Fezile Dabi
District Municipality

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Aiming above the horizon

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Atmospheric Emissions Licence Holder: ESKOM HOLDINGS SOC LTD, LETHABO POWER STATION

Atmospheric Emissions Licence Reference Number: FDDM-MET-2011-P1-25-E1

ATMOSPHERIC EMISSIONS LICENCE ISSUED IN TERMS OF SECTION 13 OF REGULATION No.893 of 22 NOVEMBER 2013 READ WITH 43 OF THE NATIONAL ENVIRONMENTAL MANAGEMENT: AIR QUALITY AMENDMENT ACT, 2014, (ACT NO. 20 OF 2014)

This Atmospheric Emissions Licence issued to **Eskom Holdings SOC Ltd, Lethabo Power Station** in terms of Section 47(1) read with Section 59 (1) of the National Environmental Management: Air Quality Amendment Act, 2014 (Act No. 20 of 2014) and also the List of Activities which result in atmospheric emissions which have or may have significant detrimental effects on the environment, including health, social conditions, economic conditions, ecological conditions or cultural heritage:

The licence is issued in respect of the following Listed Activities:

- Subcategory 1.1: Solid Fuel Combustion Installations
- Subcategory 2.4: Storage and Handling of Petroleum Products

The Atmospheric Emissions Licence is issued on the basis of information provided in Eskom Lethabo Power Station's application for a renewal of the existing atmospheric emissions Licence and the decision on the application for exemption to meet certain minimum emissions in terms of Section 59 (1) submitted to the Minister of the Department of Forestry Fisheries and the Environment and information that became available during processing of the application.

The Atmospheric Emissions Licence is effective from **01 October 2025 and valid until 31 October 2030.**

The reason for issuance of the current licence is renewal of the AEL issued on **1 April 2015 (Reference Number: FDDM-MET-2011-P1),** incorporated with exemption application decision of the Minister of Forestry, Fisheries and the Environment issued by the Minister on the **31st March 2025**.

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

1. ATMOSPHERIC EMISSIONS LICENCE ADMINISTRATION

Name of the Licensing Authority	Fezile Dabi District Municipality
Atmospheric Emissions Licence Number	FDDM-MET-2011-P1-25-E1
Atmospheric Emissions Licence Issue Date	Date of signature by the AQO
Atmospheric Emissions Licence Type	Final Atmospheric Emissions Licence
Review Date	As deemed necessary by Licensing Authority or upon request of the licence holder
Renewal Date	Six (6) months before expiry date

2. ATMOSPHERIC EMISSIONS LICENCE HOLDER DETAILS

Enterprise Name	Eskom Holdings SOC Ltd
Trading as	Eskom Lethabo Power Station
Enterprise Registration Number (Registration Numbers if Joint Venture)	2002/015527/30
Registered Address	Lethabo Power Station Off R716 Denysville/ Viljoensdrif Raod Viljoensdrif 1932
Postal Address	P.O Box 415, Vereeniging, 1930
Telephone Number (General)	016 457 5111
Industry Sector	Power Generation
Name of Responsible Officer	Karabo Rakgolela
Telephone Number	016 457 5500
Cell Phone Number	072 797 8019
Email Address	rakgolk@eskom.co.za
After Hours Contact Details	016 457 5604
Land Use Zoning as per Town Planning Scheme	Agriculture / Heavy Industry

3. SITUATION AND EXTENT OF PLANT

3.1. Location and extent of the plant-

Physical Address of the Premises	Farm Lethabo Power Station 1814, Fezile Dabi District Municipality, Free State, 1930
Description of Site (Erf)	The area surrounding the Power Station is mainly agricultural land with the coal mine to the northwest of the site and Ash Resources to the south. The nearest towns are Sasolburg (25km West) and Vereeniging (10 km north). The Vaal River at its closest point is about 1,5km from the station boundary. There exist smaller settlements within a 5km radius, namely Vaal Village.
Coordinates of Approximate Centre of Operations	Lat: -26.74083333 Long: 27.97638889
Extent	1085.0007 ha
Elevation Above Mean Sea Level (m)	1465
Province	Free State
District Municipality	Fezile Dabi District Municipality
Local Municipality	Metsimaholo Local Municipality
Designated Priority Area	Vaal Triangle Airshed Priority Area (VTAPA)

3.2. Description of Surrounding Land Use within 5 km radius

The area surrounding the Power Station is mainly agricultural land with the coal mine to the north west of the site and Ash Resources to the south. The nearest towns are Sasolburg (25km west) and Vereeniging (10 km north). The Vaal River at its closest point is about 1.5km from the station boundary. There exist smaller settlements within a 5km radius, namely Vaal Village.

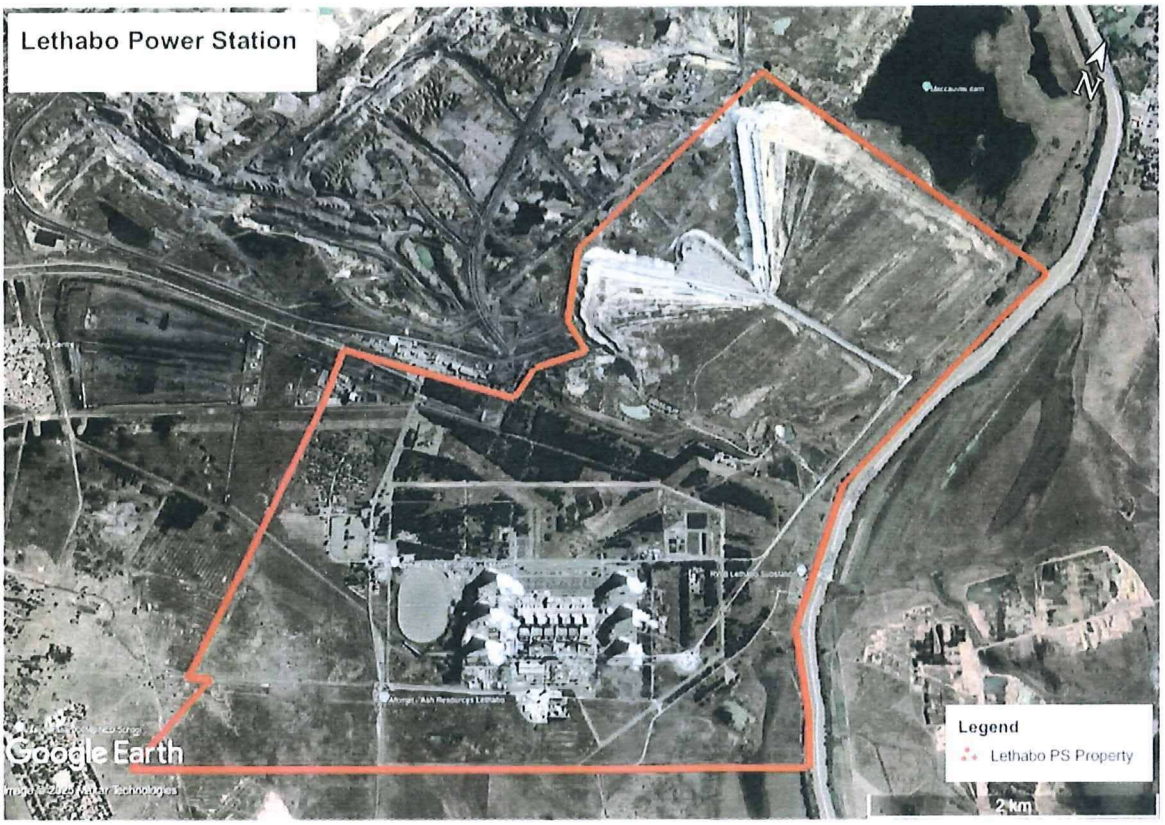

Figure 1: Aerial photograph of the area around the Eskom Lethabo facility

4. GENERAL CONDITIONS

4.1. Process and ownership changes

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

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

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

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

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

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

4.2. General duty of care

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

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

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

4.3. Sampling and/or analysis requirements

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

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

4.4. General requirements for licence holder

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

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

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

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

The licence holder must report and submit an annual emissions report on the National Atmospheric Emission Inventory System (NAEIS) for the preceding year in terms of GNR 283 in Government Gazette 38633 of 02 April 2015.

4.5. Statutory obligations

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

4.6. Variation of Atmospheric Emissions Licence

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

4.7. Non- Compliance with Conditions

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

4.8. Conditions in terms of MES Exemption decision dated 31 March 2025

Eskom Holdings is required to comply with the conditions of the Ministers MES exemption decision of 31 March 2025. The following are listed in this AEL as per table 4 of the Ministers decision for incorporation in station AEL. Additional detail on the requirements of the conditions is to be found in the Ministers decision.

4.8.1 Health Interventions

4.8.1 The licence holder must conduct a detailed plant level health risk assessment to quantify excess mortality/morbidity associated with the licence holder's emissions based on existing health response models at the power station. Based on this data, the licence holder is to demonstrate how they are mitigating these effects in a quantitative sense through direct investments in communities most affected. This must be initiated within 6 months of the exemption being granted through a partnership with experts in the field of health impact assessment with annual report backs on progress sent to the Minister.

4.8.2 The licence holder must improve green spaces, particularly around established healthcare facilities and schools, as this is important for mitigating some of the effects of air pollution. The licence holder must create one greenspace per year in each community situated close to the power station, starting with the worst affected community in terms of ambient air quality. In addition, the licence holder may use some of its unused land to establish green spaces, an approach that is gaining momentum, which involves planting large scale tree farms that will improve ambient air quality by reducing wind-blown PMs. The licence holder must explain the benefits of this approach go get buy-in from people in the communities who can be enlisted to assist it with establishing the green spaces.

4.8.2 Socio-economic interventions

4.8.2.1 The licence holder must invest in strategies to reduce other sources of air pollution that adversely affect ambient air quality, particularly those that cause and/or exacerbate pulmonary and cardiovascular diseases. In this regard, the following conditions are imposed:

4.8.2.1.1 Collection of waste and eradication of illegal waste dumps to cover a minimum of 2 at-risk settlements located around the power station, where illegal mining dumps have been established. This will result in the reduction of uncontrolled burning of refuse containing tyres/plastics which reduces harmful toxins.

4.8.2.1.2 The licence holder must submit plans within six months of the issuance of the AEL that comprehensively address how it intends to deal with the ash dumps it has established in the various areas. These dumps contribute significantly to the emission of PM, particularly during windy conditions. The licence holder must set out clear timelines for when it will address the issues however, these timelines must fall within the time period that the AEL is in place.

4.8.3 Air Quality Transparency and Governance

4.8 3.1The licence holder must compile or update if already in existence an air quality monitoring plan for the power station and submit such to the NAQO within six months of the date of the exemption. The plan must:

4.8.3.1.2 Indicate the reasoning behind the placement of the minimum two monitors around the power station (with reference to the dispersion modeling done, showing that placement is capturing predicted ambient peaks) and justification for the equipment selected.

4.8.3.1.3 Present calibration schedules, backup power options, backup equipment, data quality assurance and quality control (QA/QC).

3.1.3 Stipulate that the monthly monitoring reports as well as annual reports (showing seasonal patterns and trends over the full/multi-year monitoring period, with comparisons with abatement schedules, etc) must be submitted to the NAQO.

4.8.3.2 The licence holder must commission/maintain at least two continuous air quality monitoring stations (measuring PM10, PM 2.5, NO2 and SO2) around the power station within 12 months of the date of the exemption (these stations can be taken offline when the station shuts down) and ensure that continuous data output from the stations is maintained.

4.8.3.3 The monitoring stations must comply to International Organisation for Standardisation (ISO) 14001 environmental standards, but Eskom is free to select what technology they utilize (e.g low-cost sensors could be considered).

4.8.3.2.4 Key sensitive receptors must be considered in locations as specified in the Minister's exemption decisions for additional monitoring due to high pollutant concentrations. These must be installed sufficient distance away from existing stations, within twelve months of the date of exemption.

4.8.3.2.5 The ambient air quality monitoring data at a minimum of two monitoring stations must be published live/in real time on the Eskom website in addition to being live fed to the Department so that it can be reported on the SAAQIS web portal. Additionally, the licence holder must provide live daily stack emission data for each of the pollutants on Eskom's website for full disclosure to all stakeholders and this must be live fed to the National Department of Forestry, Fisheries and the Environment so that it can be reported on the SAAQIS web portal with immediate effect. This will enable all stakeholders to access information relating to the licence holder compliance with its obligations, as set out in the AEL.

4.8.3.2.6 The licence holder must send stack monitoring data (emission concentration and volumetric flow) at a 10 minute resolution to the National Air Quality Officer (NAQO), The Provincial Air Quality Officer (PACO) and the District Air Quality Officer (DAQO) weekly with immediate effect. This is in addition to the live feed data.

4.8.3.2.7 Data coverage must be maintained at a minimum of 90% every month for at least two monitoring stations and the licence holder need to explain/justify any data gaps in their monthly reports to the NAQO, PAQO & DAQO. There should be penalties if the air quality monitoring stations are down due to lack of maintenance/planning. Backup equipment must be installed if equipment is removed for repairs or calibration.

4.8.3.2.8 Any exceedances of the recommended emission limits will require a full atmospheric dispersion assessment to determine likely health incidents (with reporting that is in line with the Atmospheric Impact Report Regulations)

4.8.3.2.9 The licence holder must record the emissions data, referred to above, in its annual Sustainability Report and in its financial results/Annual General Meeting.

4.8.3.2.10 Progress on abatement projects must continue to be included in Eskom's quarterly reporting to the NAQO, PAQO & DAQO.

5. NATURE OF PROCESS

5.1. Process description

Coal from the mine is transported to the station on conveyors via the coal stockyard into silos. In exceptional circumstances, when coal stocks are low, or special combustion tests are required, coal will be trucked in via public roads to the coal stockyard. Coal is fed from the silos to the mill bunkers, from where it is fed with volumetric feeders into the mills. In the mills, the coal is milled to a fineness of at least 75% passing through a 75 micron sieve. From the mills it is carried by pre-heated Primary air to the burners and boiler. In the boiler it mixes with Secondary air and combusts at a temperature of +/- 1500˚C. This process produces steam at a temperature of 540˚C and pressure of 17.3 MPa at boiler outlet. The steam driven turbine drives a generator that supplies the national grid via a 275 kV system. After combustion, the ash and flue gas (by-products of combustion) pass through the back of the boiler where SO_3 is injected into the flue gas stream before the inlet of the electrostatic precipitators. In the electrostatic precipitators the ash is extracted and carried to the ash conditioners to eventually be transported to the ash dump while the clean flue gas is

emitted through the smoke stack. As part of continues improvement, the station plan to install low NOx burners to reduce NOx emissions.

5.2. Listed Activity

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

Category of Listed Activity	Listed Activity Name	Sub-category of the Listed Activity	Description of the Listed Activity	Application
1	Combustion Installations	**Subcategory 1.1**: Solid fuel combustion installations	Solid fuel combustion installations used primarily for steam raising or electricity generation.	All installations with design capacity equal to or greater than 50 MW heat input per unit, based on the lower caloric value of the fuel used.
2	Petroleum Industry	**Subcategory 2.4**: Storage and Handling of Petroleum Products.	Storage and Handling of Petroleum Products.	All permanent immobile liquid storage facilities at a single site with a combined storage capacity of greater than 1000 cubic meters.

5.3. Unit Processes

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

Emission Unit Code	Emission Unit Type	Emission Unit Description	Batch or Continuous Process	Operating Hours
EU0001	Boiler	Pulverised fuel boiler burning coal	Continuous	24-hours/day
EU0002	Boiler	Pulverised fuel boiler burning coal	Continuous	24-hours/day
EU0003	Boiler	Pulverised fuel boiler burning coal	Continuous	24-hours/day
EU0004	Boiler	Pulverised fuel boiler burning coal	Continuous	24-hours/day
EU0005	Boiler	Pulverised fuel boiler burning coal	Continuous	24-hours/day

Emission Unit Code	Emission Unit Type	Emission Unit Description	Batch or Continuous Process	Operating Hours
EU0006	Boiler	Pulverised fuel boiler burning coal	Continuous	24-hours/day
EU0019	Conveyor	Coal Conveyors	Continuous	24-hours/day
EU0020	Conveyor	Ash Conveyors	Continuous	24-hours/day
EU0021	Crusher	Milling Plant	Continuous	24-hours/day
EU0022	Ash Dump	Ash Disposal Facility	Continuous	24-hours/day
EU0023	Storage Tank	Fuel Oil Storage Tanks	Continuous	24-hours/day
EU0018	Silo	Coal Silo 1	Continuous	24-hours/day
EU0024	Silo	Coal Silo 2	Continuous	24-hours/day
EU0025	Silo	Coal Silo 3	Continuous	24-hours/day
EU0026	Silo	Coal Silo 4	Continuous	24-hours/day
EU0027	Silo	Coal Silo 5	Continuous	24-hours/day
EU0028	Silo	Coal Silo 6	Continuous	24-hours/day
EU0029	Coal Bunkers	Coal Bunkers	Continuous	24-hours/day
EU0030	Emergency Offloading	Ash Emergency Offloading Area	Continuous	24-hours/day

5.4. Graphical Process Information

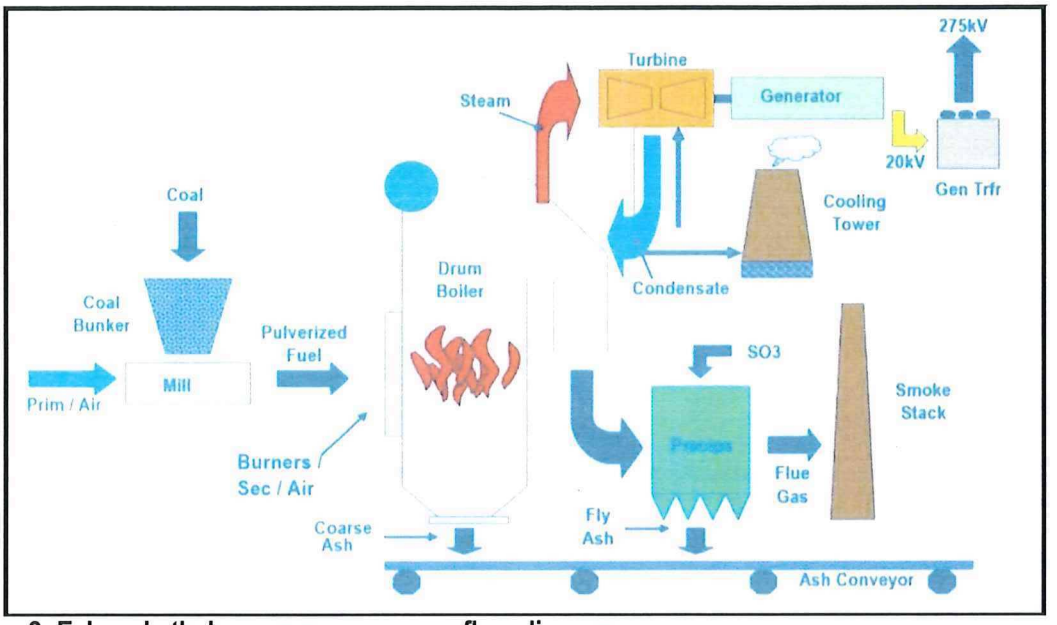

Figure 2: Eskom Lethabo summary process flow diagram

6. RAW MATERIALS AND PRODUCTS

6.1. Raw materials used

Raw Material Type	Maximum Permitted Consumption Rate (Quantity)	Design Consumption Rate (Quantity)	Units (quantity/period)
Coal	2 000 000	N/A	Tons/month
Fuel Oil	3700	N/A	Tons/month

6.2. Production Rates

Product Name	Actual Production Capacity (Quantity)	Design Production Capacity (Quantity)	Units (quantity/period)
Electricity	2 835	2 835	GWh/month
BY-PRODUCTS			

By-Product Name	Actual Production Capacity Permitted (Quantity)	Design Production Capacity (Quantity)	Units (Quantity/Period)
Ash	940 000	N/A	Tons/month

6.3. Materials Used In Energy Sources

Materials for Energy	Sulphur Content of the Material (%)	Ash Content of Material (%)	Design Consumption Rate (Quantity)	Actual Consumption Rate (Quantity)	Units (Quantity/ Period)
Coal	< 1.2% (dry basis)	< 47% (dry basis)	N/A	2 000 000	Tons/Month
Fuel Oil	< 3.5	0.1	N/A	3700	Tons/Month

6.4. SOURCES OF ATMOSPHERIC EMISSIONS

6.4.1. Point source parameters

Unique Stack ID	Emission Unit 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 (Am^3/hr)	Actual Gas Exit Velocity (m/s)
SV0011	EU0001	Boiler 1	-26.7424	27.9758	275	175	7.260	150	4 140 000	35
SV0012	EU0002	Boiler 2			275	175	7.260	150	4 140 000	35
SV0013	EU0003	Boiler 3			275	175	7.260	150	4 140 000	35
SV0014	EU0004	Boiler 4	-26.7426	27.9774	275	175	7.260	150	4 140 000	35
SV0015	EU0005	Boiler 5			275	175	7.260	150	4 140 000	35
SV0016	EU0006	Boiler 6			275	175	7.260	150	4 140 000	35

6.4.2. Area and/or line source parameters

Unique Area Source ID	Source Name	Source Description	Latitude (decimal degrees) of SW corner	Longitude (decimal degrees) of SW corner	Height of Release Above Ground (m)	Length of Area (m)	Width of Area (m)
EU0019	Conveyor	Coal Conveyors	-26.746168	27.968863	40 (Maximum Height)	2000 (total)	6
EU0020	Conveyor	Ash Conveyors	-26.743892	27.975005	3	9000 (total)	6
EU0021	Crusher	Milling Plant	-26.743892	27.974130	16	500	90

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)
EU0022	Ash Dump	Ash Disposal Facility	-26.743525	27.97641	50	3000	2500
EU0023	Storage Tank	Fuel Oil Storage Tanks	-26.74258	27. 97641	13	20	20
EU0018	Silo 1	Coal Silo 1	-26.743465	27.975553	65	15	15
EU0024	Silo 2	Coal Silo 2	-26.743218	27.975983	65	15	15
EU0025	Silo 3	Coal Silo 3	-26.742826	27.977085	65	15	15
EU0026	Silo 4	Coal Silo 4	-26.742626	27.977546	65	15	15
EU0027	Silo 5	Coal Silo 5	-26.742168	27.978646	65	15	15
EU0028	Silo 6	Coal Silo 6	-26.741976	27.979121	65	15	15
EU0029	Coal Bunkers	Coal Bunkers	-26.742385	27.974130	35	500	90
EU0030	Emergency Offloading	Emergency Offloading Area	-26.740140	27.9856645	15	150	100

*The following structures are fully enclosed; foal silos, fuel oil storage tanks & Coal bunkers.
* The following structures are partially closed; milling plant, coal conveyors & ash conveyors.

7. APPLIANCES AND MEASURES TO PREVENT AIR POLLUTION

7.1. Appliances and control measures

			Abatement Equipment Control Technology								
Associated Unique Stack ID	**Appliance / Process Equipment Number**	**Appliance Type / Description**	**Appliance Serial Number**	**Abatement Equipment Manufacture Date**	**Abatement Equipment Name and Model**	**Abatement Equipment Technology Type**	**Commission Date**	**Date of Significant Modification / Upgrade**	**Design Capacity**	**Minimum Control Efficiency (%)**	**Minimum Utilization (%)**
SV0011	01	Electrostatic Precipitator	08-01NT	1981	Apparatbau, Rothemuehle, Brand & Kritzler	Electrostatic Precipitator	1985	2026 FY	Gas Volume 1150 Am3/sec Gas Temperature 1500 C Dust Concentration 30g/m3	99 (Combined efficiency of SO3 and ESP)	N/A
		Sulphur Plant	08-01NQ	2023	Howden (PTY) LTD	Sulphur Trioxide Flue Gas Conditioning Plant	2023	2024 FY	40 ppm	99 (Combined efficiency of SO3 and ESP)	75
SV0012	02	Electrostatic Precipitator	08-02NT	1981	Apparatbau, Rothemuehle, Brand & Kritzler	Electrostatic Precipitator	1986	2026 FY	Gas Volume 1150 Am3/sec Gas Temperature 1500	99 (Combined efficiency of SO3 and ESP)	N/A

			Abatement Equipment Control Technology								
Associated Unique Stack ID	**Appliance / Process Equipment Number**	**Appliance Type / Description**	**Appliance Serial Number**	**Abatement Equipment Manufacture Date**	**Abatement Equipment Name and Model**	**Abatement Equipment Technology Type**	**Commission Date**	**Date of Significant Modification / Upgrade**	**Design Capacity**	**Minimum Control Efficiency (%)**	**Minimum Utilization (%)**
									C Dust Concentration 30g/m3		
		Sulphur Plant	08-02NQ	2025	Howden (PTY) LTD	Sulphur Trioxide Flue Gas Conditioning Plant	2July 2025	2026 FY	40 ppm	99 (Combined efficiency of SO3 and ESP)	75
SV0013	03	Electrostatic Precipitator	08-03 NQ	1981	Apparatba, Rothemuehle, Brand & Kritzler	Electrostatic Precipitator	1987	2025 FY	Gas Volume 1150 Am3/sec Gas Temperature 1500 C Dust Concentration 30g/m3	99 (Combined efficiency of SO3 and ESP)	N/A
		Sulfur Plant	08-03 NQ	2024	Howden (PTY) LTD	Sulphur Trioxide Flue Gas Conditioning Plant	2025	2024 FY	40 ppm	99 (Combined efficiency of SO3	75

			Abatement Equipment Control Technology								
Associated Unique Stack ID	**Appliance / Process Equipment Number**	**Appliance Type / Description**	**Appliance Serial Number**	**Abatement Equipment Manufacture Date**	**Abatement Equipment Name and Model**	**Abatement Equipment Technology Type**	**Commission Date**	**Date of Significant Modification / Upgrade**	**Design Capacity**	**Minimum Control Efficiency (%)**	**Minimum Utilization (%)**
										and ESP)	
SV0014	04	Electrostatic Precipitator	08-04 NQ	2022	Apparatba, Rothemuehle, Brand & Kritzler	Electrostatic Precipitator	1987	2026 FY	Gas Volume 1150 Am3/sec Gas Temperature 1500 C Dust Concentration 30g/m3	99 (Combined efficiency of SO3 and ESP)	N/A
		Sulphur Plant	08-04 NQ	2023	Howden (PTY) LTD	Sulphur Trioxide Flue Gas Conditioning Plant	2023	2023 FY	40 ppm	99 (Combined efficiency of SO3 and ESP)	75

			Abatement Equipment Control Technology								
Associated Unique Stack ID	**Appliance / Process Equipment Number**	**Appliance Type / Description**	**Appliance Serial Number**	**Abatement Equipment Manufacture Date**	**Abatement Equipment Name and Model**	**Abatement Equipment Technology Type**	**Commission Date**	**Date of Significant Modification / Upgrade**	**Design Capacity**	**Minimum Control Efficiency (%)**	**Minimum Utilization (%)**
SV0015	05	Electrostatic Precipitator	08-05 NT	1981	Apparatba, Rothemuehle, Brand & Kritzler	Electrostatic Precipitator	1989	2026 FY	Gas Volume 1150 Am3/sec Gas Temperature 1500 C Dust Concentration 30g/m3	99 (Combined efficiency of SO3 and ESP)	N/A
		Sulphur Plant	08-05 NQ	2025	Howden (PTY) LTD	Sulphur Trioxide Flue Gas Conditioning Plant	2025	2026 FY	40 ppm	99 (Combined efficiency of SO3 and ESP)	75
SV0016	06	Electrostatic Precipitator	08-01 NT	1981	Apparatba, Rothemuehle, Brand & Kritzler	Electrostatic Precipitator		2024 FY	Gas Volume 1150 Am3/sec Gas Temper	(Combined efficiency of SO3 and ESP)	N/A

			Abatement Equipment Control Technology								
Associated Unique Stack ID	Appliance / Process Equipment Number	Appliance Type / Description	Appliance Serial Number	Abatement Equipment Manufacture Date	Abatement Equipment Name and Model	Abatement Equipment Technology Type	Commission Date	Date of Significant Modification / Upgrade	Design Capacity	Minimum Control Efficiency (%)	Minimum Utilization (%)
									ature 1500 C Dust Concentration 30g/m3		
		Sulphur Plant	08-06NQ	2024	Howden (PTY) LTD	Sulphur Trioxide Flue Gas Conditioning Plant	July 2024	2024 FY	40 ppm	99 (Combined efficiency of SO3 and ESP)	75

7.2. Point Source – Minimum Emissions Standards (Under Normal Working Conditions)

Point Source Code	Category	Appliance	Pollutant Name	Maximum Release Rate			Duration of Emissions
				(mg/Nm³)	Compliance Time Frame	Average Period	
EU0001	**Subcategory 1.1:** Combustion Installations	Boiler	PM	100	Immediate	Daily	Continuous
				50	01 October 2027		
			NOx	1100	Immediate	Daily	Continuous

Point Source Code	Category	Appliance	Pollutant Name	Maximum Release Rate			Duration of Emissions
				(mg/Nm³)	Compliance Time Frame	Average Period	
			SO_2	2600	Immediate	Daily	Continuous
EU0002	**Subcategory 1.1:** Combustion Installations	Boiler	PM	100	Immediate	Daily	Continuous
				50	1 April 2026		
			NOx	1100	Immediate	Daily	Continuous
			SO_2	2600	Immediate	Daily	Continuous
EU0003	**Subcategory 1.1:** Combustion Installations	Boiler	PM	100	Immediate	Daily	Continuous
				50	1 April 2026		
			NOx	1100	Immediate	Daily	Continuous
			SO_2	2600	Immediate	Daily	Continuous
EU0004	**Subcategory 1.1:** Combustion Installations	Boiler	PM	100	Immediate	Daily	Continuous
				50	1 April 2027		
			NOx	1100	Immediate	Daily	Continuous
			SO_2	2600	Immediate	Daily	Continuous
EU0005	**Subcategory 1.1:** Combustion Installations	Boiler	PM	100	Immediate	Daily	Continuous
				50	1 April 2026		
			NOx	1100	Immediate	Daily	Continuous
			SO_2	2600	Immediate	Daily	Continuous
EU0006	**Subcategory 1.1:** Combustion Installations	Boiler	PM	50	From date of AEL issuance	Daily	Continuous
			NOx	1100	From date of AEL issuance	Daily	Continuous
			SO_2	2600	From date of AEL issuance	Daily	Continuous

*** All minimum emission standards are expressed on a daily average basis, under normal conditions of 273 K, 101.3 KPa, 10% oxygen and dry gas.**

POINT SOURCE - OPERATING REQUIREMENTS

7.2.1. The licence holder must report any non-compliance with any condition stipulated in the licence through the monthly reports.

7.2.2. Since the licence holder's activities are carried out in a national air pollution priority area (Vaal Triangle Air Shed Priority Area), further stricter conditions may be introduced should it be found prudent to do so.

7.2.3. The licence holder is responsible for ensuring compliance with conditions stipulated in this licence.

7.2.4. All records of compliance and non-compliance must be maintained and kept for at least five (5) years.

7.2.5. Any abnormalities experienced shall form part of the normal part of the monthly reporting and be forwarded to the licensing authority.

7.2.6 The licencing authority may request atmospheric dispersion assessment for exceedances of the emissions limits set in 7.2.

7.2.7 Continuous emission monitoring of PM, SO_2 and NO_X is required.

7.3. Point Source Operating Conditions (Under Start-Up, Maintenance, Upset & Shut-Down & Conditions)

7.3.1 The emission limits in Section 7.2 do not apply during start-up, maintenance, upset and shut down conditions.

7.3.2 The licence holder must take all reasonable measures to control atmospheric emissions during start-up, maintenance, shut-down and upset conditions.

7.3.3 PM emissions should be below the limit value within 48 hours of synchronising with the grid during a hot start (when the unit was off for less than 8 hours), and below the limit value within 48 hours of synchronising with the grid during a cold start (when the unit was off for more than 8 hours).

7.3.4 Should cold start up, maintenance, shutdown and upset conditions exceed a period of 48 hours per plant, Section 30 of the National Environmental Management Act, Act No.107 of 1998 (as amended), shall apply when a definition of a NEMA Section 30 is fulfilled and the incident shall be reported, if triggered by the exceedance of the emissions limit.

7.3.5 Reporting of emissions will commence 24 hours after a unit has been synchronised.

7.3.6 In order to put into effect the provisions of sections 43 of the Act, the licence holder shall, undertake an investigation to calculate, measure or monitor and report on point source emissions released during start – up, maintenance and shut-down conditions. Such measurement and reporting shall be carried out in terms of the measurement, monitoring and reporting requirements set out in the National Environment: Air Quality Act (Act 39 of 2004): Standards and Regulations.

7.3.7 The licence holder shall be liable to prevent and mitigate against the risk to harm human health and the environment and shall put measures necessary to prevent and or mitigate against such risks.

7.3.8 All records of start-up, shut-down, maintenance and upset conditions to recorded and kept onsite for the duration of the validity of the licence.

7.4. POINT SOURCE – EMISSIONS MONITORING AND REPORTING REQUIREMENTS

Emission Unit Code	Emissions Sampling / Monitoring Method	Sampling Frequency	Sampling Duration	Parameters to be measured	Parameters to be reported	Conditions under which monitoring should be stopped	Reporting Frequency
EU0001	Continuous Monitoring	Daily	Continuous	PM, NOx & SO_2	PM, NOx & SO_2	Upon written approval by the Air Quality Officer	Monthly
EU0002	Continuous Monitoring	Daily	Continuous	PM, NOx & SO_2	PM, NOx & SO_2	Upon written approval by the Air Quality Officer	Monthly
EU0003	Continuous Monitoring	Daily	Continuous	PM, NOx & SO_2	PM, NOx & SO_2	Upon written approval by the Air Quality Officer	Monthly
EU0004	Continuous Monitoring	Daily	Continuous	PM, NOx & SO_2	PM, NOx & SO_2	Upon written approval by the Air Quality Officer	Monthly
EU0005	Continuous Monitoring	Daily	Continuous	PM, NOx & SO_2	PM, NOx & SO_2	Upon written approval by the Air Quality Officer	Monthly
EU0006	Continuous Monitoring	Daily	Continuous	PM, NOx & SO_2	PM, NOx & SO_2	Upon written approval by the Air Quality Officer	Monthly

7.5. AREA SOURCE – EMISSIONS MONITORING AND REPORTING REQUIREMENTS

Area Unit Code	Emissions Sampling / Monitoring Method	Sampling Frequency	Sampling Duration	Parameters to be measured	Parameters to be reported	Conditions under which monitoring should be stopped	Reporting Frequency
EU0022	ASTM D1739: 1970	As per Method	As per Method	Dust fall	Dust fall	Upon written approval by the Air Quality Officer	Monthly

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

Area and/or Line Source Code	Area and/or Line Source Description	Description of Specific Measures	Timeframe for Achieving Required Control Efficiency	Method of Monitoring Measures Effectiveness	Contingency Measures
EU0019	Coal Conveyor	Coal conveyors are enclosed	Immediately	Visible dust	N/A
EU0020	Ash Conveyor	Ash conveyors are enclosed	Immediately	Visible dust	N/A
EU0021	Milling Plant	Milling plant	Immediately	Visible dust	N/A
EU0022	Ash Disposal Facility	Wet dust suppression & progressive rehabilitation of ash disposal facility	Immediately	Dust bucket monitoring	N/A
EU0023	Fuel Oil Storage Tanks	Fuel oil tanks are enclosed	Immediately	N/A	N/A
EU0018	Coal Silo 1	Silo enclosed	Immediately	Visible dust	N/A
EU0024	Coal Silo 2	Silo enclosed	Immediately	Visible dust	N/A
EU0025	Coal Silo 3	Silo enclosed	Immediately	Visible dust	N/A
EU0026	Coal Silo 4	Silo enclosed	Immediately	Visible dust	N/A
EU0027	Coal Silo 5	Silo enclosed	Immediately	Visible dust	N/A
EU0028	Coal Silo 6	Silo enclosed	Immediately	Visible dust	N/A

EU0029	Coal Bunkers	Located inside Milling plant. Cleaning at the mill is conducted.	Immediately	Visible dust	N/A
EU0030	Ash Emergency Offloading Area	Mobile truck dust suppression	Immediately	Visible dust	N/A

7.7. Routine Reporting and Record-Keeping

Complaints register

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

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

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

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

8. REPORTING

8.1. Annual reporting

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

(a) Pollutant emissions trend;

(b) Compliance audit report(s);

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

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

8.2. Reporting of abnormal releases and Emergency Responses

The holder must prevent deviations from normal operating conditions that would result in pollution exceeding specified limit values. If any conditions exist that will result in excessive emissions or nuisance, the licence holder must report to the Air Quality Officer as soon as reasonably possible. If applicable, a section 30 incident must be reported in terms of NEMA and must also be reported to the Air Quality Officer within 24 hours. Where excessive emissions occur, which could cause adverse health and environmental impacts or nuisance, urgent corrective measures must be taken by the holder to contain or minimise the emissions

through operational interventions. Remediation, if required shall be carried out to the satisfaction of the licensing authority and/or any other government agencies.

9. 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.

10. 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.

11. APPEAL OF ATMOSPHERIC EMISSIONS LICENCE

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

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

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

11.3 An appeal against the decisions contained in this atmospheric emissions licence must be lodged, in writing with the: Municipal Manager: Fezile Dabi District Municipality, PO Box 10, Sasolburg, 1947, Tel No: 016 970 8600, Fax No: 016 970 8733.

12. REVIEW

12.1 The licencing authority shall have the right to review the licence within the period of the validity of the licence or as and when such review is deemed necessary by the Air Quality Officer;

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

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

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