	Technical and Generic Report	Matimba Power Station
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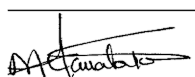
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Figure 19: Unit 4 daily generated power in MWh for the month of September 202330

Figure 20: Unit 6 daily generated power in MWh for the month of September 202331

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1. Report Summary

Matimba Power Station was issued with an Atmospheric Emission License (H16/1/13-WDM05) in September 2022. 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 September 2023.



During the period under review, Matimba experienced 65 exceedances of the daily particulate matter emission limit (50mg/Nm³), twenty-four (24) of these exceedances occurred outside of the 48-hour grace period and were recorded on the Eskom incident management process as non-compliance to the Atmospheric Emissions Licence and forty one (41) exceedances occurred within the 48-hour grace period.

There were no exceedances of the monthly SO_x limit (3500mg/Nm³) and the daily NO_x emission limit (750mg/Nm³) occurred.

The flue gas conditioning plant (SO₃ Plant) availability for the month of September 2023 was 94%. Issues that affected the availability were addressed and the plants returned to operation.

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	958 104
	Fuel Oil	Tons/month	1 200	1020,886
Production Rates	Product/ By-Product Name	Unit	Maximum Production Capacity Permitted (Quantity)	Production Rate
	Energy	MW	4000	2498,532

The consumption rates for the month of September 2023 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%	99,85%
Unit 2	Electrostatic Precipitator	100%	99,84%
Unit 3	Electrostatic Precipitator	100%	99,59%
Unit 4	Electrostatic Precipitator	100%	99,78%
Unit 5	Electrostatic Precipitator	100%	99,85%
Unit 6	Electrostatic Precipitator	100%	99,90%
Associated Unit	Technology Type	Minimum utilisation (%)	Actual Utilisation (%)
Unit 1	SO ₃ Plant	100%	87%
Unit 2	SO ₃ Plant	100%	98%
Unit 3	SO ₃ Plant	100%	99%
Unit 4	SO ₃ Plant	100%	86%
Unit 5	SO ₃ Plant	100%	93%
Unit 6	SO ₃ Plant	100%	97%

Flue gas conditioning plant availability was below the required 100% for all six (06) units due to unplanned breakdowns and defects. Defects were addressed and plants returned to service.

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Table 3: Energy Source Material Characteristics.

	Characteristic	Stipulated Range (Unit)	Monthly Average Content
Coal burned	Sulphur Content	1.6%	1,39%
	Ash Content	40%	34,59%

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

2.3 Emissions reporting

2.3.1 Particulate Matter Emissions

Unit 1 Particulate Emissions

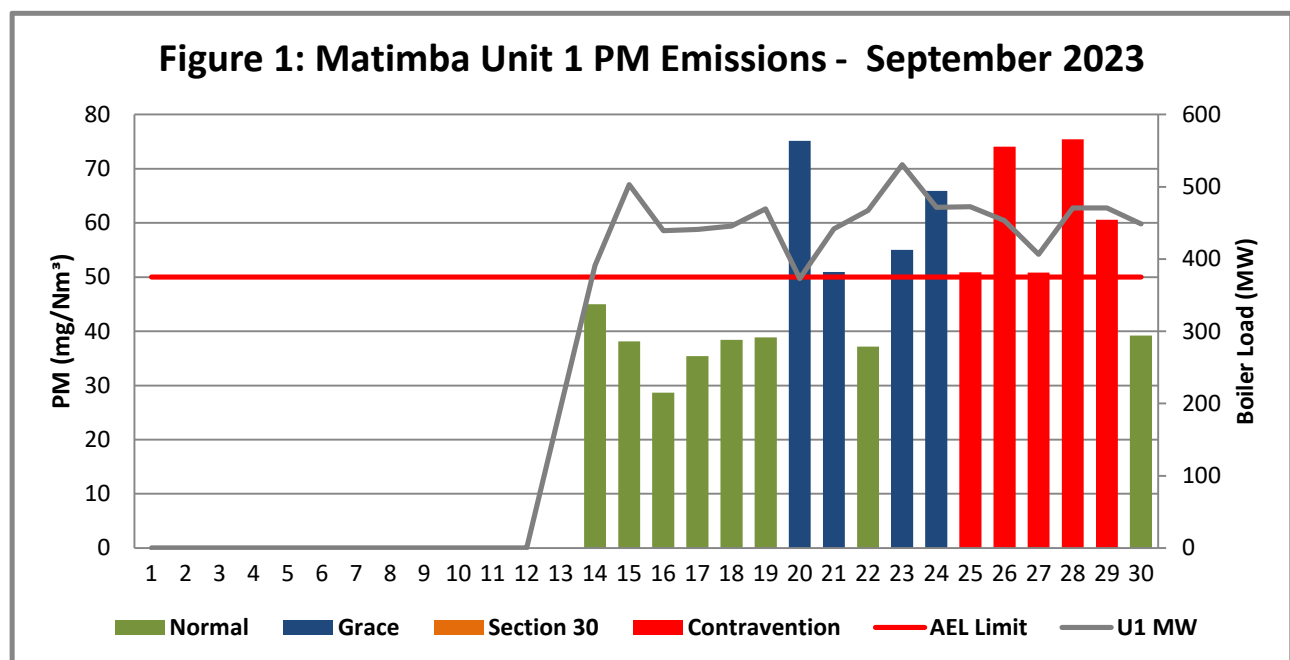


Figure 1: Particulate matter daily average emissions against emission limit for unit 1 for the month of September 2023

Interpretation:

Unit 1 exceeded the daily particulate emission limit of 50mg/Nm³ on 20,21,23 to 29 September 2023. The exceedances of the 25 to 29 September 2023 occurred outside of the 48-hour grace period and were recorded on the Eskom incident management process as non-compliance to the Atmospheric Emissions Licence. The exceedances were due to unavailability of the ash conveyance plant that led to accumulation of ash at the dust handling plant leading to high hopper levels within the flue gas cleaning system and reducing the efficiency of the abatement technology (electrostatic precipitator fields). The investigation into the causes of the exceedances were done and corrective measure put in place to correct the root causes.

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Unit 2 Particulate Emissions

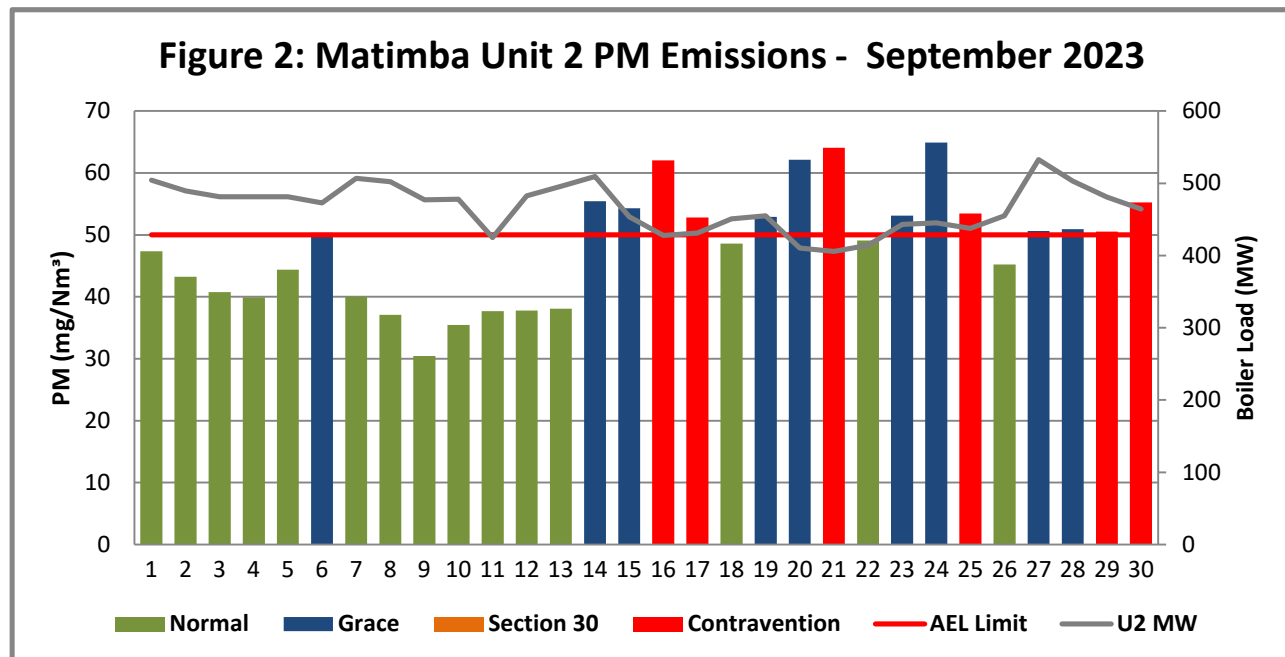


Figure 2: Particulate matter daily average emissions against emission limit for unit 2 for the month of September 2023

Interpretation:

Unit 2 exceeded the daily particulate emission limit of 50mg/Nm³ on 6,14,15,16,17,19,20,21,23,24,25,27 to 30 September 2023. The exceedances from the 16-17,21,25 and 29 to 30 September 2023 occurred outside of the 48-hour grace period and were recorded on the Eskom incident management process as non-compliance to the Atmospheric Emissions Licence. The exceedances were due to unavailability of the ash conveyance plant that led to accumulation of ash at the dust handling plant leading to high hopper levels within the flue gas cleaning system and reducing the efficiency of the abatement technology (electrostatic precipitator fields). The investigation into the causes of the exceedances were done and corrective measures put in place to correct the root causes.

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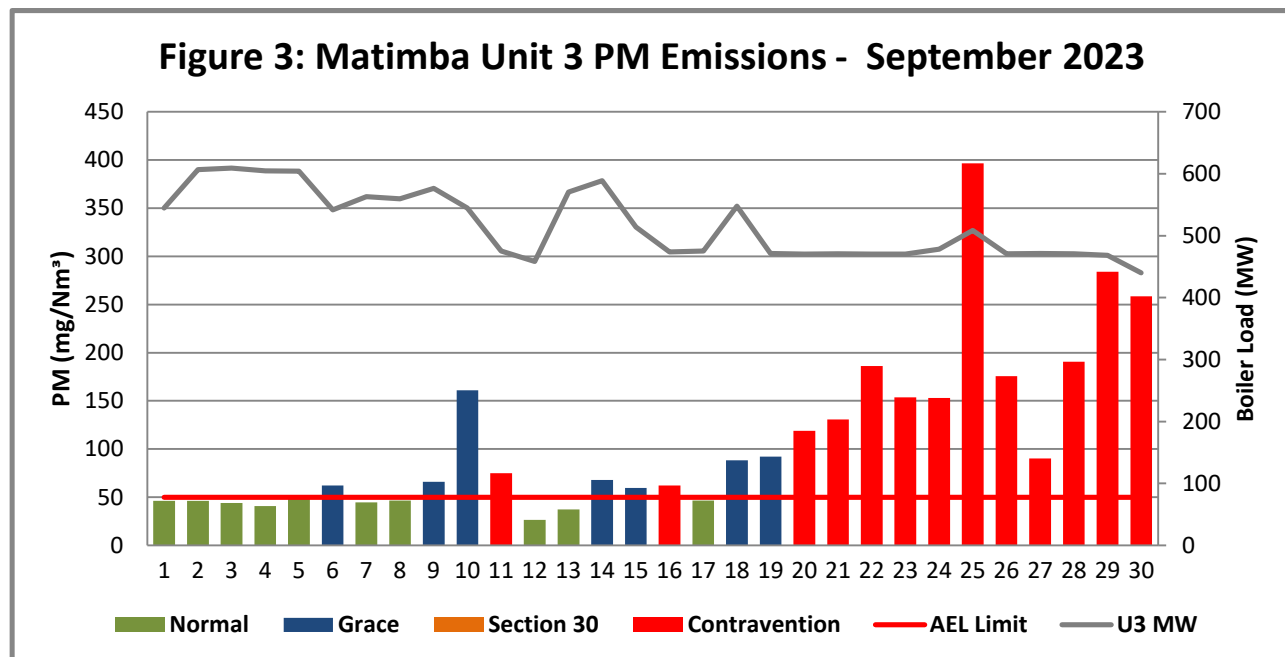
Unit 3 Particulate Emissions

Figure 3: Particulate matter daily average emissions against emission limit for unit 3 for the month of September 2023

Interpretation:

Unit 3 Particulate matter exceeded the daily limit of 50 mg/Nm³ on 6,9 -11,14 – 16,18 to 30 September 2023. The exceedances from the 11,16,20 to 30 September 2023 occurred outside of the 48-hour grace period and were recorded on the Eskom incident management process as non-compliance to the Atmospheric Emissions Licence. The exceedances were due unavailability of the ash conveyance plant that led to accumulation of ash at the dust handling plant leading to high hopper levels within the flue gas cleaning system and reducing the efficiency of the abatement technology (electrostatic precipitator fields). The investigation into the causes of the exceedances were done and corrective measure put in place to correct the root causes.

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Unit 4 Particulate Emissions

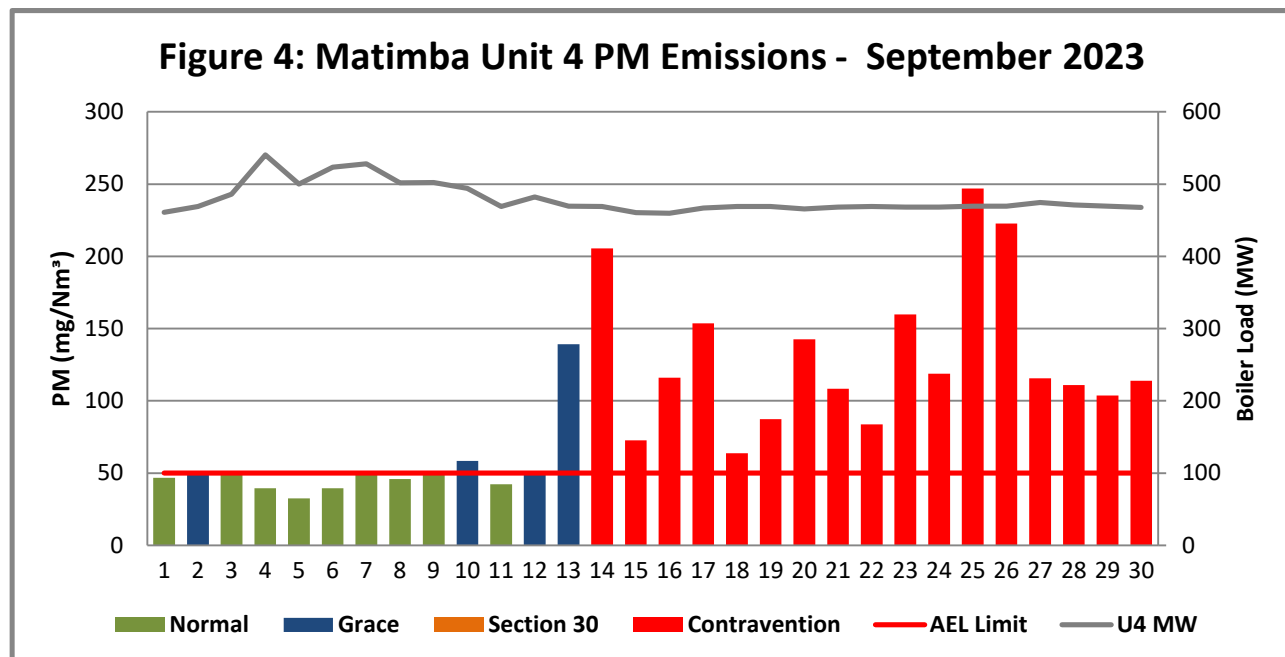


Figure 4: Particulate matter daily average emissions against emission limit for unit 4 for the month of September 2023

Interpretation:

Unit 4 Particulate matter exceeded the daily limit of 50 mg/Nm³ on 2,10,12 to 30 September 2023. Exceedances of 14 to 30 September 2023 occurred outside of the 48-hour grace period and were recorded on the Eskom incident management process as non-compliance to the Atmospheric Emissions Licence. The exceedances were due to defects on the dust handling plants leading to high hopper levels within the flue gas cleaning system and reducing the efficiency of the abatement technology (electrostatic precipitator fields). The investigation into the causes of the exceedances were done and corrective measure put in place to correct the root causes.

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Unit 5 Particulate Emissions

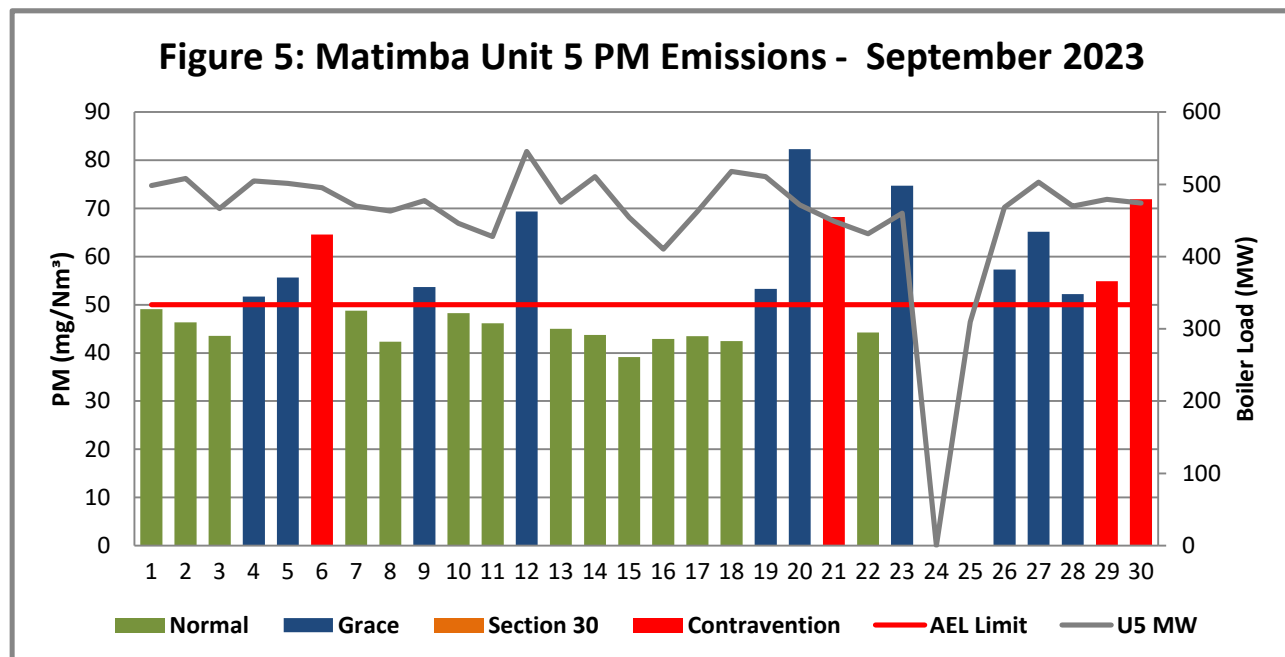


Figure 5: Particulate matter daily average emissions against emission limit for unit 5 for the month of September 2023

Interpretation:

Unit 5 Particulate matter exceeded the daily limit of 50 mg/Nm³ on 4,5,6,9,12,19,20,21,23,26 to 30 September 2023. Exceedances from 6,21,29 to 30 September 2023 occurred outside of the 48-hour grace period and were recorded on the Eskom incident management process as non-compliance to the Atmospheric Emissions Licence. The exceedances were due to defects on the dust handling plants leading to high hopper levels within the flue gas cleaning system and reducing the efficiency of the abatement technology (electrostatic precipitator fields). The investigation into the causes of the exceedances were done and corrective measure put in place to correct the root causes.

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Unit 6 Particulate Emissions

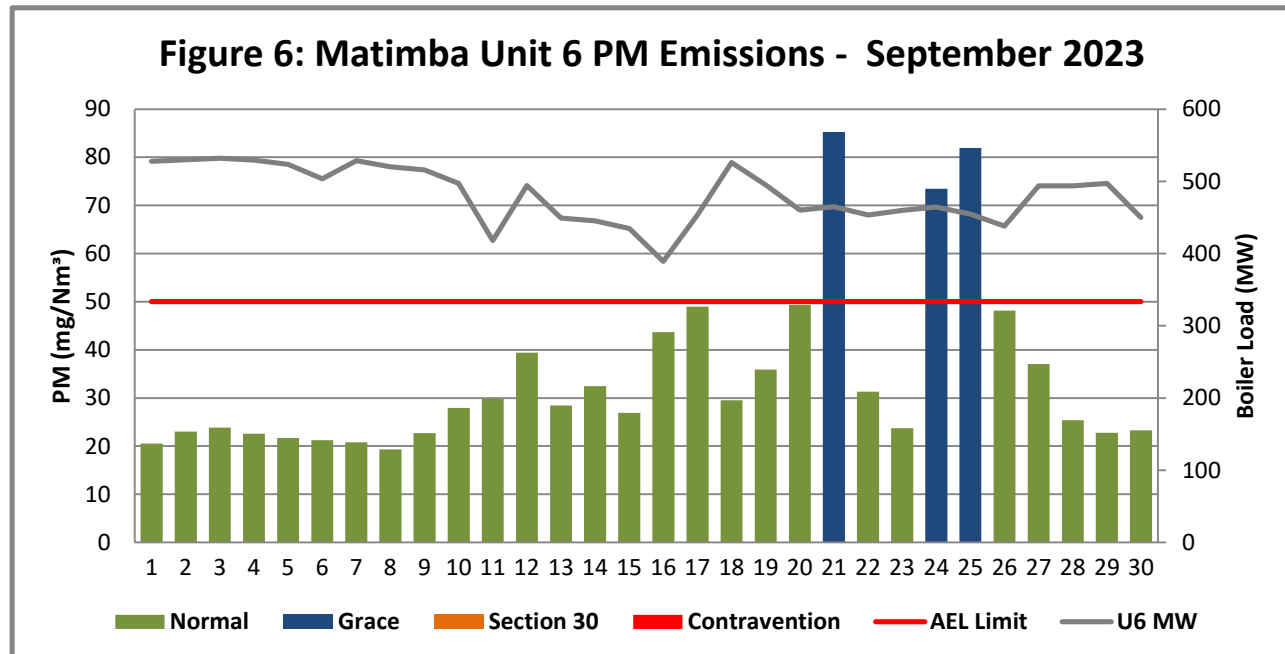


Figure 6: Particulate matter daily average emissions against emission limit for unit 6 for the month of September 2023

Interpretation:

Unit 6 Particulate matter exceeded the daily limit of 50 mg/Nm³ on 21, 24 and 25 August 2023. The exceedance was due to unavailability of the ash conveyance system that led to ash accumulation on the dust handling plants leading to high hopper levels within the flue gas cleaning system and reducing the efficiency of the abatement technology (electrostatic precipitator fields). The exceedances remained within the 48-hour grace period.

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2.3.2 Gaseous Emissions

Gaseous emissions analyzers calibration for all 6 units were performed in September 2023 as per the AEL requirements.

The quality assurance spot tests were performed on the monitors in July 2023.

Unit 1 SO₂ Emissions

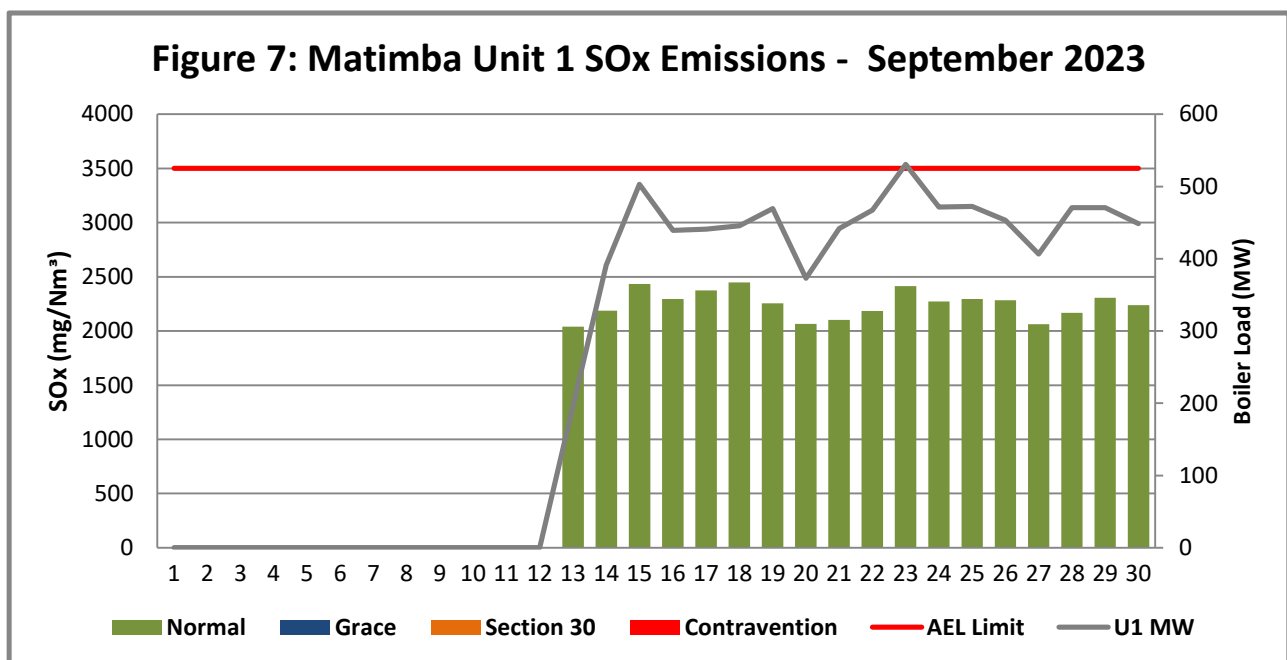


Figure 7: SO₂ daily average emissions against emission limit for unit 1 for the month of September 2023

Interpretation:

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

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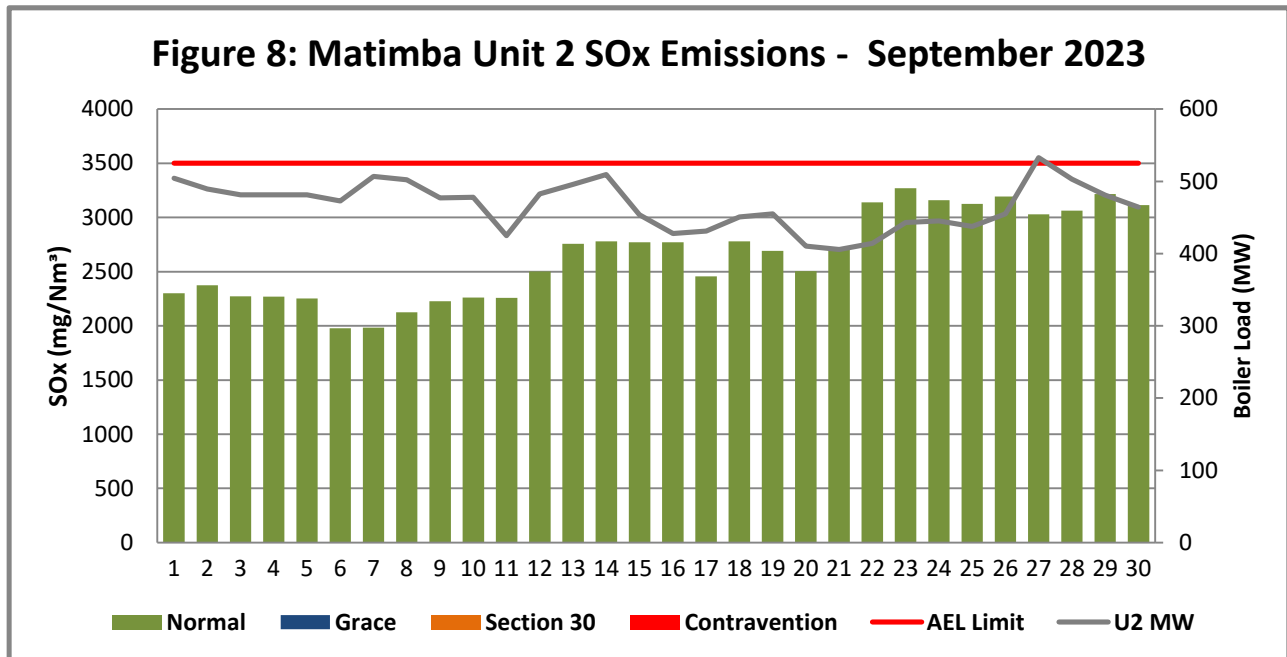
Unit 2 SO₂ Emissions

Figure 8: SO₂ daily average emissions against emission limit for unit 2 for the month of September 2023

Interpretation:

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

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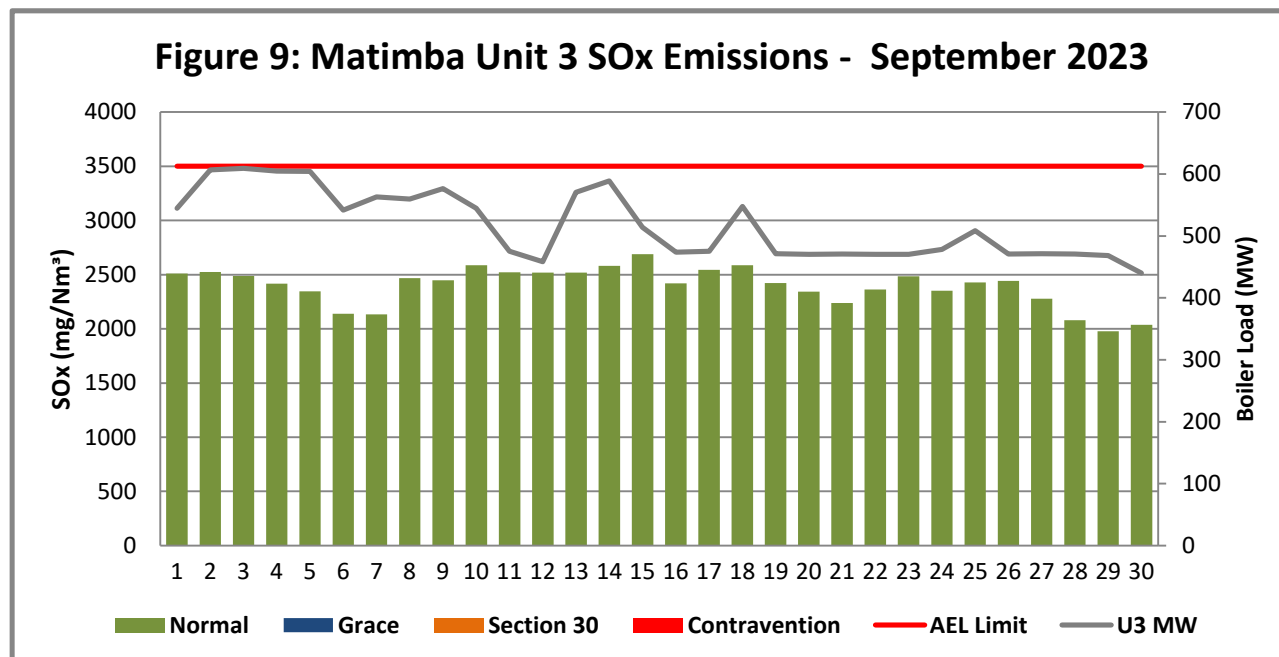
Unit 3 SO₂ Emissions

Figure 9: SO₂ daily average emissions against emission limit for unit 3 for the month of September 2023

Interpretation:

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

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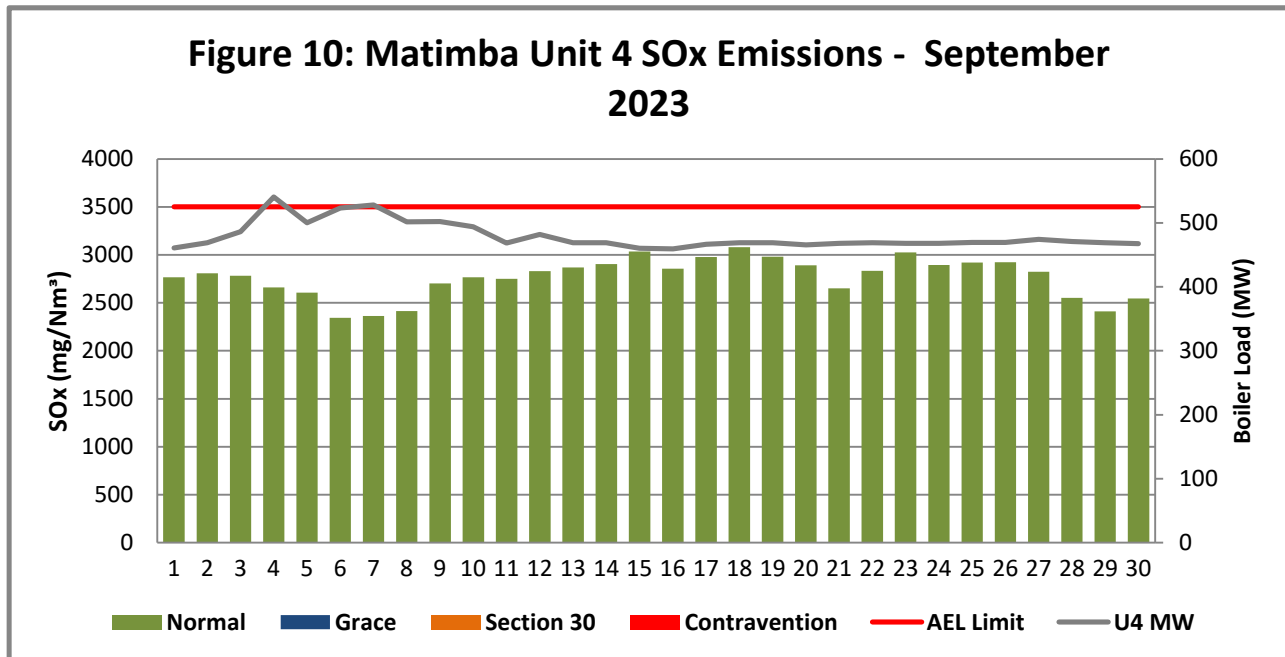
Unit 4 SO₂ Emissions

Figure 10: SO₂ daily average emissions against emission limit for unit 4 for the month of September 2023

Interpretation:

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

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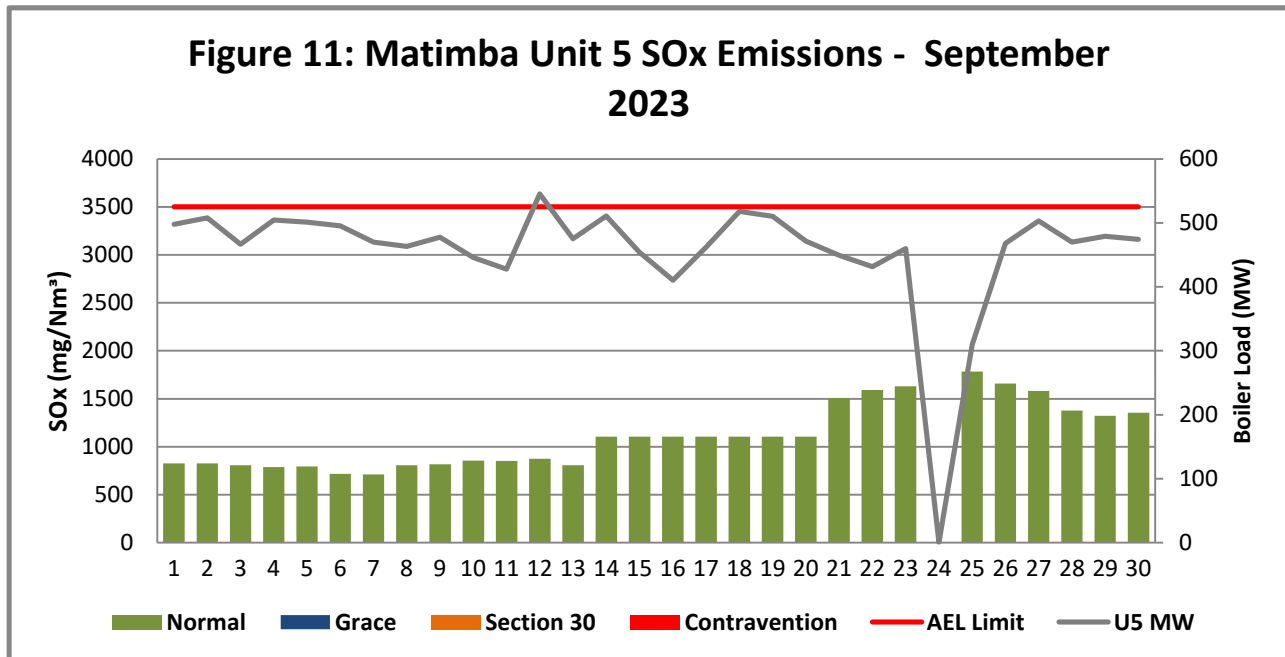
Unit 5 SO₂ Emissions

Figure 11: SO₂ daily average emissions against emission limit for unit 5 for the month of September 2023

Interpretation:

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

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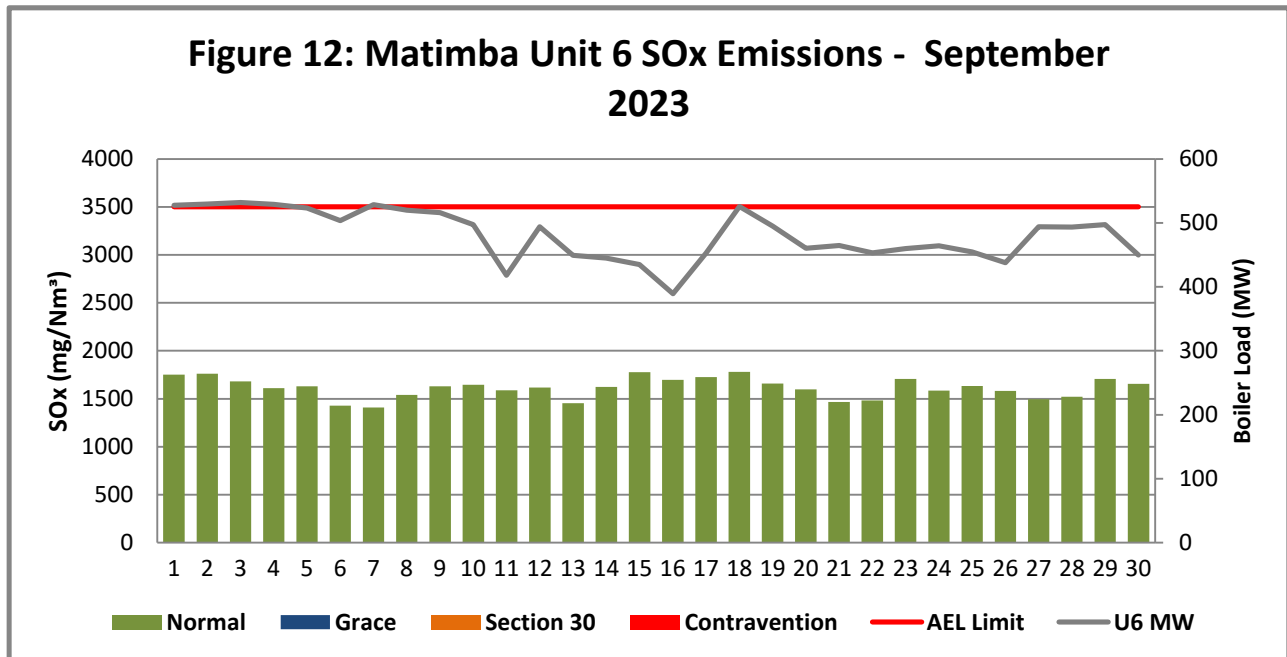
Unit 6 SO₂ Emissions

Figure 12: SO₂ daily average emissions against emission limit for unit 6 for the month of September 2023

Interpretation:

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

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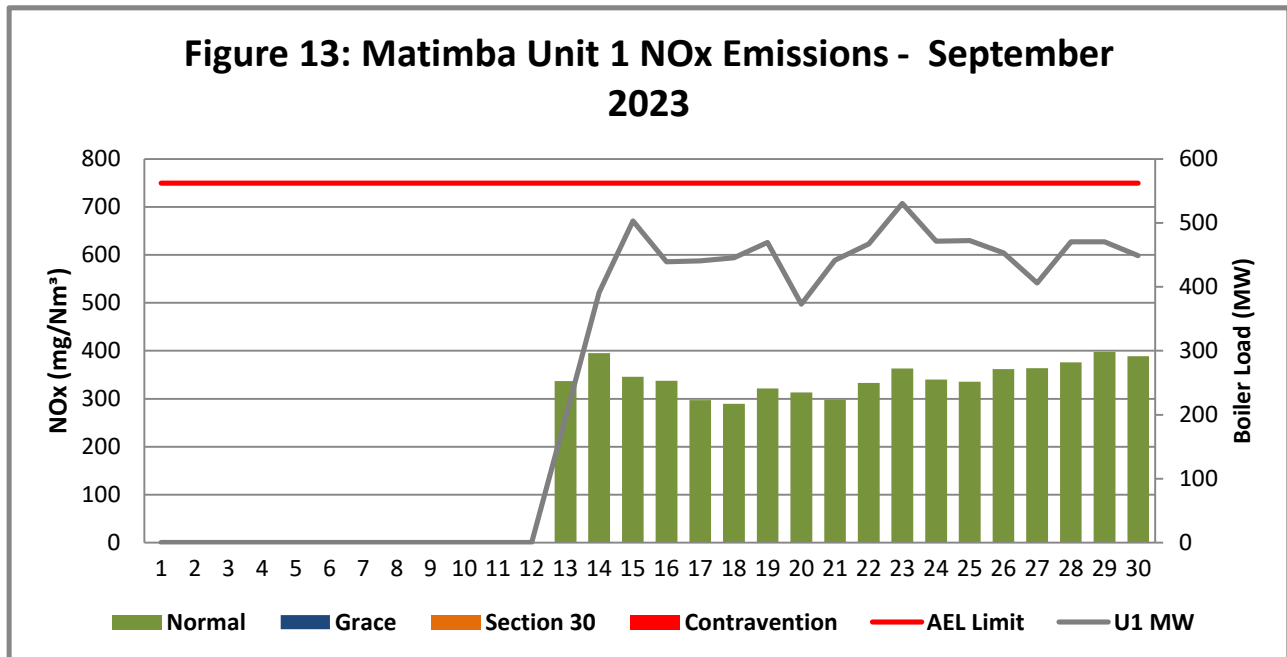
Unit 1 NO_x Emissions

Figure 13: NO_x daily average emissions against emission limit for unit 1 for the month of September 2023

Interpretation:

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

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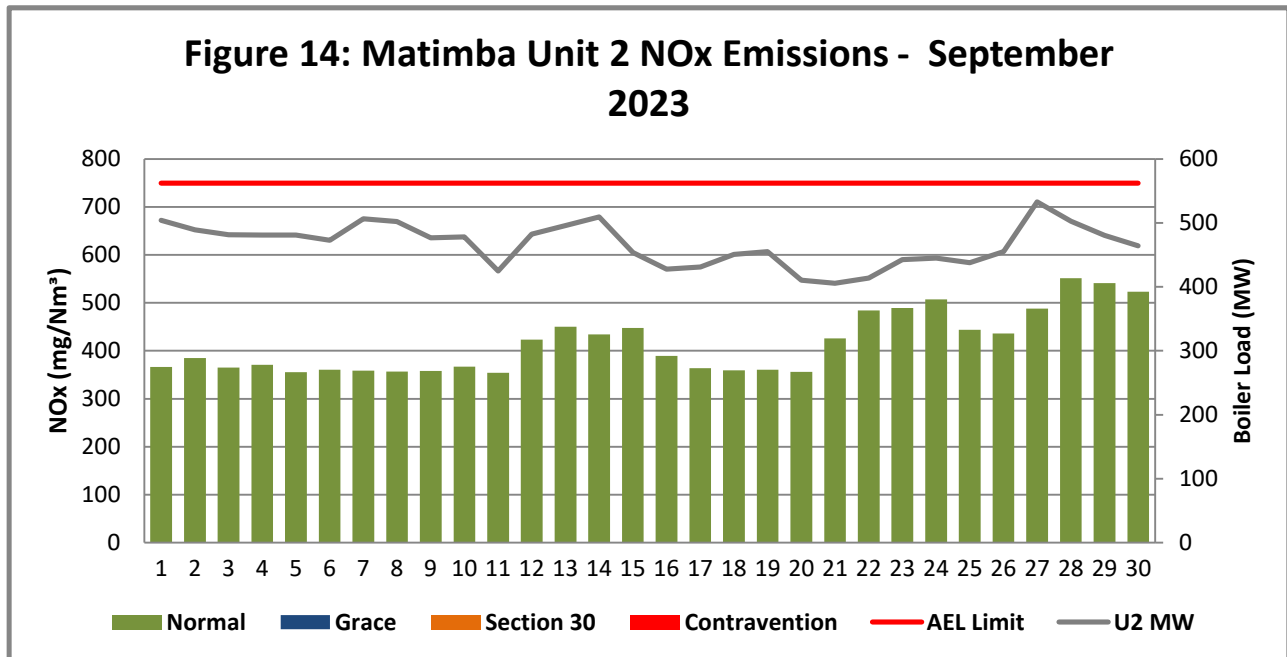
Unit 2 NO_x Emissions

Figure 14: NO_x daily average emissions against emission limit for unit 2 for the month of September 2023

Interpretation:

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

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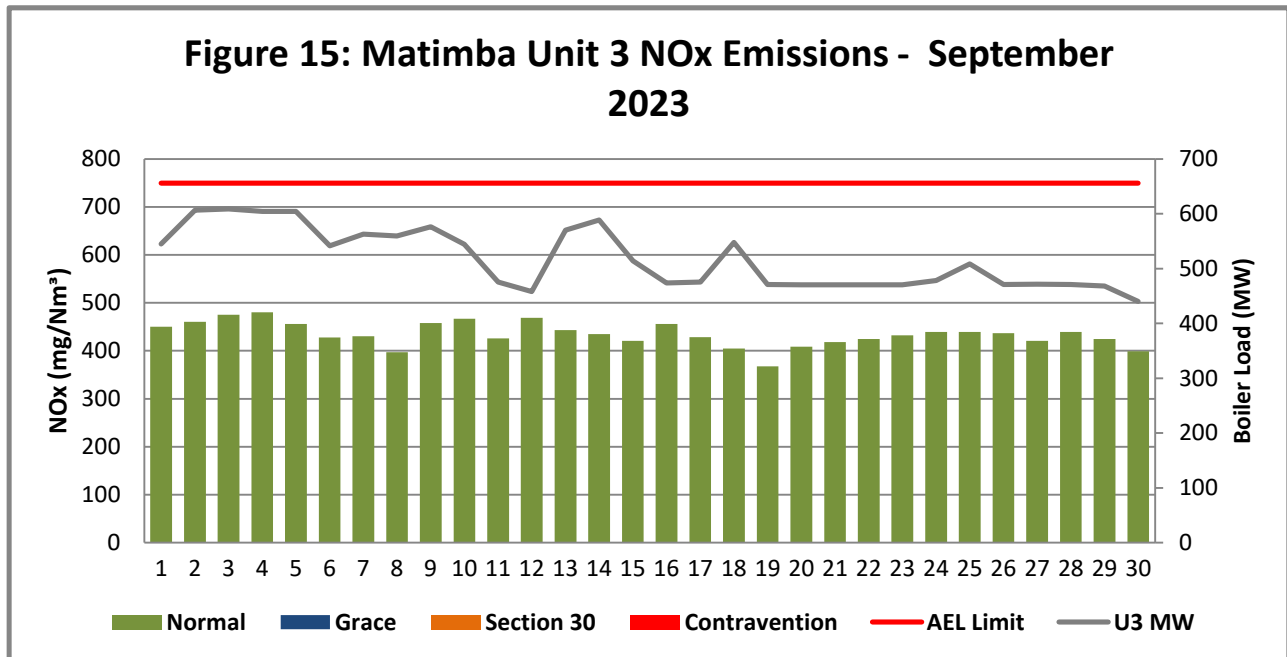
Unit 3 NO_x Emissions

Figure 15: NO_x daily average emissions against emission limit for unit 3 for the month of September 2023

Interpretation:

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

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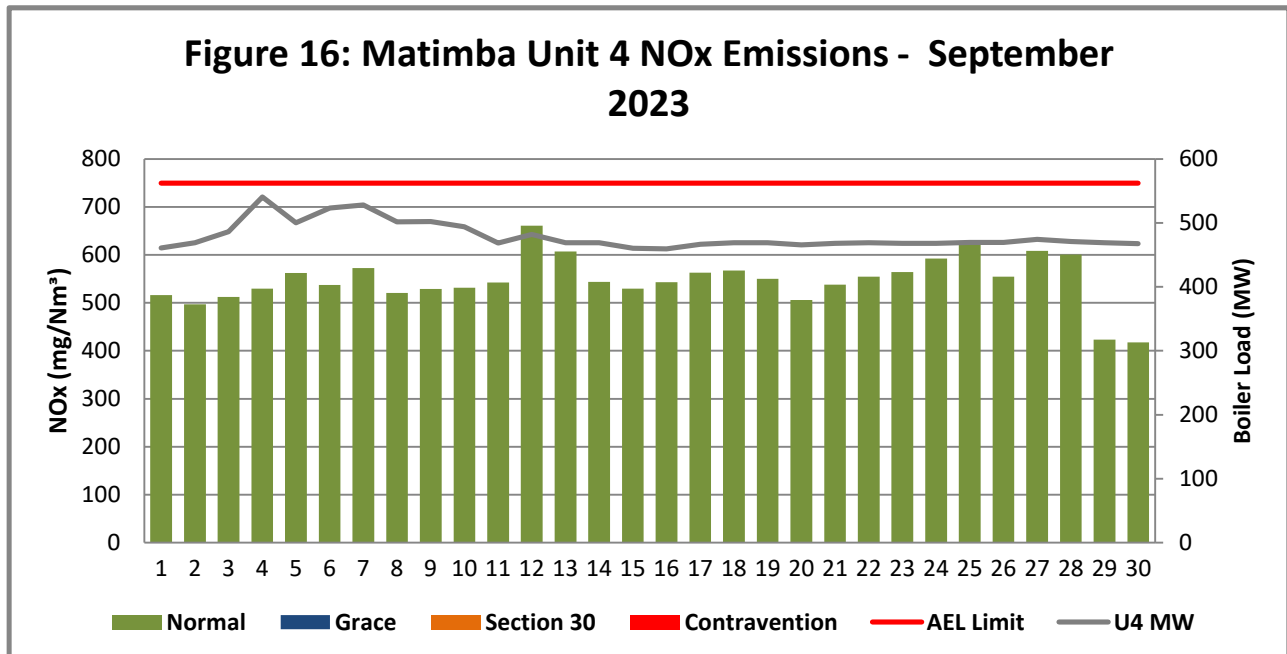
Unit 4 NO_x Emissions

Figure 16: NO_x daily average emissions against emission limit for unit 4 for the month of September 2023

Interpretation:

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

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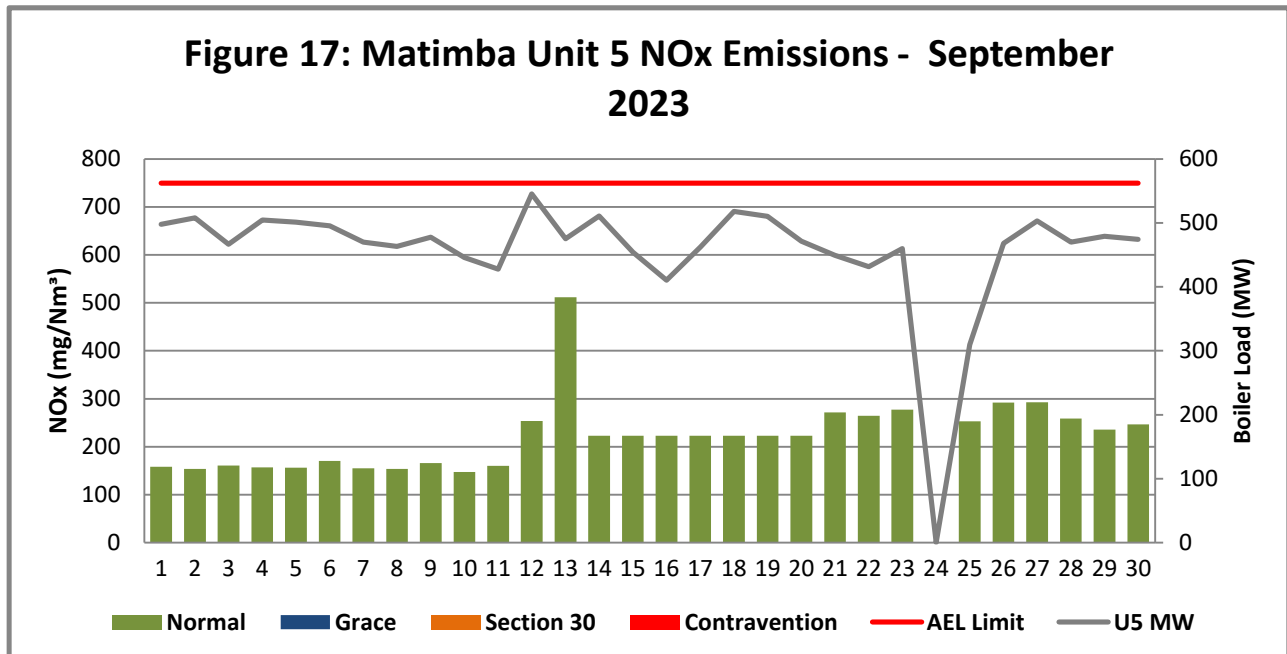
Unit 5 NO_x Emissions

Figure 17: NO_x daily average emissions against emission limit for unit 5 for the month of September 2023

Interpretation:

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

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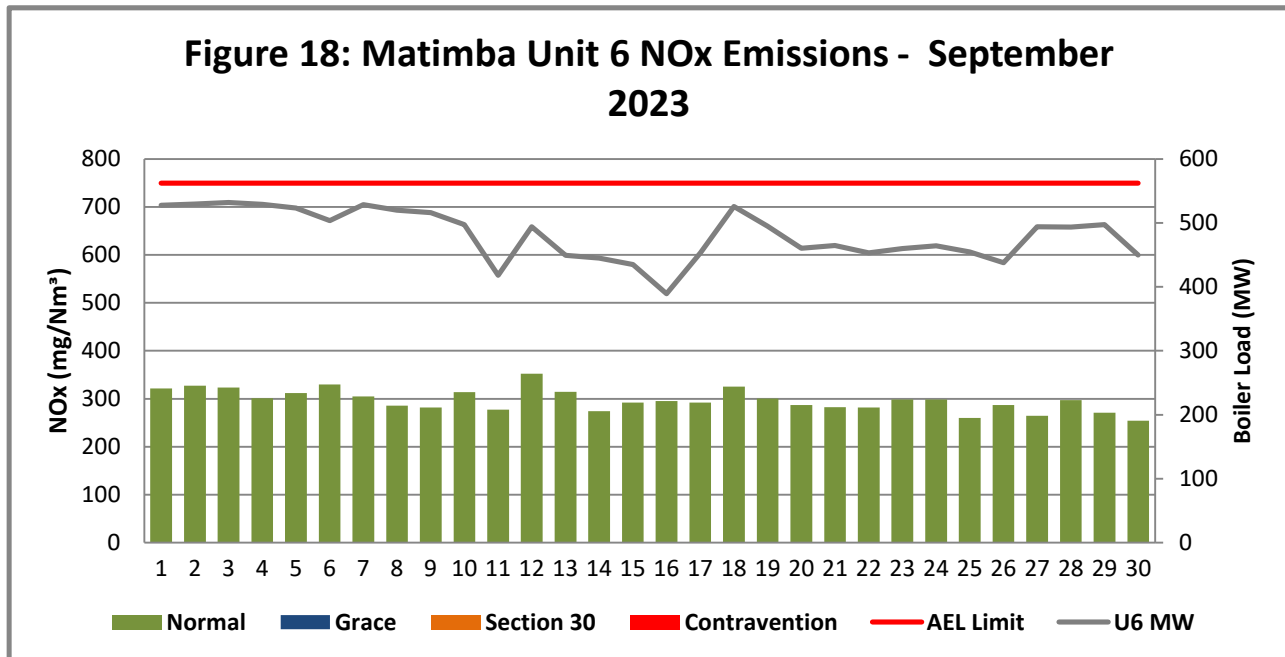
Unit 6 NO_x Emissions

Figure 18 NO_x daily average emissions against emission limit for unit 6 for the month of September 2023

Interpretation:

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


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2.3.3 Total Volatile Organic Compounds

Table 4: Total volatile compound estimates

		
CALCULATION OF EMISSIONS OF TOTAL VOLATILE COMPOUNDS FROM FUEL OIL STORAGE TANKS*		
Date:	Monday, 23 October 2023	
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	
<p align="center">MONTHLY INPUT DATA FOR THE STATION</p> <p align="center">Please only insert relevant monthly data inputs into the blue cells below</p> <p align="center">Choose from a dropdown menu in the green cells</p> <p align="center">The total VOC emissions for the month are in the red cells</p> <p align="center">IMPORTANT: Do not change any other cells without consulting the AQ CoE</p>		
MONTH:	September	
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:	1020,886	
Molecular weight of the fuel oil:	166,00	Lb/lb-mole
METEROLOGICAL DATA FOR THE MONTH	Data	Unit
Daily average ambient temperature	23,43	°C
Daily maximum ambient temperature	31,06	°C
Daily minimum ambient temperature	16,52	°C
Daily ambient temperature range	14,54	°C
Daily total insolation factor	4,41	kWh/m²/day
Tank paint colour	Grey/medium	NA
Tank paint solar absorbance	0,68	NA
FINAL OUTPUT:	Result	Unit
Breathing losses:	0,54 kg/month	
Working losses:	0,03 kg/month	
TOTAL LOSSES (Total TVOC Emissions for the month):	0,57 kg/month	
<p>*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 Chew Chase Street, Jamaica, NY 11432 USA, Tel - 718-454-3920, Fax - 718-454-6330, e-mail - PeressJ@nyc.rr.com.</p>		

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2.3.4 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.

2.4 Daily power generated

Table 5: Daily power generated per unit in MWh for the month of September 2023

Date	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6
2023/09/01		10688,8	11828,6	9954,42	10762,6	11397
2023/09/02		10369,2	13236,9	10146,9	10983,8	11464,4
2023/09/03		10190,3	13269,5	10505	10066,3	11516,6
2023/09/04		10192,7	13187,5	11718,4	10913,3	11464,1
2023/09/05		10183,6	13199,9	10814,4	10830,8	11352,2
2023/09/06		10006,8	11839,6	11308,2	10703,9	10891,1
2023/09/07		10750,5	12279,9	11499,7	10149	11475,7
2023/09/08		10676,7	12136	10894,5	9989,32	11285,8
2023/09/09		10113,8	12556	10878,3	10291,9	11186,8
2023/09/10		10165,1	11890,6	10707,1	9615,22	10765
2023/09/11		8982,37	10308	10126,1	9210,33	8997,33
2023/09/12		10272,2	9973	10452,6	11819,3	10646,2
2023/09/13	326,499	10566,6	12440,6	10171,1	10329,8	9739,08
2023/09/14	8456,93	10839	12899,6	10167,8	11039,1	9548,06
2023/09/15	10981,4	9598,78	11199,8	9960,37	9803,93	9373,31
2023/09/16	9573,1	9009,23	10259,2	9921,33	8843,28	8376,91
2023/09/17	9641,81	9115,14	10336,6	10108,3	9955,41	9743,59
2023/09/18	9741,74	9552,55	11942,6	10184,8	11201,2	11370,7
2023/09/19	10334,7	9629,51	10235,4	10188,6	11034,2	10694,4
2023/09/20	8042,96	8642,25	10205,2	10090,9	10181	5371,54
2023/09/21	9674,42	8549,81	10207,8	10147,7	9692,44	9997,78
2023/09/22	10154	8716,46	10195,7	10161,3	9333,59	9804,95
2023/09/23	11672,4	9348,09	10194,4	10145,8	4737,86	9874,26
2023/09/24	10317,8	9412,65	10358,5	10143,8		10006
2023/09/25	10333,4	9260,73	11059,5	10177,1	1472,58	9801,12
2023/09/26	9895,09	9603,73	10230,5	10174,2	10070	9425,41
2023/09/27	8836,29	11281,4	10258,7	10247,4	10886,4	10654,9
2023/09/28	10284,8	10690	10249	10215,9	10177,4	10685,2
2023/09/29	10284,8	10148,1	10202,9	10184,8	10364,9	10733,8
2023/09/30	9776,17	9797,29	9529,97	10120,3	10238,8	9657,22

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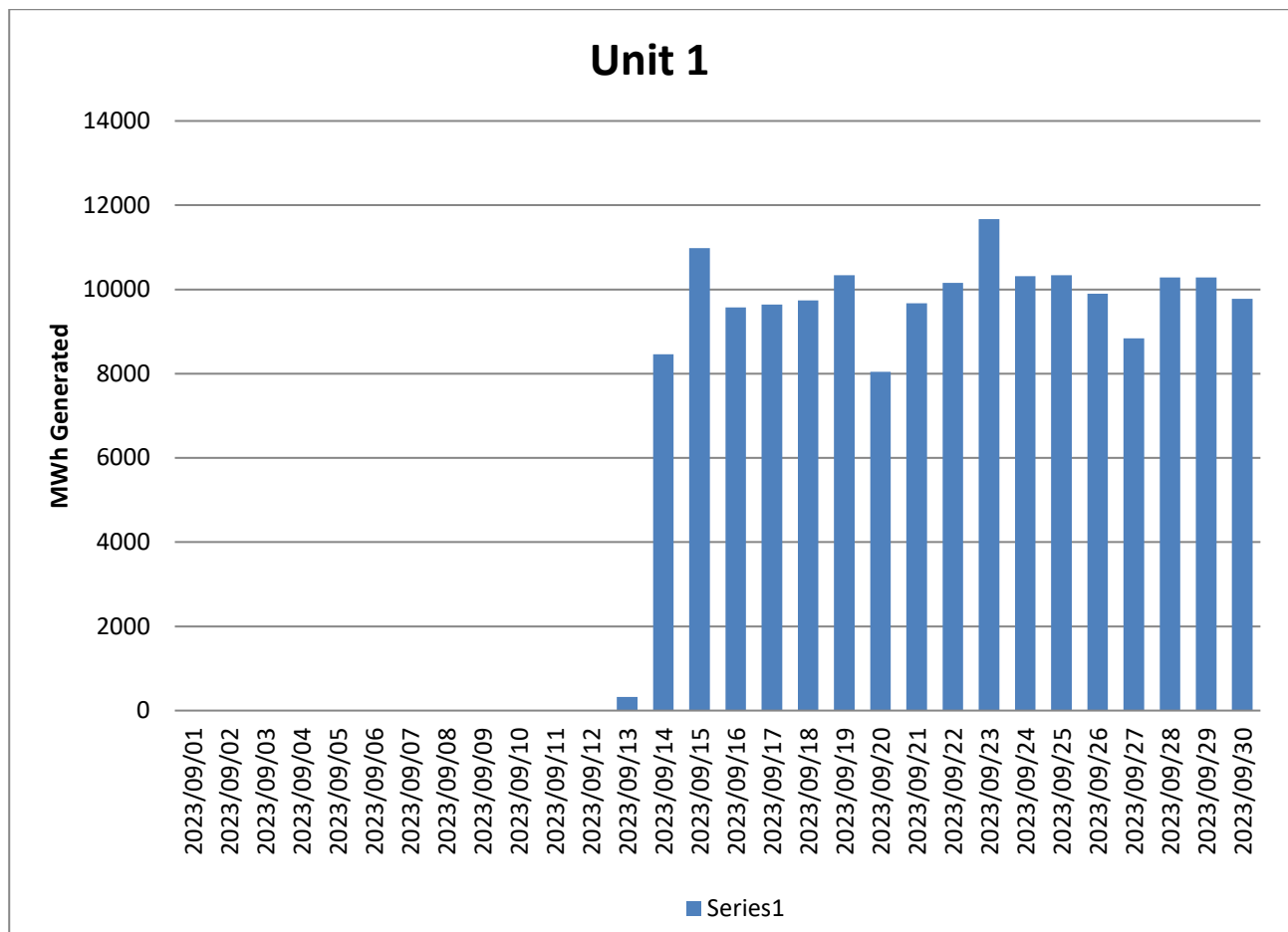


Figure 19: Unit 1 daily generated power in MWh for the month of September 2023

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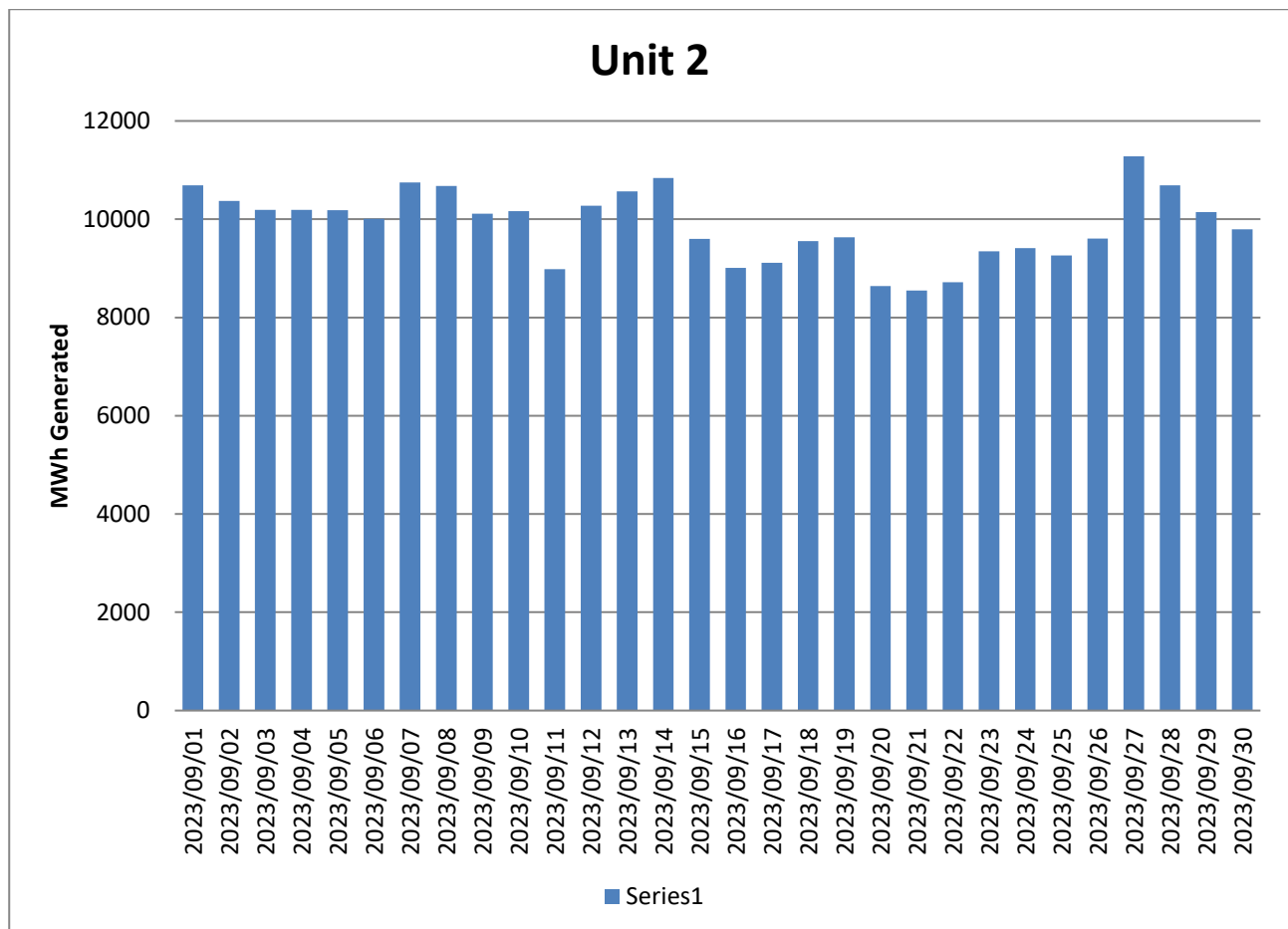


Figure 20: Unit 2 daily generated power in MWh for the month of September 2023

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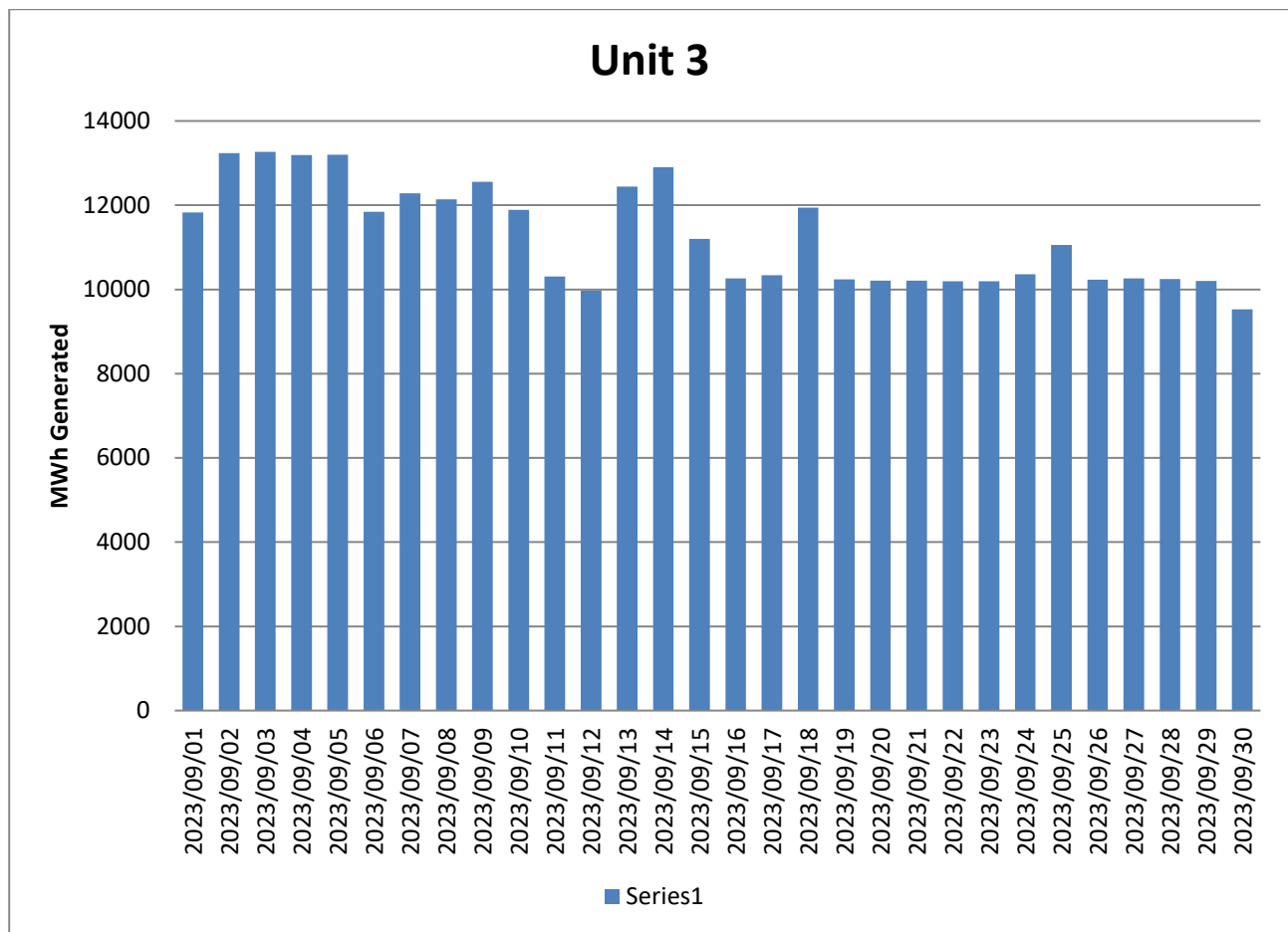


Figure 21: Unit 3 daily generated power in MWh for the month of September 2023

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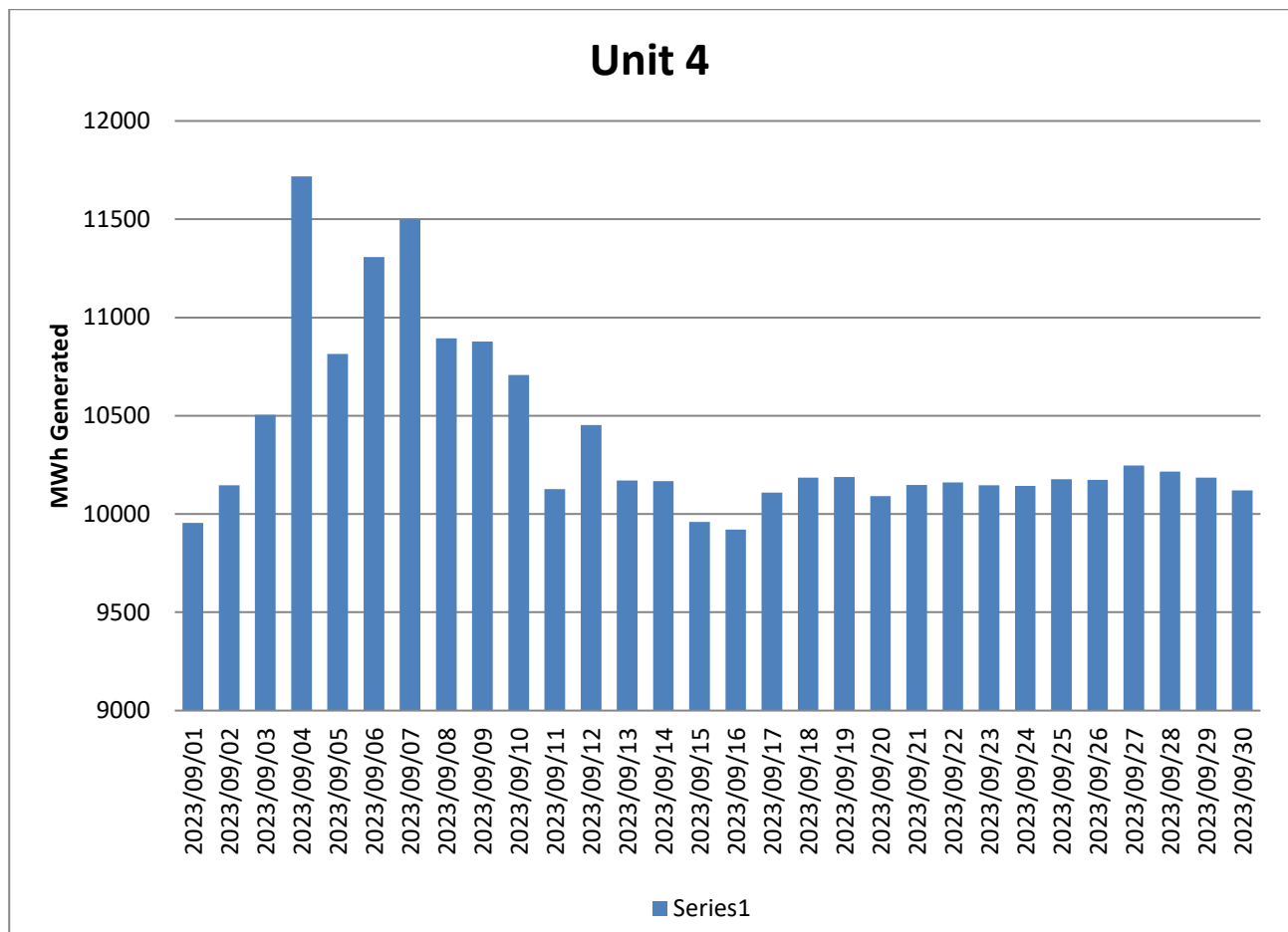


Figure 22: Unit 4 daily generated power in MWh for the month of September 2023

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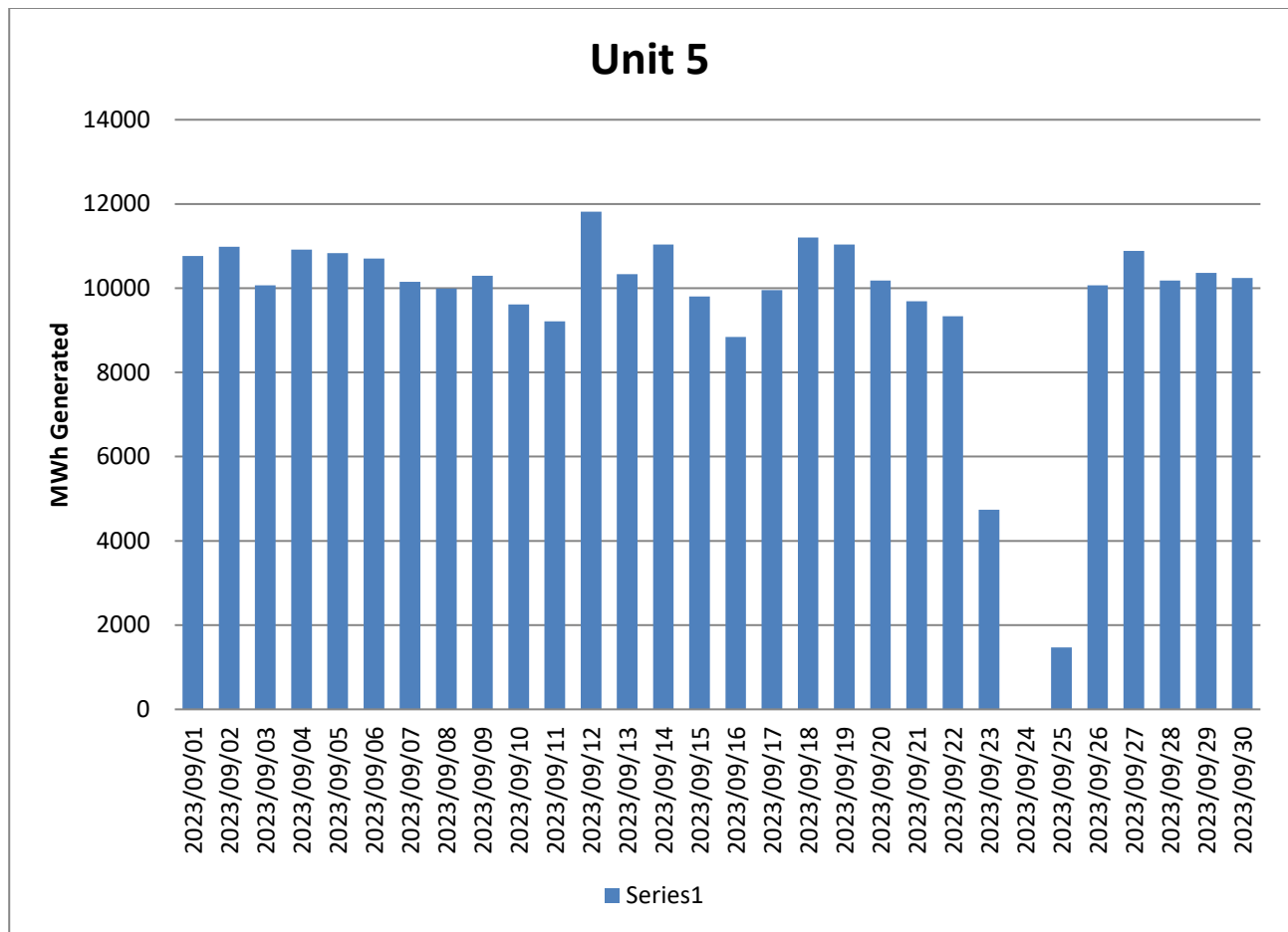


Figure 23: Unit 5 daily generated power in MWh for the month of September 2023

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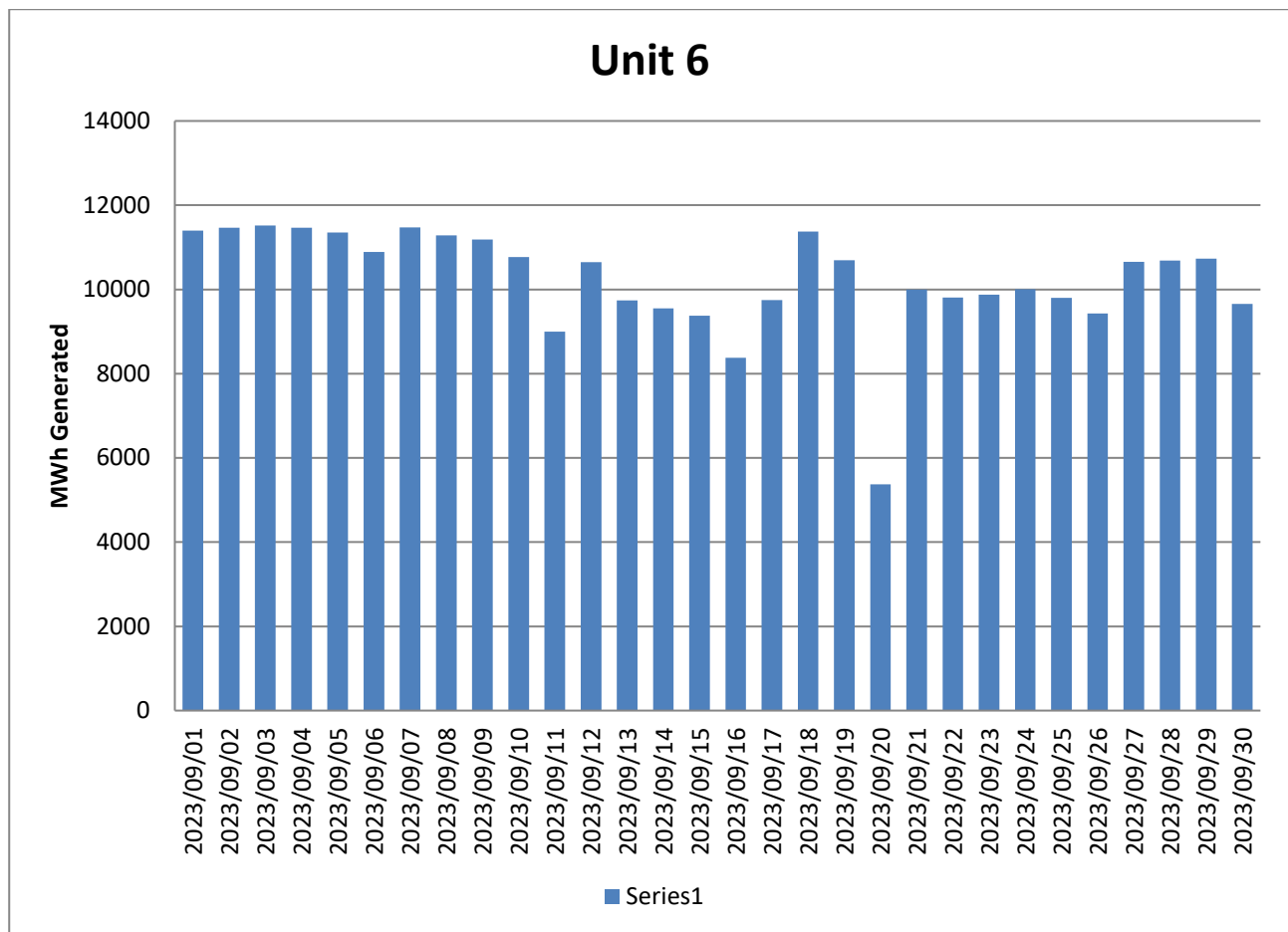


Figure 24: Unit 6 daily generated power in MWh for the month of September 2023

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2.5 Pollutant Tonnages

The emitted pollutant tonnages for September 2023 are provided in table 6.

Table 6: Pollutant tonnages for the month of September 2023

Associated Unit/Stack	PM (tons)	SO ₂ (tons)	NO _x (tons)	CO ₂ (tons)
Unit 1	45,3	2 518,1	384,3	189 965
Unit 2	86,5	7 566,2	1 188,3	411 653
Unit 3	218,8	6 034,8	1 096,1	405 183
Unit 4	119,0	5 377,5	1 065,7	285 323
Unit 5	78,0	1 925,3	395,0	195 451
Unit 6	54,4	3 678,0	675,8	351 457
SUM	602,0	27 099,8	4 805,2	1 839 031

2.6 Operating days in compliance to PM AEL Limit

Table 7: Operating days in compliance with PM AEL limit of September 2023

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average PM (mg/Nm ³)
Unit 1	8	4	0	5	9	50,6
Unit 2	15	9	0	6	15	48,2
Unit 3	10	7	0	13	20	109,7
Unit 4	9	4	0	17	21	97,3
Unit 5	14	10	0	4	14	53,5
Unit 6	27	3	0	0	3	34,7
SUM	42	24	0	41	65	

2.7 Operating days in compliance to SO_x AEL Limit

Table 8: Operating days in compliance with SO_x AEL limit of September 2023

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average SO _x (mg/Nm ³)
Unit 1	18	0	0	0	0	2 246,2
Unit 2	30	0	0	0	0	2 644,8
Unit 3	30	0	0	0	0	2 396,4
Unit 4	30	0	0	0	0	2 766,3
Unit 5	29	0	0	0	0	1 104,1
Unit 6	30	0	0	0	0	1 615,0
SUM	108	0	0	0	0	

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2.8 Operating days in compliance to NOx AEL Limit

Table 9: Operating days in compliance with NOx AEL limit of September 2023

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average NOx (mg/Nm³)
Unit 1	18	0	0	0	0	344,2
Unit 2	30	0	0	0	0	415,8
Unit 3	30	0	0	0	0	434,6
Unit 4	30	0	0	0	0	546,8
Unit 5	29	0	0	0	0	222,6
Unit 6	30	0	0	0	0	296,9
SUM	108	0	0	0	0	

2.9 Reference values

Table 10: Reference values for data provided, September 2023

Compound / Parameter	Units of Measure	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6
Oxygen	%	5,98	8,64	5,09	7,41	6,76	6,35
Moisture	%	4,17	3,13	4,96	2,63	2,77	1,51
Velocity	m/s	21,3	37,1	26,8	23,9	21,8	28,3
Temperature	°C	137,3	121,8	129,6	132,2	123,9	164,2
Pressure	mBar	929,7	935,8	918,2	926,6	938,3	913,0

2.10 Continuous Emission Monitors

2.10.1 Reliability

Continuous emission monitors were available for more than 80% of the reporting period. The emitted pollutant tonnages for September 2023 are provided in table 6.

Table 11: Average percentage (%) availability of monitors for the month of September 2023.

Associated Unit/Stack	PM	SO ₂	NO	CO ₂
Unit 1	99,8	99,8	99,8	99,8
Unit 2	100,0	97,1	96,0	96,4
Unit 3	98,5	99,9	99,9	99,7
Unit 4	97,5	96,5	96,9	96,5
Unit 5	100,0	72,0	55,3	28,9
Unit 6	99,5	98,1	98,1	98,1

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2.10.2 Changes, downtime, and repairs

Unit 1

- No adjustments done on the CEMs.
- No downtime or repairs done on the particulate monitors

Unit 2

- No adjustments done on the CEMs.
- No downtime or repairs done on the particulate monitors

Unit 3

- No adjustments done on the CEMs.
- No downtime or repairs done on the particulate monitors

Unit 4

- No adjustments done on the CEMs.
- No downtime or repairs done on the particulate monitors

Unit 5

- No adjustments done on the CEMs.
- No downtime or repairs done on the particulate monitors

Unit 6

- No adjustments done on the CEMs.
- No downtime or repairs done on the particulate monitors

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2.10.3 Sampling dates and times

Table 12: 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

Note: The CEMS verification tests for PM, SO₂ and NO_x were performed in October 2022 and failed. The spot tests were done in August 2023.

2.11 Units Start-up information

Table 13: Start-up information

Unit	1	
Fires in	2023/09/13	08h35
Synchronization with Grid	2023/09/13	19h40
Emissions below limit	2023/09/14	16h02
Fires in, to synchronization	11,5	HOURS
Synchronization to < Emission limit	20,20	HOURS

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Unit	5	
Fires in	2023/09/25	11h10
Synchronization with Grid	2023/09/25	17h46
Emissions below limit	2023/09/25	20h00
Fires in, to synchronization	6,3	HOURS
Synchronization to < Emission limit	2,20	HOURS

Unit	6	
Fires in	2023/09/20	12h42
Synchronization with Grid	2023/09/20	22h54
Emissions below limit	2023/09/21	00h21
Fires in, to synchronization	10,12	HOURS
Synchronization to < Emission limit	1,27	HOURS

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2.12 Emergency generation

Table 14: Emergency generation

	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6
Emergency Generation hours declared by national Control	720	720	720	720	720	720
Emergency Hours declared including hours after stand down						
Days over the Limit during Emergency Generation	9	15	20	21	14	3

During the period under review all Units were on emergency generation in force from 01 September 2023 until 31 September 2023.

2.13 Complaints register

Table 15: 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
Waterberg District Municipality (Air Quality) in response to public complains.	Operational changes -The ashing philosophy was updated to piggybacking format (increasing height of the dump by ashing on top of rehabilitated old ash body);	Fugitive dust fallout results for September 2023 report attached.	N/A	Acquire additional resources to extend the dust suppression with water at the ash dump to cover the piggybacking area.	Completed
				Rehabilitation and covering of the exposed areas of the ash dump with topsoil.	March 2024

Matimba fugitive dust fallout results for September 2023 report attached .

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2.14 Air quality improvements and social responsibility conducted.

2.14.1 Air quality improvements

None

2.14.2 Social responsibility conducted.

None

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2.15 Ambient air quality monitoring

Ambient air quality monitoring report was not available at the time of publishing this report.

2.16 Electrostatic precipitator and Sulphur plant status

Unit 1

- 9 fields out of service, will be repaired during next opportunity.
- No abnormalities on the SO3 plant. Preventive maintenance done during the month.

Unit 2

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

Unit 3

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

Unit 4

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

Unit 5

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

Unit 6

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

SO3 common plant

- No abnormalities on the sulphur storage plant.

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2.17 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

None

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

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GENERAL MANAGER: MATIMBA POWER STATION

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