

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

22 May 2019

Enquiries:
 Tel: 021 - 9415856

Ref: EC/AR/BCMM/021/2015

Dear Mr. Mgadle

PORT REX POWER STATION'S ANNUAL EMISSIONS REPORT: April 2018 – March 2019

This serves as the annual report required in terms of Section 7.6 in Port Rex Power Station's Atmospheric Emission License (EC/AR/BCMM/021/2015). The information represented stems from 2018/19 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 2018/2019

Emissions	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	Total (Tons/annu m) 2013/2014
PM	0.0318	0.0031	0.00264	1.735	1.704	1.864
SO ₂	1.1398	0.078834	0.063233	41.55097	40.8037	44.64172
CO ₂	1792.85	124.006	99.465	65359	64184	70221

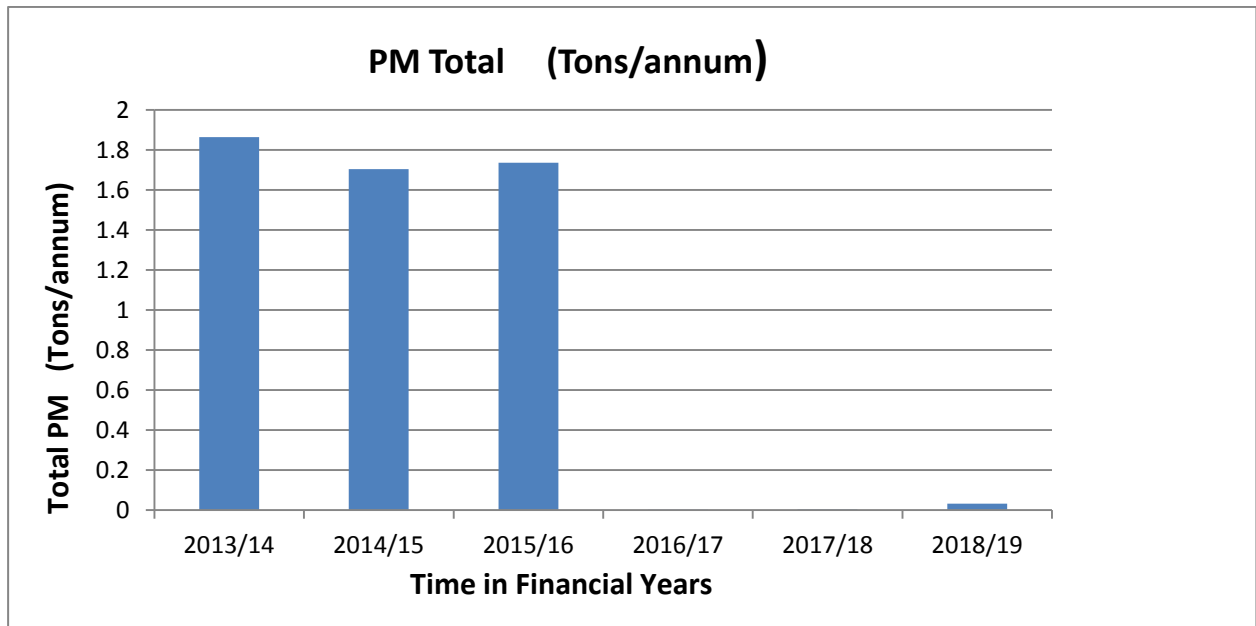


Figure 1. Trend of total PM emissions in tons per financial year

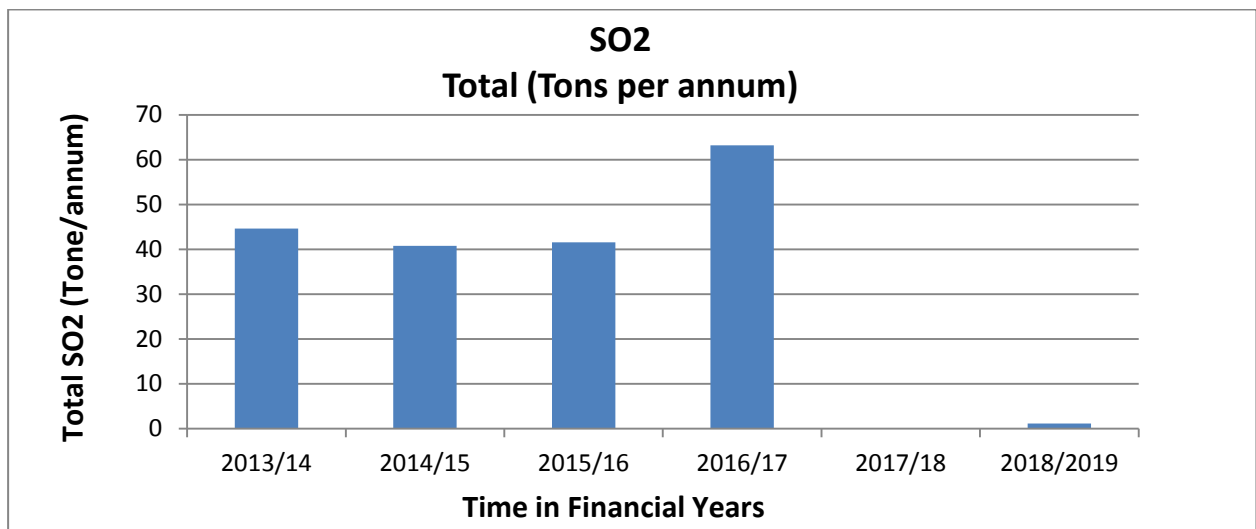


Figure 2. Trend of total SO₂ emissions in tons per financial year

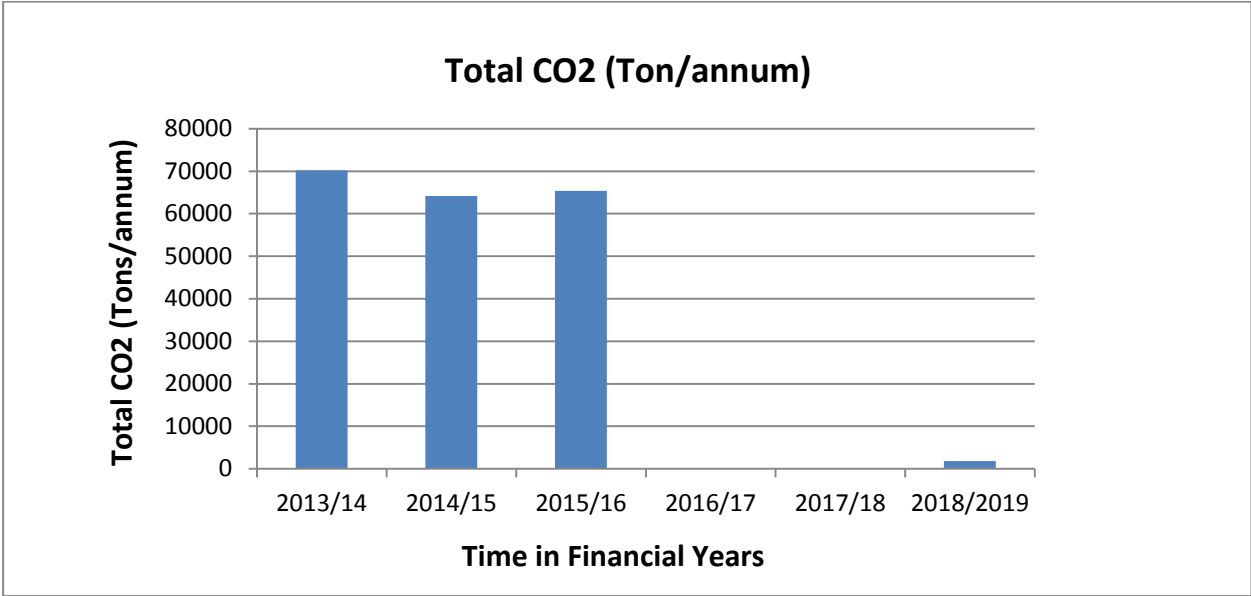


Figure 3. Trend of total CO₂ emissions in tons per financial year

Table 2. Fuel Use

Year	Fuel Used (Tons)	Fuel Type
2018/2019	569.883	Diesel
2017/2018	39.41	Diesel
2016/2017	31.61	Diesel
2015/2016	20775	Diesel
2014/2015	20402	Diesel
2013/2014	22321	Diesel

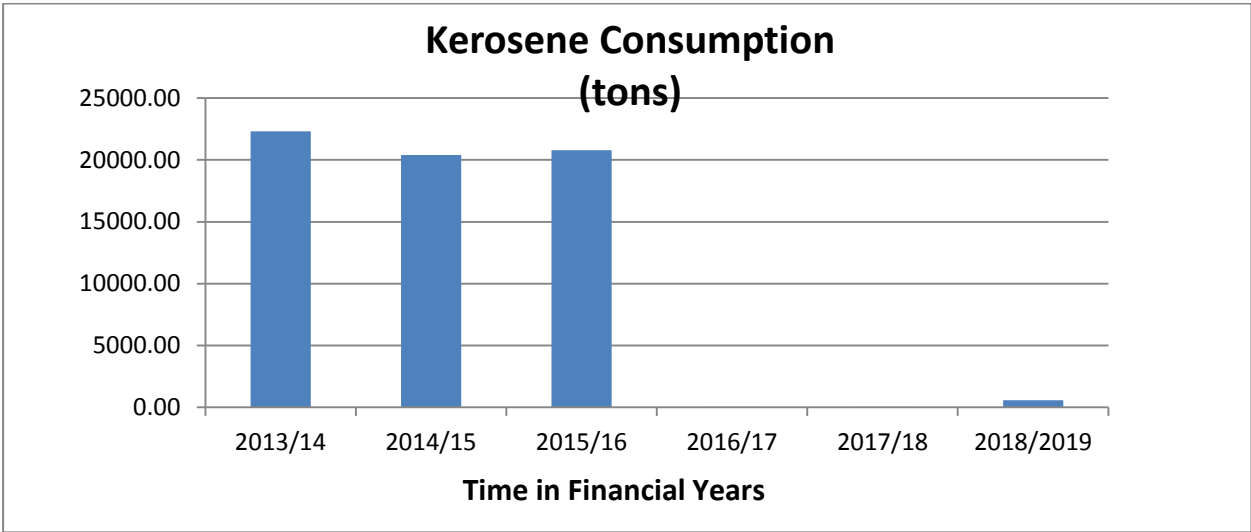


Figure 4. Port Rex Power Station Fuel Use 2013/2014 to 2018/2019

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)
2018/2019	1.787
2017/2018	0.063
2016/2017	0.041
2015/2016	68.699
2014/2015	67.421
2013/2014	73.166

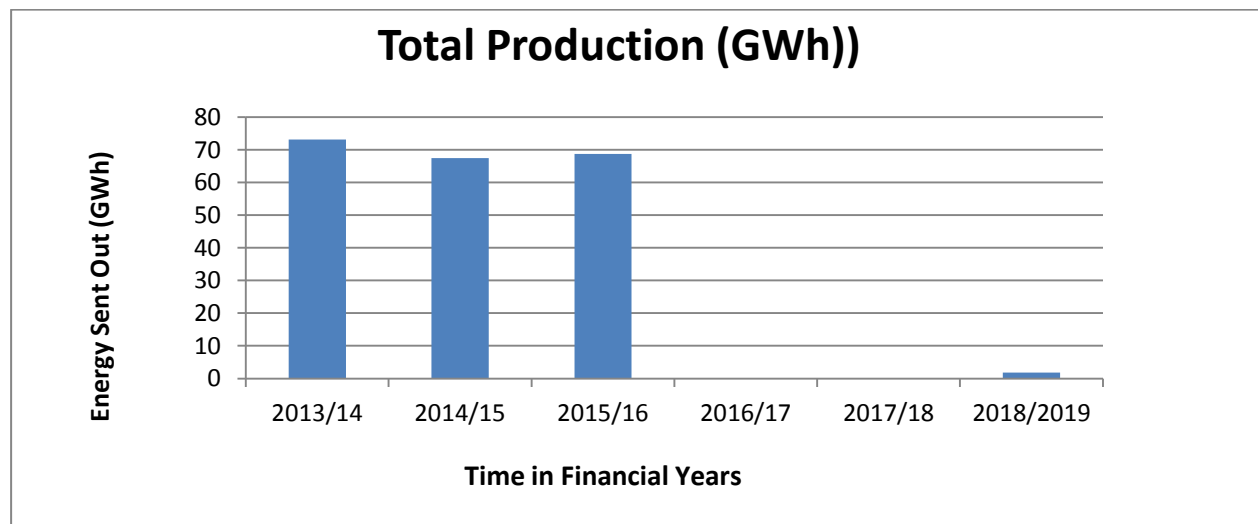


Figure 5. Total Production / Energy sent out (GWh) 2013/2014 to 2018/2019

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

As per section 16 of the Minimum Emission Standards and as per section 7.2.8 of Port Rex’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 last year’s annual report (2017/18).

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.

As Port Rex Power Station is currently hardly operating (and if so, only for testing purposes), Port Rex has submitted a variation request of the station’s AEL to your offices to request that the annual testing frequency be amended.

The variation request pertains specifically to Section 7.2.8 of the AEL, which guides the frequency of required emission testing measurements to be conducted at the station’s point sources.

Instead of annual emission testing, it proposed that Port Rex Power Station conduct emission testing either a) once every three years or alternatively b) once the load factor is >5% for three consecutive months, depending on which of the above occurs first from the date of the last emission tests undertaken. The decision will need to be assessed and granted by the Office of the National Air Quality Officer, Environmental Affairs. This decision is still pending.

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 2018_2019

A Leak Detection and Repair Programme (LDAR) is in place as guided by section 7.2.4 of the AEL (as per the Daily Plant Inspection Checklists). No leaks occurred.

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 compliance audits were undertaken in the past financial year.

9. Major upgrades projects

No major upgrades were undertaken in 2018/19.

10. NAEIS Reporting

As required, Port Rex reported its 2018 NAEIS report online, within the required timeline.

Yours sincerely



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Rodney Booth
Plant Manager

PORT REX POWER STATION