GERT SIBANDE DISTRICT MUNICIPALITY

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

Atmospheric Emission Licence

Concerning Listed Activities

Eskom Holdings SOC Limited: Grootvlei Power Station

Is authorized to continue the processes listed below, with the equipment and plant as detailed in licence conditions of licence no. **Dipaleseng/Eskom H SOC Ltd/GPS/0015/2024/F04** on the premises known as **Farm Panfontein 452 IR, Grootvlei, Dipaleseng Local Municipality, Gert Sibande** District, Mpumalanga.

Category of Listed Activity	Sub-category of the listed activity	Description of the Listed Activity	Application
1. Combustion Installations	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 calorific value of the fuel used.
2. Petroleum Industry	2.4. Storage and Handling of Petroleum Products	Petroleum product storage tanks and product transfer facilities.	All permanent immobile liquid storage tanks larger than 1000 cubic meters cumulative tankage capacity at the site.
5. Mineral Processing, Storage and Handling	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 work as defined in the Mines Health and Safety Act 29/1996.	Locations designed to hold more than 100 000 tons.

LICENSING AUTHORITY

Dipaleseng/Eskom H SOC Ltd/GPS/0015/2024/F04
Date: 28 June 2024

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, **Tsunke Daniel Hlanyane**, in my capacity as **License Officer** (hereinafter referred to as "the Licensing Authority"), in terms of section 36(1) of the National Environmental Management: Air Quality Act, 2004 (Act 39 of 2004, hereinafter referred to as the "Act"), and as provided for in section 40(1)(a) of the Act, hereby grant an Atmospheric Emission Licence to **Eskom Holdings SOC Limited: Grootvlei Power Station** (the Applicant).

The Atmospheric Emission Licence is issued to **Eskom Holdings SOC Limited: Grootvlei Power Station** in terms of section 42 of the National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004), in respect of Listed Activity **Category 1 Sub-category 1.1: Solid Fuel Combustion Installations; Category 2 Sub-category 2.4: Storage and Handling of Petroleum Products, and 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 dated 27 March 2024, pre-licensing conducted on the 05th of June 2024 and information that became available during processing of the application.

The Atmospheric Emission Licence is valid until 31 March 2030. The reason for issuing the licence is renewal. The Atmospheric Emission Licence is issued subject to the conditions and requirements set out below which form part of The Atmospheric Emission Licence, and which are binding on the holder of the Atmospheric Emission Licence ("the holder").

1 ATMOSPHERIC EMISSION LICENCE ADMINISTRATION

Name of the Licensing Authority	Gert Sibande District Municipality
Atmospheric Emission Licence Number	Dipaleseng/Eskom H SOC Ltd/GPS/0015/2024/F04
Atmospheric Emission Licence Issue Date	28 June 2024
Atmospheric Emission Licence Type	Renewal
Validity Date	31 March 2030

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2 ATMOSPHERIC EMISSION LICENCE HOLDER DETAILS

Enterprise Name	Eskom Holding SOC Limited
Trading as	Grootvlei Power Station
Enterprise Registration Number (Registration Numbers if Joint Venture)	2002/015527/30
Registered Address	Grootvlei Power Station, Grootvlei
Postal Address	Private Bag X Eskom Grootvlei 2420
Telephone Number (General)	017 779 8500
Industry Sector	Power Generation
Name of Responsible Person or Emission Control Officer	Mr. Themba Mokgosi
Telephone Number	017 779 8838
Cell Phone Number	082 859 1907
Email Address	MokgosTS@eskom.co.za
After Hours Contact Details	082 859 1907
Land Use Zoning as per Town Planning Scheme	Agriculture

3. LOCATION AND EXTENT OF PLANT

3.1. Facility Address

Physical Address of the Premises	Farm Panfontein 452 IR, Grootvlei
Description of Site (Erf)	Grootvlei Power Station
Coordinates of Approximate Centre of Operations	Latitude: -26.769251^0 S Longitude: 28.497292^0 E
Extent (km^2)	0.52777
Elevation Above Mean Sea Level (m)	5106
Province	Mpumalanga
Metropolitan/District Municipality	Gert Sibande District Municipality
Local Municipality	Dipaleseng Local Municipality
Designated Priority Area	Highveld Priority Area

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

The surrounding community is primarily agricultural (maize, sunflower, and cattle farmers) with two proclaimed communities. Grootvlei Extension 1 which includes a small shopping centre to the South of the station site and agricultural supply company, i.e OTK, to the Southeast; and Grootvlei Extension 2.

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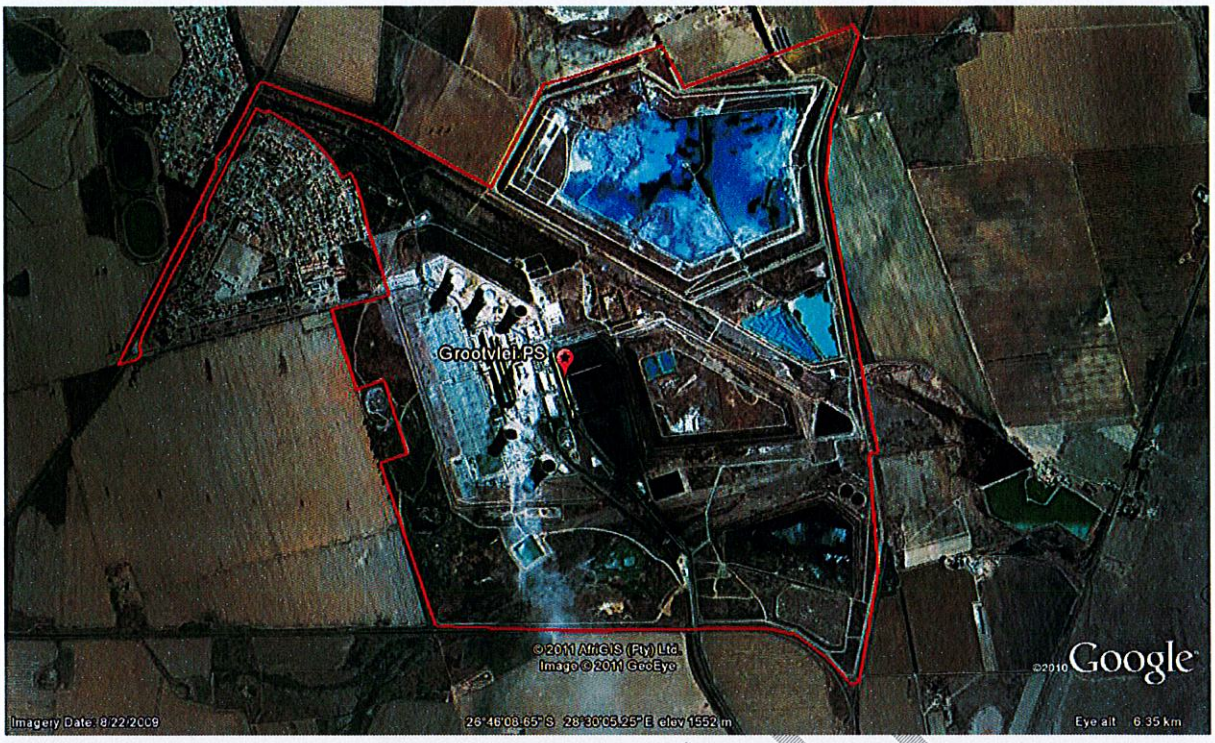

Figure 1: Satellite image of Grootvlei Power Station

Figure 2: Locality map illustrating the area and activities within 5km radius of Eskom Grootvlei Power Station

4. GENERAL CONDITIONS

4.1. Process and ownership changes.

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

(b) No building, plant or site of works related to the listed activity or activities used by the licence holder shall be extended, altered, or added to the listed activity without an environmental authorisation from the competent authority. The investigation, assessment, and communication of potential impact of such an activity must follow the assessment

procedure as prescribed in the Environmental Impact Assessment Regulations published in terms of Section 24(5) of the National Environmental Management Act, 1998 (Act No. 107 of 1998) as amended.

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

(d) Any changes 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 submit decommissioning plan within 12 months of issuance of the Minister's appeal decision. The decommissioning plan must consist of the following minimum requirements:

i. General information about the new plant.
ii. Engineering/activity plan.
iii. Cost of decommissioning and fully funded financing plan.
iv. Rehabilitation and/or repurposing plan.
v. Public consultation and stakeholder engagement strategy/ plan - A part of this needs to be specific to directly affected parties (employees, contractors, suppliers, service providers, etc.). Organized labor needs to be engaged noting that Eskom is not alone in ending the life of projects and dealing with the consequences, workforce downscaling, etc. There are lessons to be learned from other sectors and operations, two of which are: how to avoid genuine efforts at finding resolutions being hijacked by special interest groups and how to moderate expectations, especially because Eskom is an SOE, with many citizens viewing SOEs as having an infinite pool of resources (money) to meet every need, demand, etc. The point is that this is not an ordinary stakeholder engagement (it is tailored, specific, focused, and extremely complex because there will be many competing needs and desires). A socio-economic conditions and impact assessment report (local economic development, employment, health, diversification plan).
vi. Health and safety risk assessment.
vii. Air quality impact assessment.
viii. Geotechnical assessment (restoration of the land, water, and waste).
ix. Local economic development and diversification plan and
x. Alternatives to decommissioning.

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.

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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 environmental management issues including air quality issues to any person acting on his, her or its behalf including but not limited to an employee, agent, sub-contractor, or person rendering a service to the holder.

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

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

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

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

(f) The Emission Control Officer or facility representative must attend the Highveld Priority Area Implementation Task Team or Air Quality Stakeholder Forum Meetings.

(g) The licence holder must report and submit annual emission report for the preceding year in terms of GNR 4493 in Government Gazette 50284 of 08 March 2024.

4.5. Statutory obligations

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

5 NATURE OF PROCESS

5.1 Process Description

Grootvlei Power Station comprises of six 200 MW units or boiler-turbine-generator sets. The first unit (Unit 3) was initially commissioned in 1969 and the last of the six units (Unit 6) was initially commissioned in 1977. The total station capacity is 1200 MW. Units 1 -4 and Units 6 are supplied coal from Babcock & Wilcox 8.5 E mills. The Boilers re Babcock boilers with MAN turbines and Brown Boveri generators. Unit 5 is supplied coal from Loesche LM16 mills. The boiler is Steinmuller boiler with MAN turbine and Brown Boveri generator. Each boiler has six mills allocated to it and nominally, five are required for the boiler to reach full load. All the mills are vertical spindle mills and are fed from a common coal storage bunker. The bunker is supplied by three incline conveyors coming from the coal staithes which are fed from the open coal stockyard.

The coal stockyard is located on the Station site. Coal is currently trucked in and off-loaded on the coal stockyard. From the mills which grind the coal into fine particles known as pulverised fuel (PF), PF is fed into the boilers via 24 PF burners. To bring the boiler up to maximum operation, the boiler temperature must be high enough to facilitate efficient combustion of PF. Correct boiler temperature are achieved by starting –up the boiler using heavy fuel oil. The boiler is brought up to a temperature of about 400 °C using oil burners before PF is injected into the boiler. During start-up, since fuel oil is being burnt, exit emissions will greatly exceed those from super-heated steam which is sent to the turbines to turn blades. The turbine blades are attached to a shaft which rotates within the generator.

The cooled steam from the turbines is sent to the condenser. In the condenser, spent steam is fed through a series of tubes which is isolated from the cooling water which is passed over the tubes. A heat exchange takes place, and the spent steam condenses back into demineralised water or condensate, which is sent back to the boiler. The now heated cooling water is sent to the three northern cooling towers where it is cooled through convection using a wet cooling system. Units 5 and 6 utilise a dry cooling system with Unit 5 circulating the total condensate as cooling medium in a direct dry cooling system and Unit 6 using demineralised water as a cooling medium in an indirect dry cooling system.

Once PF has been combusted in the boilers, two types of ash result: fly ash which stays buoyant in the exit flue gas stream and coarse ash (or bottom ash) which is too heavy to remain airborne and falls into the hopper at the bottom of the boiler. Once in the boiler hoppers, coarse ash is quenched using water in concreted trenches and sent to a common ash slurry sump. From the ash slurry sump, the coarse ash is sent via steel pipes to the wet ash dams.

Fly ash, or particulate matter (PM), is captured using fabric filter plant, before the flues gas exits the stacks, at a height of 152m above ground level. Grootvlei Power Station is designed for load following. This implies that the station will run on a continuous basis. However, the Station may operate in a two-shifting, the Station supplies electricity to address peak demand periods. The Units will need to synchronise and start loading between 6:00 and 7:00 and all units must be at full load before 8:00 to ensure that a total load of about 113MW is added to the national grid system.

5.2 Listed Activities

Listed Activity Number	Category of Listed Activity	Sub-category of the listed activity	Description of the Listed Activity	Application	Grootvlei Power Station Processes
1.1	Combustion Installations	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 calorific value of the fuel used.	Steam Plant
2.4	Petroleum Industry	Storage and Handling of Petroleum Products	Petroleum product storage tanks and product transfer facilities.	All permanent immobile liquid storage tanks larger than 1000 cubic meters cumulative tankage capacity at the site.	Storage tanks
5.1	Mineral Processing, Storage and Handling	Storage and Handling of Ore and Coal	Storage and handling of ore and coal not situated on a premises of a mine or work as defined in the Mines Health and Safety Act 29/1996.	Locations designed to hold more than 100 000 tons.	Coal Storage Area

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
Boiler Unit 1-6	Power Generation	Continuous	24	350
Coal Stockpile	Storage and handling of coal	Continuous	24	350
1x 75 000 litres storage tanks	Storage of fuel oil	Continuous	24	350
5x 90 000 litres storage tanks	Storage of fuel oil	Continuous	24	350
Loading and offloading area	Loading and offloading of fuel oil	Continuous	24	350
Ash dump	Disposal of ash	Continuous	24	350
Unpaved roads	Road around ash dump and pollution control dam for work vehicles and machinery	Continuous	24	350
Inclined conveyor belts	Convey coal to the plant	Continuous	24	350

5.4 Graphical Process Information

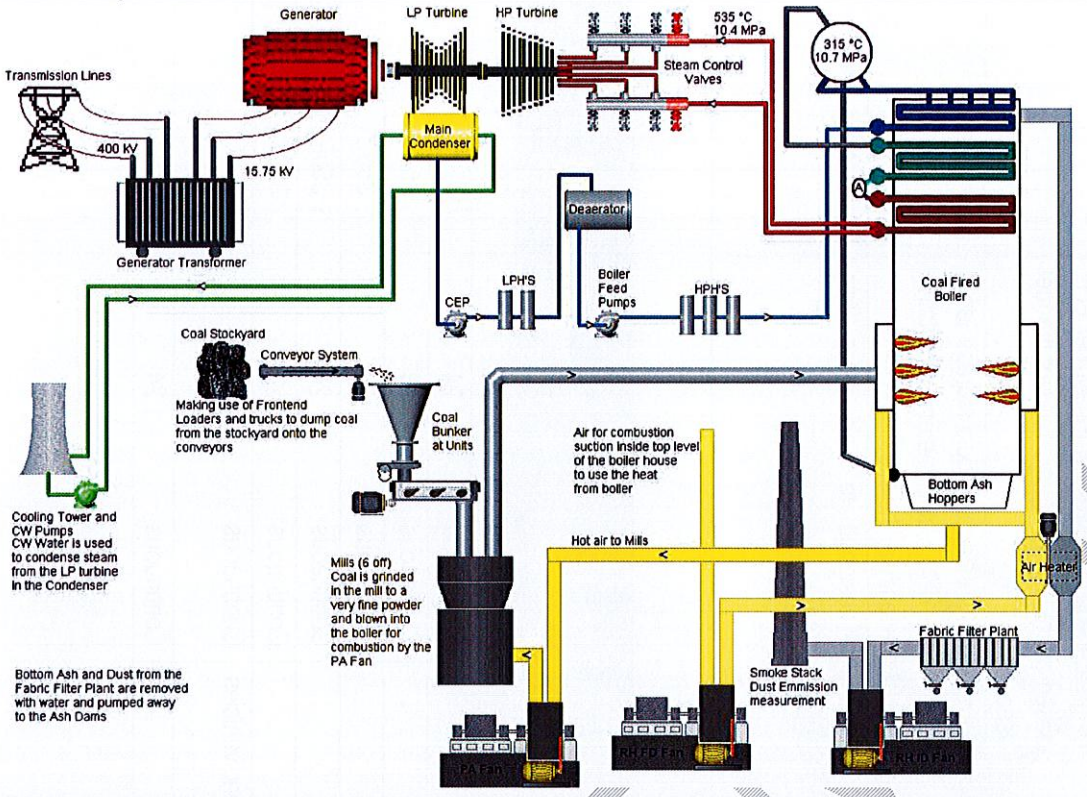

Figure 3: Grootvlei Power Station process flow diagram

6. RAW MATERIAL AND PRODUCTS

6.1. Raw materials used

Material type	Maximum Operational Consumption Rate	Units (quantity/period)
Fuel Oil	20 000	Tons/month
Coal	650 000	Tons/month

6.2. Production rates

Production name	Maximum Production Rate	Units (quantity/period)
Electricity	892.8	GWh/month
	10 714	GWh/annum

6.3. By product

Product name	Maximum By-product Rate	Units (quantity/period)
Ash	300 000	Tons/month

6.4. Material used in energy sources

Material	Maximum Consumption Rate	Units (quantity/period)	Materials Characteristics
Fuel Oil	20 000	Tons/month	<3.5% (Sulphur content) <0.1% (Ash content)
Coal	650 000	Tons/month	<1.46% (Sulphur content) <24.7-38.1% (Ash content)

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6.5. Sources of atmospheric emission

6.5.1. Point Source parameters

Point source code	Source name	Latitude	Longitude	Height of release above ground (m)	Height above nearby building (m)	Diameter at stack tip / vent exit (m)	Gas exit temperature (°C)	Gas volumetric flow (m³/hr)	Gas exit velocity (m/s)
Stack 1	North Stack Boiler Unit 1-3	-26.768056	28.497500	152	85.5	4.17	150	1710 000	>10
Stack 2	South Stack Boiler Unit 4-6	-26.768889	28.497778	152	85.5	4.17	150	1710 000	>10

6.5.2. Area source parameters

Unique ID	Source name	Latitude	Longitude	Height release above ground (m)	Length (m)	Width of area (m)
EU007	Fuel oil storage tanks including loading Gantry	-26.768272⁰	28.498047⁰	0-3,8	92,4	17,4
EU008	Coal stockpile	-26.768962⁰	28.500682⁰	0-15	550	130
EU009	Ash dump	-26.760882⁰	28.504370⁰	10.50	1 020	1300
EU0010	Incline conveyers	-26.768469⁰	28.498183⁰	0-40	3415.4	1.05
EU0011	Unpaved roads	-26.760883⁰	28.504371⁰	0-15	10 200	4

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7. APPLIANCES AND MEASURES TO PREVENT AIR POLLUTION

7.1. Appliances and control measures

Point Source or unit associated with equipment	Equipment Type	Equipment Number	Equipment Name Technology Type	Equipment Manufacture Date	Commission Date	Date of Significant Modification /Upgrade	Minimum Control Efficiency (%)	Minimum Utilisation (%)	Type of pollutant to abate
Stack 1 (North Stack)	Boiler Unit 1	10HQA	Fabric Filter Plant	1972	1972	2015 –Actom PJFFP Retrofit	95%	100%	PM
	Boiler Unit 2	20HQA	Fabric Filter Plant	1970	1970	2015 –Addition of Wahlco SO3 Plant	95%	100%	PM
	Boiler Unit 3	30HQA	Fabric Filter Plant	1969	1969	2015- Addition of Wahlco SO3 Plant	95%	100%	PM
Stack 2 (South Stack)	Boiler Unit 4	40HQA	Brandt ESP	1969	1969	2009- Addition of Wahlco SO3 Plant	95%	100%	PM
	Boiler Unit 5	50HQA	Brandt ESP	1970	1970	2009- Addition of Wahlco SO3 Plant	95%	100%	PM
	Boiler Unit 6	60HQA	Brandt ESP	1976	1976	2005 –Actom PJFFP Retrofit	95%	100%	PM

The following conditions shall apply:

7.1.1. Abatement equipment must be maintained to ensure efficient operation and the utilisation value as stated in 7.1 above must be always adhered to under normal operating conditions.

7.1.2. Abatement efficiency and utilisation must form part of the normal monthly reporting and be submitted to the Licensing Authority.

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

7.2.1. Boilers

Point Source Code	Pollutant Name	Maximum Release Rate		Average Period	Duration of Emissions
		Daily average basis of (mg/Nm³) under normal conditions of 273 Kelvin, 101,3-kPa, 10% O_2 and dry gas	Date to be Achieved By		
Stack 1-North Stack Boiler Unit 1-3	PM	100	1 April 2020 – 31 March 2030	Daily	Continuous
	SO_2	3 500	1 April 2020 – 31 March 2030	Daily	Continuous
	NOx	1 100	1 April 2020 – 31 March 2030	Daily	Continuous
Stack 2-South Stack Boiler Unit 4-6	PM	100	1 April 2020 – 31 March 2030	Daily	Continuous
	SO2	3 500	1 April 2020 – 31 March 2030	Daily	Continuous
	NOx	1 100	1 April 2020 – 31 March 2030	Daily	Continuous

The following conditions shall apply:

7.2.1.1. All units must be fitted with the effective continuous emission monitoring equipment for PM, SO_2 and NOx.

7.2.1.2. The licence holder must submit annual progress report on the implementation of offset projects around Grootvlei communities to the Licensing Authority and the National Air Quality Officer.

7.2.1.3. Failure to implement the offset project around Grootvlei communities will be deemed as non-compliance.

7.2.1.4. This Atmospheric emission licence will not be renewed beyond the suspension date which 31 March 2030.

7.2.1.5. Any operational plant failure or emergency incidents experienced must form part of the detailed monthly reporting and be submitted to the Licensing Authority as per condition 7.6.2.

7.2.1.6. In an event where there is a plant failure, malfunction or break down the responsible official or licence holder must reduce the load to the extent that non-compliance to the licence conditions is avoided and if it continues, the operations must be halted.

7.2.1.7. The licence holder must always prevent any deviation from Grootvlei approved standard operation procedures that may result in emission exceedances from the specified limit value.

7.2.1.8. The emission monitoring system must be maintained to yield the minimum of 80% valid hourly average values during the reporting period.

7.2.1.9. The averaging period for the purposes of compliance monitoring shall be expressed on a daily average basis.

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7.2.1.10. The emission monitoring system must be maintained and calibrated as per the original equipment manufacturers' specifications. In an event that the manufacturer did not specify the period for maintenance and calibration, the facility must conduct such in line with SANAS codes.

7.2.2. Storage of Coal

Point Source Code	Pollutant Name	Maximum Release Rate (mg/Nm³) under normal conditions of 273 Kelvin and 101,3-kPa	Date to be Achieved By
EU008- Coal Stockpile	Dust fall	[a*]	Immediately

[a*] 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. 39 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 (mg/Nm³)	Date to be Achieved By	Averaging Period	Maximum Gas Volumetric Flow (m³/hr)	Maximum Gas Exit Velocity (m/s)	Emission Hours	Maximum Permitted Duration of Emissions
Stack 1 and 2	PM, SO_2, NOx	N/A	N/A	N/A	N/A	N/A	N/A	Within 48 hours

The following conditions shall apply:

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

7.3.2. The Licence holder is operating within the Highveld Priority Area, therefore, the Licensing Authority may set maximum emission limits to be adhered to during the start-up, maintenance upset and shut down conditions.

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

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7.4. Point source – emission monitoring and reporting requirements.

Point Source code	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 and 2	In line with Annexure A of GNR 893 in Government Gazette 37054 of 22 November 2013	In line with Annexure A of GNR 893 in Government Gazette 37054 of 22 November 2013	In line with Annexure A of GNR 893 in Government Gazette 37054 of 22 November 2013	PM, SO_2, NOx	PM, SO_2, NOx	Submit report on or before the 20th of every month	Only on written authorisation by the Licensing Authority

The following conditions shall apply:

7.4.1. Continuous emission monitoring data must be submitted the Licensing Authority on or before the 20th of every month.

7.5. Area source – management and mitigation measures

Area and/or Line Source Code	Area and/or Line Source Description	Description of Specific Measures	Timeframe for Achieving Required Control Efficiency	Method of Monitoring Measures Effectiveness	Contingency Measures
EU007	Fuel oil storage tanks including loading gantry	In line with the approved leak detection and repair program.	Immediately	Implement the approved leak detection and repair program and report any incidents or leaks to the Licensing on or before the 20th of every month.	In line with the approved leak detection and repair program.
EU008	Coal stockpile	Dust suppression methods as per dust management plan.	Immediately	Dust-fallout monitoring and submitting dust monitoring reports to the Licensing Authority on or before the 20th of every month.	In line with approved dust management plan
EU009	Ash Dump	Dust suppression methods as per dust management plan.	Immediately	Dust-fallout monitoring and submitting dust monitoring reports to the Licensing Authority on or before the 20th of every month.	In line with approved dust management plan
EU0010	Inclined conveyors	Dust suppression methods as per dust management plan.	Immediately	Dust-fallout monitoring and submitting dust monitoring reports to the Licensing Authority on or before the 20th of every month.	In line with approved dust management plan

EU0011	Unpaved roads	Dust suppression methods as per dust management plan.	Immediately	Dust-fallout monitoring and submitting dust monitoring reports to the Licensing Authority on or before the 20th of every month.	In line with approved dust management plan

(a) The following transitional arrangement shall apply for the storage and handling of raw materials, intermediate and final products with a vapour pressure greater than 14kPa at operating temperature: - Leak detection and repair (LDAR) program must be reviewed, updated, and submitted to the Licensing Authority for approval three (03) months after the licence is issued.

(b) The following transitional and special arrangements shall apply for control of TVOC's from storage of raw materials, intermediate and final products with a vapour pressure of up to 14kPa at operating temperature, except during loading and offloading. (Alternative control measures that can achieve the same or better results may be used)-

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

Application	**All permanent immobile liquid storage facilities at a single site with a combined storage capacity of greater than 1000 cubic meters**
True vapour of contents at product storage temperature	**Type of tank or vessel**
Type 1: Up to 14 kPa	Fixed roof tank vented to atmosphere, or as per Type 2 and 3
Type 2: Above 14kPa and up to 91 kPa with a throughput of less than 50 000 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.

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

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

(c). The following special arrangements shall apply for control of TVOCs from the loading and unloading (excluding ships) of raw materials, intermediate and final products with a vapour pressure of greater than 14kPa at handling temperature. Alternative control measures that can achieve the same or better results may be used:

(i) All installations with a throughput of greater than 50'000 m^3 per annum of products with a vapour pressure greater than 14 kPa, must be fitted with vapour recovery / destruction units. Emission limits are set out in the table below -

Description	Vapour Recovery Units		
Application	All loading /offloading facilities with a throughput greater than 50 000m^3		
Substance or mixture of substances		**Plant Status**	**mg/Nm^3 under normal conditions of 273 Kelvin and 101.3kPa**
Common name	**Chemical symbol**		
Total volatile organic compounds from vapour recovery/destruction units using non thermal treatment	N/A	New	40 000

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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 Atmospheric Emission Licence compliance audit report.
g) Major upgrades projects (i.e. abatement equipment or process equipment).
h) Complaints received and action taken to address complains received.
i) Proof of annual reporting of greenhouse gas emissions to the National Department in accordance with the National Greenhouse Gas Emission Reporting Regulations Government Gazette No. 40762 of 03 April 2017.
j) Compliance status to statutory obligation (4.5) including any other issued authorisations.

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

7.7. Investigation

Investigation	Purpose	Completion Date
Develop and submit revised leak and repair program	To manage fugitive emissions	Submit to the Licensing Authority on or before 30 September 2024.
Develop and submit revised dust management plan	To manage dust emissions	Submit to the Licensing Authority on or before 30 September 2024.

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

Source Code / Name	Waste/Effluent Type	Method of Disposal
Boiler 1-6	FFP	In line with NEMA and SEMA's

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

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

10. APPEAL OF LICENCE

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

10.2 The notification referred to in 10.1. must –

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

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

10.2.3 An appeal against the decision must be lodged in terms of Chapter 7 Part 3 Section 62 of Municipal Systems Act, 2000 (Act 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 until 31 March 2030.