

# 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.

In both years (2021 and 2022 ) the plant has shown a proof of performance exceeding expected standards.

## Supporting documents for BOC Sydney Operations Centre Annual Emissions Test

## Regenerative Thermal Oxidiser Stack Monitoring Data – Annual Results

<b>Published: 30 November 2021 (2021 Data)</b>									
Licensee: BOC LIMITED									
EPL No.: 6679									
<b>Qualifications related to limits</b>									
Samples taken as per approved methods									
<b>Reference Conditions:</b> Dry, 273 K, 101.3 kPa									
<b>Oxygen Correction:</b> No oxygen correction									
<b>Averaging Period:</b> 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 <sup>3</sup>	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

<b>Published: 3 November 2022</b>									
Licensee: BOC LIMITED									
EPL No.: 6679									
<b>Qualifications related to limits</b>									
Samples taken as per approved methods									
<b>Reference Conditions:</b> Dry, 273 K, 101.3 kPa									
<b>Oxygen Correction:</b> No oxygen correction									
<b>Averaging Period:</b> 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 <sup>3</sup>	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

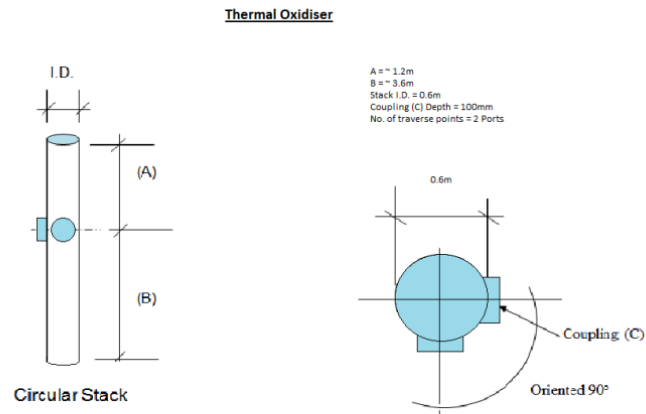


Figure 4-1: BOC RTO exhaust stack schematic diagram



Regenerative Thermal Oxidiser sample points

Location of BOC Sydney Operations Centre in relation to Victoria Street and Newton Road Intersections with the new Scientific Building and Abatement (Thermal Oxidizer ) shown in black outline.