Gert Sibande District Municipality

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

I, **MLT Mogakabe**, in my capacity as **License Officer** (hereinafter referred to as the "Licensing Authority"), in terms of Section 36(1) of the National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004), hereinafter referred to as the ("Act"), and as provided for in Section 40(1)(a) of the Act, hereby grant an Atmospheric Emission Licence to **Eskom Holdings SOC Limited- Majuba Power Station** ("the Applicant").

The Atmospheric Emission Licence is issued to **Eskom Holdings SOC Limited- Majuba Power Station** in terms of Section 41(1) of the National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004), in respect of Listed Activity **Category 1 Sub-category 1.1: Solid Fuel Combustion Installations; Category 2 Sub-category 2.4: Storage and Handling of Petroleum Products; Category 5 Sub-category 5.1: Storage and Handling of Ore and Coal**.

The Atmospheric Emission Licence has been issued based on information provided in the company's application received on the **16th of April 2025,** pre-licensing conducted on the **02nd of June 2025** and information that became available during processing of the application.

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

1. ATMOSPHERIC EMISSION LICENCE ADMINISTRATION

Name of the Licensing Authority	Gert Sibande District Municipality
Atmospheric Emission Licence Number	Dr PKI Seme/Eskom H SOC Ltd MPS/0014/2025/F05
Atmospheric Emission Licence Issue Date	31 July 2025
Atmospheric Emission Licence Type	Renewal
Renewal Date	30 April 2030
Expiry Date	31 July 2030

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2. ATMOSPHERIC EMISSION LICENCE HOLDER DETAILS

Enterprise Name	Eskom Holdings SOC Limited
Trading as	Majuba Power Station
Enterprise Registration Number	2002/015527/30
Registered Address	Farm Roodekoppies 67HS, Mezig No. 70HS, Holfontein 80HS and Witkoppies No. 81HS
Postal Address	Private Bag X9001, Volksrust, 2470
Industry Sector	Electricity Generation
Name of Responsible Person or Emission Control Officer	Mr. Yangaphe Ngcashi
Telephone Number	017 799 2100
Cell Phone Number	083 302 8851
Email Address	ngcashys@eskom.co.za
After Hours Contact Details	083 302 8851
Land Use Zoning as per Town Planning Scheme	Agriculture/Industry

3. LOCATION AND EXTENT OF PLANT

3.1. Facility Address

Physical Address of the Premises	Between Amersfoort and Volksrust towns, Volksrust, 2470
Description of Site (Erf)	Farm Roodekoppies 67HS, Mezig No. 70HS, Holfontein 80HS and Witkoppies No. 81HS
Coordinates of Approximate Centre of Operations	Latitude: -27.0999°S Longitude: 29.771194°E
Extent (km²)	15
Elevation Above Mean Sea Level (m)	1 740
Province	Mpumalanga
Metropolitan/District Municipality	Gert Sibande District Municipality
Local Municipality	Dr Pixley Ka Isaka Seme Local Municipality
Designated Priority Area	Highveld Priority Area

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

The surrounding land use is zoned as agriculture, compromising of low-density farm steads and infrastructure, livestock farming (primarily cattle and game). There are residential areas in the vicinity of the operation, i..e, Amersfoort about 10km and Volksrust about 45km. There are also schools and clinics. The farm households are scattered throughout the area with livestock farming (primarily cattle and game) representing the main agricultural use in the area.

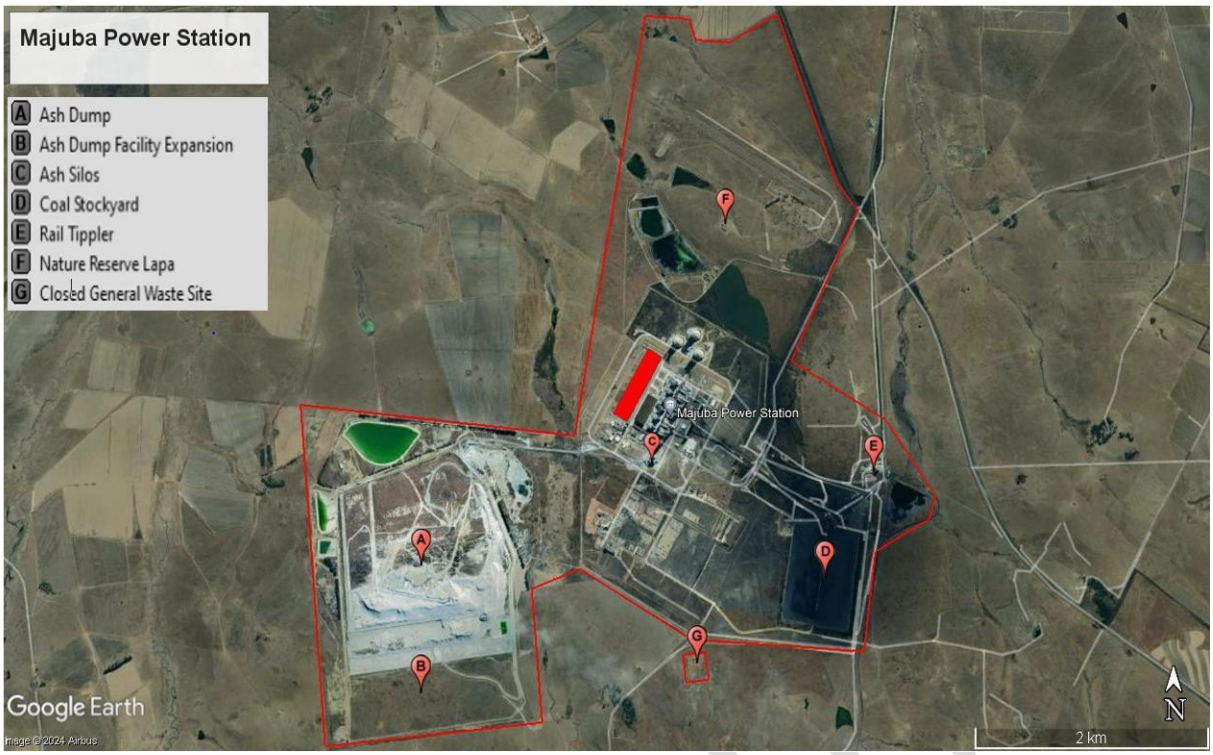

Figure 1: Satellite image of Majuba Power Station and areas surrounding the site

4. GENERAL CONDITIONS

4.1. Process and ownership changes

(a) The holder of the Atmospheric Emission Licence must ensure that all unit processes and apparatus used for the purpose of undertaking the listed activity in question, and all appliances and mitigation measures for preventing or reducing atmospheric emissions, are always properly maintained, and operated.

(b) No building, plant or site of works related to the listed activity or activities used by the licence holder shall be extended, altered, or added to the listed activity without an environmental authorisation from the competent authority. The investigation, assessment, and communication of potential impact of such an activity must follow the assessment procedure as prescribed in the Environmental Impact Assessment Regulations published in terms of Section 24(5) of the National Environmental Management Act, 1998 (Act No. 107 of 1998) as amended.

(c) Any changes in processes or increase in production, by the licence holder, will require prior written approval from the licensing authority.

(d) Any changes or increase to the type and quantities of input materials and products, or to production equipment and treatment facilities will require prior written approval from the licensing authority.

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

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

(g) The licence holder must notify the Licensing Authority in writing and submit the closure and rehabilitation plan three (3) months prior to the decommissioning of the facility.

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4.2. General duty of care

(a) The holder of the Licence must, when undertaking the listed activity, adhere to the duty of care obligations as set out in Section 28 of the NEMA as amended including Part II Section 3 of Gert Sibande District Municipal Air Quality by-laws.

(b) The Licence holder must undertake the necessary measures to minimize or contain the atmospheric emissions. The measures are set out in Section 28(3) of the NEMA as amended.

(c) Failure to comply with the above condition is a breach of the duty of care, and the Licence holder will be subject to the sanctions set out in Section 28 of the NEMA as amended including Part III Section 3 of Gert Sibande District Municipal Air Quality by-laws.

4.3. Sampling and/or analysis requirements

(a) Measurement, calculation and /or sampling and analysis shall be carried out in accordance with any nationally or internationally acceptable standard in line with Annexure A of NEMAQA as amended.

(b) Methods other than those contained in Annexure A of NEMAQA as amended may be used with the written consent of the National Air Quality Officer.

(c) In seeking the written consent referred to in paragraph (b), an applicant must provide the National Air Quality Officer with any information that supports the equivalence of the method other than those listed in Annexure A of NEMAQA as amended.

(d) The licence holder is responsible for quality assurance of methods and performance. Where the holder of the licence uses internal or external laboratories for sampling or analysis, only accredited laboratories by the national accreditation body shall be used. The certified copy of accreditation of the internal or external laboratory must be submitted to the Licensing Authority annually including its audits certification.

(e) The licence holder must provide the Licensing Authority on request with raw data obtained during sampling and or analysis including proof of agreed methodology used to reach the results submitted for compliance.

4.4. General requirements for licence holder

(a) The licence holder must conduct an induction on air quality management issues including compliance with the conditions of this licence to any person acting on his, her or its behalf including but not limited to an employee, agent, sub-contractor, or person rendering a service to the holder.

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

(c) A valid licence must be kept at the premises where the listed activity is undertaken. The licence must be made available to the Environmental Management Inspector / Air Quality Officer or an authorised officer representing the licensing authority who requests to see it.

(d) The Atmospheric Emission Licence Certificate must be displayed at the premises where the listed activity is undertaken.

(e) The licence holder must inform, in writing, the licensing authority of any change to its details but not limited to the name of the Emission Control Officer, postal address and/or telephonic details within five (05) working days after such change has been effected.

(f) The Emission Control Officer or facility representative must attend the Highveld Priority Area Implementation Task Team Forum bi-annually.

(g) The licence holder must report and submit an annual National Atmospheric Emission Inventory System Emission Report for the preceding year in terms of GNR 283 in Government Gazette 38633 of 02 April 2015 and GNR 4493 in Government Gazette 50284 of 08 March 2024 (National Atmospheric Emission Inventory System Reporting Regulations).

4.5. Minister's Exemption Conditions

4.5.1. Health Interventions

4.5.1.1. The licence holder must conduct a detailed plant level health risk assessment to quantify excess mortality/morbidity associated with Eskom's emissions based on existing health response models at the power station. Based on this data, Eskom 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. An annual report on health impact assessment must be submitted to the Minister annually.

4.5.1.2. 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. Eskom must create one green space 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, Eskom 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. Eskom must explain the benefits of this approach, to get buy-in from people in the communities who can be enlisted to assist it with establishing the green spaces.

4.5.2. Socio-economic intervention programmes

4.5.2.1. Eskom 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:

4.5.2.1.1. 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 waste dumps have been established. This will result in the reduction of uncontrolled burning of refuse containing tyres/plastics which reduces harmful toxins. This waste collection interventions associated with illegal waste dumps must be reported to the Minister on an annual basis.

4.5.2.1.2. Eskom 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. Eskom 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.

4.5.3. Air quality transparency and governance

4.5.3.1. The license 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:

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

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

4.5.3.1.3. 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.

4.5.3.2. Eskom must commission/maintain at least two continuous air quality monitoring stations (measuring PM_{10}, $PM_{2.5}$, NO_2 and SO_2) 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.

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

4.5.3.4. 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.

4.5.3.5. 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, Eskom 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 Department so that it can be reported on the SAAQIS web portal with immediate effect. This will enable all stakeholders to access information relating to Eskom's compliance with its obligations, as set out in its AELs.

4.5.3.6. Eskom must send stack monitoring data (emission concentration and volumetric flow) at a 10-minute resolution to the NAQO weekly with immediate effect. This is in addition to the live feed data.

4.5.3.7. Data coverage must be maintained at a minimum of 90% every month for at least two monitoring stations and Eskom needs to explain/justify any data gaps in their monthly reports to NAQO. 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.

4.5.3.8. 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).

4.5.3.9. Eskom must record the emissions data referred to above, in its annual Sustainability Report and in its financial results/Annual General Meeting.

4.5.3.10. Progress on abatement projects must continue to be included in Eskom's quarterly report to the NAQO.

4.6. Statutory obligations

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

5. NATURE OF PROCESS

5.1. Process Description

Majuba Power Station operates continuously except for scheduled outages to inspect and maintain. Water, coal and air are the essential elements for steam generation. Chemical energy is converted into heat energy during the combustion of coal. This energy is then transferred to the boiler water, through the furnace wall tubes and boiling results. The steam water mixture passes through the separating vessels where the steam separates from the water.

High pressure and temperature superheated steam is fed through pipes to the turbine where the heat energy is converted to mechanical energy. The turbine in turn rotates the generator and the final conversion of mechanical to electrical energy takes place. Exhaust steam is fed into the condenser where all the laten heat in the steam is lost to the circulating water. It is essential to condense the steam to pump the water back to the boiler under high pressure for re-use. The cycle is repetitive.

Combustion

Coal is fed from the staithes to the mill bunkers, from where it is fed to the pulverized mills, which grind the coal to a fine powder (Pulverized Fuel (PF)) at a maximum rate of 2400 tons/hour. A stream of air, which acts as a fuel carrier, transports the PF to the boiler furnace where combustion takes place. The products of combustion are ash and flue gases. The coarse ash falls to the bottom of the boiler, from where it is removed by the Submerged Scraper Conveyor for further processing. The fin ash is carried by the flue gases to the Fabric Filter Plant (FFP), where the fine ash is removed and collected in hoppers. The cleaned flue gas then passes through the chimney to the atmosphere.

Generation

Heat released by burning coal is absorbed by a boiler feed water on the inside of the boiler tubing, which acts as the boiler walls. The boiler feeding water is converted to steam at a temperature of 535oC and a pressure of 17.1 MPa. The steam is further processed until characterized as superheated steam. superheated steam passes through the high-pressure turbine blades, which causes the turbine to rotate at about 3000 rpm. Exhaust steam is returned to the reheater from where it passes the intermediate pressure turbine and from there to the low-pressure turbine. Coupled to the turbine shaft is the rotor of the generator. Electricity is produced by the rotation of the magnetic field in the rotor.

Cooling

After the energy from the steam has been exhausted through the turbines, the steam is condensed in the condenser. Unit 1-3: the condenser is air cooled and is located outside of the unit. Air is continuously blown over the condenser where the heat is extracted from the steam circuit by the air. Unit 4-6: Cold water from the cooling towers is pumped to the condenser. Heat, which the cooling water extracts from the steam circuit, is removed by evaporation of water. The cooled water is then re-circulated to the condensers.

5.2. Listed activity or activities.

Category of Listed Activity	Sub-category of the Listed Activity	Listed Activity Name	Description of the Listed Activity	Applications	Majuba Power Station Processes
Category 1	1.1	Solid Fuel Combustion Installations	Solid fuels combustion installations used primarily for steam raising or electricity generation.	All installations with design capacity equal to or greater than 50MW heat input per unit, based on the lower calorific value of the fuel used.	Steam Plant
Category 2	2.4	Storage and Handling of Petroleum Products	Petroleum product storage tanks and product transfer facilities	All permanent immobile liquid storage tanks larger than 1 000 cubic meters cumulative tankage capacity at a site.	Storage Tanks
Category 5	5.1	Storage and Handling of Ore and Coal	Storage and handling of ore and coal not situated on a premises of a mine or works as defined in the Mines Health and Safety Act 29/1996	Locations designed to hold more than 100 000 tons	Coal Stock Yard

5.3. Unit process or processes

Unit process	Function of unit process	Batch or continuous process	Operating hours per day	No. days operation per year
Boilers Unit 1-6	Steam Generation	Continuous	24	365
Coal Stockyard	Storage, handling and transfer of coal	Continuous	24	365
Existing Ash Disposal Facility	Storage of ash	Continuous	24	365
Extended Ash Disposal Facility	Storage of Ash	Continuous	24	365
3x Fuel Oil Tanks	Storage of fuel oil	Continuous	24	365
Coal Conveyor	Coal conveying	Continuous	24	365
Ash conveyor	Ash conveying	Continuous	24	365
Unpaved roads	Vehicle movements	Continuous	24	365
Loading and offloading Area	Loading and offloading of fuel oil	Continuous	24	365

5.4. Graphical Process Information

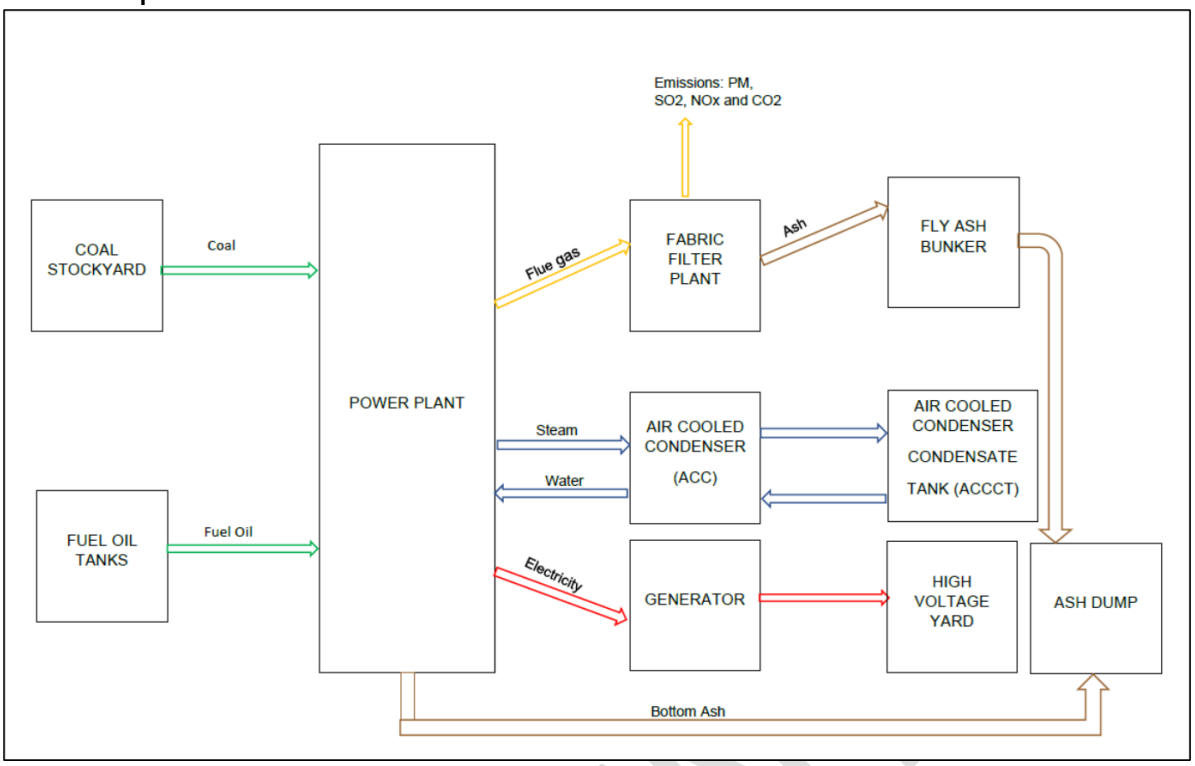

Figure 2: Dry cooling simple block diagram

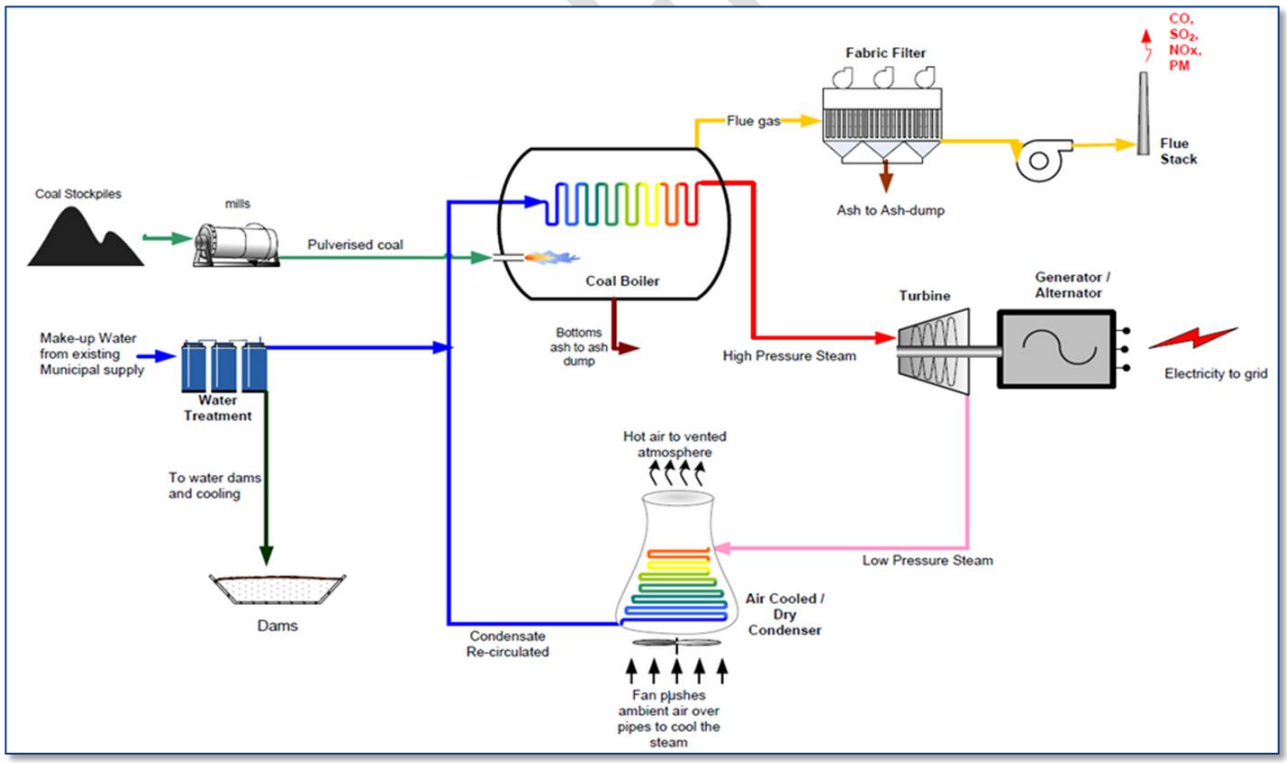

Figure 3: Dry cooling graphical process diagram

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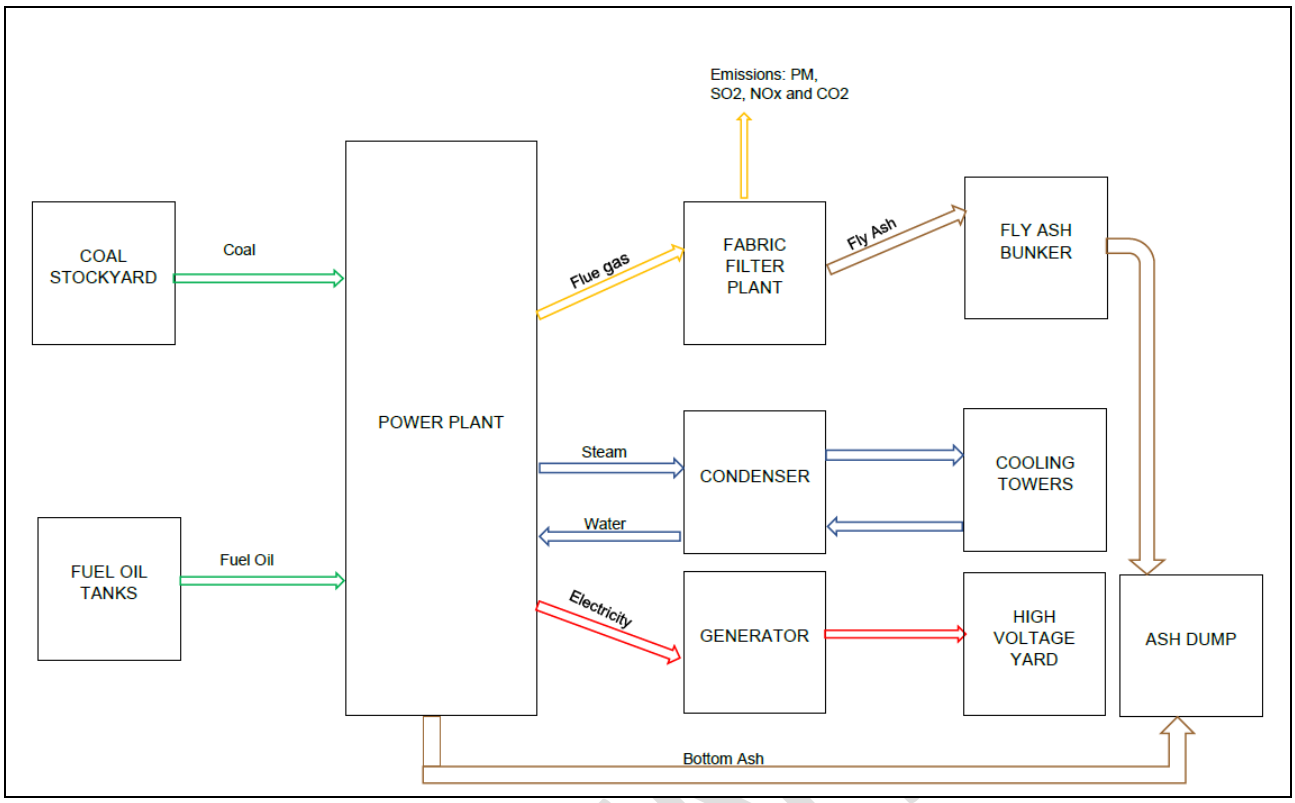

Figure 4: Wet cooling block diagram

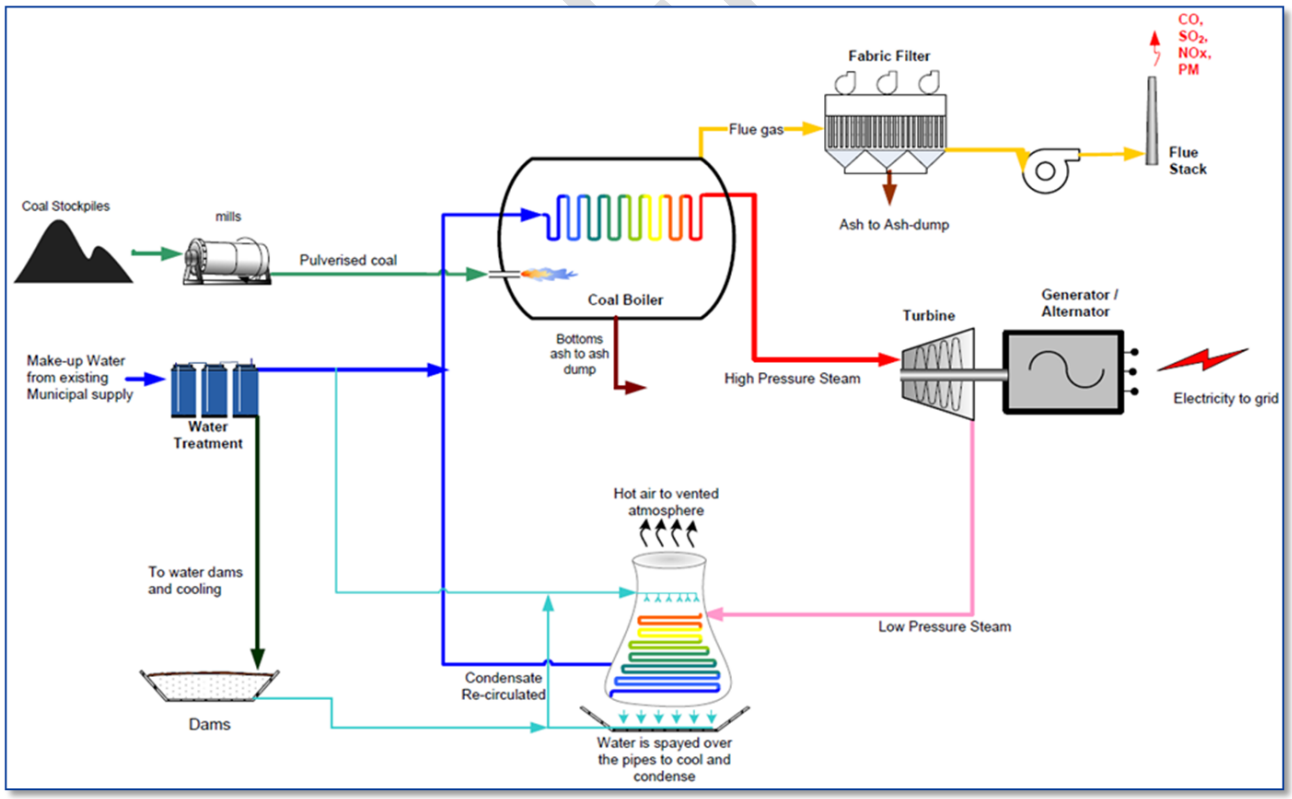

Figure 5: Wet cooling graphical process diagram

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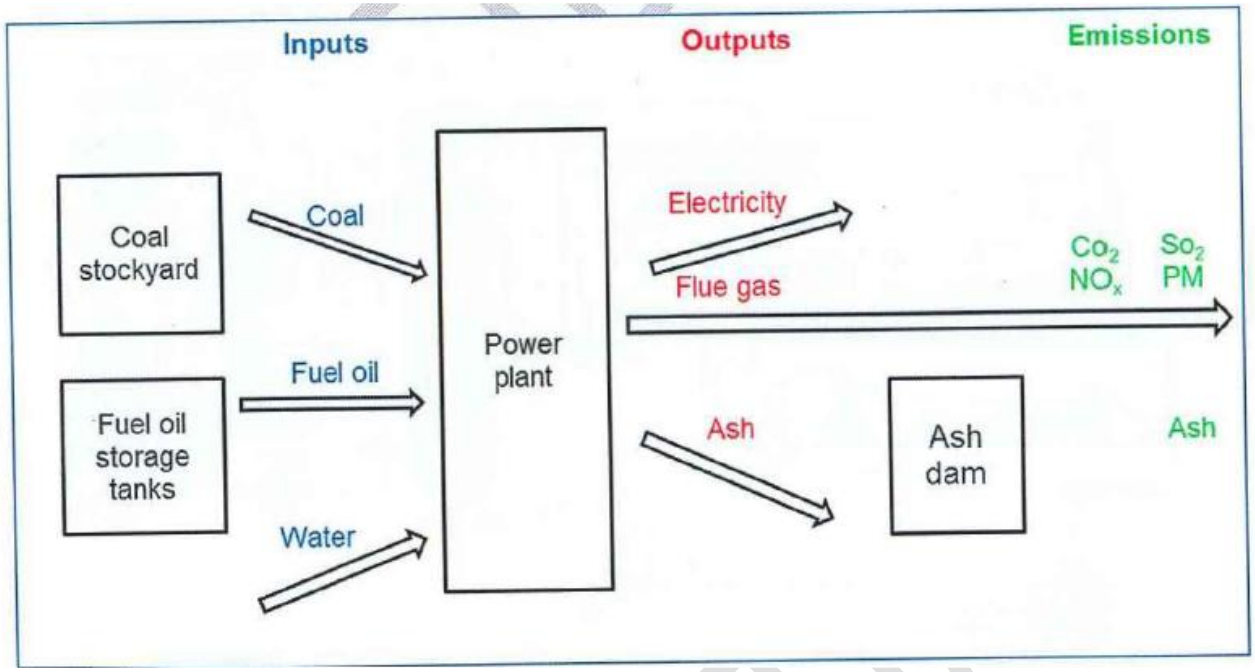

Figure 6: Fabric Filter Plant block diagram

6. RAW MATERIALS AND PRODUCTS

6.1 Raw materials used

Material type	Design Consumption Rate	Units/period
Coal	1 800 000	Tonnes/month
	21 600 000	Tonnes/annual
Heavy Fuel Oil	6 000	Tonnes/month
	72 000	Tonnes/annual

6.2 Production rates

Product name	Design Production Capacity	Units/period
Electricity	3 058	GWh/month

6.3 By-Product

By-Product name	Design Production Capacity	Units/period
Ash	429 746	Tonnes/month
	5 156 957	Tonnes/annual

6.4 Materials used in energy sources

Material	Design Consumption Rate	Units/period	Sulphur Content of the Material (%)	Ash Content of Material (%)
Coal	1 800 000	Tonnes/month	<1.25	<33.84
Fuel Oil	6 000	Tonnes/month	<3.5	0.1

6.5. Sources of atmospheric emission

6.5.1. Point source parameters.

Point Source ID	Stack Name	Latitude (decimal degrees)	Longitude (decimal degrees)	Height of Release Above Ground (m)	Diameter at Stack Tip / Vent Exit (m)	Actual Gas Exit Temperature (°C)	Actual Gas Flow Rate (m^3/sec)	Actual Gas Exit Velocity (m/s)	Emission hours	Type of emission
SV0001	Stack 1 (Unit 1)	-27.101535^0 S	29.770401^0 E	250	7.75	125	1553	35.4	24	Continuous
SV0002	Stack 2 (Unit 2)	-27.101535^0 S	29.770401^0 E	250	7.75	125	1553	35.4	24	Continuous
SV0003	Stack 3 (Unit 3)	-27.101535^0 S	29.770401^0 E	250	7.75	125	1553	35.4	24	Continuous
SV0004	Stack 4 (Unit 4)	-27.101535^0 S	29.770401^0 E	250	7.75	125	1553	35.4	24	Continuous
SV0005	Stack 5 (Unit 5)	-27.099558^0 S	29.770401^0 E	250	7.75	125	1553	35.4	24	Continuous
SV0006	Stack 6 (Unit 6)	-27.099558^0 S	29.770401^0 E	250	7.75	125	1553	35.4	24	Continuous

6.5.2 Area source parameters

Unique ID	Source name	Source Description	Latitude	Longitude	Height of release above ground (m)	Length of Area (m)	Width of Area (m)	Emission hours	Type of emission
EU0007	Coal Stockyard	Storage, handling and transfer of coal	-27.115667^0 S	29.779723^0 E	10	1000	750	24	Continuous
EU0008	Existing Ash Disposal Facility	Storage of ash	-27.119877^0 S	29.741950^0 E	80	1230	1560	24	Continuous
EU0009	Fuel oil tanks – Tank 10	Storage of fuel	-27.101731^0 S	29.779723^0 E	13	100	20	24	Continuous
	Fuel oil tanks – Tank 20	Storage of fuel oil	-27.101554^0 S	29.770994^0 E	13	100	20	24	Continuous
	Fuel oil tanks – Tank 30	Storage of fuel oil	-27.101221^0 S	29.771221^0 E	13	100	20	24	Continuous

Unique ID	Source name	Source Description	Latitude	Longitude	Height of release above ground (m)	Length of Area (m)	Width of Area (m)	Emission hours	Type of emission
EU0010	Coal conveyor	Coal conveyor belt from coal handling facility to the units	Start: -27.111111^0 S Middle: -27.103333 ^{0}S End: -27.101389^0 S	Start: 29.783333^0 E Middle: 29.775556^0 E End: 29.772222^0 E	0-70(lowest to highest point)	2500	4	24	Continuous
EU0011	Ash conveyor	Ash conveyor belt transporting coarse and fly ash to the ash disposal facility	Start: -27.103959^0 S Middle: -27.103611^0 S End: -27.106405^0 S	Start: 29.767687^0 E Middle: 29.761389^0 E End: 29.740254^0 E	0-6(lowest to highest point)	2800	5	24	Continuous
EU0012	Unpaved roads – Road from Tippler to general waste site	Vehicle movements	Start: -27.106389^0 S Middle: -27.117778^0 S End: -27.116667^0 S	Start: 29.787778^0 E Middle: 29.785556^0 E End: 29.7725^{0}E	0	2650	11.3	24	Continuous
	Unpaved roads –Road from main gate to coal stockyard	Vehicle movements	Start: -27.105^0 S Middle: -27.106667^0 S End: - 27.109444^0 S	Start: 29.777778^0 E Middle: 29.780556^0 E End: 29.783611^0 E	0	800	18.2	24	Continuous
	Unpaved roads –Road from main road to effluent dams	Vehicle movements	Start: -27.089722^0 S Middle: -27.090556^0 S End: -27.082778^0	Start: 29.784167^0 E Middle: 29.773056^0 E End: 29.766944^0 E	0	2650	7.3	24	Continuous
	Unpaved roads-Road to Ash Dam 2	Vehicle movements	Start: -27.103333^0 S Middle: -27.103611^0 S End: -27.107778^0 S	Start: 29.761667^0 E Middle: 29.748056^0 E End: 29.7375^0 E	0	2670	13.3	24	Continuous
	Unpaved roads –Road around ash dump	Vehicle movements	Start: - 27.107778^0 S Middle: -27.123984^0 S End: -27.106189^0 S	Start: 29.7375^0 E Middle: 29.749916^0 E End: 29.753485^0 E	0	5300	8.3	24	Continuous
	Unpaved roads –Road to Lapa	Vehicle movements	Start: - 27.085618^0 S Middle: -27.086111^0 S	Start: 29.775768^0 E Middle: 29.749916^0 E	0	900	7.2	24	Continuous

Unique ID	Source name	Source Description	Latitude	Longitude	Height of release above ground (m)	Length of Area (m)	Width of Area (m)	Emission hours	Type of emission
			End: -27.083889^0 S	End: 29.753485^0 E					
EU0013	Extended Ash Disposal Facility	Storage of ash	-27.142806^0 S	29.748861^0 E	80	3741	1507	24	Continuous
EU0014	Loading and offloading area	Loading and offloading of fuel oil	-27.102813^0 S	29.770574^0 E	0	6	20	24	Continuous

7. APPLIANCES AND MEASURES TO PREVENT AIR POLLUTION

7.1. Appliances and control measures

Point Source Name	Equipment Type	Abatement Equipment Name and model	Abatement Equipment Technology Manufacture Date	Commission Date	Design Capacity	Minimum Control Efficiency (%)	Minimum Utilization (%)	Type of pollutant to abate
SV0001- Stack 1 (Unit 1)	Fabric Filter Plant	Pulse Jet Fabric Filter Plant	1995	1996	1 311	95	100	PM
SV0002- Stack 2 (Unit 2)	Fabric Filter Plant	Pulse Jet Fabric Filter Plant	1996	1997	1 311	95	100	PM
SV0003- Stack 3 (Unit 3)	Fabric Filter Plant	Pulse Jet Fabric Filter Plant	1997	1998	1 311	95	100	PM
SV0004- Stack 4 (Unit 4)	Fabric Filter Plant	Pulse Jet Fabric Filter Plant	1998	1999	1 311	95	100	PM
SV0005- Stack 5 (Unit 5)	Fabric Filter Plant	Pulse Jet Fabric Filter Plant	1999	2000	1 311	95	100	PM
SV0006- Stack 6 (Unit 6)	Fabric Filter Plant	Pulse Jet Fabric Filter Plant	2000	2001	1 311	95	100	PM

7.2. Point Source – maximum emission rates (under normal working conditions)

7.2.1. Sub-category 1.1- Boilers

Point Source Code	Pollutant Name	Maximum Release Rate		Average Period	Duration of Emissions
		(mg/Nm^3) under normal conditions of 10% O_2, 273 Kelvin and 101,3-kPa	Compliance Timeframe		
SV0001- Stack 1 (Unit 1)	Particulate Matter	50	Immediately	Daily	Continuous
	Sulphur Dioxide	3 000	1 April 2025 - 31 March 2030	Daily	Continuous
	Oxides of Nitrogen	1 100	1 April 2025 - 31 March 2030	Daily	Continuous
SV0002- Stack 3 (Unit 2)	Particulate Matter	50	Immediately	Daily	Continuous
	Sulphur Dioxide	3 000	1 April 2025 - 31 March 2030	Daily	Continuous
	Oxides of Nitrogen	1 100	1 April 2025 - 31 March 2030	Daily	Continuous
SV0003- Stack 3 (Unit 3)	Particulate Matter	50	Immediately	Daily	Continuous
	Sulphur Dioxide	3 000	1 April 2025 - 31 March 2030	Daily	Continuous
	Oxides of Nitrogen	1 100	1 April 2025 - 31 March 2030	Daily	Continuous
SV0004- Stack 4 (Unit 4)	Particulate Matter	50	Immediately	Daily	Continuous
	Sulphur Dioxide	3 000	1 April 2025 - 31 March 2030	Daily	Continuous
	Oxides of Nitrogen	1 100	1 April 2025 - 31 March 2030	Daily	Continuous
SV0005- Stack 5 (Unit 5)	Particulate Matter	50	Immediately	Daily	Continuous
	Sulphur Dioxide	3 000	1 April 2025 - 31 March 2030	Daily	Continuous
	Oxides of Nitrogen	1 100	1 April 2025 - 31 March 2030	Daily	Continuous
SV0006- Stack 6 (Unit 6)	Particulate Matter	50	Immediately	Daily	Continuous
	Sulphur Dioxide	3 000	1 April 2025 - 31 March 2030	Daily	Continuous
	Oxides of Nitrogen	1 100	1 April 2025 - 31 March 2030	Daily	Continuous

7.2.2. Sub-category 2.4: Storage and Handling of Petroleum Products

The following special arrangements shall apply for control of Total Volatile Organic Compounds (TVOCs) from storage of raw materials, intermediate and final products except during loading and offloading. (Alternative control measures that can achieve the same or better results may be used)-

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

Application	**All permanent immobile liquid storage facilities at a single site with a combined storage capacity of greater than 1000 cubic meters**
True vapour of contents at product storage temperature	**Type of tank or vessel**
Type 1: Up to 14 kPa	Fixed roof tank vented to atmosphere, or as per Type 2 and 3
Type 2: Above 14kPa and up to 91 kPa with a throughput of less than 50 000 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 up to 91 kPa with a throughput of greater than 50 000 m^3 per annum	(a) External floating roof tank with primary rim seal and secondary rim seal for tank with diameter greater than 20m, or fixed roof tank with internal floating deck / roof fitted with primary seal, or fixed roof tank with vapour recovery system. (b) Fixed-roof tank with internal floating deck/roof fitted with primary seal or (c) Fixed-roof tank with vapour recovery system.
Type 4: Above 91 kPa	Pressure vessel.

(ii) The roof legs, slotted pipes and/or dipping well on floating roof tanks (except for domed floating roof tanks or internal floating roof tanks) shall have sleeves fitted to minimize emissions.

(iii) Relief valves on pressurized storage should undergo periodic checks for internal leaks. This can be carried out using portable acoustic monitors or if venting to atmosphere with an accessible open end tested with a hydrocarbon analyser.

7.2.3. Sub-category 5.1- Storage and Handling of Coal

Source Code	**Substance Name**	**Maximum Release Rate**		**Duration of Emissions**
		(mg/Nm^3) under normal conditions of 273 Kelvin and 101,3-kPa	**Compliance Timeframe**	
EU0007- Coal Stockyard	Dust fall	[a]	Immediately	Continuous

Three months running average not to exceed limit value for adjacent land use according to dust control regulations promulgated in terms of Section 32 of the NEM: AQA, 2004 (Act No. 30 of 2004), in eight principal wind directions

7.3 Point source – maximum emission rates (under start-up, maintenance, and shut-down conditions)

Point Source Code	Pollutant Name	Maximum Release Rate		Averaging Period	Maximum Gas Volumetric Flow (m^3/hr)	Maximum Gas Exit Velocity (m/s)	Emission Hours	Maximum Permitted Duration of Emissions
		(mg/Nm^3)	Date to be Achieved By					
All Point Sources	PM, SO_2 and NOx	N/A	N/A	N/A	N/A	N/A	N/A	Within 48 hours after commissioning of plant or equipment

Normal start-up, maintenance, upset and shut-down conditions must not exceed a period of 48 hours.

7.4 Point source – emission monitoring and reporting requirements.

Point Source Code/Name	Emission Sampling Method	Sampling Frequency	Sampling Duration	Parameters to be Measured	Parameters to be Reported	Reporting Frequency	Conditions under which Monitoring could be Stopped
Stack 1 (Unit 1) Stack 2 (Unit 2) Stack 3 (Unit 3) Stack 4 (Unit 4) Stack 5 (Unit 5) Stack 6 (Unit 6)	In line with GNR 893 in Government Gazette 37054 of 22 November 2013	In line with GNR 893 in Government Gazette 37054 of 22 November 2013	In line with GNR 893 in Government Gazette 37054 of 22 November 2013	PM, SO_2 and NOx	PM, SO_2 and NOx	Submit emission report on or before the 20th of every month	Only on written authorisation by the Licensing Authority

7.5. Area and or line source – management and mitigation measures

Area and or Line Source Code	Area and or Line Source Description	Description of Specific Measures	Timeframe for Achieving Required Control Efficiency	Method of Monitoring Measures Effectiveness	Contingency Measures
EU0007	Coal Stockyard	Dust suppression method as per dust management plan	Immediately	Conduct dust-fallout monitoring and submit dust monitoring reports to the Licensing Authority on or before the 20th of every month	In line with an approved dust management plan
EU0008	Existing Ash Disposal Facility	Dust suppression method as per dust management plan	Immediately	Conduct dust-fallout monitoring and submit dust monitoring reports to the Licensing Authority on or before the 20th of every month	In line with an approved dust management plan
EU0013	Extended Ash Disposal Facility	Dust suppression method as per dust management plan	Immediately	Conduct dust-fallout monitoring and submit dust monitoring reports to the	In line with an approved dust management plan

				Licensing Authority on or before the 20th of every month	
EU0009	3x Fuel Oil Tanks	In line with the approved fugitive emission management plan	Immediately	Implement an approved fugitive emission management plan and report any incidents or leaks to the Licensing Authority on or before the 20th of every month.	In line with an approved fugitive emission management plan
EU0010	Coal Conveyor	Dust suppression method as per dust management plan	Immediately	Conduct dust-fallout monitoring and submit dust monitoring reports to the Licensing Authority on or before the 20th of every month	In line with an approved dust management plan
EU0011	Ash conveyor	Dust suppression method as per dust management plan	Immediately	Conduct dust-fallout monitoring and submit dust monitoring reports to the Licensing Authority on or before the 20th of every month	In line with an approved dust management plan
EU0012	Unpaved roads	Dust suppression method as per dust management plan	Immediately	Conduct dust-fallout monitoring and submit dust monitoring reports to the Licensing Authority on or before the 20th of every month	In line with an approved dust management plan
EU0014	Loading and offloading Area	In line with the approved fugitive emission management plan	Immediately	Implement an approved fugitive emission management plan and report any incidents or leaks to the Licensing Authority on or before the 20th of every month.	In line with an approved fugitive emission management plan

7.6. Routine reporting and record-keeping

7.6.1 Complaints register.

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

Furthermore, the licence holder is to investigate and monthly report to the licensing authority in a summarised format on the total number of complaints logged. The complaints must be reported in the following format:

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

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

7.6.2 Annual reporting

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

a) The name, description, and licence reference number of the plant as reflected in the Atmospheric Emission Licence.
b) The name and address of the accredited measurement service provider that carried out or verified the emission test, including the test report produced by the accredited measurement.
c) The date and time on which emission test was carried out.
d) A declaration by the licence holder to the effect that normal operating conditions were maintained during the emission tests.
e) Pollutant emissions trend for listed activity.
f) External/Internal Atmospheric Emission Licence compliance audit report. Report must not be done by Eskom Majuba employees.
g) Major upgrades projects (i.e. abatement equipment or process equipment).
h) Complaints received and action taken to address complains received.
i) Proof of annual reporting of greenhouse gas emissions to the National Department in accordance with the National Greenhouse Gas Emission Reporting Regulations Government Gazette No. 40762 of 03 April 2017.
j) Compliance status to statutory obligation (4.6).

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

7.7 Investigation

Investigation	Purpose	Completion Date
Develop and submit a fugitive emission management plan	To manage fugitive emissions from storage tanks	Submit to the Licensing Authority on or before the 30th of September 2025

8. DISPOSAL OF WASTE AND EFFLUENT ARISING FROM ABATEMENT EQUIPMENT CONTROL TECHNOLOGY

Source Code / Name	Waste / Effluent Type	Hazardous Components Present	Method of Disposal
Unit 1-6	Damaged Fabric Filter Bags	Trace quantities of heavy metal trace elements	In line with NEMA and the SEMA

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

Failure to comply with the any of the licence and relevant statutory conditions and/or requirements is an offence, and licence holder, if convicted, will be subjected to those penalties as set out in Chapter 7 Section 52 of NEMAQA (Act No. 39 of 2004), including any penalties contained in the Gert Sibande District Municipality By-laws.

10. APPEAL OF LICENCE

10.1 The Licence Holder must notify every registered interested and affected party, in writing and within ten (10) days of receiving the district's decision.

10.2 The notification referred to in 10.1. must –

10.2.1 Inform the registered interested and affected parties of the appeal procedure provided for in Chapter 7 Part 3 Section 62 of Municipal Systems Act (Act 32 of 2000), as amended.

10.2.2 Advise the interested and affected parties that a copy of the Atmospheric Emission Licence and reasons for the decision will be furnished on request.

10.2.3 An appeal against the decision must be lodged in terms of Chapter 7 Part 3 Section 62 of Municipal Systems Act (Act 32 of 2000), from the date of issue of this Atmospheric Emission Licence, with:

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

And

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

11. REVIEW OF ATMOSPHERIC EMISSION LICENCE

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

LICENSING OFFICER