

City of Cape Town
Air Quality Management
246 Voortrekker Road
VASCO
7460

18 June 2024

Enquiries: H. Westman
Tel: 021 9415856

Ref: WCCT 023

Dear Mr Gildenhuys

ACACIA POWER STATION'S ANNUAL EMISSIONS REPORT: April 2023 – March 2024

This serves as the annual report required in terms of Section 8.2 in Acacia Power Station's Atmospheric Emission License (WCCT 023). The information represented stems from 2023/2024 Eskom's past financial year (Eskom's financial year extends from 1 April to 31 March). As Acacia Power Station does not operate installed continuous emission monitors (CEMS), the emissions reported herein are based on calculations.

Table 1. General overview of emissions at Acacia Power Station 2019/20 to 2023/2024

Emissions	Total (Tons/annum) 2023/2024	Total (Tons/annum) 2022/2023	Total (Tons/annum) 2021/2022	Total (Tons/annum) 2020/2021	Total (Tons/annum) 2019/2020
PM 10	0.714	0.316	0.277	0.764	0.013
SO ₂	0.0773	0.034	0.451	0.712	0.276
CO ₂	2483.837	1099.397	945.839	1493.32	580.73

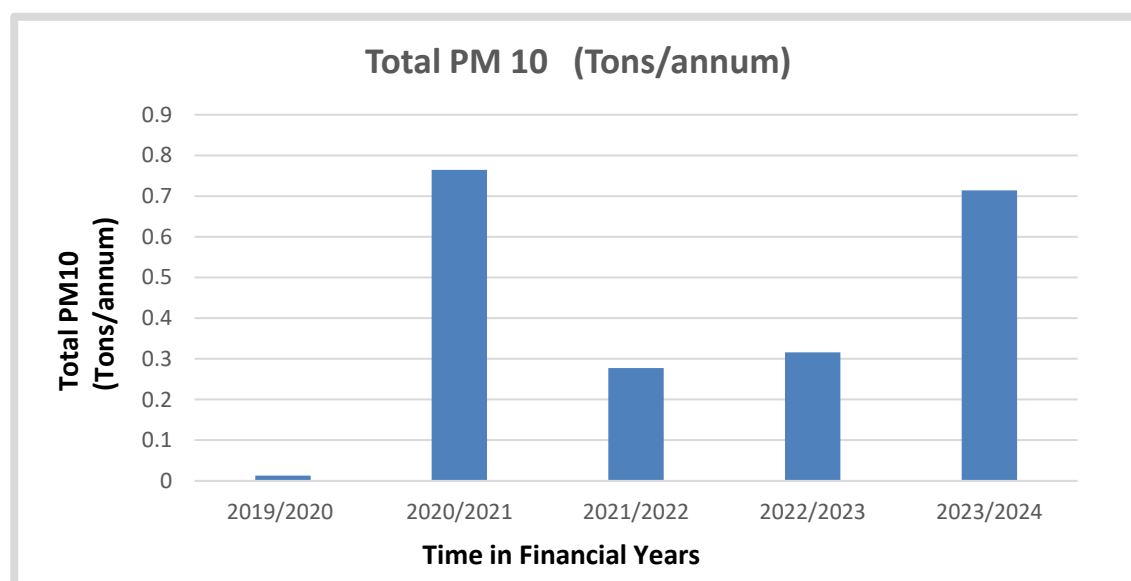
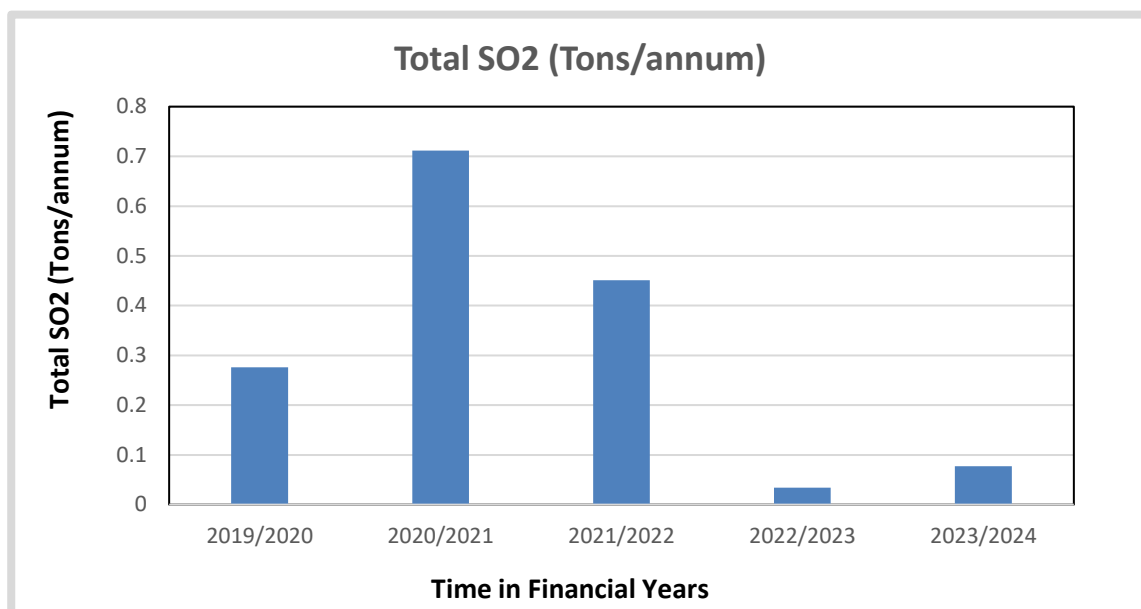


Figure 1. Trend of total PM emissions in tons per financial year

Generation Division (Peaking)

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Eskom Holdings SOC Limited Reg No 2002/015527/30



* Reduction in SO₂ emissions is due to the lower Sulphur content in the Diesel currently used by the Power Station

Figure 2. Trend of total SO2 emissions in tons per financial year

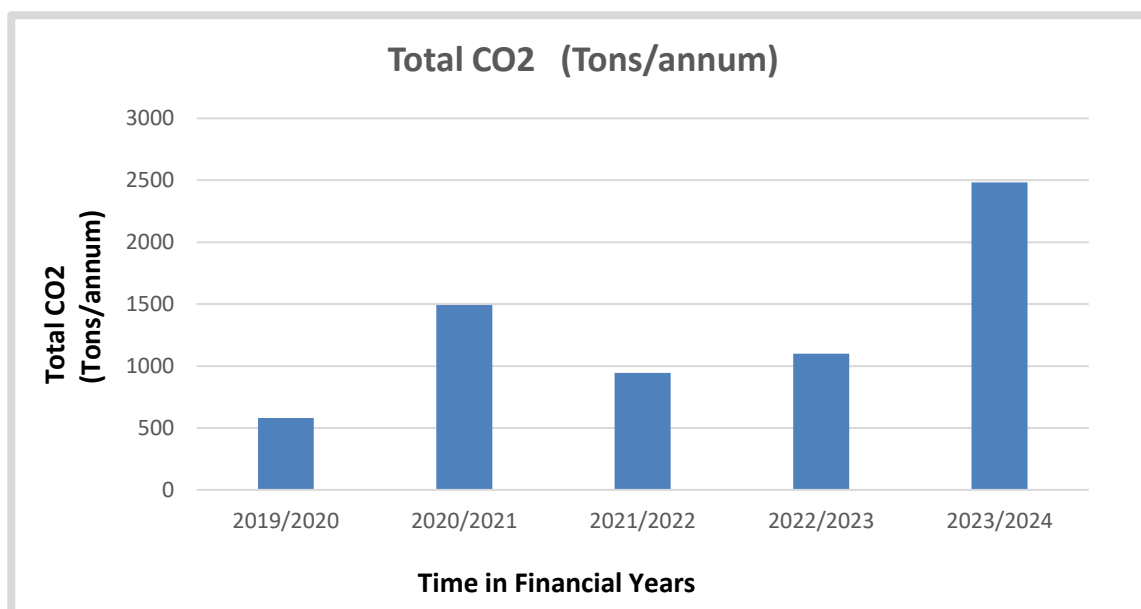


Figure 3. Trend of total CO2 emissions in tons per financial year

Table 2. Total Fuel Used per financial year (in tons)

Year	Fuel Used (Tons)	Fuel Type
2023/2024	772.814	Diesel
2022/2023	342.063	Diesel
2021/2022	300.648	Diesel
2020/2021	474.673	Diesel
2019/2020	184.595	Diesel

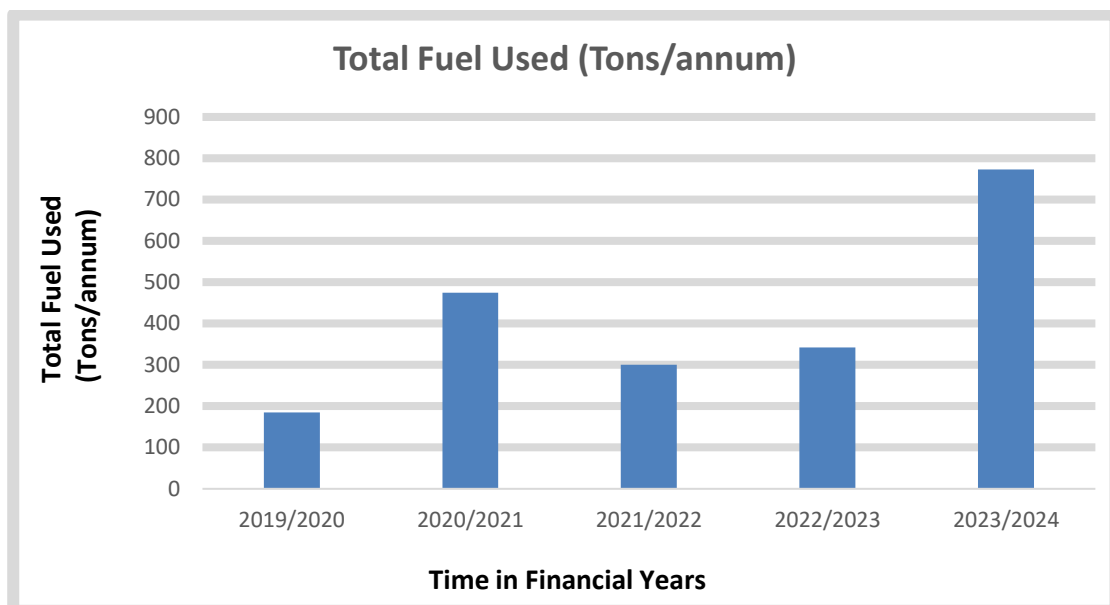


Figure 4. Acacia Power Station Fuel Use in tons per financial year

Table 3. Total Production per financial year (MWh)

Year	Energy Sent Out (MWh)
2023/2024	2486
2022/2023	1069
2021/2022	878
2020/2021	1467
2019/2020	438

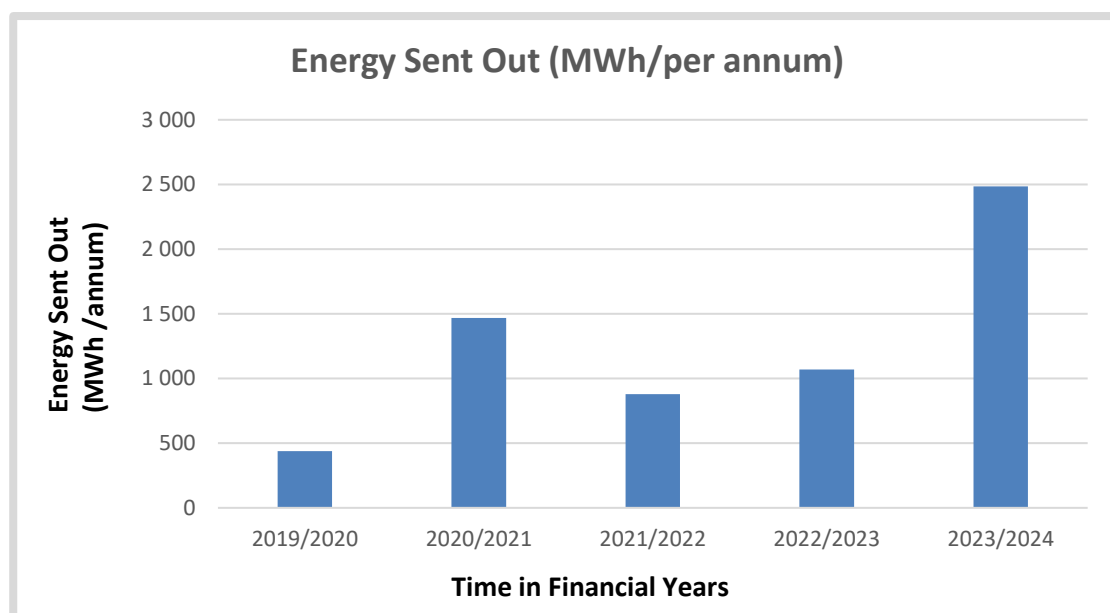


Figure 5. Total Production / Energy sent out (MWh/per annum) per financial year.

5. Point source Emission monitoring: Date of last periodic emission monitoring

As per section 16 of the Minimum Emission Standards and as per section 7.4 of Acacia's AEL, annual emission testing is required to quantify PM, SO₂ and NO_x emissions. SGS conducted the last Source Emissions Monitoring tests on the 26th March 2015 that were attached in the previous annual report.

According to the report compiled, the test results were below the pollutant specific hourly emission limit for PM, SO₂ and NO_x, showing that Acacia Power Station is following stipulated emission limits. The fuel at Acacia has not changed since these tests, and as such they are still representative of emissions from Acacia.

6. Ambient air quality monitoring

An Ambient Air Quality Monitoring Station was commissioned at Settlers Drive, Edgemead during September 2015 and the ambient data gathered is used to monitor compliance with the National Ambient Air Quality Standards and to set a baseline for comparisons during operations.

Table 4. Ambient Monitoring Results

Station Compliance to National Ambient Air Quality Standards	2023/2024	2022/2023	2021/2022	2020/2021	2019/2020
	Compliant	Compliant	Compliant	Compliant	Compliant
	No exceedances	No exceedances	No exceedances	No exceedances	No exceedances

A few PM-10 exceedances were recorded that may be attributed to prevailing weather conditions at the time, temperature inversion, traffic, fires in the area including veld fires and braais. Eskom Acacia Power Station was not operating at the time the exceedances were recorded.

7. Complaints

Acacia Power Station maintains comprehensive complaints register as per section 8.1.1 of the AEL. No power station related complaints were received for the last financial year (Table 5).

Table 5. Complaints

Total number of air quality complaints	2023/2024	2022/2023	2021/2022	2020/2021	2019/2020
	0	0	0	1	0

8. Status of any significant diesel fuel leaks and repairs 2023_2024

A Leak Detection and Repair Programme (LDAR) is in place as guided by section 8.3 of the AEL (as per the Daily Plant Inspection Checklists).

One Fuel leak incident occurred on 2023/09/26 on Unit 1 b fuel pipeline from a pinhole leak detected upon excavation. Classified as moderate fuel spill. Full clean-up was performed with support from SpillTech and the incident is closed.

9. Compliance

Audits

No external compliance audit was conducted during 2023_2024. The Environmental Management Inspectorate from the City of Cape Town Air Quality Management Unit conducted the last compliance inspection on the 27th August 2019, reviewing the compliance status of the station against all conditions of the Acacia Power Station Air Emission Licence. No findings were recorded.

Internal Compliance audits were conducted on a 6 monthly basis. Latest Internal Compliance audit conducted on 7th February 2024. No findings were recorded.

NAEIS

As required, Acacia reported its 2023 NAEIS report online, within the required timeline.

Minimum Emission Standards

MES Postponement Application was granted by DFFE in mid-May 2024.

For any queries please do not hesitate to contact Hilton Westman on 021 -9415856.

Yours sincerely



Zukile Tshisa
Manager Operations and Maintenance
ACACIA POWER STATION