

	Matimba Power Station Emissions report	Matimba Power Station
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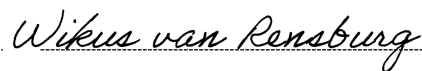


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Environmental Officer



MC Mamabolo
Environmental Manager

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Date: 2022/10/11

Date: 12/10/2022

Date: 2022-10-13

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1. Report Summary

Matimba Power Station was issued with an Atmospheric Emission License (H16/1/13-WDM05) in November 2021. The License requires the license holder to submit monthly reports to the Department. This report contains the required information as specified in the license for August 2022.



During the period under review, eight exceedances of the daily particulate matter emission limit ($50\text{mg}/\text{Nm}^3$) occurred. All exceedances remained within the 48-hour grace period. No exceedances of the monthly SO_x limit ($3500\text{mg}/\text{Nm}^3$) or the daily NO_x emission limit ($750\text{mg}/\text{Nm}^3$) occurred.

The Sulphur conditioning plant for unit 6 did not achieve the required 100% availability due to a hole that formed within the burner and a sulphur leak. The plant was repaired and is operating as normal.

More information regarding above mentioned issues is provided in the relevant sections within the report.

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2. Emission information

2.1 Raw materials and products

Table 1: Quantity of Raw Materials and Products used/produced for the month

Raw Materials and Products used	Raw Material Type	Unit	Maximum Permitted Consumption Rate (Quantity)	Consumption Rate
	Coal	Tons/month	1 500 000	1 107 120
	Fuel Oil	Tons/month	1 200	537,32
Production Rates	Product/ By-Product Name	Unit	Maximum Production Capacity Permitted (Quantity)	Production Rate
	Energy	MW	4000	2542,34

The consumption rates for the month of August 2022 were within the permitted maximum limits.

2.2 Abatement technology

Table 2: Abatement Equipment Control Technology Utilised

Associated Unit	Technology Type	Minimum utilisation (%)	Efficiency (%)
Unit 1	Electrostatic Precipitator	100%	99,91%
Unit 2	Electrostatic Precipitator	100%	99,94%
Unit 3	Electrostatic Precipitator	100%	99,88%
Unit 4	Electrostatic Precipitator	100%	99,91%
Unit 5	Electrostatic Precipitator	100%	99,91%
Unit 6	Electrostatic Precipitator	100%	99,91%
Associated Unit	Technology Type	Minimum utilisation (%)	Actual Utilisation (%)
Unit 1	SO ₃ Plant	100%	95,16%
Unit 2	SO ₃ Plant	100%	99,32%
Unit 3	SO ₃ Plant	100%	95,58%
Unit 4	SO ₃ Plant	100%	99,04%
Unit 5	SO ₃ Plant	100%	96,24%
Unit 6	SO ₃ Plant	100%	63,38%

Flue gas conditioning plant availability was below the required 100% for all six (06) units due to maintenance activities and unplanned breakdowns. Unit 6 flue gas conditioning plant was out of service from 16 August until 18 August 2022 due to a defect in the sulphur burner casing. Repairs were completed and the plant was brought back into service. However, on 28 August 2022 the plant had to be switched off again due to a sulphur leak. The leak was repaired on 30 August 2022 and returned to normal operations.

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2.3 Energy source characteristics

Table 3: Energy Source Material Characteristics.

	Characteristic	Stipulated Range (Unit)	Monthly Average Content
Coal burned	Sulphur Content	1.6%	1,22%
	Ash Content	40%	35,18%

Energy source characteristics remained within the ranges stipulated in the license.

2.4 Emissions reporting

2.4.1 Particulate Matter Emissions

Unit 1 Particulate Emissions

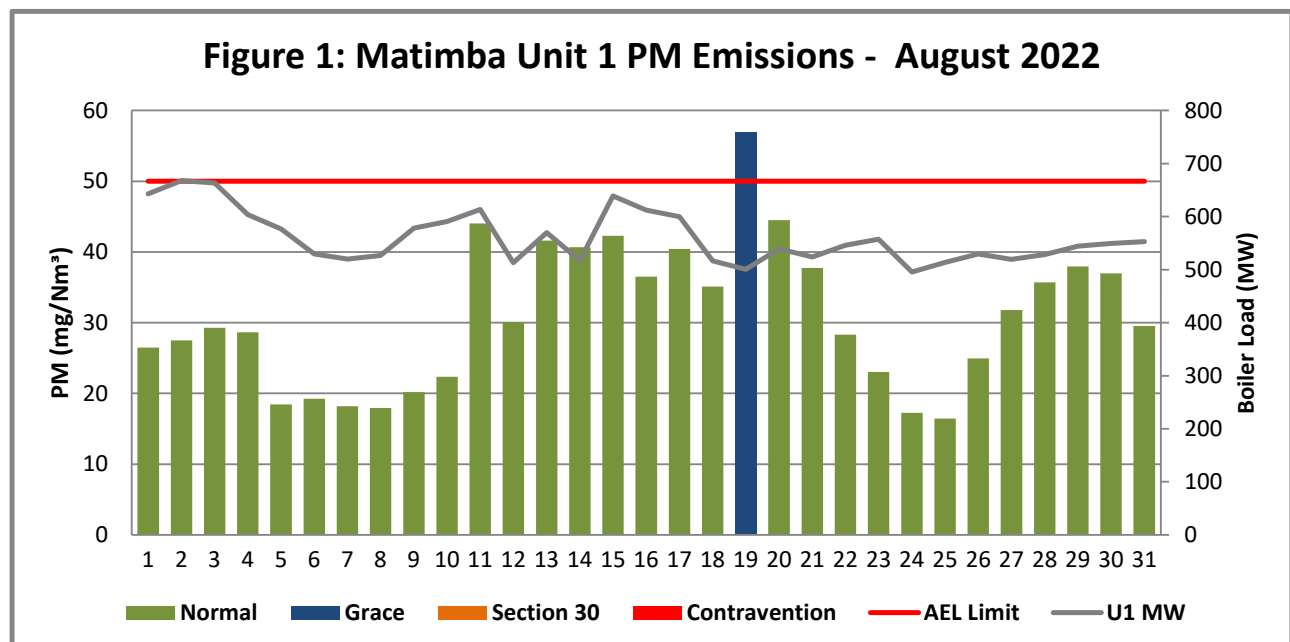


Figure 1: Particulate matter daily average emissions against emission limit for unit 1 for the month of August 2022

Interpretation:

Unit 1 exceeded the daily particulate emission limit of 50mg/Nm³ on 19 August 2022. The exceedance was due to a failure on the sulphur plant reducing the effectiveness of emission abatement technology and leading to high emission. The plant was repaired, and emissions returned to below the set limit. The exceedance remained within the 48-hour grace period.

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Unit 2 Particulate Emissions

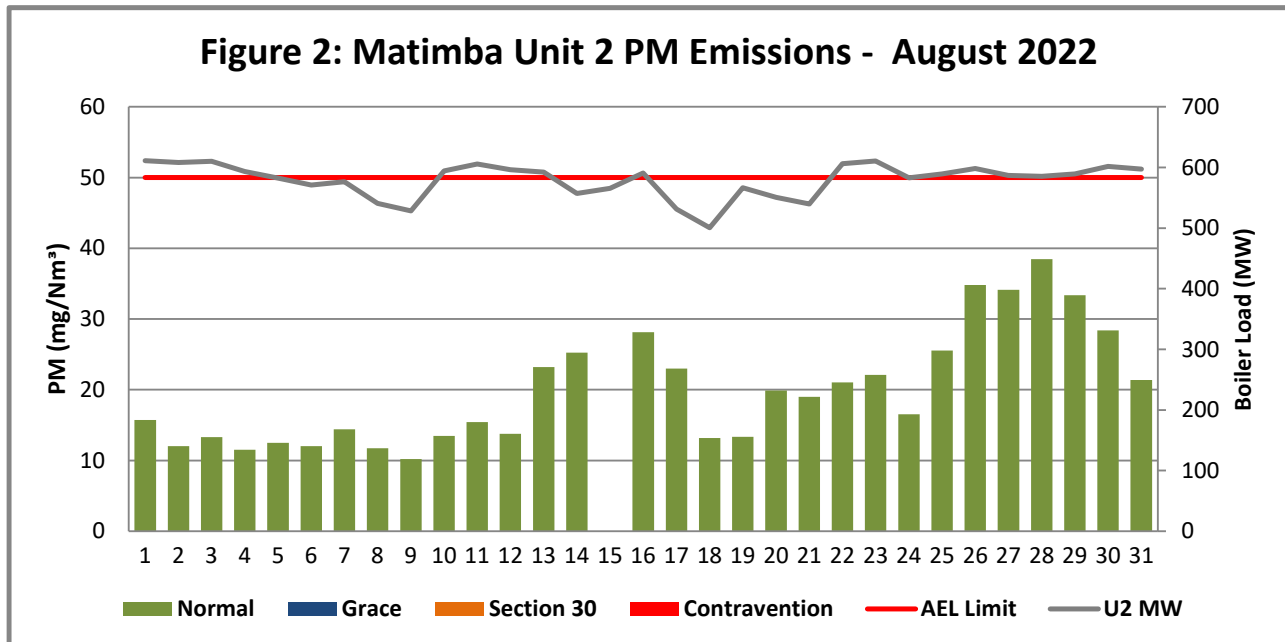


Figure 2: Particulate matter daily average emissions against emission limit for unit 2 for the month of August 2022

Interpretation:

All daily averages below Particulate matter emission daily limit of 50 mg/Nm³.

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Unit 3 Particulate Emissions

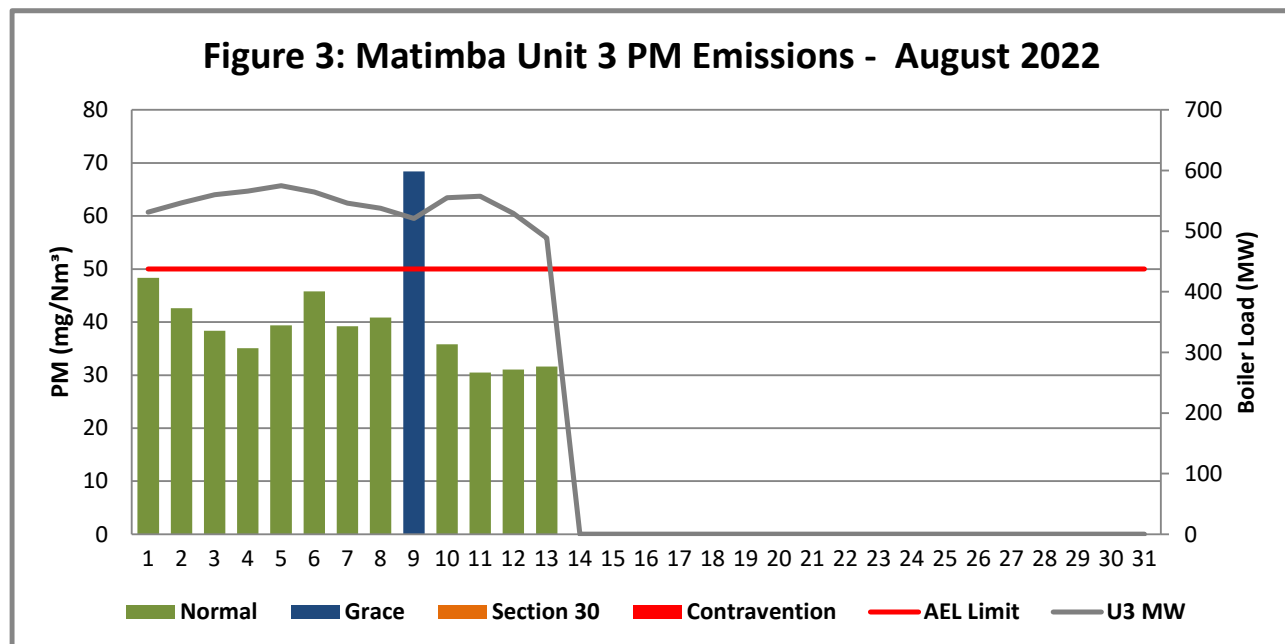


Figure 3: Particulate matter daily average emissions against emission limit for unit 3 for the month of August 2022

Interpretation:

Unit 3 Particulate matter exceeded the daily limit of 50 mg/Nm³ on 9 August 2022. The exceedances were due to breakdowns on the ash removal system leading to ash backlog within the flue gas cleaning system and reducing the efficiency of the abatement technology (electrostatic precipitator fields). The defective plants were repaired, and the exceedances remained within the 48-hour grace period.

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Unit 4 Particulate Emissions

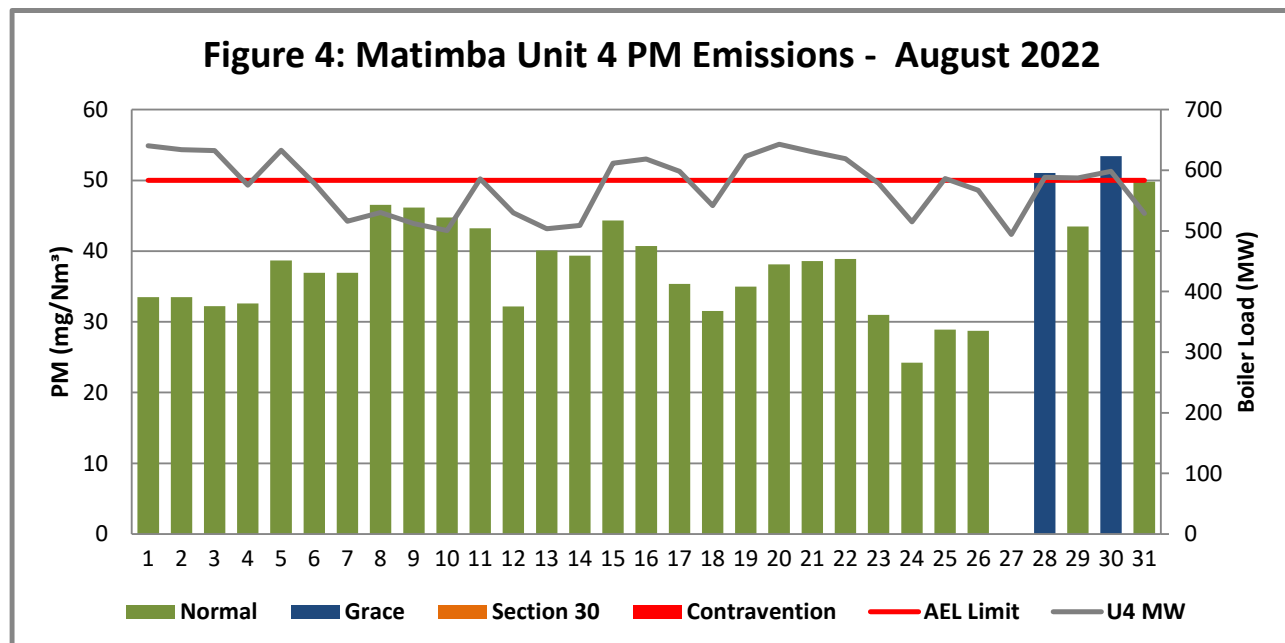


Figure 4: Particulate matter daily average emissions against emission limit for unit 4 for the month of August 2022

Interpretation:

Unit 4 Particulate matter exceeded the daily limit of 50 mg/Nm³ on 28 August 2022 and 30 August 2022. The exceedances were due to breakdowns on the ash removal system leading to ash backlog within the flue gas cleaning system and reducing the efficiency of the abatement technology (electrostatic precipitator fields). The defective plants were repaired, and the exceedances remained within the 48-hour grace period.

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Unit 5 Particulate Emissions

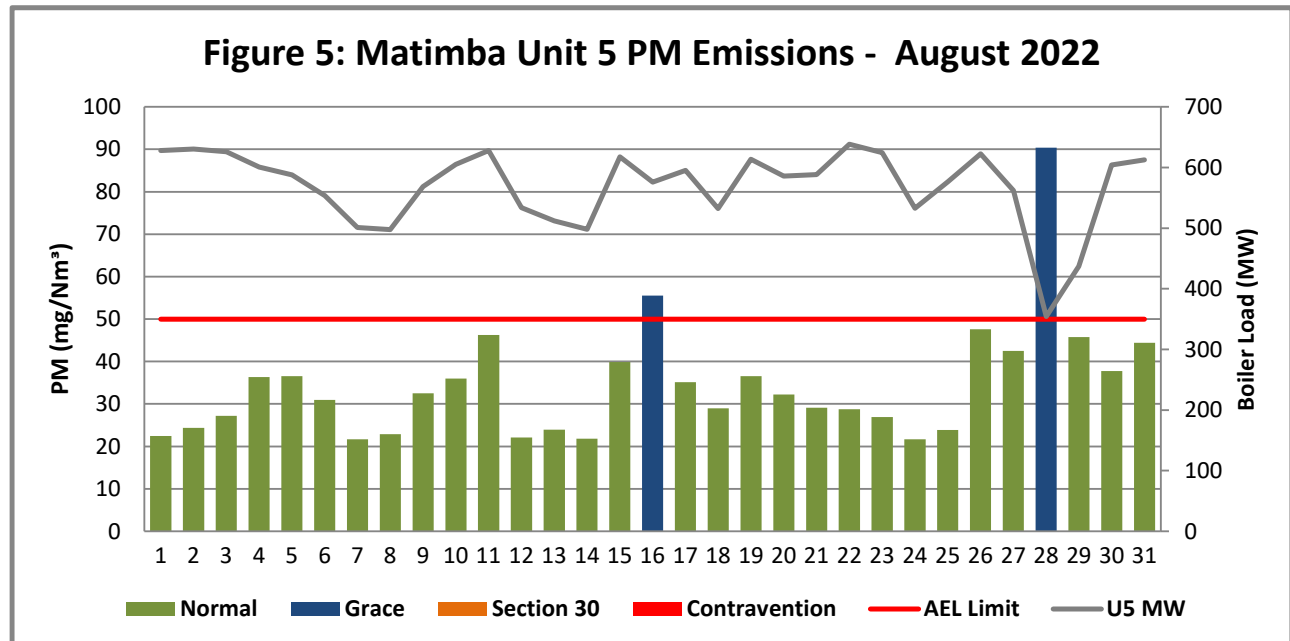


Figure 5: Particulate matter daily average emissions against emission limit for unit 5 for the month of August 2022

Interpretation:

Unit 5 exceeded the daily particulate matter limit of 50mg/Nm³ on 16 August 2022 and 28 August 2022. The exceedance on 16 August was due to the unavailability of the flue gas conditioning plant and due to breakdowns on the ash removal system, leading to ash backlog within the flue gas cleaning system and reducing the efficiency of the abatement technology (electrostatic precipitator fields). The defects on the plants were addressed and the emissions returned to below the limit. The exceedance on 28 August 2022 was due to the unit losing the right-hand draught group. During this time the unit was only able to generate an electricity load of 350 MW preventing the flue gas conditioning plant to be in operation. The defects on the draught group could be repaired and the flue gas conditioning plant operated again as normal as soon as electricity loads increased, reducing the emissions to below the limit. The exceedances remained below the 48-hour grace period.

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Unit 6 Particulate Emissions

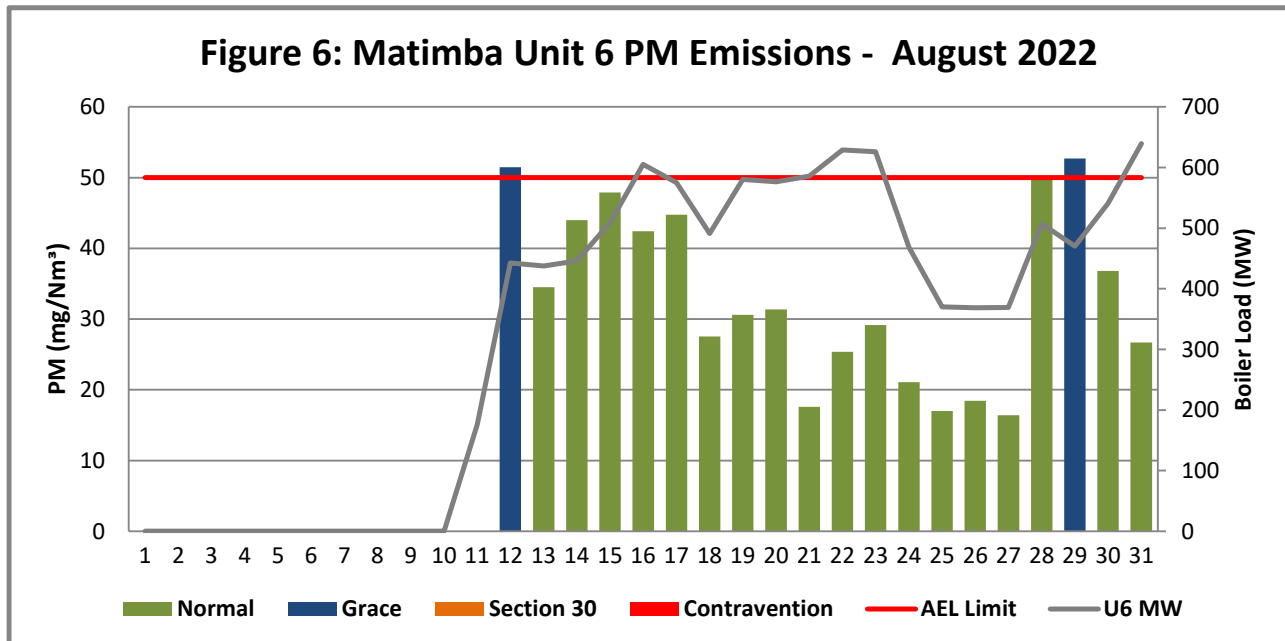


Figure 6: Particulate matter daily average emissions against emission limit for unit 6 for the month of August 2022

Interpretation:

Unit 6 exceeded the daily particulate matter emission limit of 50mg/Nm³ on 12 and 29 August 2022. The exceedance on 12 August 2022 was due to extended light-up conditions. Once conditions normalized emissions returned to below the limit. The exceedance that occurred on 29 August 2022 was due to the unavailability of the flue gas conditioning plant as described under point 2.2, the plant was repaired, and emissions reduced to below the limit. The exceedances remained within the 48-hour grace period.

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2.4.2 Gaseous Emissions

Unit 1 SO₂ Emissions

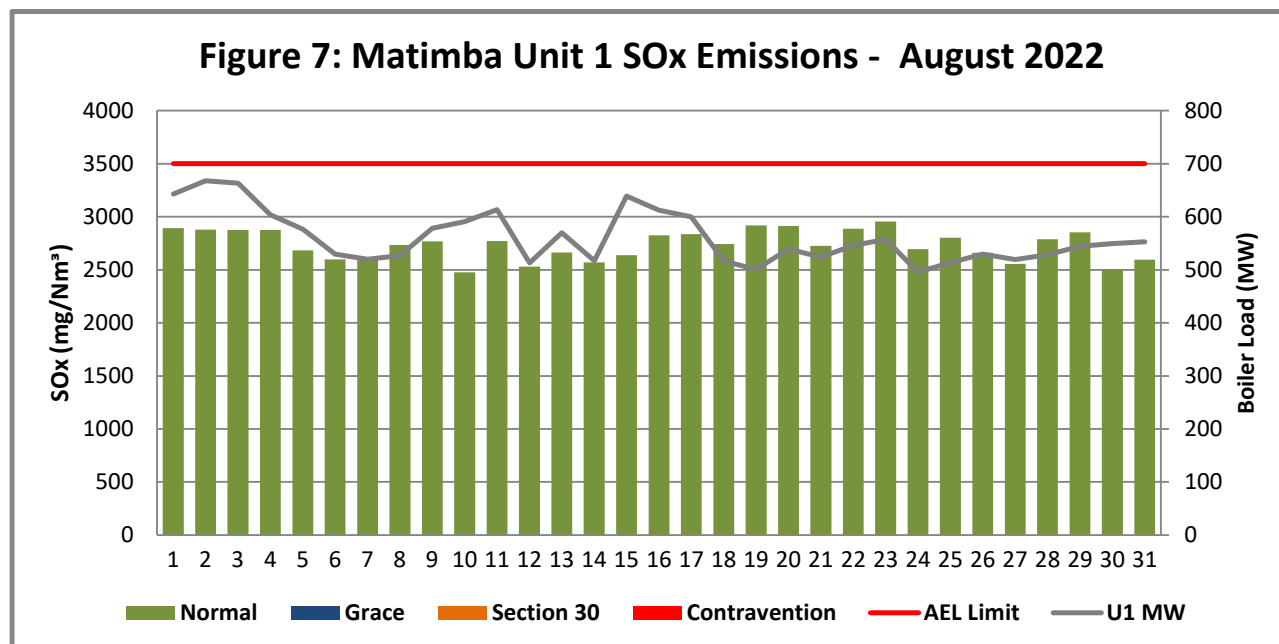


Figure 7: SO₂ daily average emissions against emission limit for unit 1 for the month of August 2022

Interpretation:

All daily averages below SO₂ emission monthly limit of 3500 mg/Nm³.

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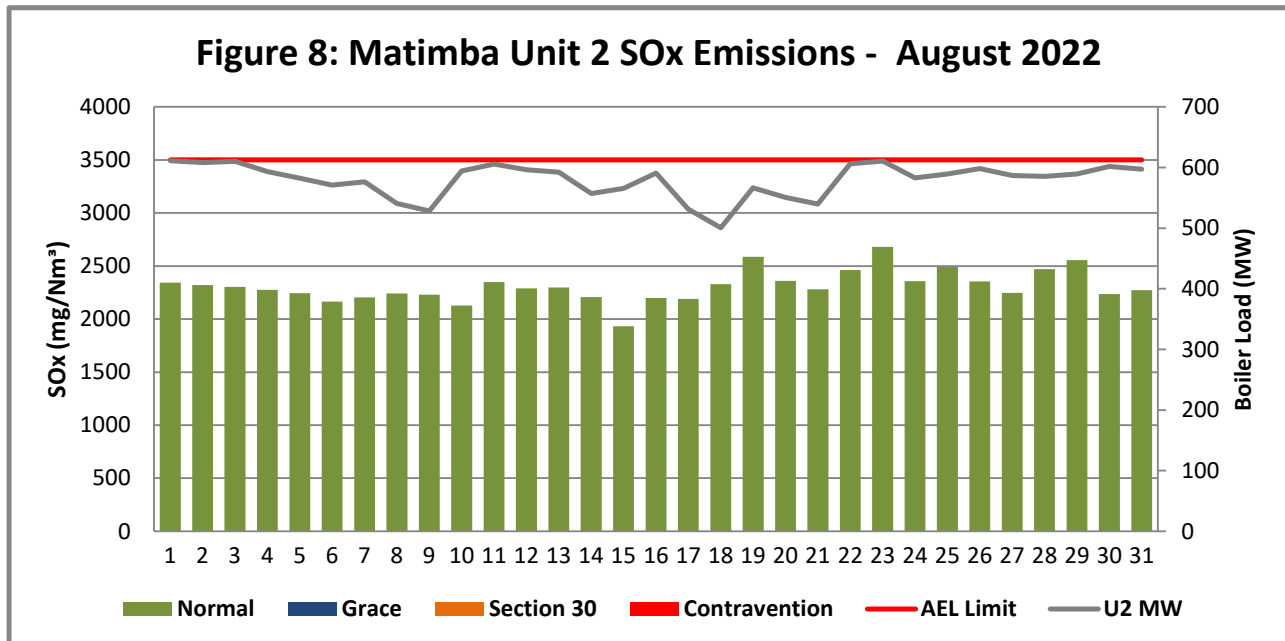
Unit 2 SO₂ Emissions

Figure 8: SO₂ daily average emissions against emission limit for unit 2 for the month of August 2022

Interpretation:

All daily averages below SO₂ emission monthly limit of 3500 mg/Nm³.

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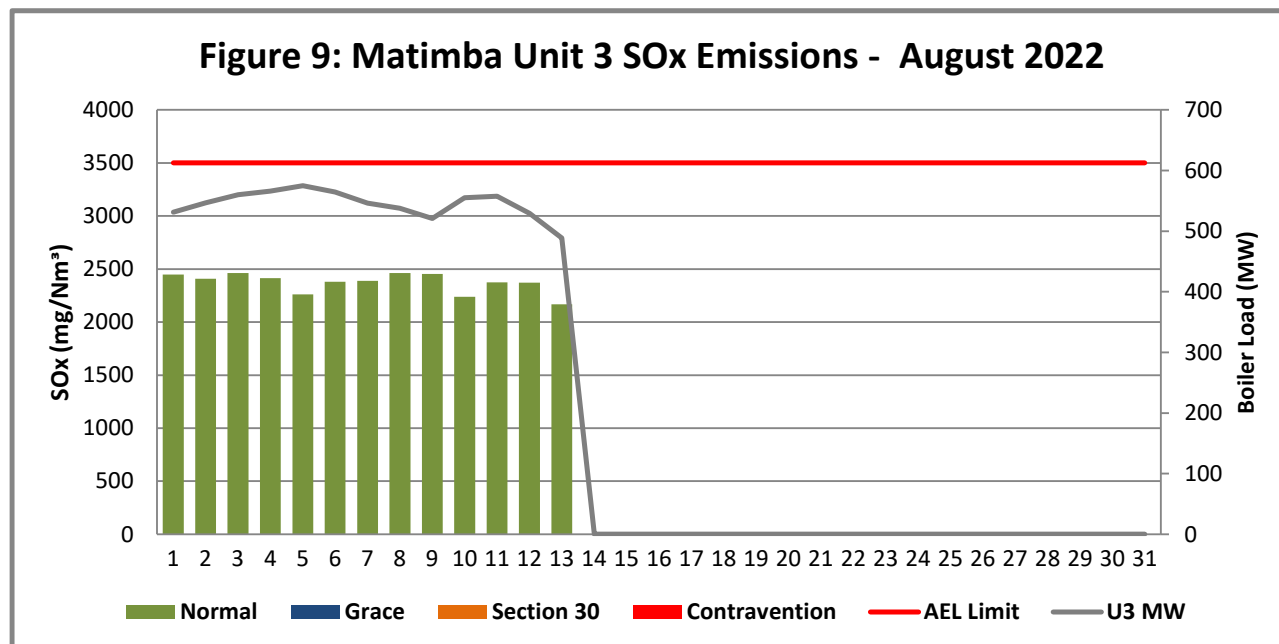
Unit 3 SO₂ Emissions

Figure 9: SO₂ daily average emissions against emission limit for unit 3 for the month of August 2022

Interpretation:

All daily averages below SO₂ emission monthly limit of 3500 mg/Nm³.

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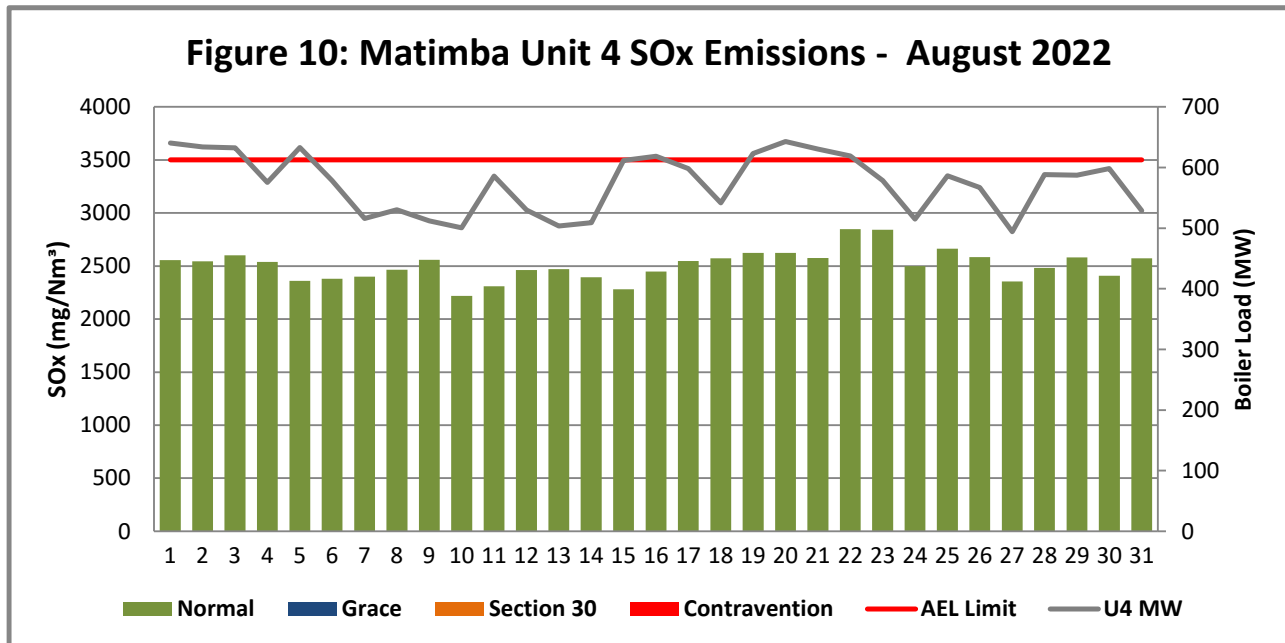
Unit 4 SO₂ Emissions

Figure 10: SO₂ daily average emissions against emission limit for unit 4 for the month of August 2022

Interpretation:

All daily averages below SO₂ emission monthly limit of 3500 mg/Nm³.

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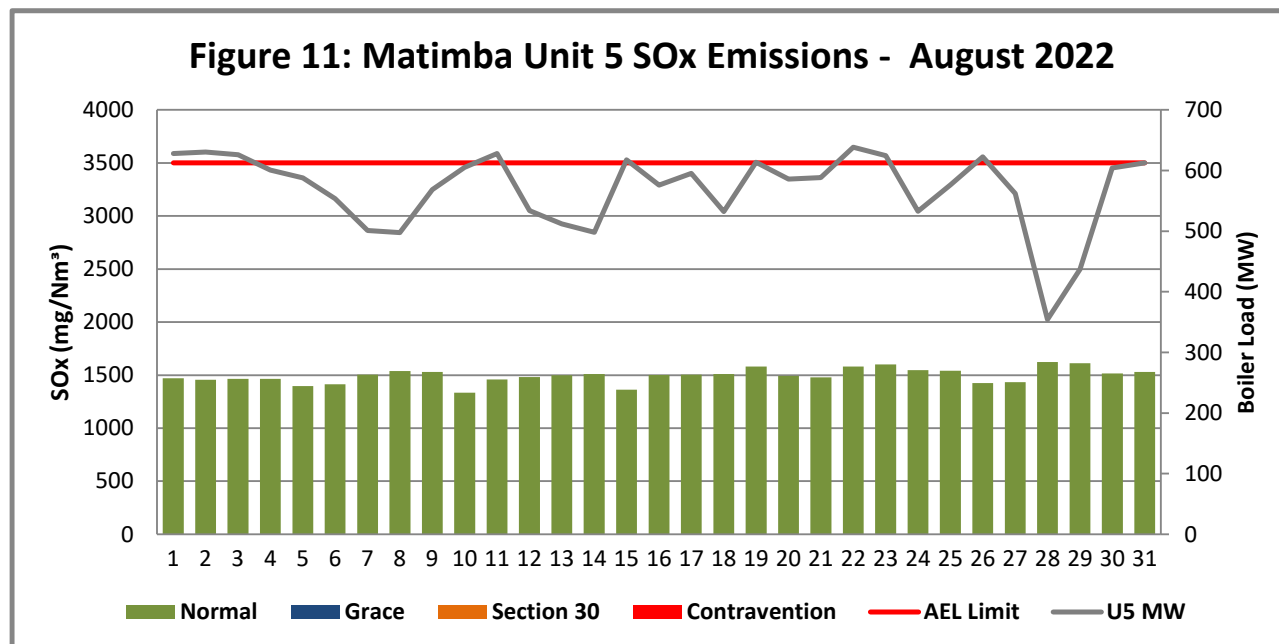
Unit 5 SO₂ Emissions

Figure 11: SO₂ daily average emissions against emission limit for unit 5 for the month of August 2022

Interpretation:

All daily averages below SO₂ emission monthly limit of 3500 mg/Nm³.

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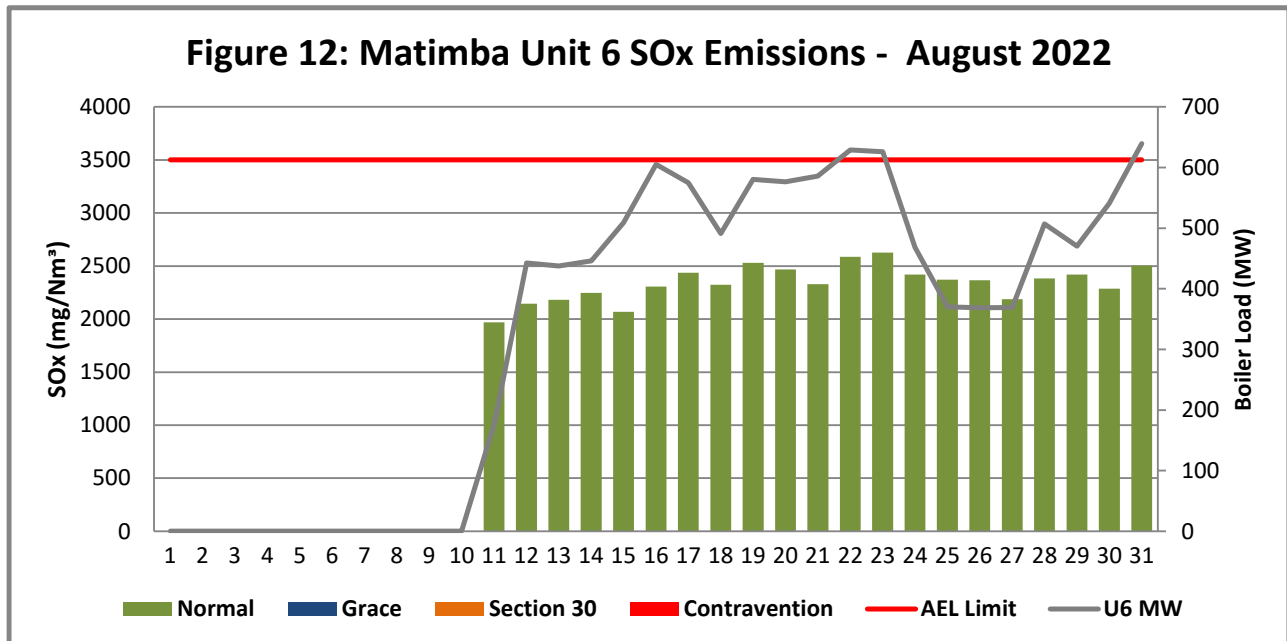
Unit 6 SO₂ Emissions

Figure 12: SO₂ daily average emissions against emission limit for unit 6 for the month of August 2022

Interpretation:

All daily averages remained below SO₂ emission monthly limit of 3500 mg/Nm³.

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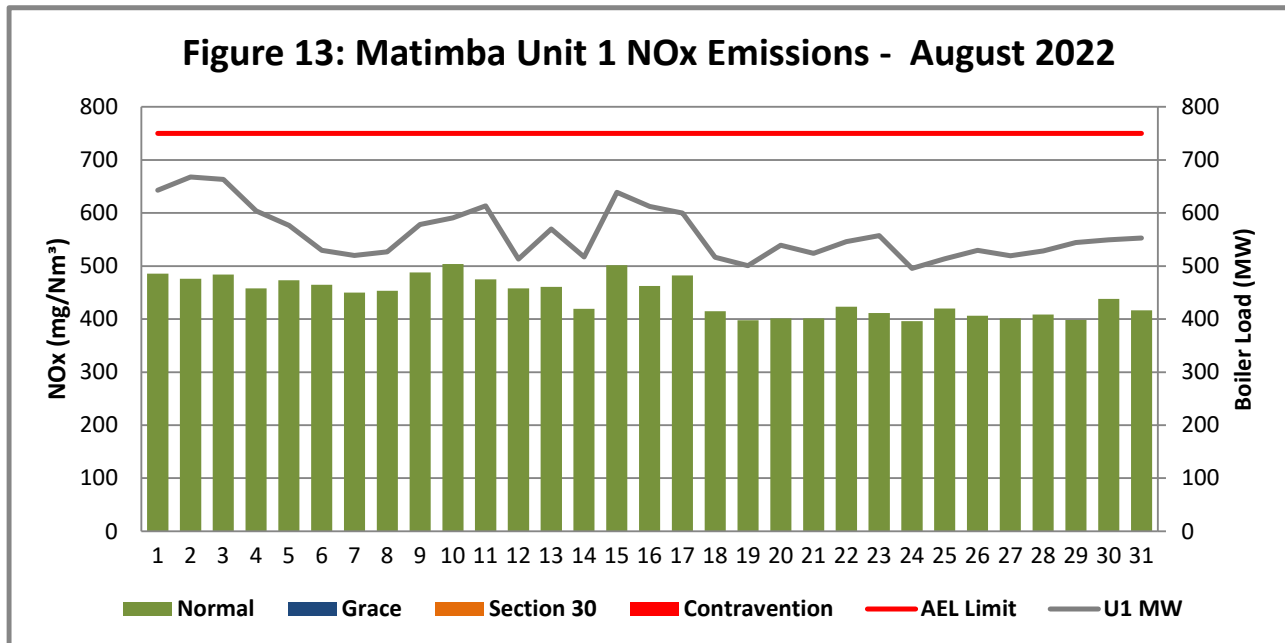
Unit 1 NO_x Emissions

Figure 13: Figure 14: NO_x daily average emissions against emission limit for unit 1 for the month of August 2022

Interpretation:

All daily averages below NO_x emission limit of 750 mg/Nm³.

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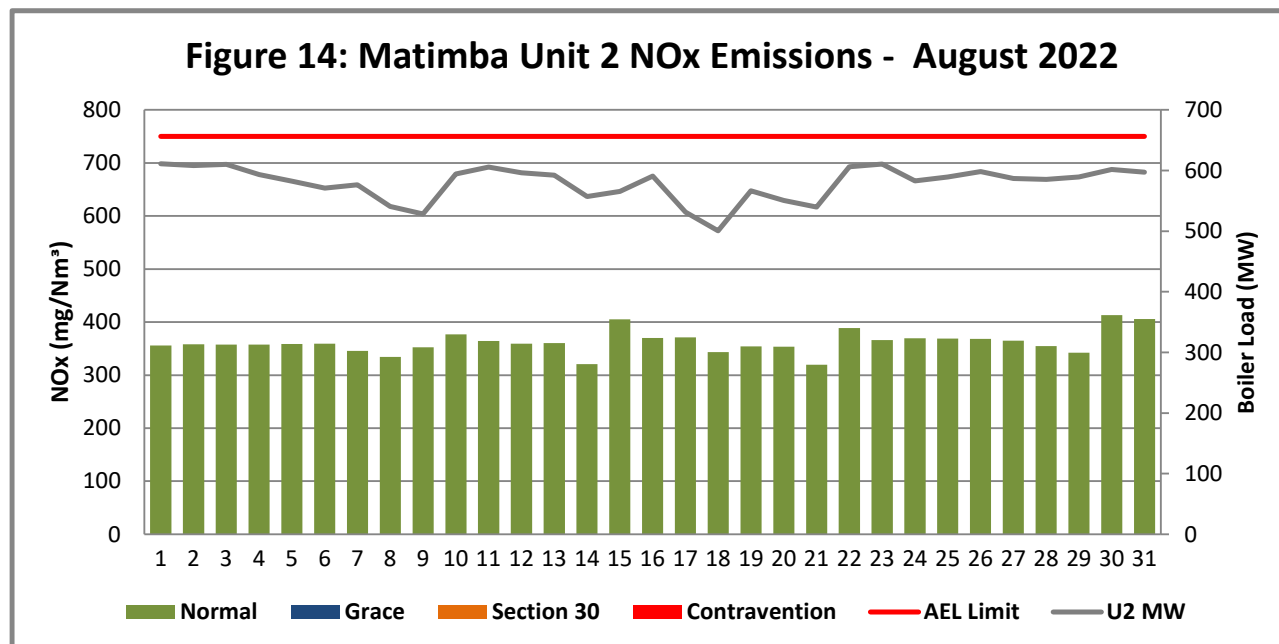
Unit 2 NO_x Emissions

Figure 15: NO_x daily average emissions against emission limit for unit 2 for the month of August 2022

Interpretation:

All daily averages below NO_x emission limit of 750 mg/Nm³.

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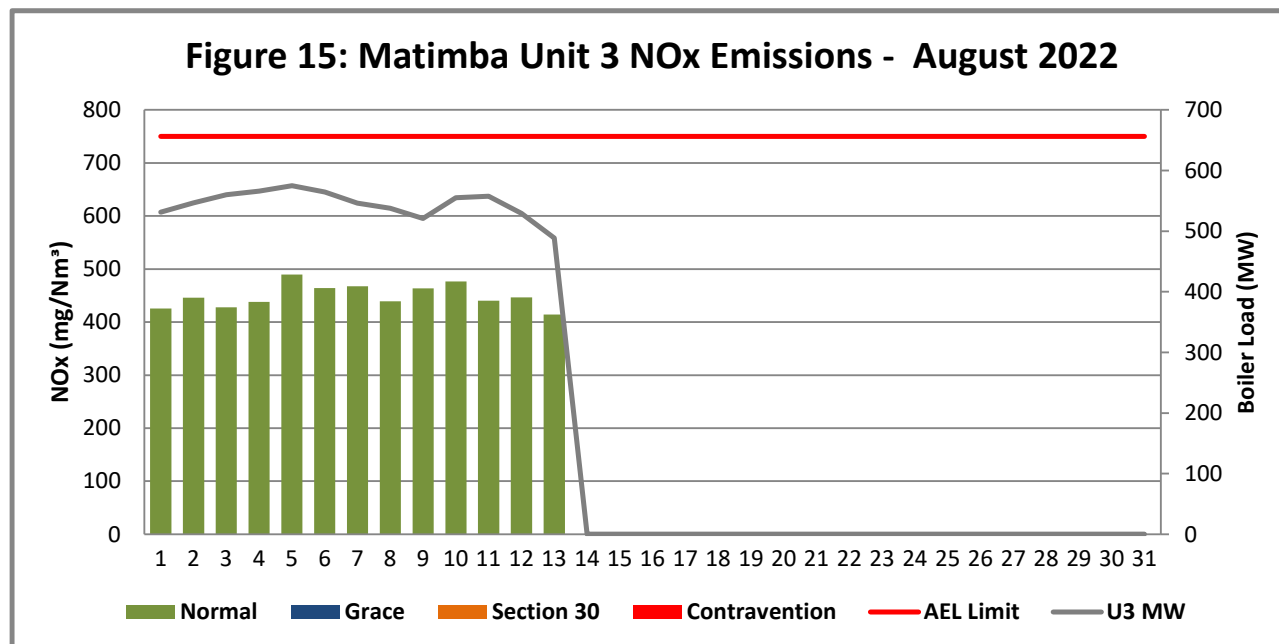
Unit 3 NO_x Emissions

Figure 16: NO_x daily average emissions against emission limit for unit 3 for the month of August 2022

Interpretation:

All daily averages below NO_x emission limit of 750 mg/Nm³.

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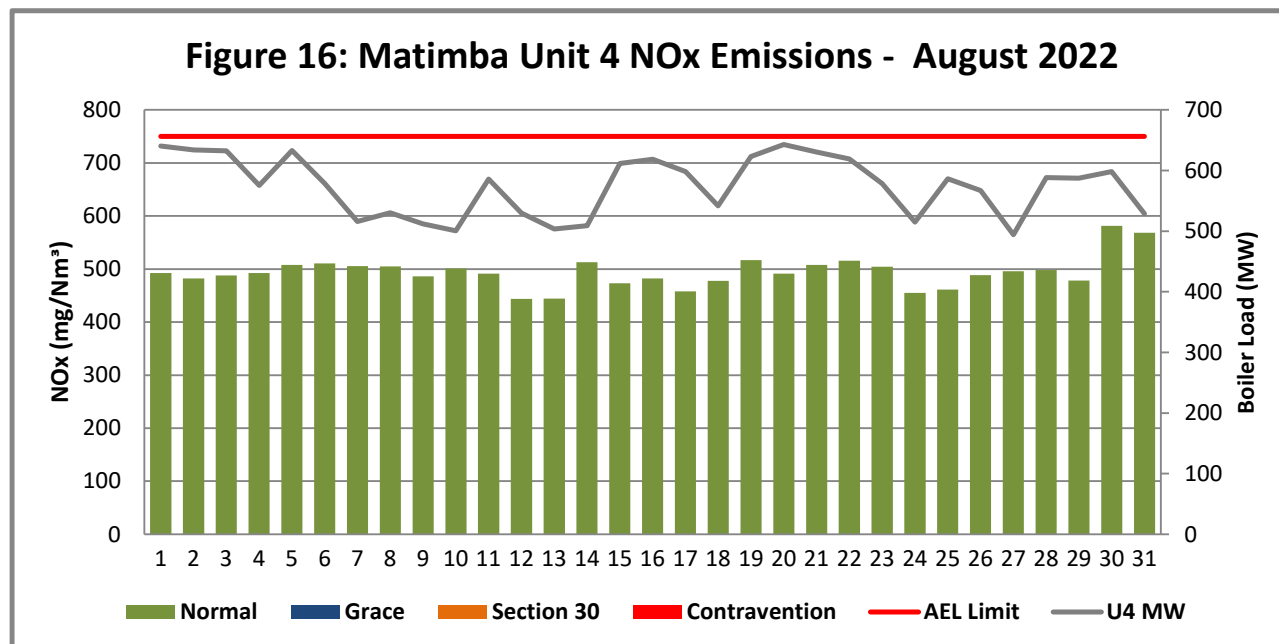
Unit 4 NO_x Emissions

Figure 17: NO_x daily average emissions against emission limit for unit 4 for the month of August 2022

Interpretation:

All daily averages below NO_x emission limit of 750 mg/Nm³.

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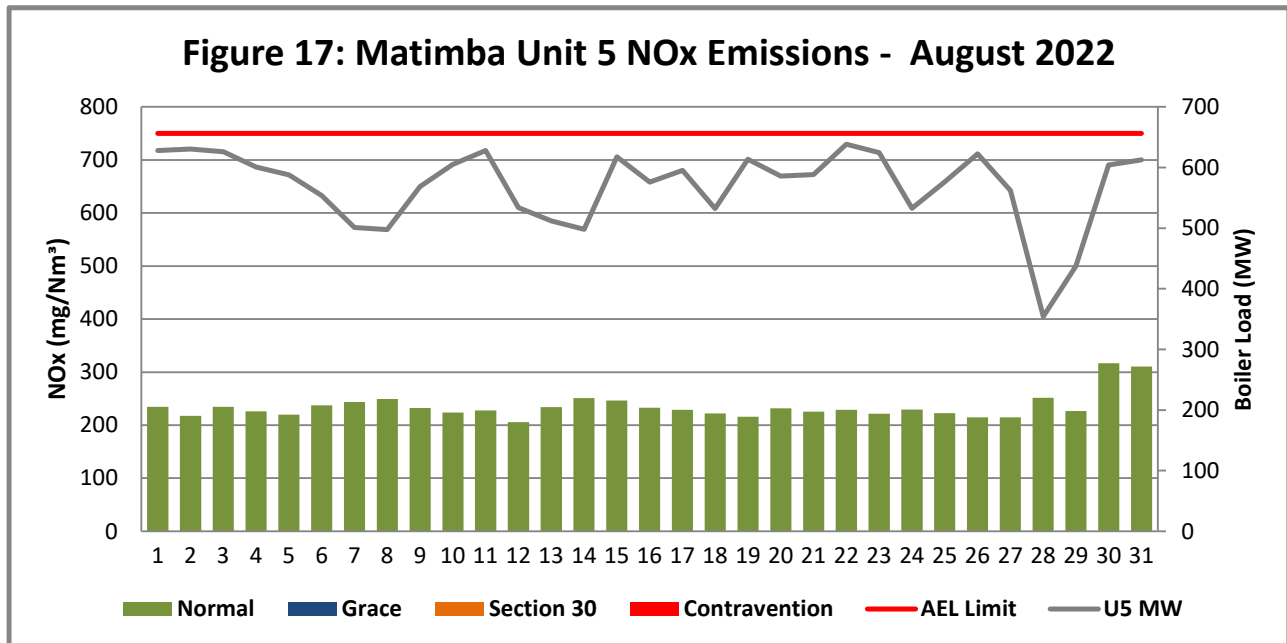
Unit 5 NO_x Emissions

Figure 18: NO_x daily average emissions against emission limit for unit 5 for the month of August 2022

Interpretation:

All daily averages below NO_x emission limit of 750 mg/Nm³.

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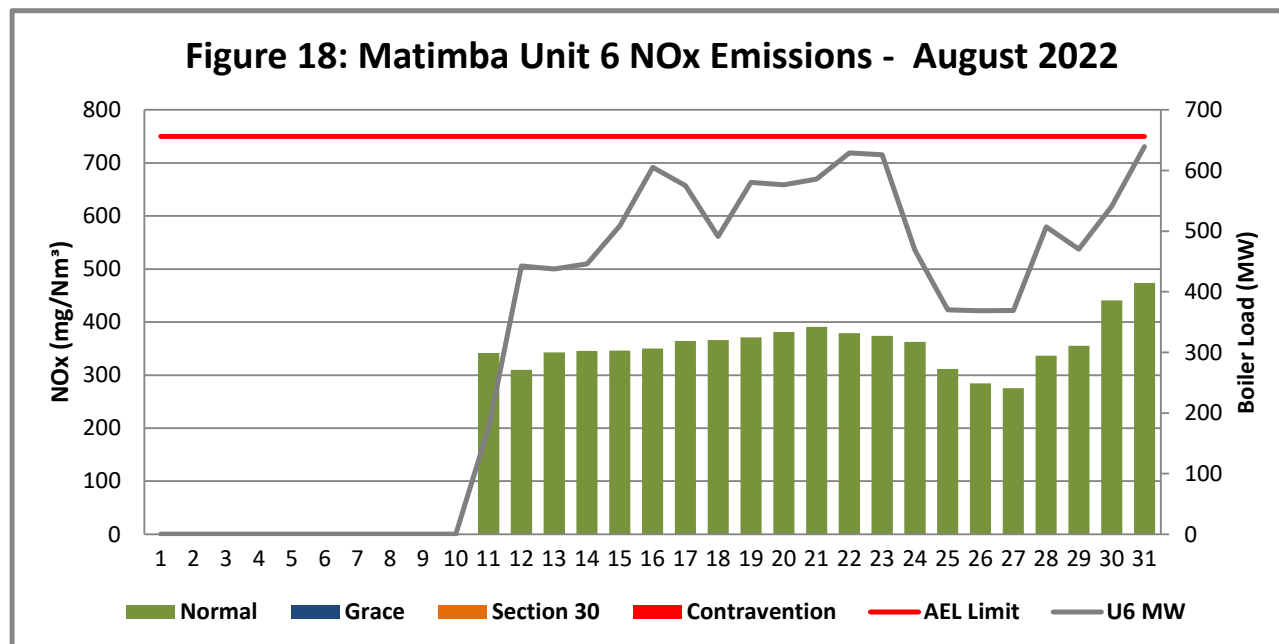
Unit 6 NO_x Emissions

Figure 19: NO_x daily average emissions against emission limit for unit 6 for the month of August 2022

Interpretation:

All daily averages below NO_x emission limit of 750 mg/Nm³.

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2.4.3 Total Volatile Organic Compounds

Table 4: Total volatile compound estimates

		
CALCULATION OF EMISSIONS OF TOTAL VOLATILE COMPOUNDS FROM FUEL OIL STORAGE TANKS*		
Date:	Friday, 23 September 2022	
Station:	Matimba Power Station	
Province:	Limpopo Province	
Tank no.	1-4	
Description:	Outdoor fuel oil storage tank	
Tank Type:	Vertical fixed roof (vented to atmosphere)	
Material stored:	Fuel Oil 150	
MONTHLY INPUT DATA FOR THE STATION Please only insert relevant monthly data inputs into the blue cells below Choose from a dropdown menu in the green cells The total VOC emissions for the month are in the red cells IMPORTANT: Do not change any other cells without consulting the AQ CoE		
MONTH:	August	
GENERAL INFORMATION:	Data	Unit
Total number of fuel oil tanks:	4	NA
Height of tank:	13,34	m
Diameter of tank:	9,53	m
Net fuel oil throughput for the month:	537,320	
Molecular weight of the fuel oil:	166,00	Lb/lb-mole
METEROLOGICAL DATA FOR THE MONTH	Data	Unit
Daily average ambient temperature	20,46	°C
Daily maximum ambient temperature	28,86	°C
Daily minimum ambient temperature	12,76	°C
Daily ambient temperature range	16,09	°C
Daily total insolation factor	4,23	kWh/m²/day
Tank paint colour	Grey/medium	NA
Tank paint solar absorptance	0,68	NA
FINAL OUTPUT:	Result	Unit
Breathing losses:	0,56 kg/month	
Working losses:	0,02 kg/month	
TOTAL LOSSES (Total TVOC Emissions for the month):	0,58 kg/month	
*Calculations performed on this spreadsheet are taken from the USEPA AP-42- Section 7.1 Organic Liquid Storage Tanks - January 1996. This spreadsheet is derived from materials provided by Jimmy Peress, PE, Tritech Consulting Engineers, 85-93 Chevy Chase Street, Jamaica, NY 11432 USA, Tel - 718-454-3920, Fax - 718-454-6330, e-mail - PeressJ@nyc.rr.com.		

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2.4.4 Greenhouse gas (CO₂) emissions

CO₂ emissions are reported in terms of the Greenhouse gas reporting regulations (GN 43712, GNR. 994/2020) and are not included in the monthly AEL compliance report.

2.5 Daily power generated

Table 5: Daily power generated per unit in MWh for the month of August 2022

Date	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6
2022/08/01	15340	14458	12685	15277	14909	0
2022/08/02	15998	14398	13025	15165	15015	0
2022/08/03	15919	14449	13400	15089	14866	0
2022/08/04	14485	14017	13484	10947	14259	0
2022/08/05	13842	13771	13712	15115	13986	0
2022/08/06	12703	13509	13464	13886	13227	0
2022/08/07	12471	13636	13095	12330	11920	0
2022/08/08	12635	12819	12792	12671	11838	0
2022/08/09	13857	12481	12473	12237	13521	0
2022/08/10	14155	14094	13230	11976	14328	0
2022/08/11	14692	14323	13335	13997	14967	513,9
2022/08/12	12242	14105	12601	12661	12721	10454
2022/08/13	13693	14045	2464	12052	12191	10417
2022/08/14	12393	12619	0	12164	11852	10639
2022/08/15	15297	9467	0	14617	14684	12056
2022/08/16	14646	14034	0	14766	13706	14365
2022/08/17	14388	12560	0	14297	14164	13711
2022/08/18	12379	11844	0	12952	12660	11680
2022/08/19	11994	13394	0	14849	14602	13854
2022/08/20	12899	13071	0	15402	13937	13691
2022/08/21	12564	12789	0	15070	13985	13987
2022/08/22	13047	14362	0	14822	15169	14947
2022/08/23	13381	14472	0	13825	14898	14919
2022/08/24	11877	13794	0	12284	12654	11159
2022/08/25	12306	13945	0	14009	13659	8779
2022/08/26	12652	14143	0	10393	14815	8750
2022/08/27	12475	13907	0	8893	13445	8762
2022/08/28	12667	13844	0	14075	8511	12024
2022/08/29	13032	13940	0	14023	10321	11174
2022/08/30	13126	14266	0	14294	14401	12813
2022/08/31	13244	14102	0	12631	14524	15214

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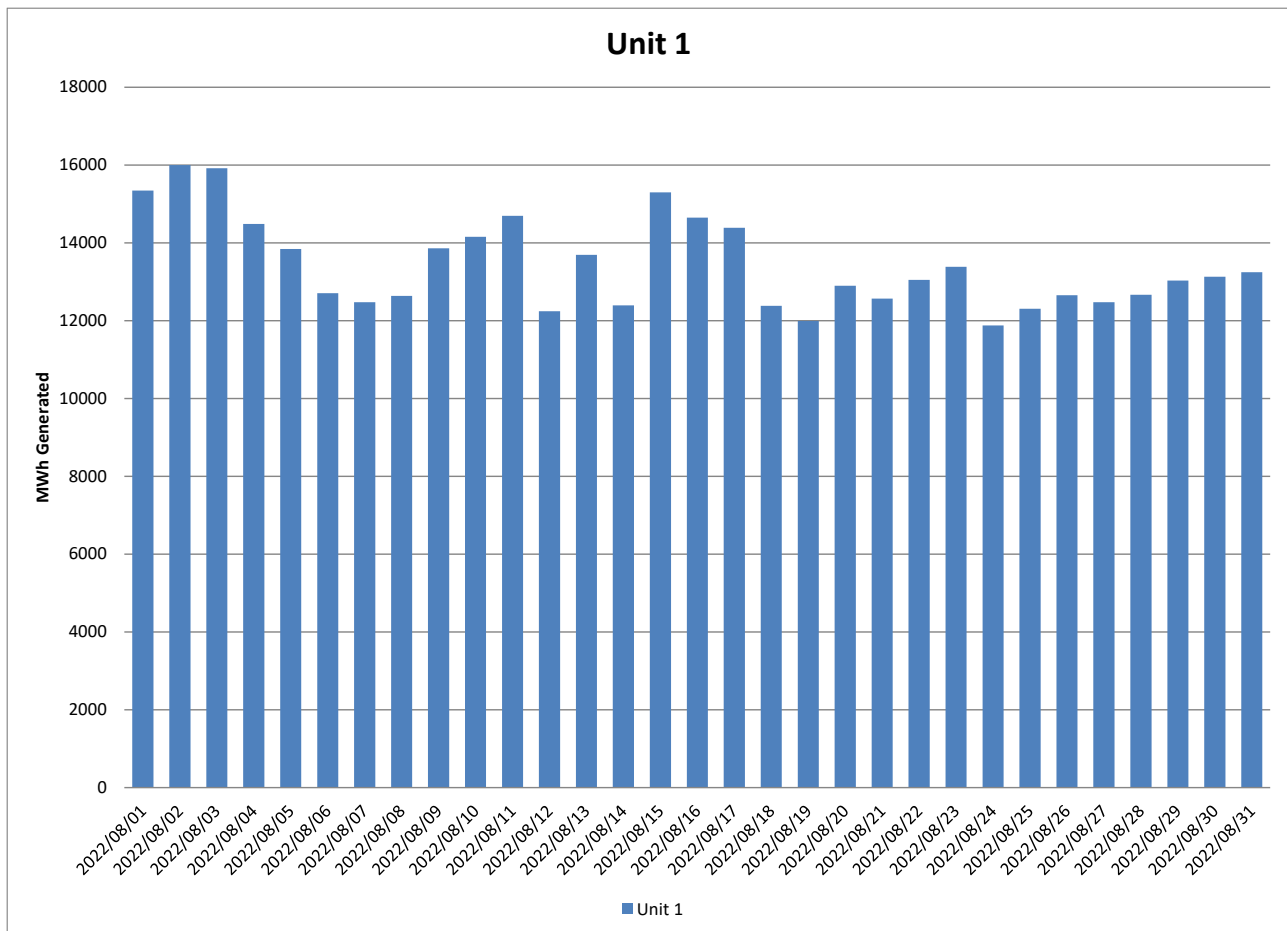


Figure 20: Unit 1 daily generated power in MWh for the month of August 2022

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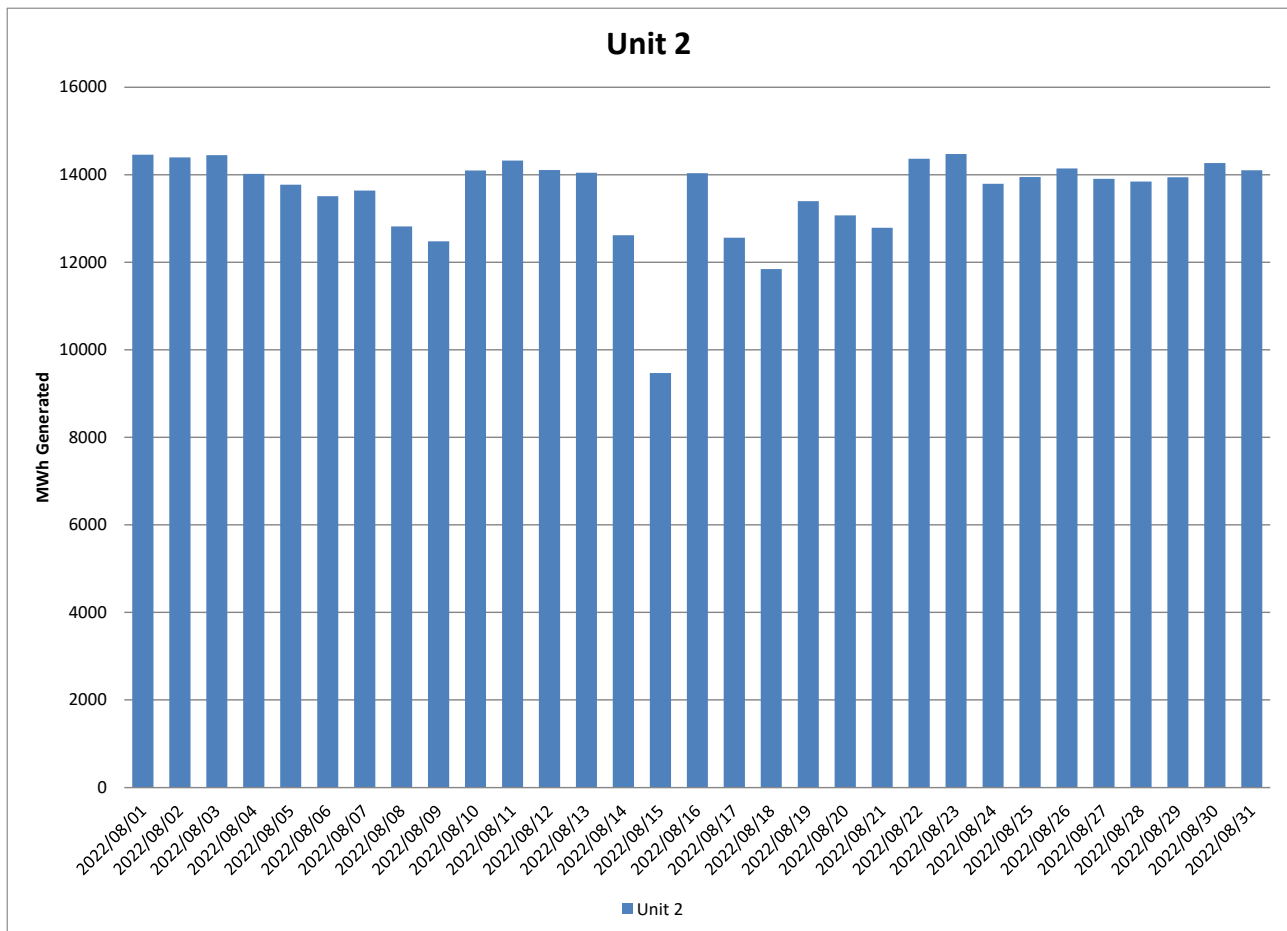


Figure 21: Unit 2 daily generated power in MWh for the month of August 2022

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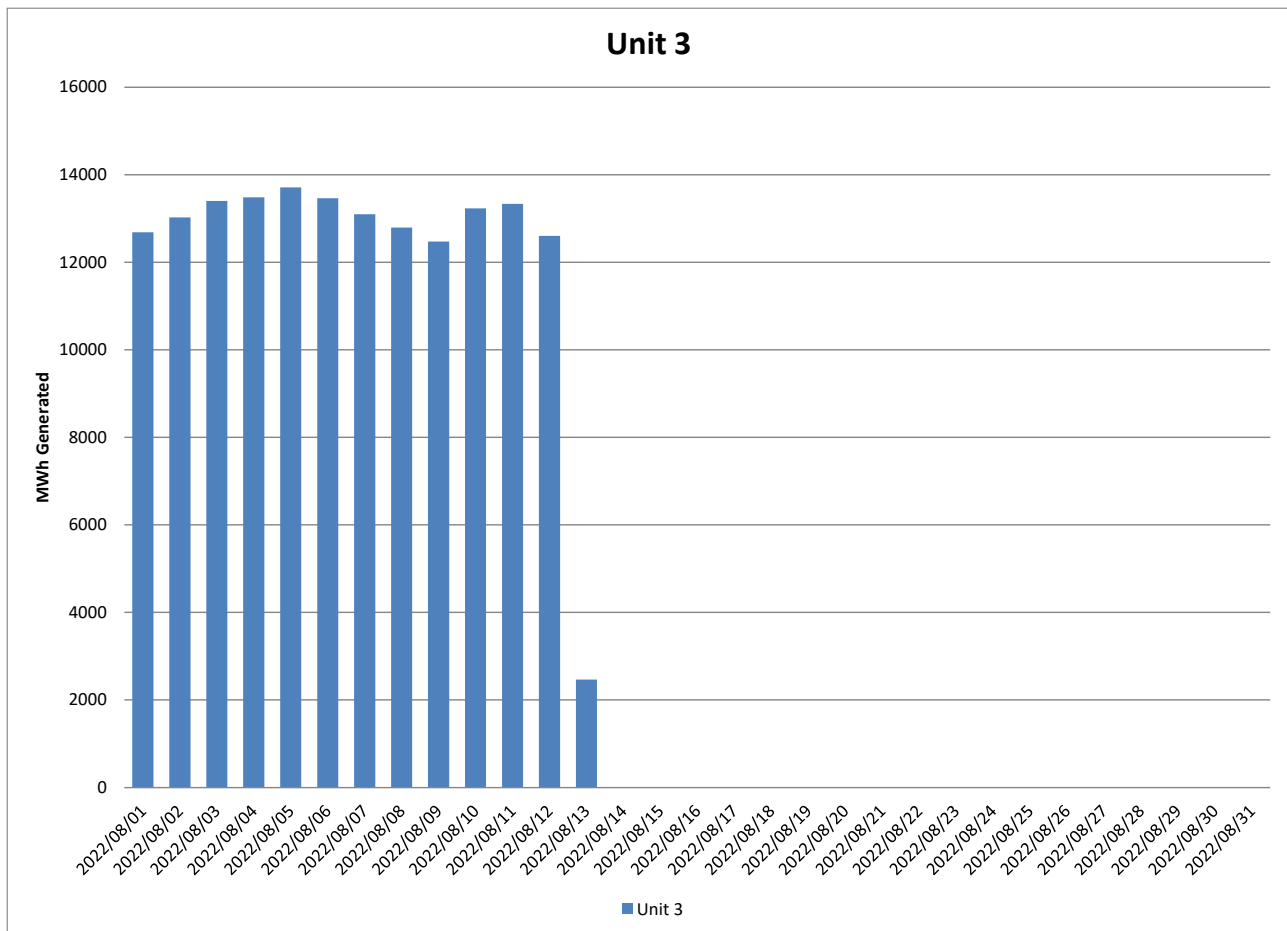


Figure 22: Unit 3 daily generated power in MWh for the month of August 2022

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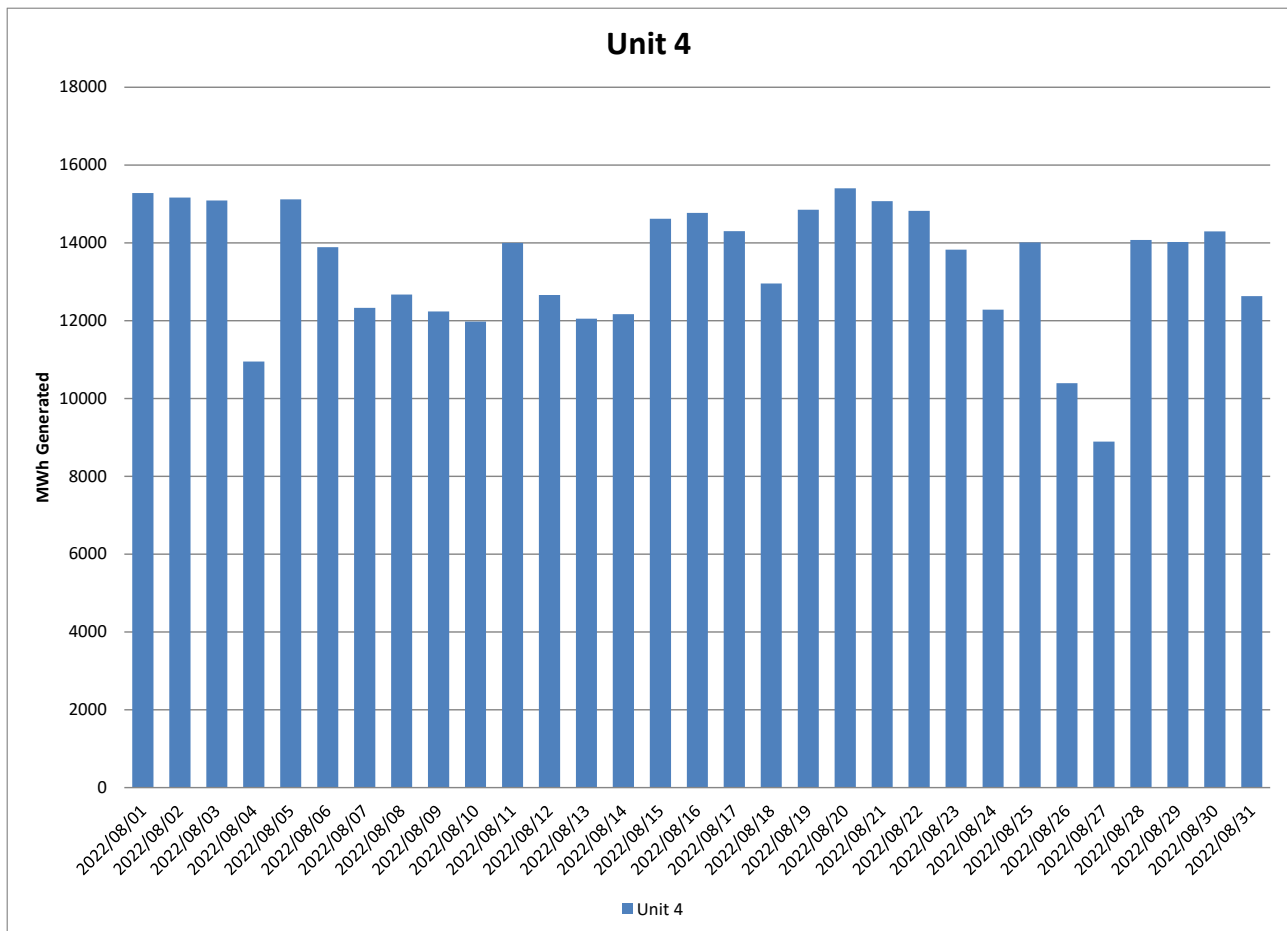


Figure 23: Unit 4 daily generated power in MWh for the month of August 2022

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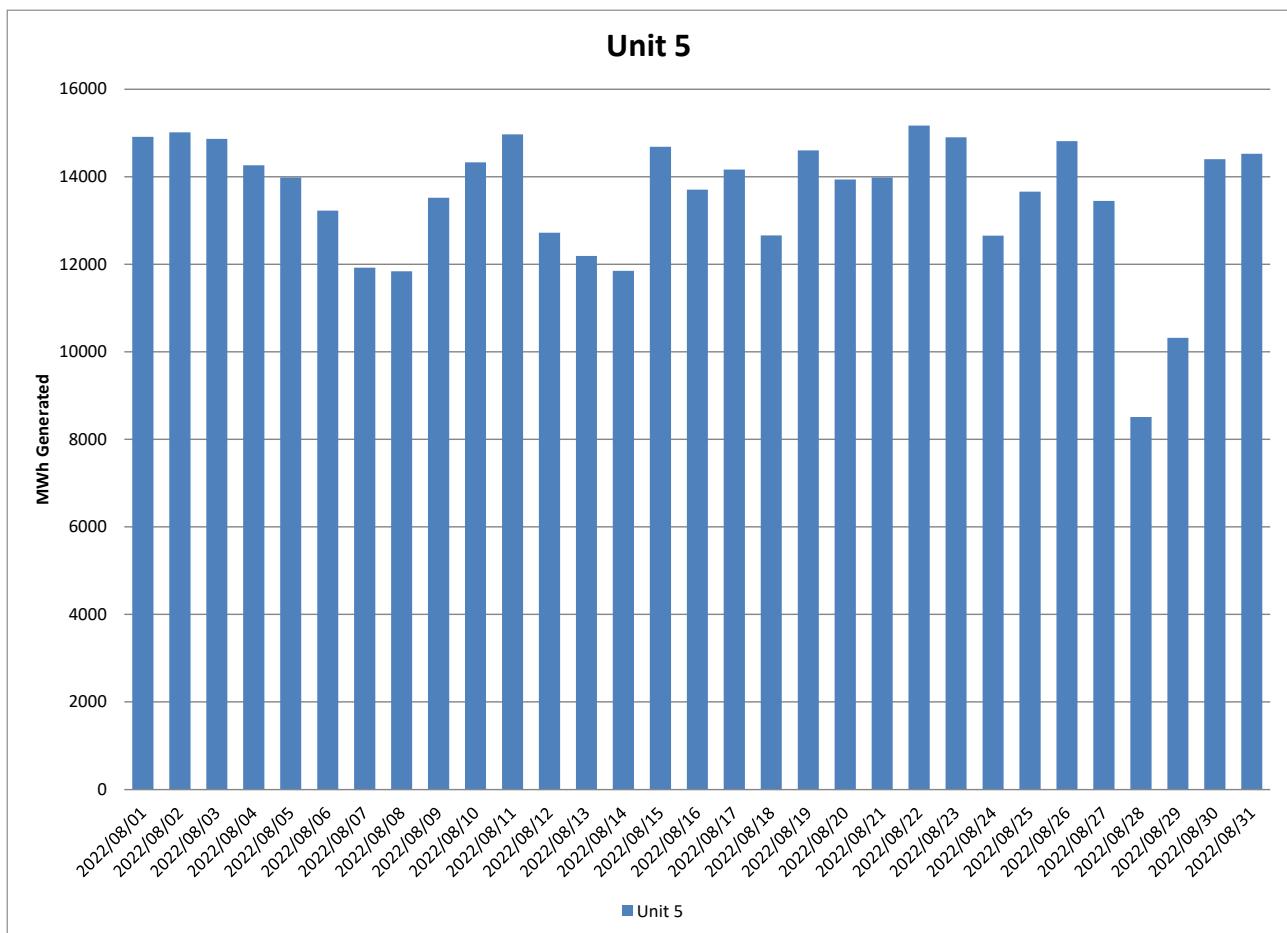


Figure 24: Unit 5 daily generated power in MWh for the month of August 2022

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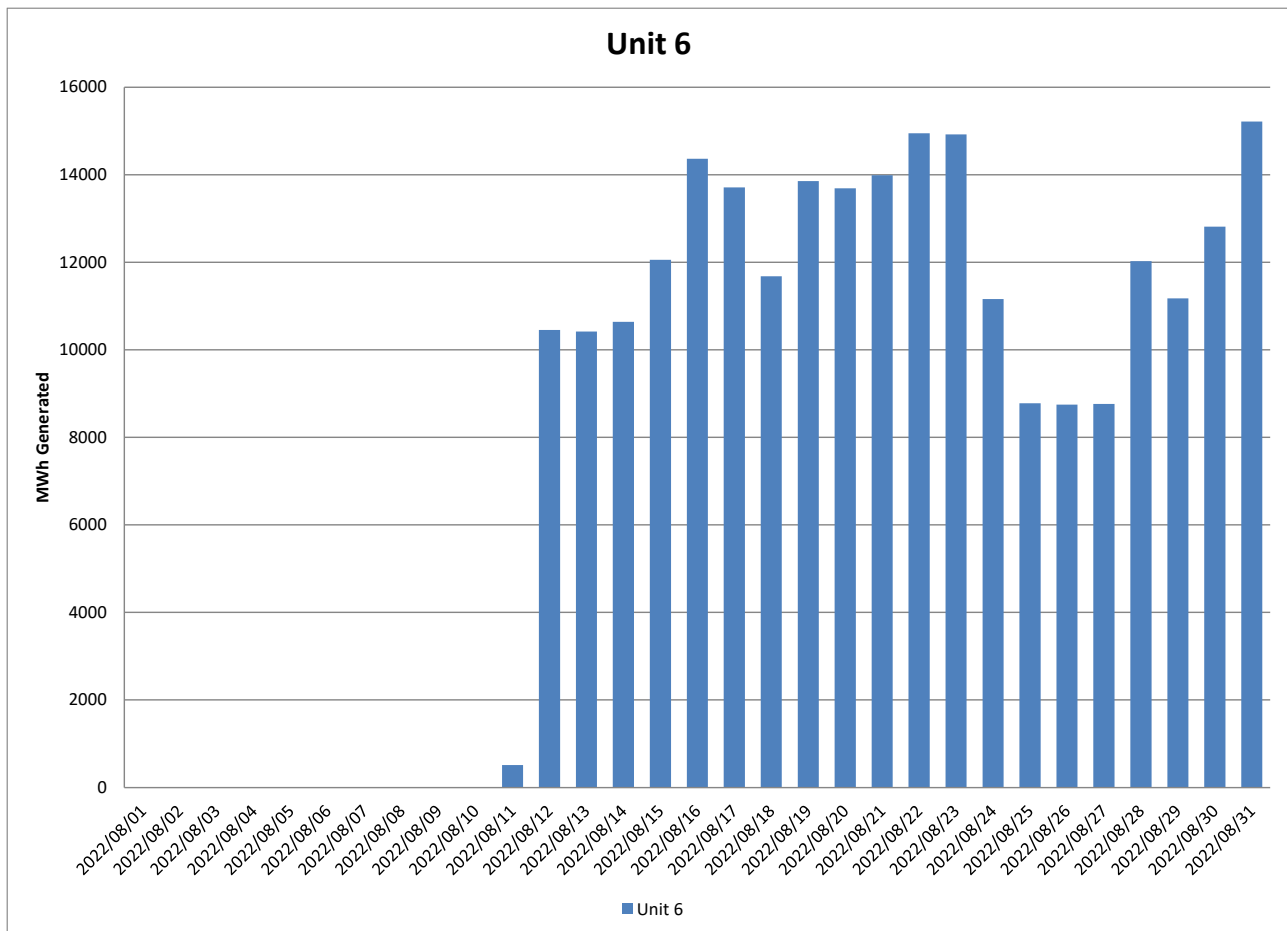


Figure 25: Unit 6 daily generated power in MWh for the month of August 2022

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2.6 Pollutant Tonnages

The emitted pollutant tonnages for August 2022 are provided in table 6. CO₂ values for units 3, 4 and 5 were calculated per balance, from O₂ values, due to analyser providing unreliable data. Averaged quality assurance level 2 test values for CO₂ were used for Unit 2 due to unreliable data from analysers. Averaged quality assurance level 2 test values for O₂ values were used for Unit 1 and Unit 2 due to the analysers being providing unreliable data. Averaged monthly emissions were used for Unit 6 on 11 August 2022, 13 to 18 August 2022, 24 to 26 August 2022 and 29 August 2022 due to unreliable values from analyser. Matimba is currently in the process of implementing recommended changes on gaseous emission analysers to improve the reliability of the data.

Table 6: Pollutant tonnages for the month of August 2022

Associated Unit/Stack	PM (tons)	SO ₂ (tons)	NO _x (tons)
Unit 1	63,8	5 081,7	825,5
Unit 2	39,0	8 649,2	1 351,9
Unit 3	33,9	2 210,0	418,6
Unit 4	63,7	4 994,2	982,6
Unit 5	63,6	3 492,6	548,8
Unit 6	36,9	3 337,1	511,1
SUM	300,8	27 764,8	4 638,6

2.7 Reference values

Table 7: Reference values for data provided, August 2022

Compound / Parameter	Units of Measure	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6
Oxygen	%	8,70	7,64	7,73	6,70	6,62	7,57
Moisture	%	4,56	4,07	5,19	3,65	4,07	2,63
Velocity	m/s	24,7	35,1	29,1	24,4	27,2	24,9
Temperature	°C	141,0	129,4	129,9	136,6	123,1	121,2
Pressure	mBar	933,4	1 201,0	916,8	888,0	884,5	915,8

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2.8 Continuous Emission Monitors

2.8.1 Reliability

Continuous emission monitors were available for more than 80% of the reporting period, however, reliability was below the required percentage for Units 1, 2 for O₂ and for units 2, 3, 4 and 5 for CO₂. CO₂ values for units 3, 4 and 5 were calculated per balance, from O₂ values, due to analyser providing unreliable data. Averaged quality assurance level 2 test values for CO₂ were used for Unit 2 due to unreliable data from analysers. Averaged quality assurance level 2 test values for O₂ values were used for Unit 1 and Unit 2 due to the analysers being providing unreliable data. Averaged monthly emissions were used for Unit 6 on 11 August 2022, 13 to 18 August 2022, 24 to 26 August 2022 and 29 August 2022 due to unreliable values from analyser. Matimba is currently in the process of implementing recommended changes on gaseous emission analysers to improve the reliability of the data.

Table 8: Average percentage (%) availability of monitors for the month of August 2022.

Associated Unit/Stack	PM	SO ₂	NO
Unit 1	100,0	99,9	99,9
Unit 2	100,0	99,7	99,6
Unit 3	100,0	100,0	100,0
Unit 4	100,0	99,9	99,9
Unit 5	100,0	99,9	99,9
Unit 6	100,0	99,8	99,8

2.8.2 Changes, downtime, and repairs

Unit 1

- No adjustments done on the CEMs. Calibration of gaseous analysers is done every second week.
- No downtime or repairs done on the particulate monitors

Unit 2

- No adjustments done on the CEMs. Calibration of gaseous analysers is done every second week.
- No downtime or repairs done on the particulate monitors

Unit 3

- No adjustments done on the CEMs. Calibration of gaseous analysers is done every second week.
- No downtime or repairs done on the particulate monitors

Unit 4

- No adjustments done on the CEMs. Calibration of gaseous analysers is done every second week.
- No downtime or repairs done on the particulate monitors

Unit 5

- No adjustments done on the CEMs. Calibration of gaseous analysers is done every second week.

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- No downtime or repairs done on the particulate monitors

Unit 6

- No adjustments done on the CEMs. Calibration of gaseous analysers is done every second week.
- No downtime or repairs done on the particulate monitors

2.8.3 Sampling dates and times**Table 9:** Dates of last conducted CEMS verification tests for PM, SO₂ and NO_x

Name of service provider:		Stacklabs Environmental Services CC		
Address of service provider:		10 Chisel Street Boltonia Krugersdorp 1739		
Stack/ Unit	PM	SO₂	NO_x	CO₂
1	2020/09/30 06h04	2020/09/09 13h00	2020/09/09 13h00	2020/09/09 13h00
2	2021/01/26 04h52	2021/01/27 13h00	2021/01/27 13h00	2021/01/27 13h00
3	2021/08/10 12h05	2020/09/24 07h00	2020/09/24 07h00	2020/09/24 07h00
4	2021/07/13 14h31	2020/09/16 02h00	2020/09/16 02h00	2020/09/16 02h00
5	2020/10/06 05h39	2020/10/08 02h30	2020/10/08 02h30	2020/10/08 02h30
6	2020/09/09 06h41	2020/09/09 13h00	2020/09/09 13h00	2020/09/09 13h00

2.9 Units Start-up information**Table 10:** Start-up information

Unit	2	
Fires in	2022/08/15	04h00
Synchronization with Grid	2022/08/15	07h02
Emissions below limit	2022/08/15	11h58
Fires in to synchronization	3,03	HOURS
Synchronization to < Emission limit	4,93	HOURS

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Unit	4	
Fires in	2022/08/04	12h11
Synchronization with Grid	2022/08/04	14h27
Emissions below limit	2022/08/04	16h26
Fires in to synchronization	2,27	HOURS
Synchronization to < Emission limit	1,98	HOURS

Unit	4	
Fires in	2022/08/27	00h03
Synchronization with Grid	2022/08/27	02h43
Emissions below limit	2022/08/27	10h25
Fires in to synchronization	2,67	HOURS
Synchronization to < Emission limit	7,7	HOURS

Unit	4	
Fires in	2022/08/27	04h27
Synchronization with Grid	2022/08/27	06h25
Emissions below limit	2022/08/27	10h25
Fires in to synchronization	1,97	HOURS
Synchronization to < Emission limit	4	HOURS

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Unit	6	
Fires in	2022/08/11	02h24
Synchronization with Grid	2022/08/11	08h01
Emissions below limit	2022/08/11	09h26
Fires in to synchronization	5,62	HOURS
Synchronization to < Emission limit	1,42	HOURS

Unit	6	
Fires in	2022/08/11	21h30
Synchronization with Grid	2022/08/11	23h22
Emissions below limit	2022/08/12	01h18
Fires in to synchronization	1,87	HOURS
Synchronization to < Emission limit	1,93	HOURS

2.10 Emergency generation

Table 11: Emergency generation

	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6
Emergency Generation hours declared by national Control	365	365	148	293	365	217
Emergency Hours declared including hours after stand down	396	396	158	322	396	238
Days over the Limit during Emergency Generation	1	0	1	2	2	1

Unit 1 exceeded the 50mg/Nm³ limit for one day during emergency generation, on 19 August 2022. Unit 3 exceeded the 50mg/Nm³ limit for one day during emergency generation, on 9 August 2022. Unit 4 exceeded the 50mg/Nm³ limit for two days during emergency generation, on 28 and 30 August 2022. Unit 5 exceeded the 50mg/Nm³ limit for two days during emergency generation, on 16 and 28 August 2022. Unit 6 exceeded the 50mg/Nm³ limit for one day during emergency generation, on 29 August 2022.

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2.11 Complaints register

Table 12: Complaints

Source Code/ Name	Root Cause Analysis	Calculation of Impacts/ emissions associated with the incident	Dispersion modelling of pollutants where applicable	Measures implemented to prevent reoccurrence	Date by which measure will be implemented
N/A					

2.12 Air quality improvements and social responsibility conducted

2.12.1 Air quality improvements

None

2.12.2 Social responsibility conducted

None

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2.13 Ambient air quality monitoring

Ten exceedances of the PM_{2.5} daily limit occurred during the period under review. The SO₂ national ambient air quality 10-minute limit was exceeded once. There were twenty-seven exceedances of the Ozone 8-hour moving average recorded for the reporting period. No other exceedances were recorded for the period under review.

The average data recovery for the period was 89,2% and the station availability was 100%.

Ambient NO₂, PM_{2.5}, PM₁₀ and Hg concentrations at Marapong monitoring site show influence of emissions from low level sources in the area and ambient SO₂ concentrations are contributed to by emissions from low level sources and high-level sources.

Detailed results can be found in Attachment 1, "Marapong Monthly Report_August_2022".

2.14 Electrostatic precipitator and Sulphur plant status

Unit 1

- 3 fields out of service, will be inspected next opportunity.
- No abnormalities on the SO₃ plant. Preventative maintenance done during the month.

Unit 2

- 2 fields out of service, will be inspected next opportunity.
- No abnormalities on the SO₃ plant. Preventative maintenance done during the month.

Unit 3

- All precipitator fields in service. Unit shut down for outage
- No abnormalities on the SO₃ plant. Preventative maintenance done during the month.

Unit 4

- 3 field out of service, will be inspected next opportunity.
- No abnormalities on the SO₃ plant. Preventative maintenance done during the month.

Unit 5

- 4 field out of service, will be inspected next opportunity.
- No abnormalities on the SO₃ plant. Preventative maintenance done during the month.

Unit 6

- 2 fields out of service, will be inspected next opportunity.
- Hole in burner casing and sulphur leak causing low availability. Preventative maintenance done during the month.

SO₃ common plant

- No abnormalities on the sulphur storage plant.

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2.15 General

Name and reference number of the monitoring methods used:

1. Particulate and gas monitoring according to standards
 - a. BS EN 14181:2004 - Quality Assurance of Automated Measuring Systems
 - b. ESKOM internal standard 240-56242363 Emissions Monitoring and Reporting Standard

Sampling locations:

1. Stack one
 - a. Particulates:
 - i. S23° 40' 2.8" E027° 36' 34.8" 175m from ground level and 75m from the top.
 - b. Gas:
 - i. S23° 40' 2.8" E027° 36' 34.8" 100m from ground level and 150m from the top.
 - c. Stack height
 - i. 250 meter consist of 3 flues
2. Stack two
 - a. Particulates:
 - i. S23° 40' 14.8" E027° 36' 47.5" 175m from ground level and 75m from the top.
 - b. Gas:
 - i. S23° 40' 14.8" E027° 36' 47.5" 100m from ground level and 150m from the top.
 - c. Stack height
 - i. 250 meter consist of 3 flues

3. Attachments

Marapong Monthly Report_August 2022

4. Report Conclusion

The rest of the information demonstrating compliance with the emission license conditions is supplied in the annual emission report sent to your office.

Hoping the above will meet your satisfaction.

I hereby declare that the information in this report is correct.

Yours sincerely

Wikus van Rensburg

GENERAL MANAGER: MATIMBA POWER STATION

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