

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

10 June 2020

Enquiries:
 Tel: 021 - 9415856

Dear Mr. Mgadle

PORT REX POWER STATION'S ANNUAL EMISSIONS REPORT: April 2019 – March 2020

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 2019/20 Eskom's past financial year (Eskom's financial year extends from 1 April to 31 March) and includes calculated figures of PM, SO₂ and CO₂ emissions.

1. Pollutant emission trends

Table 1. General overview of emissions at Port Rex Power Station 2013/14 to 2019/2020

Emissions	Total (Tons/annu m) 2019/2020	Total (Tons/annu m) 2018/2019	Total (Tons/annu m) 2017/2018	Total (Tons/annu m) 2016/2017	Total (Tons/annu m) 2015/2016	Total (Tons/annu m) 2014/2015
PM	0.010	0.0318	0.0031	0.00264	1.735	1.704
SO ₂	0.302	1.1398	0.078834	0.063233	41.55097	40.8037
CO ₂	475.156	1792.85	124.006	99.465	65359	64184

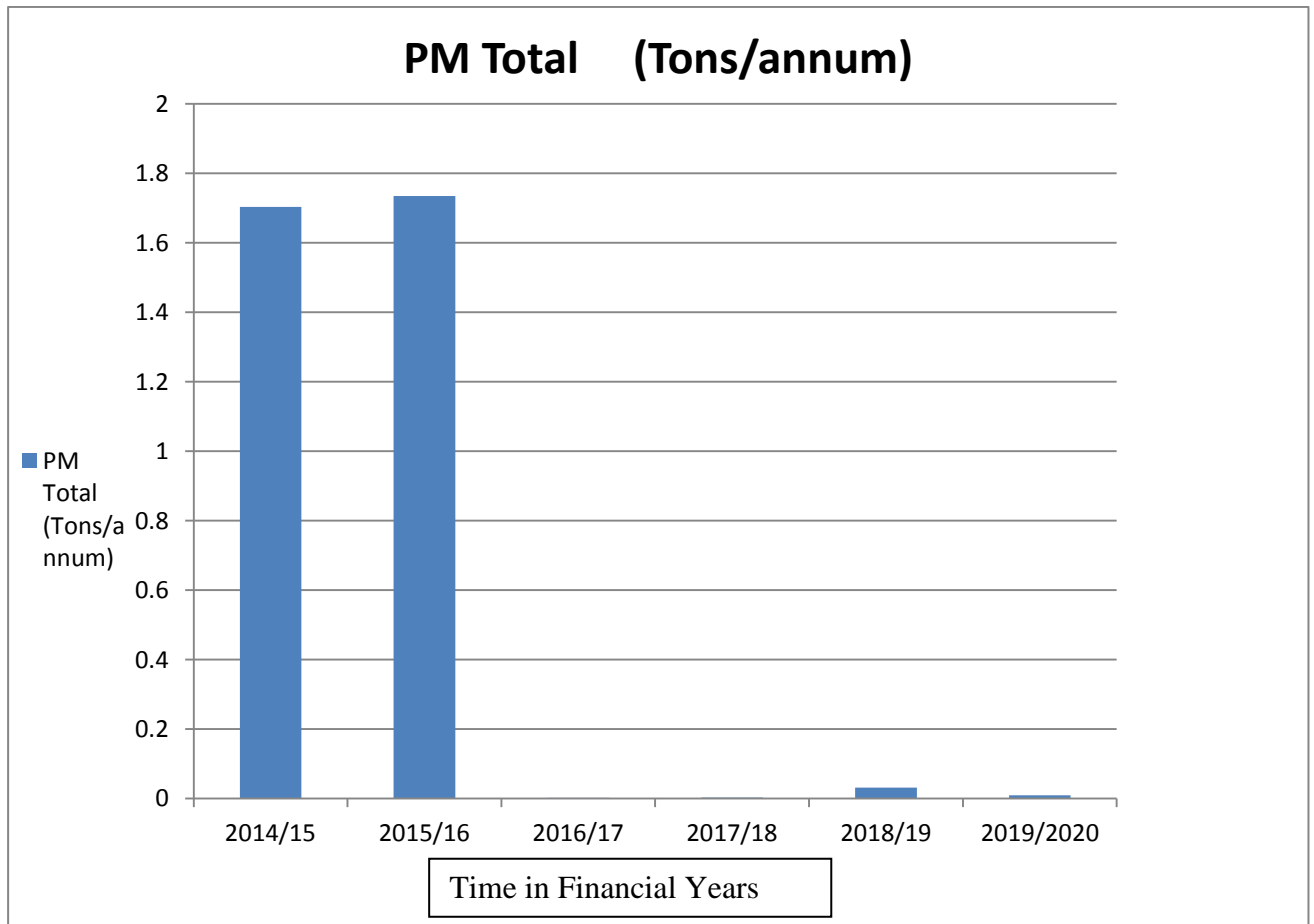


Figure 1. Trend of total PM emissions in tons per financial year 2019/2020

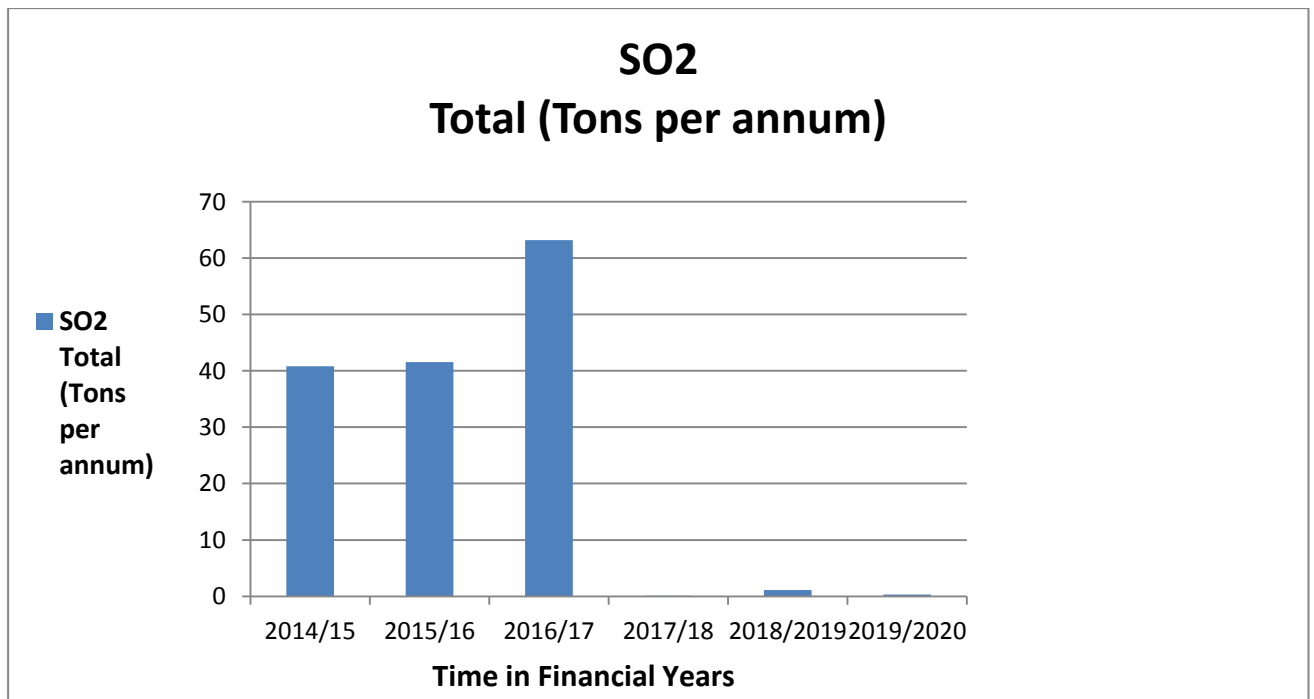


Figure 2. Trend of total SO₂ emissions in tons per financial year 2019/2020

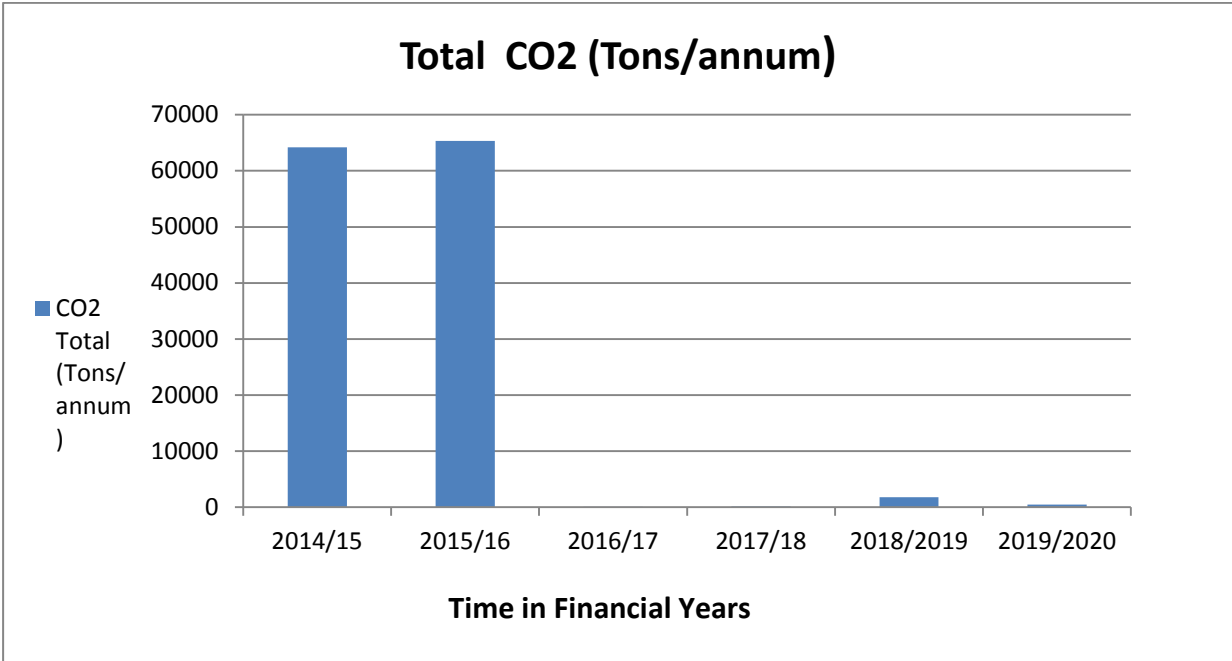


Figure 3. Trend of total CO₂ emissions in tons per financial year 2019/2020

Table 2. Fuel Use

Year	Fuel Used (Tons)	Fuel Type
2019/2020	151.035	Diesel
2018/2019	569.883	Diesel
2017/2018	39.41	Diesel
2016/2017	31.61	Diesel
2015/2016	20775	Diesel
2014/2015	20402	Diesel

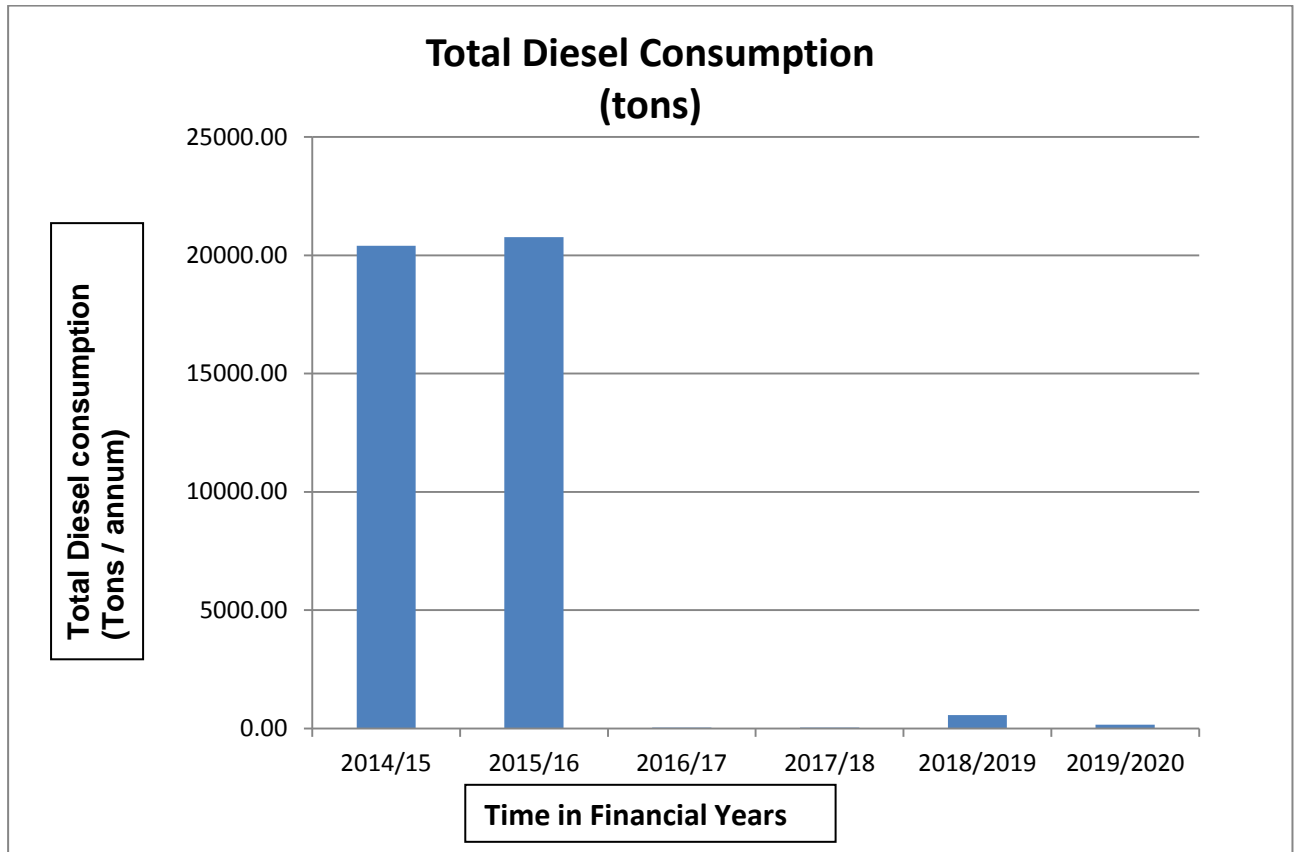


Figure 4. Port Rex Power Station Fuel Use 2014/2015 to 2019/2020

Table 3. Total Production (GWhSO)

Port Rex Power Station operating requirements include Reliability testing, 4 monthly outage test runs and routine maintenance and operating testing.

Year	Energy Sent Out (GWh)
2019/2020	0.436
2018/2019	1.787
2017/2018	0.063
2016/2017	0.041
2015/2016	68.699
2014/2015	67.421

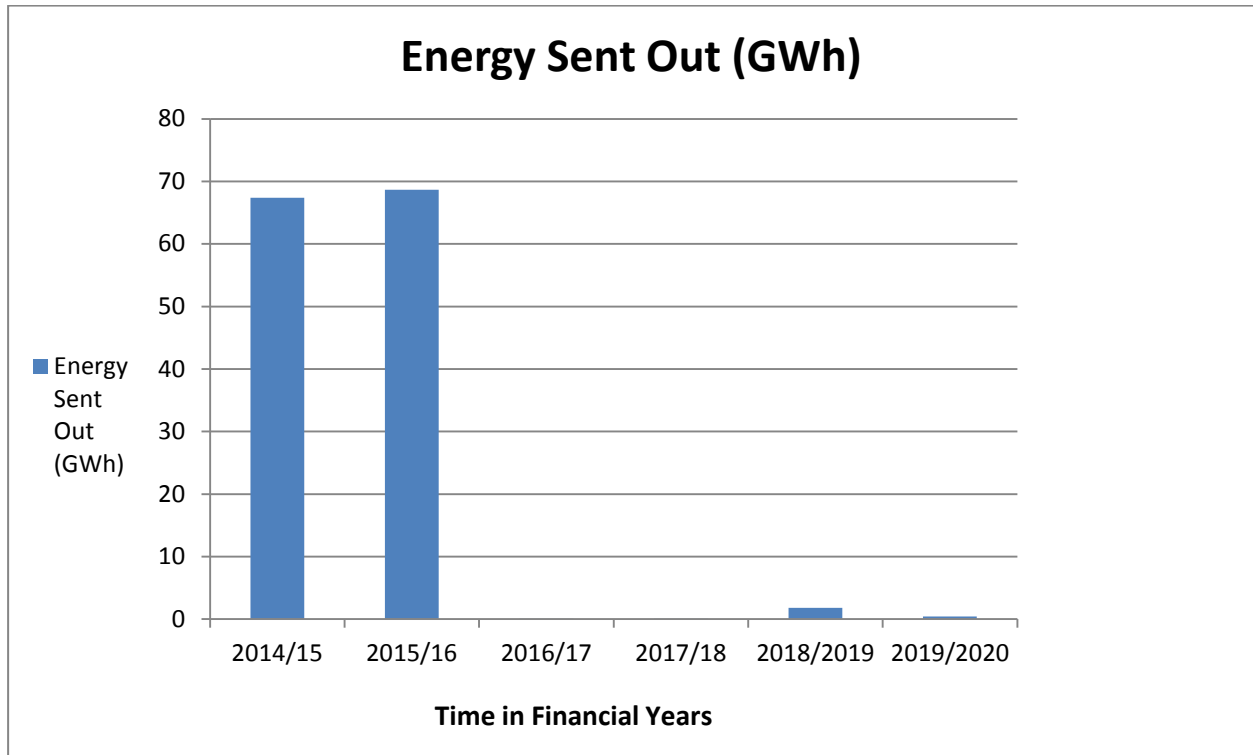


Figure 5. Total Production / Energy sent out (GWh) 2014/2015 to 2019/2020

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 NO_x emissions.

SGS conducted the last Source Emissions Monitoring tests on the 26th March 2015 that were attached in last year's annual report (2018/19).

According to the report compiled, the test results were below the pollutant specific hourly emission limit for PM, SO₂ and NO_x, 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 2019_2020

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

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

Air Quality Audit Report 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.

9. Major upgrades projects

No major upgrades were undertaken in 2019/20.

10. NAEIS Reporting

As required, Port Rex reported its 2019 NAEIS report online, within the required timeline.

11. Minimum Emission Standards

Application has been made to DEFF for a revision of the minimum emission standards for Port Rex Power Station. A full study has been completed and the Public Participation process has commenced and the Port Rex application has been published for initial consultation. The process has been delayed by the onset of the Covid pandemic, but it is expected that the Minister will delay implementation until August. Due to the low GLF at the station this is unlikely to impact on Port Rex.

In summary, the application submitted for Port Rex is:

- (i) Suspension of the new plant MES PM standard (50 mg/Nm³) from 2020 with approval of alternative limit of 75mg/Nm³, until station decommissioning which will be no later than 2030 (currently anticipated by 2026).
- (ii) Suspension of compliance from the new plant MES NO_x standard (250 mg/Nm³) from 2025 as per the 2015 postponement decision and with approval of alternative limit 600mg/Nm³ from 2020, until station decommissioning which will be no later than 2030 (currently anticipated by 2026).

Yours sincerely



Pamela Mrubata
Plant Manager

PORT REX POWER STATION