

Lukhanyo Mgadle Chief Air Quality Officer Buffalo City Metropolitan Municipality 48 Oxford Street, East London

18 June 2024

Enquiries: H Westman

Tel: 021 - 9415856

Dear Mr. Mgadle

PORT REX POWER STATION'S ANNUAL EMISSIONS REPORT: April 2023 - March 2024

This serves as the annual report required in terms of Section 7.6 in Port Rex Power Station's Atmospheric Emission License (ECBC_000603). The information represented stems from 2023/2024 Eskom's past financial year (Eskom's financial year extends from 1 April to 31 March) and includes calculated figures of PM 10, SO₂ and CO₂ emissions.

1. Pollutant emission trends

Table 1. General overview of emissions at Port Rex 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	1.113	0.834	0.288	0.859	0.010
SO ₂	0.120	0.090	1.245	2.079	0.302
CO ₂	3868.949	2901	981.465	1639.52	475.156

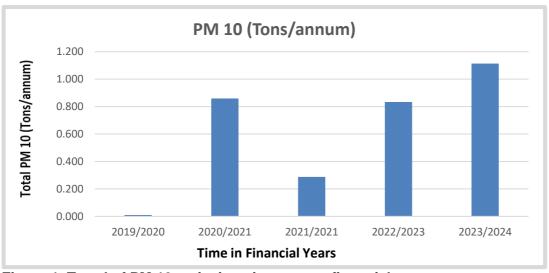
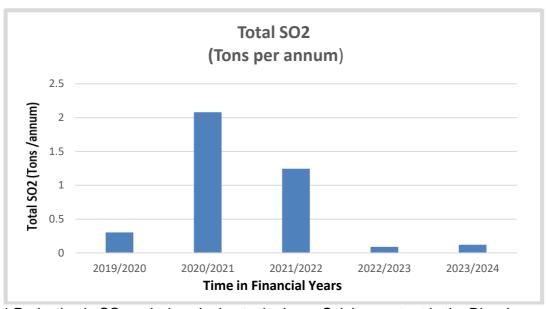


Figure 1. Trend of PM 10 emissions in tons per financial year



^{*} 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

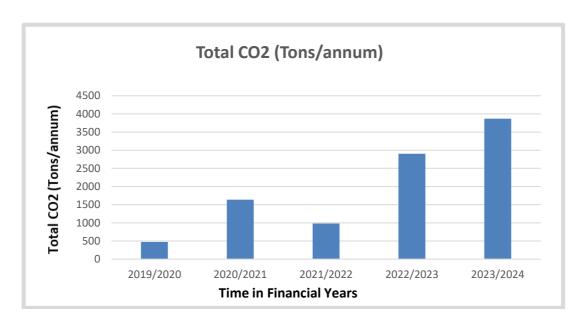


Figure 3. Trend of total CO₂ emissions in tons per financial year

Table 2. Fuel Use

Year	Fuel Used (Tons)	Fuel Type
2023/2024	1203.774	Diesel
2022/2023	902.61	Diesel
2021/2022	312.16	Diesel
2020/2021	519.934	Diesel
2019/2020	151.035	Diesel

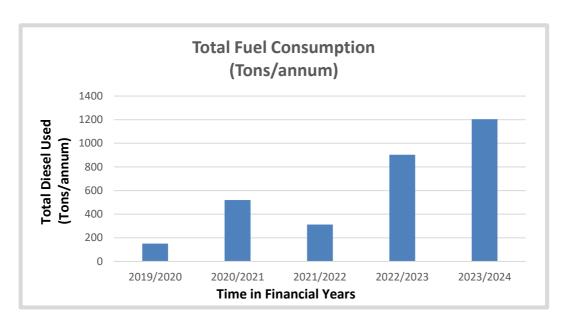


Figure 4. Total Fuel (Diesel) Consumption in tons per financial year

Table 3. Total Production (MWh Sent Out)

Year	Energy Sent Out (MWh)
2023/2024	4340
2022/2023	3010
2021/2022	937
2020/2021	1457
2019/2020	436

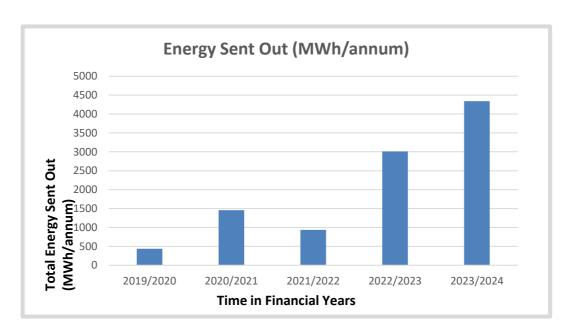


Figure 5. Total Energy sent out (MWh) per financial year

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

As per section 16 of the Minimum Emission Standards and as per section 4.3 of Port Rex's AEL, emission testing is required to quantify PM, SO₂ and NOx emissions. SGS conducted the last Source Emissions Monitoring tests on the 26th March 2015 that were attached in last year's annual report (2019/20).

According to the report compiled, the test results were below the pollutant specific hourly emission limit for PM, SO₂ and NOx, showing that Port Rex Power Station is in compliance with stipulated

emission limits. The fuel at Port Rex has not changed since these tests, and as such they are still representative of emissions from Port Rex.

Engagement with BCMM Air Quality has taken place on this issue with the understanding that testing will be done when practical and this will be reported to the authorities.

6. Complaints

Port Rex Power Station maintains a comprehensive complaints register as per section 7.6 of the AEL. No complaints were received for the last financial year.

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

A Leak Detection and Repair Programme (LDAR) are in place, in addition to the Daily Plant Inspection Checklists.

No spill incidents and no leaks have occurred during this period.

The LDAR will be reviewed in the current financial year, as part of a 3 yearly revision to incorporate latest technology and any plant engineering modifications and controls.

8. Compliance Audits

No external audits were conducted.

The last Air Quality Audit was performed on the 6th September 2019, by Department Economic Development, Environmental Affairs and Tourism in conjunction with Buffalo City Metropolitan Municipality Air Quality Department.

No findings were recorded.

Internal AEL Compliance audits were conducted on a 6 monthly basis to evaluate compliance. An Internal AEL Compliance Audit was conducted on the 8th February 2024. No findings recorded.

9. Major upgrades projects

No major upgrades were undertaken in 2023/24.

10. NAEIS Reporting

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

11. Minimum Emission Standards

MES Postponement Decision was granted by DFFE.

Yours sincerely

Zukile Tshisa

Manager Operations and Maintenance

PORT REX POWER STATION