designated Priority Area	**n/a**

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

The Natcos Prospecton site is situated next to the former Durban International Airport. There are two refiners within a 5 km radius (Engen and Sapref). Toyota is situated to the south whilst the residential areas of Isipingo and Isipingo Beach are located to the west and south respectively, and Umlazi is situated north west of the facility.



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4. GENERAL CONDITIONS

4.1. Process and ownership changes

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.

No building or plant related to the listed activity or activities used by the Licence Holder shall be materially extended, altered or added to the listed activity without the prior approval by the Licensing Authority. The investigation, assessment and communication of potential impact of an activity that triggers a listed activity 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, must follow the necessary assessment procedures as prescribed.

Any changes in processes or production increases, by the Licence Holder, will require prior approval by the Licensing Authority. (This condition will not be imposed for what the Licensing Authority regard as minor changes where there will be insignificant impact on the environment).

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. (This condition will not be imposed for what the Licensing Authority regard as minor changes where there will be insignificant impact on the environment).

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 the Licensing Authority in writing.

4.2. Duty to Evaluate Substances and Use Lower Hazard Substitutes

The Licence Holder has a duty to evaluate, understand the composition of and have an awareness of the dangers of harmful effects on the internal and external environment caused by chemicals and raw materials used or products manufactured. This should include knowledge of the bio-degradability, toxicity, bio-accumulation and sensitizing properties of each substance.

4.3. Cleaner Production

The Licence Holder shall investigate cleaner production processes and practices that are relevant to its operations with a view towards reducing water and energy consumption, waste production, chemicals usage and emissions related to the process. A brief progress summary on the application of Cleaner Production initiatives is to be included in the annual report.

4.4. Energy Conservation

The Licence Holder shall evaluate its activities to improve energy utilisation and efficiency.

4.5. General duty of care

The holder of the license 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.

4.6. 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 and agreed to the satisfactory documentation necessary in confirming the equivalent test reliability, quality and equivalence of analyses.

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 (where possible and with prior consultation with the Licensing Authority) shall be used.

4.7. 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/ Air Quality Officer representing the Licensing Authority when requested.

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.

Where excessive emissions occur, which could cause adverse health or environmental impacts or nuisance, urgent corrective measures must be taken 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 governmental agencies. Any incident which has the potential to create significant health, safety or environmental risk or nuisance needs to be reported immediately to the Licensing Authority.

The Licensing Authority indemnifies itself from any claim, loss or damage arising from the Licence Holders operations in relation to this licence.

The Licence Holder is required to apply best available techniques (BAT) so that its total pollution is

minimised. Best available technique (BAT) shall mean the most effective and advanced stage in the development of activities and their methods of operation which indicate the practical suitability of particular techniques for providing in principle the basis for emission limit values designed to prevent and, where that is not practicable, generally to reduce emissions and the impact on the environment as a whole.

4.8. Statutory obligations

The Licence Holder must comply with the obligations as set out in Chapter 5 of the NEM: AQA.

The principles and legal requirements as set out in section 2 of the NEMA are also applicable to the Atmospheric Emission Licence.

The Licensing Authority reserves the right to request an Atmospheric Impact Report as contemplated in Section 30 of NEM: AQA in the event of any excursion of the Legislative Conditions including the Section 21 Notice promulgated under the National Environmental Management: Air Quality Act 2004 (Act 39 of 2004) NEM;AQA.

4.9. Payment of Atmospheric Emission Licence processing fee

The Licence Holder must, for the period of validity of the licence, pay the prescribed fees to the Licensing Authority (an invoice will be generated by the Licencing Authority upon receipt of application for the amount payable).

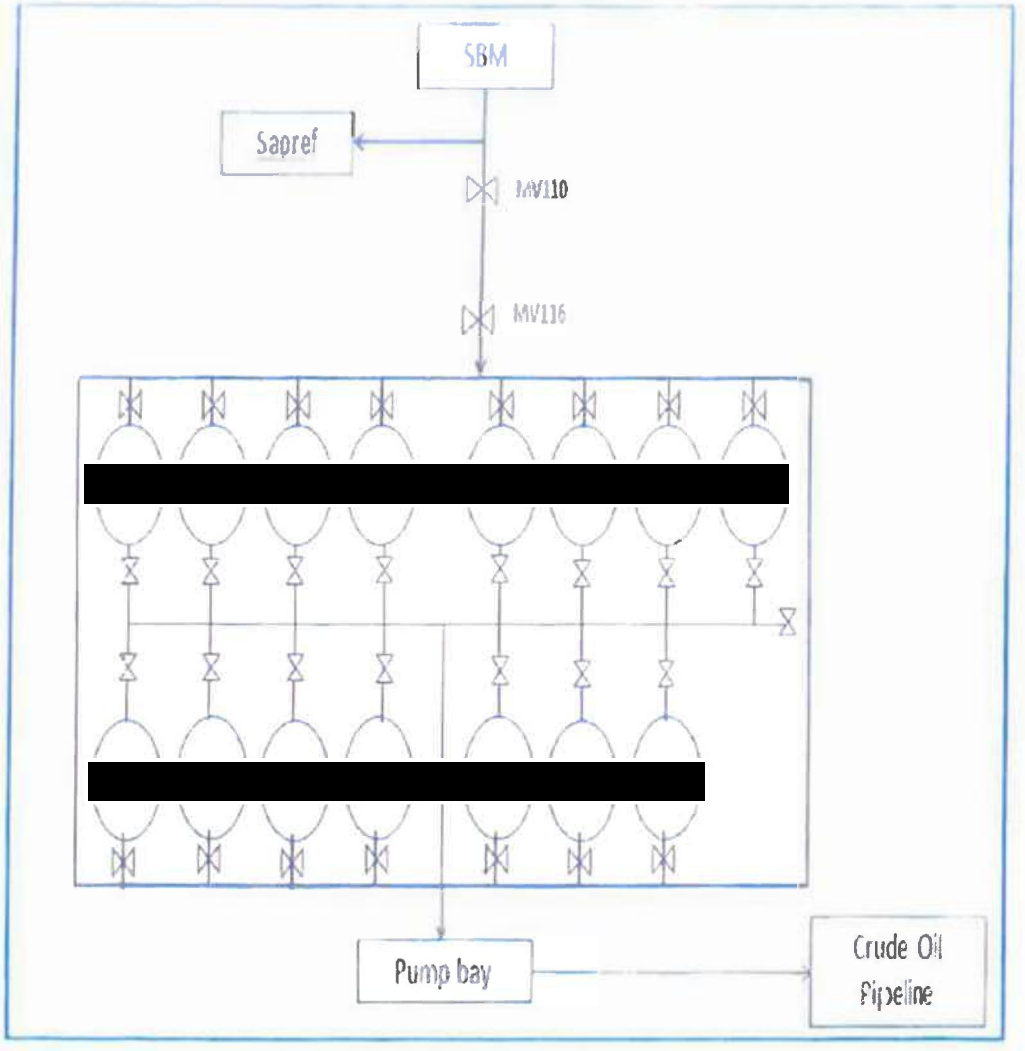
5. NATURE OF PROCESS

5.1. Process description

This facility is a bulk crude oil storage facility. [redacted] Stored product is then either transferred to the Natcos Trinidad Road facility or directly to Transnet pipelines via a [redacted] pipeline.

All [redacted] tanks are made from mild steel and equipped with external floating roofs. [redacted]

5.1.1. Graphical process information



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5.2. Listed Activity or activities

Facility Wide Listed Activities with Regulatory Applicability			
List of all Rules associated with Listed Activities, as published in terms of Section 21 of the AQA, authorised to be conducted at the premises by the licence holder:			
Rule Category	**Rule Number**	**Listed Activity Name**	**Description of Listed Activity**
CATEGORY2 SUBCATEGORY 2.4	SA0204	Storage and Handling of Petroleum Products	Petroleum product storage tanks and product transfer facilities, except those used for liquefied petroleum gas.

5.3. Unit process or processes

Unit Process	Unit Process Function	Batch or Continuous Process
Crude oil storage tanks	Storage and distribution of petroleum products	Continuous

5.4 Hours of operations

Unit Process	Operating Hours	Number of Days Operated per Year
Crude oil storage tanks	24	365

6 RAW MATERIALS AND PRODUCTS

6.1.Raw materials used *(No raw materials are used at this site. This is a storage facility of finished products.)*

Regulated Raw Materials		
Raw Material Type	**Maximum Permitted Consumption Rate (Quantity)**	**Units (Quantity/Period)**
N/A	-	-

6.2. Storage capacity

Storage Name/Product	Maximum Permitted Storage Capacity (Volume)*	Units
Crude Oil	[redacted]	m^3

**The maximum product stored is limited by the total storage capacity; however, the individual product volumes stored in individual tanks will vary depending on demand.*

6.3. Throughput capacity

Name	Maximum Permitted Throughput Capacity (Volume)*	Units (Quantity/Period)
Crude Oil	[redacted]	m^3/year

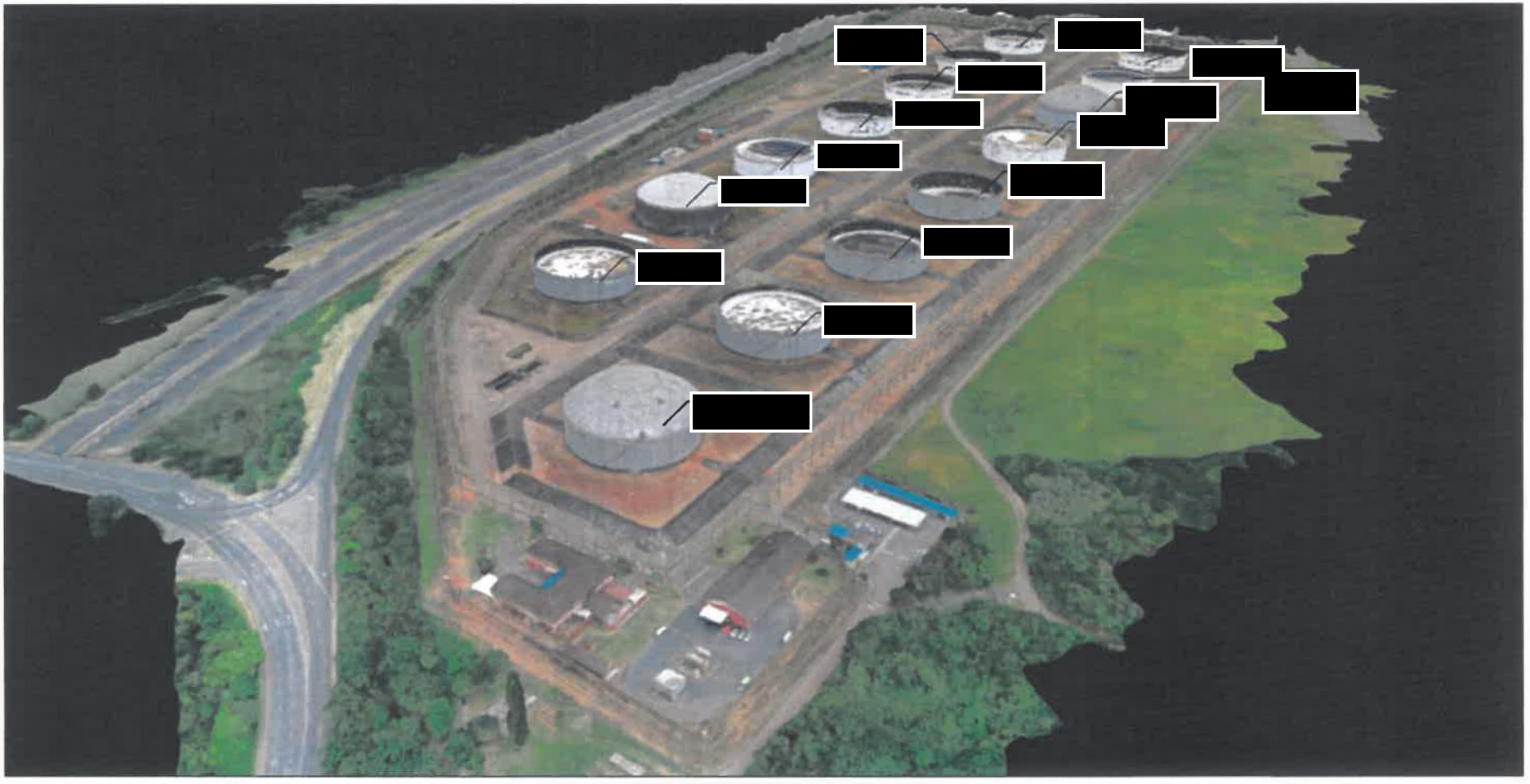
**The maximum product is limited by the maximum permitted throughput; however, the individual product volumes stored in individual tanks will vary depending on demand.*

6.4. Materials used in energy sources

Materials for Energy	Actual Consumption Rate (Quantity)	Units (Quantity/ Period)
Electricity	[redacted]	Kw/annum

6.5. Emission Units

6.5.1. Graphical Depiction of Point and Area Sources



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6.5.2. Emission Units Information

Emission Unit ID	Emission Unit Name	Emission Unit Type	Emission Units New/Existing	Installation Date	Description	Batch / Continuation Specification
[redacted]		Storage Tank	Existing	[redacted]	Storage tank for crude oil (LAST = Large atmospheric tanks) with internal floating (Geodesic Dome Roof)	Continuous
		Storage Tank	Existing		Storage tank for crude oil (LAST = Large atmospheric tanks) with external floating roof	Continuous
		Sterage Tank	Existing		Storage tank for crude oil (LAST = Large atmospheric tanks) with external floating roof	Continuous
		Storage Tank	Existing		Storage tank for crude oil (LAST = Large atmospheric tanks) with internal floating (Geodesic Dome Roof)	Continuous
		Storage Tank	Existing		Storage tank for crude oil (LAST = Large atmospheric tanks) with external floating roof	Continuous
		Storage Tank	Existing	[redacted]	Storage tank for crude oil (LAST = Large atmospheric tanks) with external floating roof	Continuous
[redacted]		Storage Tank	Existing		Storage tank for crude oil (LAST = Large atmospheric tanks) with external floating roof	Continuous
		Storage Tank	Existing		Storage tank for crude oil (LAST = Large atmospheric tanks) with external floating roof	Continuous
		Storage Tank	Existing		Storage tank for crude oil (LAST = Large atmospheric tanks) with external floating roof	Continuous

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[redacted]	Storage Tank	Existing	[redacted]	Storage tank for crude oil (LAST = Large atmospheric tanks) with external floating roof	Continuous
	Storage Tank	Existing		Storage tank for crude oil (LAST = Large atmospheric tanks) with internal floating roof (Geodesic Dome Roof)	Continuous
	Storage Tank	Existing		Storage tank for crude oil (LAST = Large atmospheric tanks) with external floating roof	Continuous
	Storage Tank	Existing		Storage tank for crude oil (LAST = Large atmospheric tanks) with external floating roof	Continuous
	Storage Tank	Existing		Storage tank for crude oil (LAST = Large atmospheric tanks) with external floating roof	Continuous
	Storage Tank	Existing		Storage tank for crude oil (LAST = Large atmospheric tanks) with external floating roof	Continuous
	Other process equipment	Existing		Water is drained from the tank bottoms into the Separator area	Intermittent

6.5.3. Emission Units – Area Sources

Area Source Code	Source Name	Source Description	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 (Continuous / Intermittent)
[redacted]		Storage tank for crude oil (LAST = Large atmospheric	-29.978879	30.938391	[redacted]			24	Continuous

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		tanks) with internal floating (Geodesic Dome Roof)							
[redacted]		Storage tank for crude oil (LAST = Large atmospheric tanks) with external floating roof	29.977490	30.938112	[redacted]			24	Continuous
		Storage tank for crude oil (LAST = Large atmospheric tanks) with external floating roof	29.978057	30.939083				24	Continuous
		Storage tank for crude oil (LAST = Large atmospheric tanks) with internal floating (Geodesic Dome Roof)	29.976570	30.938686				24	Continuous
		Storage tank for crude oil (LAST = Large atmospheric tanks) with external floating roof	29.976491	30.940392				24	Continuous
		Storage tank for crude oil (LAST = Large atmospheric tanks) with external floating roof	29.975787	30.93951				24	Continuous
		Storage tank for crude oil (LAST = Large atmospheric tanks) with external floating roof	-29.976435	30.940416				24	Continuous

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[redacted]		Storage tank for crude oil (LAST = Large atmospheric tanks) with external floating roof	-29.974895	30.940043	[redacted]	24	Continuous
		Storage tank for crude oil (LAST = Large atmospheric tanks) with external floating roof	-29.975548	30.941132		24	Continuous
		Storage tank for crude oil (LAST = Large atmospheric tanks) with external floating roof	-29.974081	30.940751		24	Continuous
		Storage tank for crude oil (LAST = Large atmospheric tanks) with internal floating roof (Geodesic Dome Roof)	-29.974744	30.941797		24	Continuous
		Storage tank for crude oil (LAST = Large atmospheric tanks) with external floating roof	-29.973308	30.941400		24	Continuous
		Storage tank for crude oil (LAST = Large atmospheric tanks) with external floating roof	-29.973947	30.942473		24	Continuous
EU40114	EUF40114	Storage tank for crude oil (LAST = Large atmospheric	-29.972481	30.942052		24	Continuous

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		tanks) with external floating roof							
[redacted]		Storage tank for crude oil (LAST = Large atmospheric tanks) with external floating roof	-29.973122	30.943119	[redacted]			24	Continuous
		Water is drained from the tank bottoms into the Separator area	29.978324	30.937940				6	Intermittent

6.5.4 Reporting Group

Reporting Group Identifier	Reporting Group Type	Description	Emission Units	Type	Installation Date
[redacted]	Single-unit Reperting Group	Storage tank for crude oil (LAST = Large atmospheric tanks) with internal floating (Geodesic Dome Roof)	EUF40101	Storage Tank	[redacted]
	Single-unit Reporting Group	Storage tank for crude oil (LAST = Large atmospheric tanks) with external floating roof	EUF40102	Storage Tank	
	Single-unit Reporting Group	Storage tank for crude oil (LAST = Large atmospheric tanks) with external floating roof	EUF40103	Storage Tank	
	Single-unit Reporting Group	Storage tank for crude oil (LAST = Large atmospheric tanks) with internal floating (Geodesic Dome Roof)	EUF40104	Storage Tank	
	Single-unit Reporting Group	Storage tank for crude oil (LAST = Large atmospheric tanks) with external floating roof	EUF40105	Storage Tank	

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[redacted]	Single-unit Reporting Group	Storage tank for crude oil (LAST = Large atmospheric tanks) with external floating roof	EUF40106	Storage Tank	[redacted]
	Single-unit Reporting Group	Storage tank for crude oil (LAST = Large atmospheric tanks) with external floating roof	EUF40107	Storage Tank	
	Single-unit Reporting Group	Storage tank for crude oil (LAST = Large atmospheric tanks) with external floating roof	EUF40108	Storage Tank	
	Single-unit Reporting Group	Storage tank for crude oil (LAST = Large atmospheric tanks) with external floating roof	EUF40109	Storage Tank	
	Single-unit Reporting Group	Storage tank for crude oil (LAST = Large atmospheric tanks) with external floating roof	EUF40110	Storage Tank	
	Single-unit Reporting Group	Storage tank for crude oil (LAST = Large atmospheric tanks) with internal floating roof (Geodesic Dome Roof)	EUF40111	Storage Tank	
	Single-unit Reporting Group	Storage tank for crude oil (LAST = Large atmospheric tanks) with external floating roof	EUF40112	Storage Tank	
	Single-unit Reporting Group	Storage tank for crude oil (LAST = Large atmospheric tanks) with external floating roof	EUF40113	Storage Tank	
	Single-unit Reporting Group	Storage tank for crude oil (LAST = Large atmospheric tanks) with external floating roof	EUF40114	Storage Tank	
	Single-unit Reporting Group	Storage tank for crude oil (LAST = Large atmospheric tanks) with external floating roof	EUF40115	Storage Tank	
	Single-unit Reporting Group	Water is drained from the tank bottoms into the Separator area	EU0083	Other process equipment	

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7. CONTROL DEVICES, EMISSION UNITS AND REPORTING GROUPS

7.1. Area Source – Management and Mitigation Measures

Source Code	Source Name	Description of Specific Measures	Timeframe for Implementation of Specific Measures	Method of Monitoring Effectiveness	Contingency Measure
[redacted]	Storage Tanks: [redacted]	**Storage and Handling of Petroleum Products** **Leak Detection and Repair (LDAR) Program**	Refer to section 8.3	Refer to section 8.3	- All tanks are equipped with Enrafs (automatic level indicators) - EMS (Emergency management system) - Monitoring, repair and maintenance program in place
[redacted]	Storage Tanks: [redacted]	**Storage Tanks – TIMS Program** - Visual inspection of roof for presence of oil when testing the high level alarm - Maintenance inspections to monitor Tank Cathodic Protection (CP) - Undertake pontoon inspections to ensure that pontoons are not leaking or to report leaking pontoons	Minimum weekly Monthly 6 monthly	All tanks are equlpped with Enrafs (automatic level indicators) Inspections are done as per Tank Integrity Management System (TIMS): - LDAR (Annual) - Daily Inspections by operators - 6 Monthly inspections by a 3rd party - Bi-annual BTEX measurements - Independent /approved service providers for fence	- EMS (Emergency management system) - All tanks fitted with fixed cooling, bund and rim seal fire protection systems

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		Immediately - Approved Inspection Authority (AIA) to conduct Non Destructive Testing (NDT) and Integrity inspections of tank shell and equipment - Dip tubes being fitted with socks when tanks are being maintained	5 yearly Ongoing	line passive sampling for BTEX - Annual H_2S Sampling - Site Audit by independent Authority	
[redacted]	Storage Tanks: [redacted]	**Tank Seal Area:** Primary and Secondary seals are fitted on the tanks to prevent emissions from escaping between the pontoon deck and the tank shell	On-going	All tanks are equipped with Enrafs (automatic level indicators) Inspections are done as per Tank Integrity Management System (TIMS): - LDAR (Annual) - Daily Inspections by operators - 6 Monthly inspections by a 3rd party - Bi-annual BTEX measurements - Independent /approved service providers for fence line passive sampling for BTEX - Annual H_2S Sampling - Site Audit by independent	- EMS (Emergency management system) - Monitoring, repair and maintenance program in place

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				Authority	
[redacted]	Storage T nk : [redacted]	**Tank Drain Pit:** Water is drained from the tank bottoms into the separator area. Petrol/diesel is sometimes also drained with the water. Emissions can be present during the draining process.	On-going	The following are put in place: - Standard operating procedure - Checklist to perform the task - Level gauge to monitor oil discharged from separator into the tank - PH and conductivity tests are done as well as visual inspection prior and during pumping effluent to Metro system - Continuous gas monitoring	- Each operator issued with personal gas monitors - No hydrocarbons are allowed to be discharged to Metro - Discharged to Metro is stopped should the hydrocarbons, PH and conductivity tests fail to meet the required parameters - Commence with emergency procedure if LEL is detected outside of pits
[redacted]	[redacted]	Water is drained from the tank bottoms into the separator area. With the water, traces of oil are also discharged through the system. The crude oil is recovered at the separator and pumped back into the tanks. The water is then piped to Sapref to be treated and discharged.	On-going	The following are in place: - Standard operating procedure - Checklist to perform task - Level gauge to monitor oil discharged from separator into the tank - PH and conductivity tests are done as well as visual inspection prior and during pumping effluent to Metro system - Continuous gas monitoring	- Each operator issued with personal gas monitors - No hydrocarbons are allowed to be discharged to Metro - Discharged to Metro is stopped should the hydrocarbons, PH and conductivity tests fail to meet the required parameters - Commence with emergency procedure if

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					LEL is detected outside of pits.

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8. EMISSION MONITORING AND REPORTING REQUIREMENTS

8.1. Emissions from the site

8.1.1 The Licence Holder is required to provide an **updated emissions inventory** by **31 March 2023** and thereafter every licence period or after any significant process change as agreed with the Licensing Authority.

8.1.2 An **updated Odour Management Plan** shall be prepared and submitted to the Licensing Authority by **31 December 2022**.

8.1.3 The Licensing Authority reserves the right to request the Licence Holder to install or apply the appropriate measures to reduce **fugitive emissions from area / line sources** in consultation with the Licence Holder.

8.1.4 An **updated Tank Integrity Management Plan** must be submitted to the Licensing Authority by **30 June 2023**.

8.2 Fence Line Monitoring Programme

Natcos must continue with BTEX Fence-Line Monitoring program approved by the Licensing Authority to determine the annual averages of Benzene, Toluene, Ethyl Benzene and Xylene and report these to the Licensing Authority annually.

8.3. Storage and Handling of Petroleum Products

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:-

An **updated Leak Detection and Repair (LDAR) Program** approved by the Licencing Authority must be instituted by **31 January 2023**. The program must include detailed methodologies, timeframes for implementation, assessment of efficiency and regular reporting criteria.

b) 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)–

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

Description	**Petroleum products storage tanks and product transfer facilities.**
Application	**All permanent immobile liquid storage tanks larger than 1000 cubic meters cumulative tankage capacity at a site.**
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 per Type 2 and 3

Type 2: Above 14 kPa and 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.

(iii) 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.

c) 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 m^3 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 m^3 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%, shall be fitted.

8.4. Special Conditions

The Licence Holder is required to identify and prioritize environmental projects and formulate a five (5) year environmental improvement plan in line with the philosophy of continuous improvement and the optimisation of **Natcos - 1 Natcos Road, Prospecton, Durban** operations. The environmental improvement project plan with associated timeframes must be submitted to the Licencing Authority by **31 July 2023.**

9. ROUTINE REPORTING AND RECORD KEEPING

9.1 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 dust and offensive odour complaints.

Furthermore, the Licence Holder is to investigate and report monthly to the Licensing 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:

- Source code / name;
- Root cause analysis;
- Calculation of impacts / emissions associated with incidents and dispersion modeling of pollutants, where applicable;
- Measures implemented or to be implemented to prevent recurrence; and
- 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.

9.2 Annual Reporting

The Licence Holder must complete and submit to the Licensing Authority an annual report which must include information for the calendar year under review**. The report must be submitted to the Licencing Authority not later than 60 (sixty) days after the end of each reporting period** and it must be completed in the format as required by the Licensing Authority.

9.3 National Atmospheric Emission Inventory System (NAEIS)

In terms of Government Notice (GN) 283 promulgated on 2 April 2015, the licence holder is required to submit all emission inventory reports in the format required for the internet based National Atmospheric Emissions Inventory System (**NAEIS)** on an annual basis by **31st March of each year.**

9.4 Compliance Reporting on SAAELIP

The Licence Holder is required to submit an online compliance report by **31 August 2023** and thereafter annually in the format required by the **South African Atmospheric Emission Licensing and Inventory Portal (SAAELIP).**

9.5 Greenhouse Gas Reporting

Reporting in terms of Section 43(1)(l) of the NEM: AQA shall be done in accordance with the National Greenhouse Reporting Regulations

10. INVESTIGATIONS

The following investigations are required:

No.	Investigations	Purpose	Completion Date
1.	AEL Action Plan	Action Plan relating to compliance with AEL Reporting requirements/timeframes	1 August 2022

11. 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.

Signature: ..... **Date:** 16/06/2022

Ms Phumzile Vezi
Acting Air Quality Officer: eThekwini Municipality