

BOC Sydney Operations Centre Regenerative Thermal Oxidizer Annual Testing Data

BOC owns and operates a specialty gas filling and reclaim facility in Wetherill Park. This facility supplies special mixtures of gases to industry, science and agricultural businesses. The site has a regenerative thermal oxidiser to capture and scrub residual gases ensuring all emissions from the process meet regulatory limits.

The thermal oxidizer is subject to a condition in the Environmental Protection Licence that annual testing must show the plant is processing within approved limits.

The results of each annual test starting in 2021 are included below.

Supporting documents for BOC Sydney Operations Centre Annual Emissions Test

Regenerative Thermal Oxidiser Stack Monitoring Data – Annual Results

Published: 30 November 2021 (2021 Data) Licensee: BOC LIMITED EPL No.: 6679									
Qualifications related to limits Samples taken as per approved methods									
Reference Conditions: Dry, 273 K, 101.3 kPa Oxygen Correction: No oxygen correction Averaging Period: 1 hour									
EPA Point ID	Sampling Date(s)	Date Results Received	Pollutant	Measurement Period & Monitoring Frequency Required	Units	Method	Value	100 percentile concentration limit	Exceedance (yes/no)
EPL Point 1 Stack for the Regenerative Thermal Oxidiser	5/11/2021	15/11/2021	Moisture content	Yearly	%	TM-22	0	N/A	N/A
			Nitrogen Oxides	Yearly	mg/m ³	TM-11	4.5	250	no
			Temperature	Yearly	C	TM-2	107	N/A	N/A
			Velocity	Yearly	m/s	TM-2	10	N/A	N/A

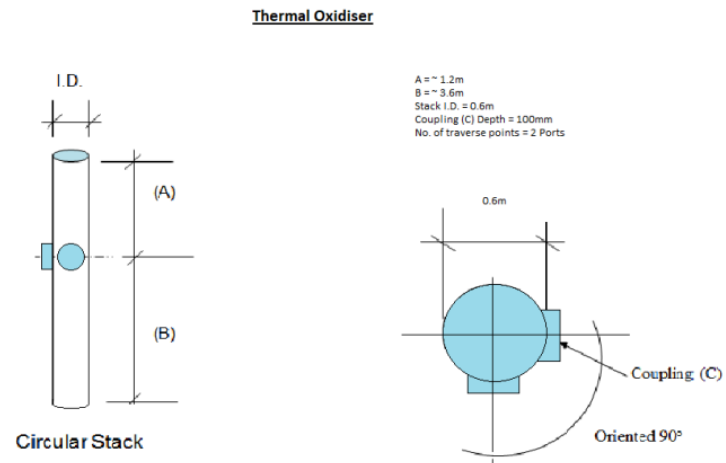
Published: 28 October 2022 Licensee: BOC LIMITED EPL No.: 6679									
Qualifications related to limits Samples taken as per approved methods									
Reference Conditions: Dry, 273 K, 101.3 kPa Oxygen Correction: No oxygen correction Averaging Period: 1 hour									
EPA Point ID	Sampling Date(s)	Date Results Received	Pollutant	Measurement Period & Monitoring Frequency Required	Units	Method	Value	100 percentile concentration limit	Exceedance (yes/no)
EPL Point 1 Stack for the Regenerative Thermal Oxidiser	20/10/2022	26/10/2022	Moisture content	Yearly	%	TM-22	0.29	N/A	N/A
			Nitrogen Oxides	Yearly	mg/m ³	TM-11	8.92	250	No
			Temperature	Yearly	C	TM-2	102.5	N/A	N/A
			Velocity	Yearly	m/s	TM-2	8.9	N/A	N/A

Regenerative Thermal Oxidiser Stack Monitoring Data – Annual Results

Published: 20 December 2023 Licensee: BOC LIMITED EPL No.: 6679									
Qualifications related to limits Samples taken as per approved methods									
Reference Conditions: Dry, 273 K, 101.3 kPa Oxygen Correction: 20.68 with No oxygen correction Sampling Duration: 30 minutes									
EPA Point ID	Sampling Date(s)	Date Results Received	Pollutant	Measurement Period & Monitoring Frequency Required	Units	Method	Value	100 percentile concentration limit	Exceedance (yes/no)
EPL Point 1 Stack for the Regenerative Thermal Oxidiser	07/11/2023	11/11/2023	Moisture content	Yearly	%	TM-22	0.21	N/A	N/A
			Nitrogen Oxides	Yearly	mg/m ³	TM-11	10.86	250	No exceedance Compliant Result
			Temperature	Yearly	C	TM-2	106.73	N/A	N/A
			Velocity	Yearly	m/s	TM-2	9.34	N/A	N/A

Conclusion: BOC are operating within EPL Air Concentration licence limits

Regenerative Thermal Oxidiser Stack Monitoring Data – Annual Results



Regenerative Thermal Oxidiser
Sample Points

Figure 4-1: BOC RTO exhaust stack schematic diagram



Regenerative Thermal Oxidiser
(Abatement) Exhaust Location