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 and Social Development Department
P O Box 4
Alberton
1450

Tel: (011)999 2470/ 999 2849
Email: Edmund.VanWyk@ekurhuleni.gov.za

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 **Eco Energy Trading (Pty) Ltd** in terms of section 41(1)(a) of the National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004), in respect of Listed Activity **No.2.4 Storage of Petroleum Products & 7.2 Production of acids**. The Atmospheric Emission Licence has been issued on the basis of information provided in the company's application dated 05 June 2024 and information that became available during processing of the application.

The Atmospheric Emission Licence is valid until **31 July 2029**.

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 - **Eco Energy Trading (Pty) Ltd.**

Air Quality Officer Signature: _____
Dr J S Chaka
Divisional Head: Environmental Health
Health and Social Development Department

Date: 23/07/2024

1. ATMOSPHERIC EMISSION LICENCE ADMINISTRATION

Name of the Licensing Authority	City of Ekurhuleni
Atmospheric Emission Licence Number	GTEK_001489
Atmospheric Emission Licence Issue Date	23 July 2024
Atmospheric Emission Licence Type	*Final*
Review / Renewal Date, not later than	31 January 2029 (6 months before the expiration date)

2. ATMOSPHERIC EMISSION LICENCE HOLDER DETAILS

Enterprise Name	Eco Energy Trading (Pty) Ltd
Trading as	Eco Energy Trading (Pty) Ltd
Enterprise Registration Number (Registration Numbers if Joint Venture)	2018/621160/07
Registered Address	Corner of Rail Road and Canon Cres, Roodekop, Germiston, 1401
Postal Address	P.O. Box 10320, The Falls, Benoni, 1522
Telephone Number (General)	(011) 900 8005
Industry Sector	Waste oil recovering, blending, and recycling
Name of Responsible Officer	Richard Laros
Name of Emission Control Officer	Richard Laros
Telephone Number	011 900 8005
Cell Phone Number	083 400 0409
Fax Number	Not Applicable
Email Address	rory@ecoenergy.co.za
After Hours Contact Details	083 400 0409
Land Use Zoning as per Town Planning Scheme	Industrial

Air Quality Officer Signature: _____
Dr J S Chaka
Divisional Head: Environmental Health
Health and Social Development Department

Date: 23/07/2024

3. LOCATION AND EXTENT OF PLANT

3.1 Location and extent of plant

Physical Address of the Premises	Corner of Rail Road and Canon Cres, Roodekop, Germiston, 1401
Description of Site (Erf)	Portion 6 of Erf 1642, Roodekop IR Portion 0 of Erf 3300, Roodekop IR
Coordinates of Approximate Centre of Operations	North-south:-26.304561°S East-west:28.194811°E
Extent (km²)	0.013
Elevation Above Mean Sea Level (m)	1561
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)

Eco Energy is located in the industrial hub of Roodekop, Germiston, which falls within the jurisdiction of the Ekurhuleni Metropolitan Municipality. Adjacent land uses include the residential suburbs of Roodekop and Leondale (to the south and southwest) with industrial activity to the west, northwest, north, northeast, east and southeast. The nearest residences in Roodekop are located ~80 m from the facility's southern fence line.

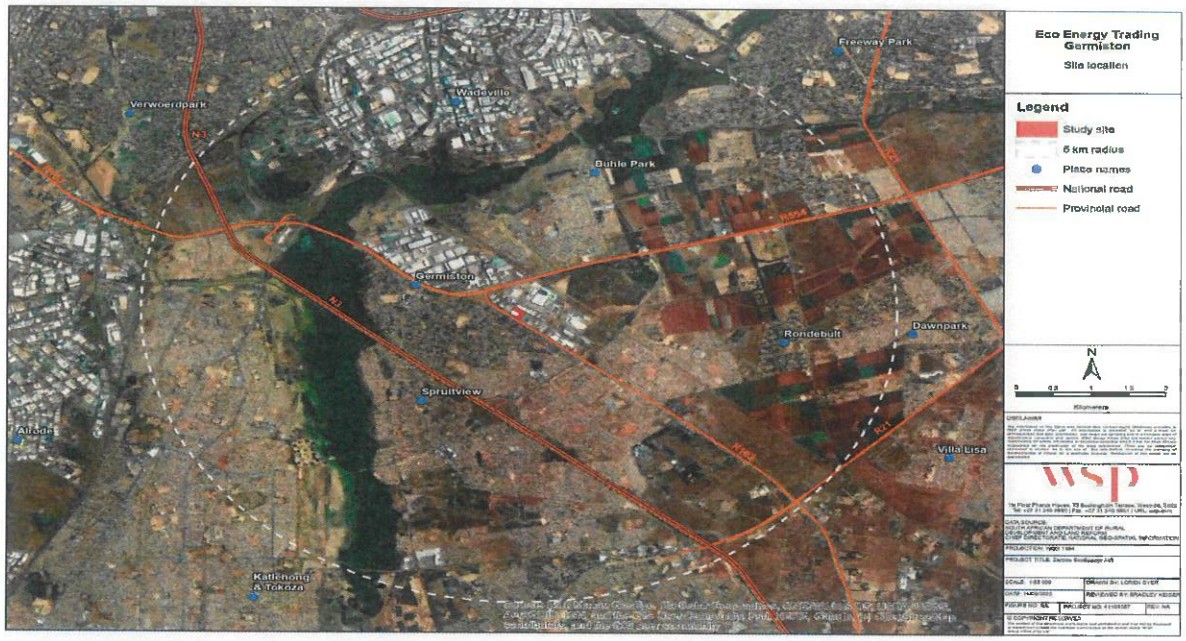

Figure 1: Location of Eco Energy

Air Quality Officer Signature: _____ Date: 23/07/2024
Dr J S Chaka
Divisional Head: Environmental Health
Health and Social Development Department

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.

Air Quality Officer Signature: _____ Date: 23/07/2024
Dr J S Chaka
Divisional Head: Environmental Health
Health and Social Development Department

4.3.3 The licence holder is responsible for quality assurance of methods and performance.

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. 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.

Air Quality Officer Signature: _____ Date: 23/07/2024
Dr J S Chaka
Divisional Head: Environmental Health
Health and Social Development Department

5. NATURE OF PROCESS

5.1. Process description

Receiving and Storage of Waste Oils

Waste oil is transported to the Eco Energy facility via tanker trucks or in sealed flow bins. Each load which enters the site crosses over a weighbridge which documents the load weight and or volume and details of the vehicles entering the facility. Samples are taken and the quality of the load pre-determined before acceptance. Once accepted the load is pumped into storage tanks until it can be processed.

Processing of Waste Oil

Eco Energy receives vegetable oil (general waste) and hazardous waste oils (for example Automotive waste, oils, Marine waste oils, and similar liquid hydrocarbon waste.)

Chemical Processing

The ratio of waste oil and caustic wash water differs from one supplier to another which in turn affects processing timeframes. Processing of waste oil is undertaken in Tank Farm C. Waste oil is pumped into the holding tanks and blended. Once blending is complete, the mixture is pumped to the reactor where the inline dosing controller (situated just before the reactor) reads the oil pH and automatically treats the product with sulphuric acid while being pumped to the reactor. During this process the acid is activated which in turn triggers the separation of oil and water.

Once the reaction has been completed, product from the reactor is pumped to the C1 cooking pot and allowed to settle. At the C1 cooking pot, the water and oil starts to separate. Oil rises to the top of the tank and water sinks to the bottom. Oil is then harvested, and water drained from the mix. The mix remaining is then pumped over from tank C1 to tank C2 where the same process is followed. The oil and water fractions will again separate from the mix. The separated oil is then pumped over to C3 and later to C4.

While the oil and water separate in C1-C4, sludge will accumulate in pots C3 and C4. The sludge is then pumped to the decanter and centrifuge for further processing while oil in C1-C3 is pumped to the holding tanks for storage. Additional oil from the centrifuge and decanter is pumped back to the holding tanks and left-over sludge is collected in allocated hazardous waste bins for temporary storage before it is collected by a licensed service provider for safe disposal.

All effluent water generated from Tank Farm C during processing is consistently pumped to the E-tanks (Tank Farm E). Oil in the holding tanks is dispatched and sold to various customers into various markets depending on the quality of the products recovered and recycled.

Storage and Handling of Dangerous Goods

Dangerous goods are sourced from external clients and transported to the Eco Energy facility via tanker trucks and or flow bins. Each load that enters the site is required to cross over the weighbridge which logs the load. The dangerous good is then pumped into holding tanks before blending commences. Once blended, the final product is loaded and dispatched for delivery.

Currently dangerous goods are stored in Tank Farm A. Once the approved expansion activities have been completed, majority of the tanks and tank farms will be used interchangeably for the storage of either dangerous goods, vegetable oil or hazardous waste.

In summary, Tank Farm A, Tank Farm B, Tank Farm F(a) and Tank Farm F(b) can either be used for the storage of dangerous goods, hazardous waste, or general waste (vegetable oils). The capacity of the Tank Farms is fixed and provided as maximum for each product or waste stream, as a worst-case scenario, for the event where only one type of material is used on site. Tank Farm G and Tank Farm H which will be used only for the storage of dangerous goods. Dangerous goods handled and stored on site include;

- Coker Gas Oil
- Fuel Oil 150
- Illuminating Paraffin
- GTL Diesel
- Turbodiesel ULS (50ppm)
- Multi-Purpose Grease
- Transformer Oil
- Caustic Soda (Membrane Cell)
- Sulphuric Acid (78)
- Ethyl Alcohol (Precut)
- N-Butanol
- Fully Refined Paraffin Wax
- Low Melt Wax
- FFP Waxy Oil
- Polyfuel 7/40 D
- Light Cycle Oil
- Cut Back Bitumen (MC 10)
- Sasol Turbo Unleaded Petrol 93
- Engine Oil
- Hydraulic Oil
- Caustic Soda (Diaphragm Cell)
- Hydrochloric Acid (CP)
- Ethanol 95E5
- Methanol
- Clycol Oil
- Hydrocarbon Wax

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	2	2.4	Storage of Petroleum Products	Petroleum product storage tanks and product transfer facilities, except those used for liquefied petroleum gas.
2	7	7.2	Production of acids	The production, bulk handling and or use of hydrofluoric, hydrochloric, nitric, and sulphuric acid (including oleum) in concentration

Air Quality Officer Signature: _____ Date: 23/07/2024
Dr J S Chaka
Divisional Head: Environmental Health
Health and Social Development Department

Listed Activity Number	Category of Listed Activity	Sub-category of the Listed Activity	Listed Activity Name	Description of the Listed Activity
				exceeding 10%. Processes in which oxides of sulphur are emitted through the production of acid sulphites of alkalis or alkaline earths or through the production of liquid sulphur or sulphurous acid. Secondary production of hydrochloric acid through regeneration.

Air Quality Officer Signature: _____

Dr J S Chaka
Divisional Head: Environmental Health
Health and Social Development Department

Date: 23/07/2024

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
Storage of raw materials and products	Bulk storage of waste oils and fats, petroleum products and process chemicals.	Batch
Loading	Loading and handling of waste oils, fats and waxes, petroleum products and process chemicals.	Batch
Cooking plant	Chemical treatment of waste oils.	Batch
Boilers	Combustion of coal in one 2 MW boiler for heat generation (backup unit). Combustion of coal in two 8 MW boilers for heat generation.	Batch
Effluent plant	Industrial wastewater treatment	Batch

5.4. Hours of operations

Unit Process	Operating Hours	Number of Days Operated per Year
Storage of raw materials and products	24	365
Loading	24	365
Cooking plant	21 (a)	365
Boiler (one 2 MW back up unit)	24	73 (b)
Boilers (two 8 MW units)	18	292 (c)
Effluent plant	24	365

Notes:

(a) Day shift: 07h30 – 16h30. Night shift: 18h30 – 06h30.

(b) Estimated operation time is 20% of the year, noting that only a single boiler operates at any given time.

(c) Estimated operation time is 60% of the year, noting that only a single boiler operates at any given time.

Air Quality Officer Signature: _____ Date: 23/07/2024
Dr J S Chaka
Divisional Head: Environmental Health
Health and Social Development Department

5.5. Graphical process information

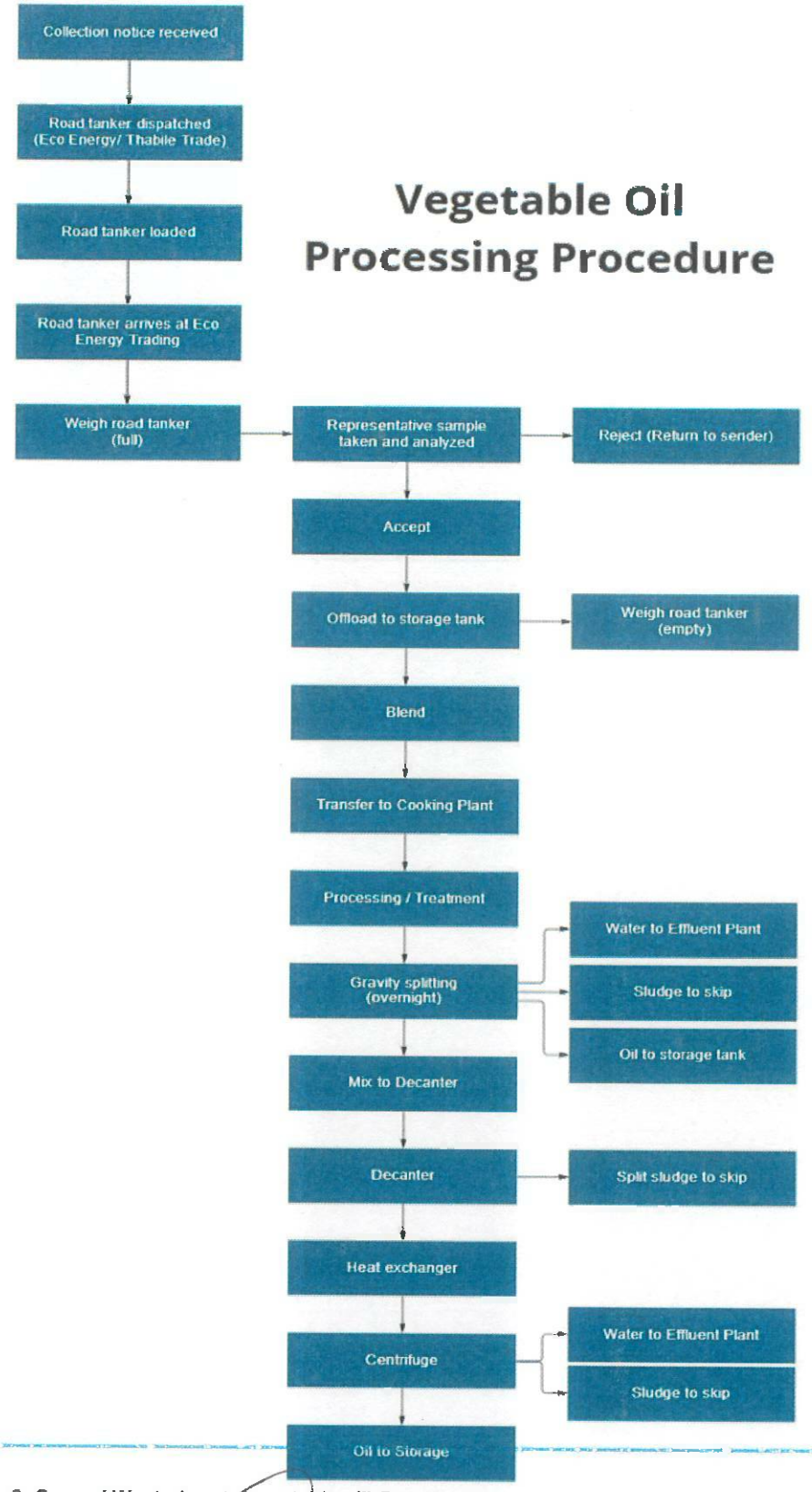

Figure 2: General Waste (waste vegetable oil) Process Flow

Air Quality Officer Signature: _____ Date: 23/07/2024
Dr J S Chaka
Divisional Head: Environmental Health
Health and Social Development Department

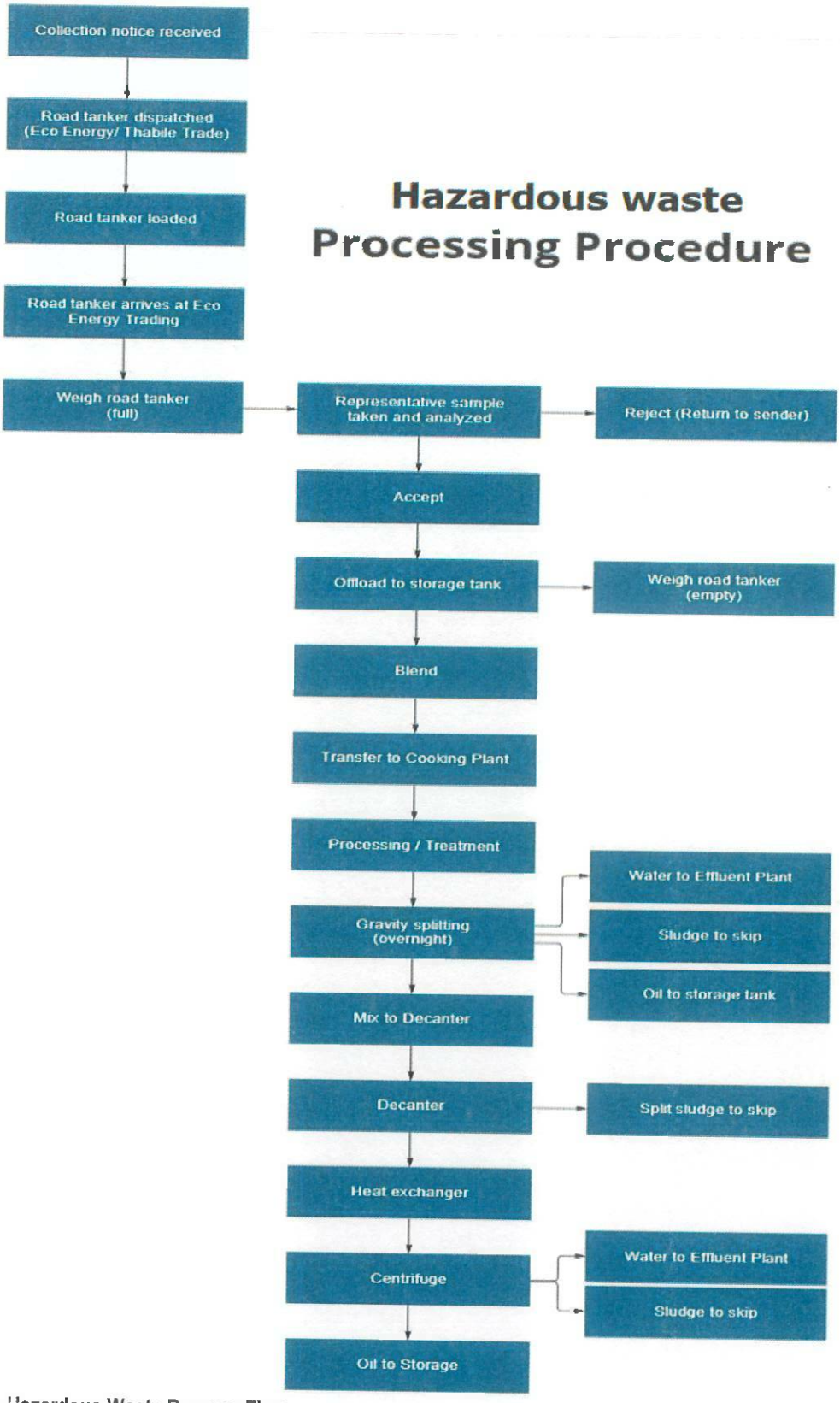

Figure 3: Hazardous Waste Process Flow

Air Quality Officer Signature: _____

Dr J S Chaka
Divisional Head: Environmental Health
Health and Social Development Department

Date: 23/07/2024

Incoming Dangerous Goods, Hazardous Waste, & Chemicals

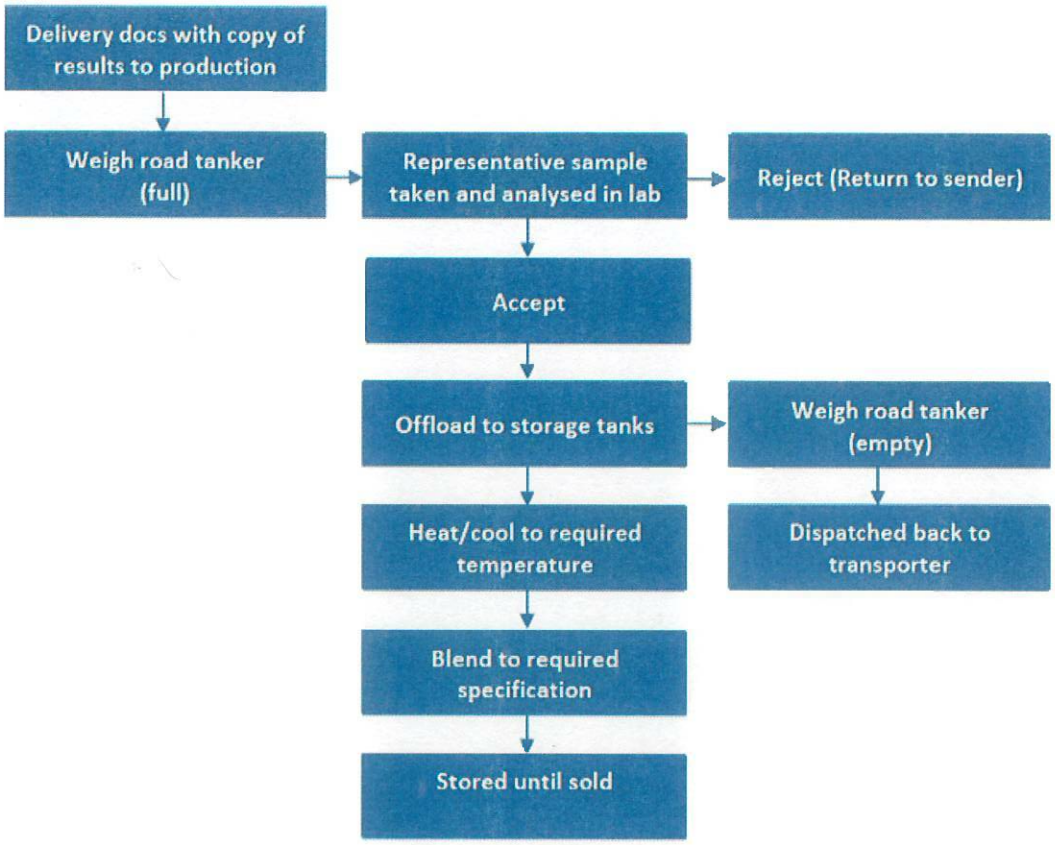

Figure 4: Dangerous Goods Handling and Storage Process Flow

Air Quality Officer Signature: _____ Date: 23/07/2024
Dr J S Chaka
Divisional Head: Environmental Health
Health and Social Development Department

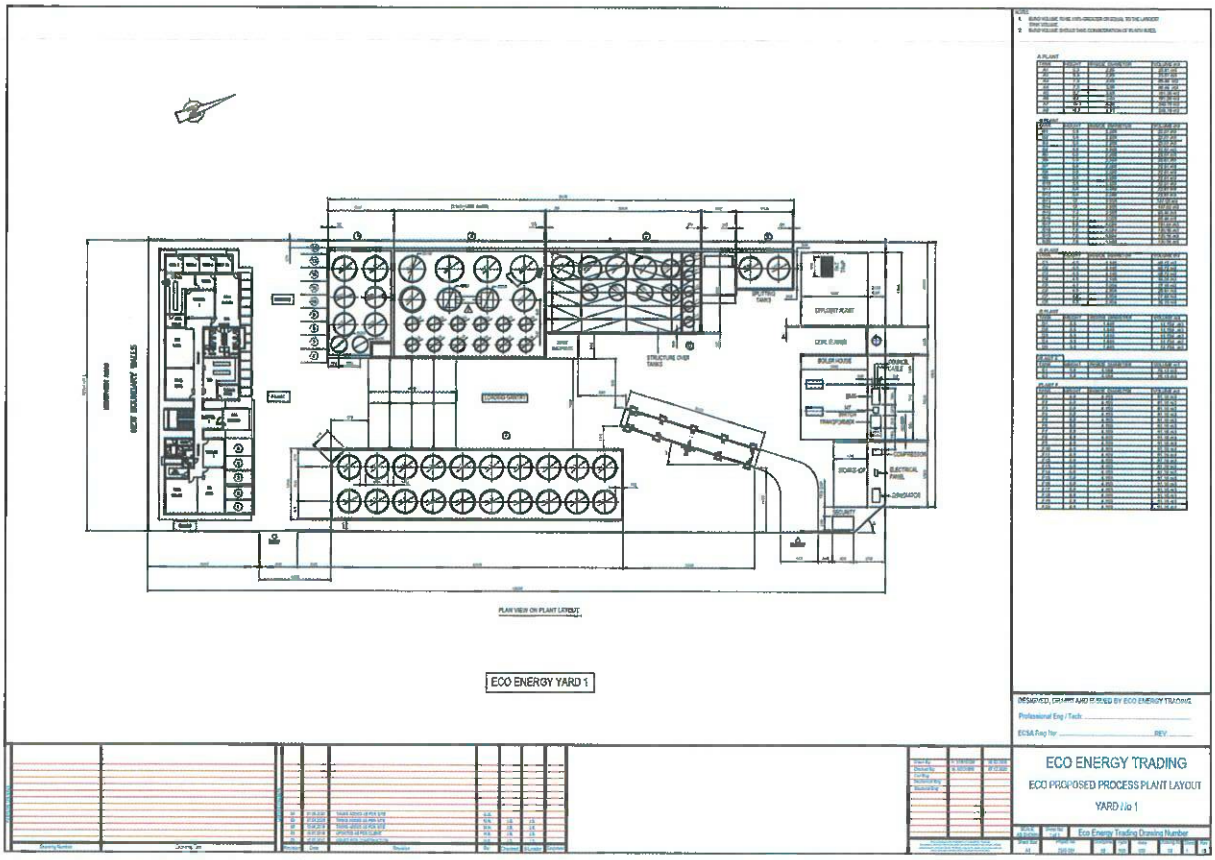

Figure 5: Yard 1 - Site Layout

Air Quality Officer Signature: _____ Date: 23/07/2024
Dr J S Chaka
Divisional Head: Environmental Health
Health and Social Development Department

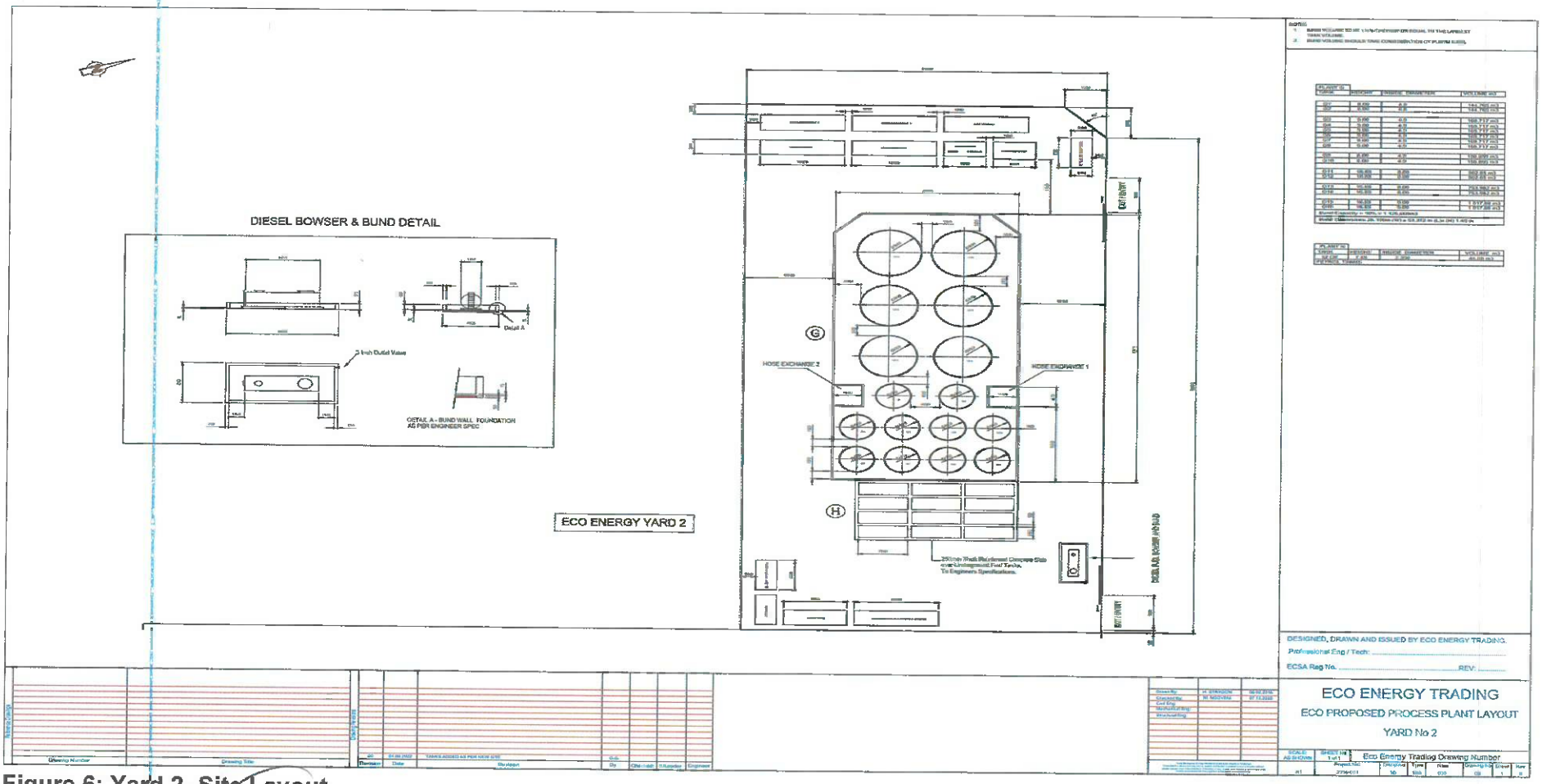

Figure 6: Yard 2- Site Layout

Air Quality Officer Signature: _____

Dr J S Chaka

Divisional Head: Environmental Health

Health and Social Development Department

Date: 23/07/2024

Figure 7: Simplified Site Layout

Air Quality Officer Signature: _____ Date: 23/07/2024

Dr J S Chaka
Divisional Head: Environmental Health
Health and Social Development Department

6. RAW MATERIALS AND PRODUCTS

6.1. Raw materials used

Regulated Raw Materials		
Raw Material Type	**Maximum Permitted Consumption Rate (Quantity)**	**Units (quantity/period)**
Process chemicals (e.g., sulphuric acid)	52	tons/month
Waste vegetable fats and oils (e.g., soap stock, mix of various vegetable oils, margarine, etc.) Industrial waste oils (e.g., lubricants, automotive, marine)	2 169	tons/month
Petroleum products (i.e., HFO, diesel and ULP)	147 114	tons/month
Recycled/recovered vegetable oils and or waste oils	2 400	tons/month
Non-regulated Raw Materials		
Raw Material Type	**Maximum Permitted Consumption Rate (Quantity)**	**Units (quantity/period)**

* **Regulated raw materials** refers to those materials when increased or decreased may result in the change of air emissions output.
* **Non-regulated raw materials** refers to those materials when increased or decreased may not result in any change of air emissions output.

Table 1: Vapour Pressures for all materials to be stored and handled on site

Material	Vapour Pressure
Coker Gas Oil	<0.01 kPa (20°C)
Fuel Oil	<0.1 kPa (21°C)
Illuminating Paraffin	6.1 kPa (20°C)
GTL Diesel	5 kPa (20°C)
Turbodiesel ULS (50ppm)	< 1 kPa 20 °C
Multi-Purpose Grease	0.5 kPa (20°C)
Transformer Oil	<0.1 kPa (20°C)
Caustic Soda (Membrane Cell)	<2,4 kPa (20°C)
Sulphuric Acid (78)	< 0.001 kPa (20°C)
Ethyl Alcohol (Precut)	< 0.001 (20°C)
N-Butanol	< 0.01 (20°C)
Fully Refined Paraffin Wax	0.013 kP (20°C)

Air Quality Officer Signature: _____ Date: 23/07/2024
Dr J S Chaka
Divisional Head: Environmental Health
Health and Social Development Department

Low Melt Wax	0.013 kP (20°C)
FFP Waxy Oil	0.013 kP (20°C)
Polyfuel 7/40 D	0.1 kPa (20°C)
Light Cycle Oil	0.01 kPa (20°C)
Cut Back Bitumen (MC 10)	< 0,1 kPa (20°C)
Sasol Turbo Unleaded Petrol 93	0.4 kPa (20°C)
Engine Oil	<0.1 kPa (20°C)
Hydraulic Oil	<0.1 kPa (20°C)
Caustic Soda (Diaphragm Cell)	<2.4 kPa (20°C)
Hydrochloric Acid (CP)	1.4 kPa (20°C)
Ethanol 95E5	0.5 kPa (20°C)
Methanol	1.2 kPa (20°C)
Clycol Oil	0.012 kPa (20°C)
Hydrocarbon Wax	0.013 kP (20°C)

6.2. Production rates

Product Name	Maximum Permitted Production Capacity (Quantity)	Units (quantity/period)
Petroleum products (i.e., HFO, diesel and ULP)	147 114	tons/month
Recycled/recovered vegetable oils and or waste oils	2400	tons/month

6.3. Materials used in energy sources

Materials for Energy Source	Actual Consumption Rate (Quantity)	Units (quantity/period)	Materials Characteristics
Coal	9,600	tons/annum	-
Electricity	850 000	kWh/annum	Electricity
Heavy fuel oil	4330	tons/annum	Fuel oil

Air Quality Officer Signature: _____
Dr J S Chaka
Divisional Head: Environmental Health
Health and Social Development Department

Date: 23/07/2024

6.4. Emission Units

6.4.1. Emission Units – Stack Parameters (Point Sources)

Unique Stack ID	Source Name	Latitude (decimal degrees)	Longitude (decimal degrees)	Height of Release Above Ground (m)	Height Above Nearby Building (m)	Diameter at Stack Tip / Vent Exit (m)	Actual Gas Exit Temperature (°C)	Actual Gas Volumetric Flow (m^3/hr)	Actual Gas Exit Velocity (m/s)	Emission Hours	Type of Emission (Continuous / Batch)
SV005	Boiler 1 (2 MW)	-26.304437	28.195012	12	4	0.5	165	1.6	7.9	24	Continuous
SV006	Boiler 2 (8 MW)	-26.304475	28.195068	14	4	0.85	165	4.5	7.9	24	Continuous
SV007	Boiler 3 (8 MW)	-26.304457	28.195040	14	4	0.85	165	4.5	7.9	24	Continuous
SV008	Breather vent for underground Tank Farm H	-26.304288	28.194567	3.5		0.001	Ambient	0.000002	2.6	24	Continuous

Air Quality Officer Signature: _____

Dr J S Chaka
Divisional Head: Environmental Health
Health and Social Development Department

Date: 23/07/2024

6.4.2. Emission Units - Area and/or line source parameters

Unique Area Source ID	Source Name	Source Description	Latitude (decimal degrees) of SW corner	Longitude (decimal degrees) of SW corner	Height of Release Above Ground (m)	Length of Area (m)	Width of Area (m)	Emission Hours	Type of Emission (Continuous / Intermittent)
EU0006	Coal bunker	Storage of coal in a bunker	-26.304448°	28.194954°	2.4	12.9	4.4	24	Continuous
EU0008	Tank A1	Swing tank used for Vegetable oil / Hazardous Waste /Petroleum Products	-26.305066°	28.194442°	5.3	5.3	2.85	24	Continuous
EU0009	Tank A2	Swing tank used for Vegetable oil / Hazardous Waste /Petroleum Products	-26.305036°	28.194466°	5.3	5.3	2.85	24	Continuous
EU0010	Tank A3	Swing tank used for Vegetable oil / Hazardous Waste /Petroleum Products	-26.305038°	28.194411°	7.3	7.3	3.95	24	Continuous
EU0011	Tank A4	Swing tank used for Vegetable oil / Hazardous Waste /Petroleum Products	-26.304997°	28.194443°	7.3	7.3	3.95	24	Continuous
EU0012	Tank A5	Swing tank used for Vegetable oil / Hazardous Waste /Petroleum Products	-26.305011°	28.194369°	9.7	9.7	3.65	24	Continuous

Air Quality Officer Signature: _____
Dr J S Chaka
Divisional Head: Environmental Health
Health and Social Development Department

Date: 23/07/2024

Unique Area Source ID	Source Name	Source Description	Latitude (decimal degrees) of SW corner	Longitude (decimal degrees) of SW corner	Height of Release Above Ground (m)	Length of Area (m)	Width of Area (m)	Emission Hours	Type of Emission (Continuous / Intermittent)
EU0013	Tank A6	Swing tank used for Vegetable oil / Hazardous Waste /Petroleum Products	-26.304970°	28.194403°	9.7	9.7	3.65	24	Continuous
EU0014	Tank A7	Swing tank used for Vegetable oil / Hazardous Waste /Petroleum Products	-26.304982°	28.194328°	16.7	16.7	4.35	24	Continuous
EU0015	Tank A8	Swing tank used for Vegetable oil / Hazardous Waste /Petroleum Products	-26.304943°	28.194364°	16.7	16.7	4.35	24	Continuous
EU0016	Tank B1	Swing tank used for Vegetable oil / Hazardous Waste / Petroleum Products	-26.304977°	28.194515°	5.5	5.5	2.3	24	Continuous
EU0017	Tank B2	Swing tank used for Vegetable oil / Hazardous Waste /Petroleum Products	-26.304949°	28.194539°	5.5	5.5	2.3	24	Continuous
EU0018	Tank B3	Swing tank used for Vegetable oil / Hazardous Waste /Petroleum Products	-26.304919°	28.194564°	5.5	5.5	2.3	24	Continuous

Air Quality Officer Signature: _____
Dr J S Chaka
Divisional Head: Environmental Health
Health and Social Development Department

Date: 23/07/2024

Unique Area Source ID	Source Name	Source Description	Latitude (decimal degrees) of SW corner	Longitude (decimal degrees) of SW corner	Height of Release Above Ground (m)	Length of Area (m)	Width of Area (m)	Emission Hours	Type of Emission (Continuous / Intermittent)
EU0019	Tank B4	Swing tank used for Vegetable oil / Hazardous Waste /Petroleum Products	-26.304892°	28.194588°	5.5	5.5	2.3	24	Continuous
EU0020	Tank B5	Swing tank used for Vegetable oil / Hazardous Waste /Petroleum Products	-26.304863°	28.194614°	5.5	5.5	2.3	24	Continuous
EU0021	Tank B6	Swing tank used for Vegetable oil / Hazardous Waste /Petroleum Products	-26.304834°	28.194640°	5.5	5.5	2.3	24	Continuous
EU0022	Tank B7	Swing tank used for Vegetable oil / Hazardous Waste /Petroleum Products	-26.304954°	28.194483°	5.5	5.5	2.3	24	Continuous
EU0023	Tank B8	Swing tank used for Vegetable oil / Hazardous Waste /Petroleum Products	-26.304927°	28.194506°	5.5	5.5	2.3	24	Continuous
EU0024	Tank B9	Swing tank used for Vegetable oil / Hazardous Waste /Petroleum Products	-26.304899°	28.194531°	5.5	5.5	2.3	24	Continuous

Air Quality Officer Signature: _____
Dr J S Chaka
Divisional Head: Environmental Health
Health and Social Development Department

Date: 23/07/2024

Unique Area Source ID	Source Name	Source Description	Latitude (decimal degrees) of SW corner	Longitude (decimal degrees) of SW corner	Height of Release Above Ground (m)	Length of Area (m)	Width of Area (m)	Emission Hours	Type of Emission (Continuous / Intermittent)
EU0025	Tank B10	Swing tank used for Vegetable oil / Hazardous Waste /Petroleum Products	-26.304870°	28.194557°	5.5	5.5	2.3	24	Continuous
EU0026	Tank B11	Swing tank used for Vegetable oil / Hazardous Waste /Petroleum Products	-26.304841°	28.194581°	5.5	5.5	2.3	24	Continuous
EU0027	Tank B12	Swing tank used for Vegetable oil / Hazardous Waste /Petroleum Products	-26.304811°	28.194606°	5.5	5.5	2.3	24	Continuous
EU0028	Tank B13	Swing tank used for Vegetable oil / Hazardous Waste /Petroleum Products	-26.304924°	28.194462°	12	12	3.95	24	Continuous
EU0029	Tank B14	Swing tank used for Vegetable oil / Hazardous Waste /Petroleum Products	-26.304877°	28.194503°	12	12	3.95	24	Continuous
EU0030	Tank B15	Swing tank used for Vegetable oil / Hazardous Waste /Petroleum Products	-26.304836°	28.194537°	7.3	7.3	3.95	24	Continuous

Air Quality Officer Signature: _____
Dr J S Chaka
Divisional Head: Environmental Health
Health and Social Development Department

Date: 23/07/2024

Unique Area Source ID	Source Name	Source Description	Latitude (decimal degrees) of SW corner	Longitude (decimal degrees) of SW corner	Height of Release Above Ground (m)	Length of Area (m)	Width of Area (m)	Emission Hours	Type of Emission (Continuous / Intermittent)
EU0031	Tank B16	Swing tank used for Vegetable oil / Hazardous Waste /Petroleum Products	-26.304791°	28.194573°	7.3	7.3	3.95	24	Continuous
EU0032	Tank B17	Swing tank used for Vegetable oil / Hazardous Waste /Petroleum Products	-26.304894°	28.194423°	8.8	8.8	4.7	24	Continuous
EU0033	Tank B18	Swing tank used for Vegetable oil / Hazardous Waste /Petroleum Products	-26.304850°	28.194459°	7.6	7.6	4.7	24	Continuous
EU0034	Tank B19	Swing tank used for Vegetable oil / Hazardous Waste / Petroleum Products	-26.304810°	28.194497°	7.6	7.6	4.7	24	Continuous
EU0035	Tank B20	Swing tank used for Vegetable oil / Hazardous Waste /Petroleum Products	-26.304764°	28.194537°	7.6	7.6	4.7	24	Continuous
EU0036	Tank C1	Processing tank, recycled oils (vegetable oil and hazardous waste)	-26.304672°	28.194585°	4.5	4.5	4.2	24	Continuous
EU0037	Tank C2	Processing tank, recycled	-26.304634°	28.194620°	4.5	4.5	4.2	24	Continuous

Air Quality Officer Signature: _____
Dr J S Chaka
Divisional Head: Environmental Health
Health and Social Development Department

Date: 23/07/2024

Unique Area Source ID	Source Name	Source Description	Latitude (decimal degrees) of SW corner	Longitude (decimal degrees) of SW corner	Height of Release Above Ground (m)	Length of Area (m)	Width of Area (m)	Emission Hours	Type of Emission (Continuous / Intermittent)
		oils (vegetable oil and hazardous waste)							
EU0038	Tank C3	Processing tank, recycled oils (vegetable oil and hazardous waste)	-26.304596°	28.194653°	4.5	4.5	4.2	24	Continuous
EU0039	Tank C4	Processing tank, recycled oils (vegetable oil and hazardous waste)	-26.304564°	28.194682°	4.5	4.5	3.1	24	Continuous
EU0040	Tank C5	Processing tank, recycled oils (vegetable oil and hazardous waste)	-26.304697°	28.194620°	4.1	4.1	2.9	24	Continuous
EU0041	Tank C6	Processing tank, recycled oils (vegetable oil and hazardous waste)	-26.304659°	28.194654°	4.5	4.5	2.9	24	Continuous
EU0042	Tank C7	Processing tank, recycled oils (vegetable oil and hazardous waste)	-26.304621°	28.194686°	4.2	4.2	2.9	24	Continuous
EU0043	Tank C8	Processing tank, recycled oils (vegetable oil and hazardous waste)	-26.304588°	28.194715°	5.3	5.3	2.9	24	Continuous
EU0044	Tank D1	Processing chemicals	-26.304588°	28.194800°	5.5	5.5	1.8	24	Continuous
EU0045	Tank D2	Processing chemicals	-26.304570°	28.194775°	5.5	5.5	1.8	24	Continuous

Air Quality Officer Signature: _____
Dr J S Chaka
Divisional Head: Environmental Health
Health and Social Development Department

Date: 23/07/2024

Unique Area Source ID	Source Name	Source Description	Latitude (decimal degrees) of SW corner	Longitude (decimal degrees) of SW corner	Height of Release Above Ground (m)	Length of Area (m)	Width of Area (m)	Emission Hours	Type of Emission (Continuous / Intermittent)
EU0046	Tank D3	Processing chemicals	-26.304551°	28.194750°	5.5	5.5	1.8	24	Continuous
EU0047	Tank D4	Processing chemicals	-26.304533°	28.194724°	5.5	5.5	1.8	24	Continuous
EU0048	Tank D5	Processing chemicals	-26.304514°	28.194697°	5.5	5.5	1.8	24	Continuous
EU0049	Tank F1	Swing tank used for Vegetable oil / Hazardous Waste /Petroleum Products	-26.305169°	28.194633°	6.9	6.9	4.1	24	Continuous
EU0050	Tank F2	Swing tank used for Vegetable oil / Hazardous Waste /Petroleum Products	-26.305199°	28.194678°	6.9	6.9	4.1	24	Continuous
EU0051	Tank F3	Swing tank used for Vegetable oil / Hazardous Waste /Petroleum Products	-26.305130°	28.194667°	6.9	6.9	4.1	24	Continuous
EU0052	Tank F4	Swing tank used for Vegetable oil / Hazardous Waste /Petroleum Products	-26.305161°	28.194713°	6.9	6.9	4.1	24	Continuous
EU0053	Tank F5	Swing tank used for Vegetable oil / Hazardous Waste /Petroleum	-26.305090°	28.194701°	6.9	6.9	4.1	24	Continuous

Air Quality Officer Signature: _____
Dr J S Chaka
Divisional Head: Environmental Health
Health and Social Development Department

Date: 23/07/2024

Unique Area Source ID	Source Name	Source Description	Latitude (decimal degrees) of SW corner	Longitude (decimal degrees) of SW corner	Height of Release Above Ground (m)	Length of Area (m)	Width of Area (m)	Emission Hours	Type of Emission (Continuous / Intermittent)
		Products							
EU0054	Tank F6	Swing tank used for Vegetable oil / Hazardous Waste /Petroleum Products	-26.305121°	28.194748°	6.9	6.9	4.1	24	Continuous
EU0055	Tank F7	Swing tank used for Vegetable oil / Hazardous Waste /Petroleum Products	-26.305051°	28.194736°	6.9	6.9	4.1	24	Continuous
EU0056	Tank F8	Swing tank used for Vegetable oil / Hazardous Waste /Petroleum Products	-26.305082°	28.194783°	6.9	6.9	4.1	24	Continuous
EU0057	Tank F9	Swing tank used for Vegetable oil / Hazardous Waste /Petroleum Products	-26.305015°	28.194768°	6.9	6.9	4.1	24	Continuous
EU0058	Tank F10	Swing tank used for Vegetable oil / Hazardous Waste /Petroleum Products	-26.305047°	28.194815°	6.9	6.9	4.1	24	Continuous
EU0059	Tank F11	Swing tank used for Vegetable oil / Hazardous	-26.304981°	28.194799°	6.9	6.9	4.1	24	Continuous

Air Quality Officer Signature: _____

Dr J S Chaka
Divisional Head: Environmental Health
Health and Social Development Department

Date: 23/07/2024

Unique Area Source ID	Source Name	Source Description	Latitude (decimal degrees) of SW corner	Longitude (decimal degrees) of SW corner	Height of Release Above Ground (m)	Length of Area (m)	Width of Area (m)	Emission Hours	Type of Emission (Continuous / Intermittent)
		Waste / Petroleum Products							
EU0060	Tank F12	Swing tank used for Vegetable oil / Hazardous Waste / Petroleum Products	-26.305012°	28.194848°	6.9	6.9	4.1	24	Continuous
EU0061	Tank F13	Swing tank used for Vegetable oil / Hazardous Waste /Petroleum Products	-26.304944°	28.194831°	6.9	6.9	4.1	24	Continuous
EU0062	Tank F14	Swing tank used for Vegetable oil / Hazardous Waste /Petroleum Products	-26.304977°	28.194879°	6.9	6.9	4.1	24	Continuous
EU0063	Tank F15	Swing tank used for Vegetable oil / Hazardous Waste /Petroleum Products	-26.304908°	28.194863°	6.9	6.9	4.1	24	Continuous
EU0064	Tank F16	Swing tank used for Vegetable oil / Hazardous Waste /Petroleum Products	-26.304941°	28.194912°	6.9	6.9	4.1	24	Continuous
EU0065	Tank F17	Swing tank used for Vegetable oil / Hazardous	-26.304873°	28.194895°	6.9	6.9	4.1	24	Continuous

Air Quality Officer Signature: _____
Dr J S Chaka
Divisional Head: Environmental Health
Health and Social Development Department

Date: 23/07/2024

Unique Area Source ID	Source Name	Source Description	Latitude (decimal degrees) of SW corner	Longitude (decimal degrees) of SW corner	Height of Release Above Ground (m)	Length of Area (m)	Width of Area (m)	Emission Hours	Type of Emission (Continuous / Intermittent)
		Waste /Petroleum Products							
EU0066	Tank F18	Swing tank used for Vegetable oil / Hazardous Waste /Petroleum Products	-26.304905°	28.194944°	6.9	6.9	4.1	24	Continuous
EU0067	Tank F19	Swing tank used for Vegetable oil / Hazardous Waste /Petroleum Products	-26.304838°	28.194926°	6.9	6.9	4.1	24	Continuous
EU0068	Tank F20	Swing tank used for Vegetable oil / Hazardous Waste /Petroleum Products	-26.304870°	28.194974°	6.9	6.9	4.1	24	Continuous
EU0097	Tank E1	Effluent wastewater	-26.304389°	28.194895°	5.8	5.8	4	24	Continuous
EU0098	Tank E2	Effluent wastewater	-26.304389°	28.194895°	5.8	5.8	4	24	Continuous
EU0099	Tank EP1	Effluent wastewater	-26.304389°	28.194895°	2	2	1.8	24	Continuous
EU0100	Tank EP2	Effluent wastewater	-26.304389°	28.194895°	2	2	1.8	24	Continuous
EU0101	Tank EP3	Effluent wastewater	-26.304389°	28.194895°	2	2	1.8	24	Continuous

Air Quality Officer Signature: _____
Dr J S Chaka
Divisional Head: Environmental Health
Health and Social Development Department

Date: 23/07/2024

Unique Area Source ID	Source Name	Source Description	Latitude (decimal degrees) of SW corner	Longitude (decimal degrees) of SW corner	Height of Release Above Ground (m)	Length of Area (m)	Width of Area (m)	Emission Hours	Type of Emission (Continuous / Intermittent)
EU0102	Tank EP4	Effluent wastewater	-26.304389°	28.194895°	2	2	1.8	24	Continuous
EU0103	Tank EP5	Effluent wastewater	-26.304389°	28.194895°	2	2	1.8	24	Continuous
EU0104	Tank EP6	Effluent wastewater	-26.304389°	28.194895°	2	2	1.8	24	Continuous
Tanks still to be constructed – part of WML and EA approval for expansion									
EU0069	Tank G1	Swing tank used for petroleum products	-26.304190°	28.194341°	8	8	4.9	24	Continuous
EU0070	Tank G2	Swing tank used for petroleum products	-26.304126°	28.194397°	8	8	4.9	24	Continuous
EU0071	Tank G3	Swing tank used for petroleum products	-26.304256°	28.194365°	9	9	4.9	24	Continuous
EU0072	Tank G4	Swing tank used for petroleum products	-26.304218°	28.194402°	9	9	4.9	24	Continuous
EU0073	Tank G5	Swing tank used for petroleum products	-26.304176°	28.194441°	9	9	4.9	24	Continuous
EU0074	Tank G6	Swing tank used for petroleum products	-26.304294°	28.194422°	9	9	4.9	24	Continuous
EU0075	Tank G7	Swing tank used for petroleum products	-26.304254°	28.194459°	9	9	4.9	24	Continuous

Air Quality Officer Signature: _____
Dr J S Chaka
Divisional Head: Environmental Health
Health and Social Development Department

Date: 23/07/2024

Unique Area Source ID	Source Name	Source Description	Latitude (decimal degrees) of SW corner	Longitude (decimal degrees) of SW corner	Height of Release Above Ground (m)	Length of Area (m)	Width of Area (m)	Emission Hours	Type of Emission (Continuous / Intermittent)
EU0076	Tank G8	Swing tank used for petroleum products	-26.304212°	28.194497°	9	9	4.9	24	Continuous
EU0077	Tank G9	Swing tank used for petroleum products	-26.304168°	28.194534°	8	8	4.9	24	Continuous
EU0078	Tank G10	Swing tank used for petroleum products	-26.304132°	28.194479°	8	8	4.9	24	Continuous
EU0079	Tank G11	Swing tank used for petroleum products	-26.304150°	28.194270°	10	10	8	24	Continuous
EU0080	Tank G12	Swing tank used for petroleum products	-26.304069°	28.194343°	10	10	8	24	Continuous
EU0081	Tank G13	Swing tank used for petroleum products	-26.304091°	28.194180°	15	10	8	24	Continuous
EU0082	Tank G14	Swing tank used for petroleum products	-26.304012°	28.194251°	15	15	8	24	Continuous
EU0083	Tank G15	Swing tank used for petroleum products	-26.304032°	28.194094°	16	16	9	24	Continuous
EU0084	Tank G16	Swing tank used for petroleum products	-26.303953°	28.194165°	16	16	9	24	Continuous
EU0085	Tank H1	Swing tank used for petroleum products	-26.304288°	28.194567°	0	7	2.35	24	Continuous
EU0086	Tank H2	Swing tank used for petroleum products	-26.304288°	28.194567°	0	7	2.89	24	Continuous

Air Quality Officer Signature: _____
Dr J S Chaka
Divisional Head: Environmental Health
Health and Social Development Department

Date: 23/07/2024

Unique Area Source ID	Source Name	Source Description	Latitude (decimal degrees) of SW corner	Longitude (decimal degrees) of SW corner	Height of Release Above Ground (m)	Length of Area (m)	Width of Area (m)	Emission Hours	Type of Emission (Continuous / Intermittent)
EU0087	Tank H3	Swing tank used for petroleum products	-26.304288°	28.194567°	0	7	2.89	24	Continuous
EU0088	Tank H4	Swing tank used for petroleum products	-26.304288°	28.194567°	0	7	2.89	24	Continuous
EU0089	Tank H5	Swing tank used for petroleum products	-26.304288°	28.194567°	0	7	2.89	24	Continuous
EU0090	Tank H6	Swing tank used for petroleum products	-26.304288°	28.194567°	0	7	2.89	24	Continuous
EU0091	Tank H7	Swing tank used for petroleum products	-26.304288°	28.194567°	0	7	2.89	24	Continuous
EU0092	Tank H8	Swing tank used for petroleum products	-26.304288°	28.194567°	0	7	2.89	24	Continuous
EU0093	Tank H9	Swing tank used for petroleum products	-26.304288°	28.194567°	0	7	2.89	24	Continuous
EU0094	Tank H10	Swing tank used for petroleum products	-26.304288°	28.194567°	0	7	2.89	24	Continuous
EU0095	Tank H11	Swing tank used for petroleum products	-26.304288°	28.194567°	0	7	2.89	24	Continuous
EU0096	Tank H12	Swing tank used for petroleum products	-26.304288°	28.194567°	0	7	2.89	24	Continuous
Notes: (1) The contents of EU0008 to EU0035, and EU0049 to EU0096 are interchangeable and therefore referred to as a "swing tank".									

Air Quality Officer Signature: _____
Dr J S Chaka
Divisional Head: Environmental Health
Health and Social Development Department

Date: 23/07/2024

Unique Area Source ID	Source Name	Source Description	Latitude (decimal degrees) of SW corner	Longitude (decimal degrees) of SW corner	Height of Release Above Ground (m)	Length of Area (m)	Width of Area (m)	Emission Hours	Type of Emission (Continuous / Intermittent)
(2) EU0085 to EU0096 are underground storage tanks.									

Air Quality Officer Signature: _____
Dr J S Chaka
Divisional Head: Environmental Health
Health and Social Development Department

Date: 23/07/2024

APPLIANCES AND MEASURES TO PREVENT AIR POLLUTION

7.1. Appliances and control measures

Associated EU 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 (%)
	None Installed.										

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

EU Code	Activity	Pollutant Name	Maximum Release Rate			Duration of Emissions
			(mg/Nm³)	Date to be Achieved By	Average Period	
	Subcategory 2.4	Emission limits set in this subcategory are applicable to all installations with a throughput greater than 50'000 m3 per annum of products with a vapour pressure greater than 14 kPa.				
	Subcategory 7.2	N/A – No production of acids. Sulphuric acid is stored on site and used in manufacturing only.				

Special requirements/arrangements for depots that store and Handle petroleum products.

(a) The following transitional arrangements shall apply:

(i) Leak detection and repair (LDAR) program approved by licensing authority to be instituted, immediately after issuing of this Provisional Atmospheric Emission License (PAEL).

Air Quality Officer Signature: _____
Dr J S Chaka
Divisional Head: Environmental Health
Health and Social Development Department

Date: 23/07/2024

(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 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.

(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:

Air Quality Officer Signature: _____
Dr J S Chaka
Divisional Head: Environmental Health
Health and Social Development Department

Date: 23/07/2024

(i) All installations with a throughput of 50 000m³ per annum of products with vapour pressure greater than 14kPa, must be fitted with vapour recovery/ destruction units.
(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 equivalent, with the venting pipe connected to a vapour balancing system. Where vapour balancing and/or bottom loading is not possible, a recovery system utilising adsorption, absorption and condensation and /or incineration of the remaining VOC's, with a collection efficiency of at least 95% shall be fitted.

(d) An odour management programme must continuously be implemented to mitigate odours emanating from activities/processes of the facility.

(e) The License holder must conduct bi-annual ambient sampling of Volatile Organic Compounds (VOC's) and submit reports to the Licensing Authority.

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

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 / Emission Unit – operating requirements

Should normal start-up, 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.

Air Quality Officer Signature: _____
Dr J S Chaka
Divisional Head: Environmental Health
Health and Social Development Department

Date: 23/07/2024

7.4. Reporting Groups / Emission Units – emission monitoring and reporting requirements

EU Code	Emission Sampling / Monitoring Method	Sampling Frequency	Sampling Duration	Parameters to be Measured	Parameters to be Reported	Reporting Frequency
	Emission Sampling /Monitoring conditions are applicable to all installations with a throughput greater than 50 000 m3 per annum of products with a vapour pressure greater than 14 kPa					

Reporting Group / Emission Unit – operating requirements

Should the above thresholds be triggered or exceeded by the Petroleum Products handled and stored on site, the onus is on the License Holder to install a Vapour Recovery Unit for the control of Total Volatile Organic Compounds and to conduct reliable emission tests to comply with emission limits set out in sub-category 2.4 of the Minimum Emission Standards for new plants.

7.5. Reporting Groups / Emission Units (Area and/or line source) – management and mitigation measures

Area and/or Line EU Code	Description of Specific Measures	Timeframe for Implementation of Specific Measures	Method of Monitoring Measure Effectiveness	Contingency Measure
EU006	—General housekeeping, including the regular cleaning of machinery and the areas around the coal bunker to remove deposited particles to minimise the load available for entrainment during high wind speed events. — Stockpile loading/offloading must seize during high wind speed events. —Provide a fabric or canvas cover or tarpaulin to cover the coal stockpile (or portions thereof) when frequent access is not required or during high wind speed events.	Immediate	Visual inspection	Spray the stockpile with water to dampen the coal surface and suppress dust emissions during high wind speed events, should the stockpile be uncovered.

Air Quality Officer Signature: _____
Dr J S Chaka
Divisional Head: Environmental Health
Health and Social Development Department

Date: 23/07/2024

Area and/or Line EU Code	Description of Specific Measures	Timeframe for Implementation of Specific Measures	Method of Monitoring Measure Effectiveness	Contingency Measure
EU0008 to EU0043, and EU0049 to EU0084.	—Maintain appropriate operational controls (e.g., appropriate temperature and pressure settings for storage vessels and loading operations). —Conduct regular equipment inspections for visible/audible/odorous leaks. —Conduct regular checks and periodic replacement of components including pump seals, compressor seals, pipeline valves, open-ended valves, flanges, and other connections (as applicable) in line with manufacturer specifications. —Maintain meticulous record keeping of all inputs, throughputs, and production rates, including loading and dispatch quantities for each tank to allow for a more accurate accounting of evaporative losses and emission inventory updates going forward. —In line with MES requirements for Subcategory 2.4 the following AEL conditions should apply: —Storage vessels for liquids above 14 kPa (e.g. ULP) must comply with Type 2 (fixed roof tank with pressure vacuum vents) or Type 3 (floating roof tank or VRU) special arrangements.	Immediate	Passive monitoring and LDAR monitoring programme	—Implement isolation and shutdown procedures to stop the flow of material or product from the leaking tank. This will help contain the leak and prevent further emissions. —The tank must be taken out of service until repairs are completed. —Develop a comprehensive emergency response plan specific to fugitive leaks from fixed roof tanks. This plan should outline the roles and responsibilities of personnel, procedures for reporting leaks, and step-by-step actions to be taken during an emergency.

Air Quality Officer Signature: _____
Dr J S Chaka
Divisional Head: Environmental Health
Health and Social Development Department

Date: 23/07/2024

Area and/or Line EU Code	Description of Specific Measures	Timeframe for Implementation of Specific Measures	Method of Monitoring Measure Effectiveness	Contingency Measure
	—Throughputs of liquids above 14kPa (e.g. ULP) exceeding 50 000 m3 per annum require a VRU for the control of TVOCs.			
EU0044 to EU0048	—Maintain appropriate operational controls (e.g. appropriate temperature and pressure settings for storage vessels and loading operations). —Conduct regular equipment inspections for visible/audible/odorous leaks. —Conduct regular checks and periodic replacement of components including pump seals, compressor seals, pipeline valves, open-ended valves, flanges, and other connections (as applicable) in line with manufacturer specifications. —Maintain meticulous record keeping of all inputs, throughputs, and production rates, including loading and dispatch quantities for each tank to allow for a more accurate accounting of evaporative losses and emission inventory updates going forward.	Immediate	Passive monitoring and LDAR monitoring programme	—Implement isolation and shutdown procedures to stop the flow of material or product from the leaking tank. This will help contain the leak and prevent further emissions. —The tank must be taken out of service until repairs are completed. —Develop a comprehensive emergency response plan specific to fugitive leaks from fixed roof tanks. This plan should outline the roles and responsibilities of personnel, procedures for reporting leaks, and step-by-step actions to be taken during an emergency.
EU0085 to EU0096	—Maintain appropriate operational controls (e.g. appropriate temperature and pressure settings for storage vessels and loading operations). —Establish a scheduled inspection and maintenance program for underground tanks. Regularly inspect the tanks,	Immediate	Passive monitoring and LDAR monitoring programme	—Implement isolation and shutdown procedures to stop the flow of material or product from the leaking tank. This will help contain the leak and prevent further emissions. —The tank must be taken out of service until

Air Quality Officer Signature: _____
Dr J S Chaka
Divisional Head: Environmental Health
Health and Social Development Department

Date: 23/07/2024

Area and/or Line EU Code	Description of Specific Measures	Timeframe for Implementation of Specific Measures	Method of Monitoring Measure Effectiveness	Contingency Measure
	pipes, and associated equipment for signs of corrosion, wear, or damage that could lead to leaks. Replace components in line with manufacturer specifications where needed. —Provide secondary containment systems around underground tanks to capture and contain any leaked material. Secondary containment can prevent the leaked substances from seeping into the soil and groundwater. —Maintain meticulous record keeping of all inputs, throughputs, and production rates, including loading and dispatch quantities for each tank to allow for a more accurate accounting of evaporative losses and emission inventory updates going forward.			repairs are completed. —Develop a comprehensive emergency response plan that outlines the actions to be taken in the event of a fugitive leak from an underground tank.
EU0097 to EU0104	—Maintain appropriate operational controls (e.g., appropriate temperature and pressure settings for storage vessels and loading operations). —Conduct regular equipment inspections for visible/audible/odorous leaks. —Conduct regular checks and periodic replacement of components including pump seals, compressor seals, pipeline valves, open-ended valves, flanges, and other	Immediate	Passive monitoring and LDAR monitoring programme	—Implement isolation and shutdown procedures to stop the flow of material or product from the leaking tank. This will help contain the leak and prevent further emissions. —The tank must be taken out of service until repairs are completed. —Develop a comprehensive emergency response plan specific to fugitive leaks from fixed

Air Quality Officer Signature: _____
Dr J S Chaka
Divisional Head: Environmental Health
Health and Social Development Department

Date: 23/07/2024

Area and/or Line EU Code	Description of Specific Measures	Timeframe for Implementation of Specific Measures	Method of Monitoring Measure Effectiveness	Contingency Measure
	connections (as applicable) in line with manufacturer specifications. —Maintain meticulous record keeping of all inputs, throughputs, and production rates, including loading and dispatch quantities for each tank to allow for a more accurate accounting of evaporative losses and emission inventory updates going forward.			roof tanks. This plan should outline the roles and responsibilities of personnel, procedures for reporting leaks, and step-by-step actions to be taken during an emergency.

Additional Area Source requirement:

All storage tanks including newly installed tanks must be within a bunded area to contain spillages and leaks of liquids used and stored on site.

Air Quality Officer Signature: _____

Dr J S Chaka
Divisional Head: Environmental Health
Health and Social Development Department

Date: 23/07/2024

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 (where the facility's capacity is equal or above the threshold indicated in the IPCC Guidelines for National Greenhouse Gas inventories' source categories).

Air Quality Officer Signature: _____ Date: 23/07/2024
Dr J S Chaka
Divisional Head: Environmental Health
Health and Social Development Department

(e) The Ekurhuleni Highveld Priority Area Implementation Task Team (ITT) meetings must be attended by Responsible Officer or representative.

(f) The 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) reporting

- Reporting of all your emissions on NAEIS must be in accordance with the stipulations of the National Atmospheric Emission Reporting Regulations No..R283 of 2 April 2015.
- Persons classified as data providers and required to register, report and verify information in terms of regulations 5(1), 6, 8(1) and 10 of the National Atmospheric Emission Reporting Regulations 2015, must now temporarily do so in the manner specified by the relevant licensing authority. The data providers must submit the required information by email to the relevant authorities and to NAEISAdmin@dffe.gov.za.

7.7. Investigation

The following investigations are required:

Investigation	Purpose	Completion Date
Conduct baseline stack emission tests on all three (3) boilers located on site.	To determine the concentration of pollutants being emitted into the atmosphere and to assess compliance with relevant environmental standards.	Eight (8) months after receipt of this Atmospheric Emission License. Stack emission reports must be submitted to the Licensing Authority upon completion of this condition.

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
N/A	No abatement installed on site.		

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.

Air Quality Officer Signature: _____ Date: 23/07/2024
Dr J S Chaka
Divisional Head: Environmental Health
Health and Social Development Department