

AGL UPSTREAM INVESTMENTS PTY LTD ROSALIND PARK GAS PLANT Monthly Continuous Air Monitoring Report

Reporting Period: January 2017

AGL Upstream Investments Pty Ltd ABN 58 115 063 744 Locked Bag 1837, St Leonards NSW 2065 200 George Street, Sydney NSW 2000

Telephone: 02 9921 2999 Facsimile: 02 9921 2474

Complaints Line (24 hours): 1300 799 716



Foreword

PREMISES Rosalind Park Gas Plant

Lot 35 Medhurst Road GILEAD NSW 2560

LICENCE DETAILS Environment Protection Licence 12003

LICENCEE AGL Upstream Investments Pty Limited

LICENCEE'S ADDRESS Locked Bag 1837, North Sydney, NSW 2060

REPORTING PERIOD 01 January 2017 to 31 January 2017

DATE of MONITORING Continuous

OBTAINED DATA DATE 08 February 2017

REPORT DATE 13 February 2017

REPORT PREPARED BY Aaron Clifton

Environment Business Partner

SUMMARY OF ACTIVITY

Rosalind Park Gas Plant, located approximately 60km south west of Sydney, is a natural gas processing and treatment plant, used to process coal seam natural gas from the Camden Gas Project.

Produced natural gas is cleaned, dehydrated, compressed and odourised before being measured and transported by pipeline about 500 metres into the nearby Moomba to Sydney Natural Gas Pipeline. The premises are covered by Environment Protection Licence 12003 which includes all gas wells, gas gathering, reticulation systems, trunk lines and associated effluent storage areas and work areas of the Camden Gas Project.



This Monitoring Report relates to those air monitoring activities specified in Part 5, Monitoring and Recording Conditions, of the Environment Protection Licence. The Licence conditions stipulate air monitoring is required to be carried out at the locations, at the frequency and using the test methods as set out in the tables below.

This report sets out the results of continuous monitoring summarized on a monthly basis. A separate report is issued for quarterly monitoring.

This report is prepared in accordance with the *Requirements for Publishing Pollution Monitoring Data* (EPA, October, 2013) (**Publication Requirements**).

AIR MONITORING LOCATIONS

Point	Location	Monitoring Frequency
1	Exhaust Stack 1 on Compression Engine 1	Continuous
2	Exhaust Stack 2 on Compression Engine 2	Continuous
3	Exhaust Stack 3 on Compression Engine 3	Continuous

Note: monitoring is only undertaken when the compression engines are running.

AIR MONITORING TEST METHODS - POINTS 1, 2 and 3

Parameter	NSW EPA Test Method (Sampling Method)	Reference Method
Oxides of Nitrogen	CEM-2	USEPA Performance Specification 2
Temperature	TM-2	USEPA Method 2
Moisture content	Method approved by EPA in writing	Calibration by reference to TM-22
Volumetric Flow Rate	CEM-6	USEPA Performance Specification 6
Oxygen	CEM-3	USEPA Performance Specification 3

USEPA Method refers to the US Environmental Protection Agency 2000, Code of Federal Regulations, Title 40, Part 60, Appendix A Methods.

USEPA Performance Specification refers to the US Environmental Protection Agency 2000, Code of Federal Regulations, Title 40, Part 60, Appendix B, Performance Specifications.



Air Monitoring Results

Continuous monitoring results are based on test results obtained over a one-hour averaging period as set out in Schedule 5 of the *Protection of the Environment Operations (Clean Air) Regulation* 2010 (NSW).

Monitoring Point	Description	Pollutant	Units of measure	Oxygen correction	Sampling method	Monitoring frequency required by licence	Number of times measured during sampling period	Minimum value	Average value	Maximum value	Concentration Limit
1	Compressor Engine 1	Oxides of Nitrogen (as NO ₂ equivalent)	Milligrams per cubic metre	7% oxygen	CEM-2	Continuous	Compressor Engine 1 operated from 1-31 January 2017.	228	307	361	461
		Temperature	Degrees Celsius		TM-2	Continuous	See Note 1	332	349	360	Not applicable
		Moisture	Percent		Method approved by EPA	Continuous		7.5	8.1	8.8	Not applicable
		Volumetric flow rate	Cubic metres per second		CEM-6	Continuous		2.9	2.9	2.9	Not applicable
		Oxygen	Percent		CEM-3	Continuous		11.3	11.7	12.3	Not applicable
2	Compressor Engine 2	Oxides of Nitrogen (as NO ₂ equivalent)	Milligrams per cubic metre	7% oxygen	CEM-2	Continuous	Compressor Engine 2 operated from 1-31 January 2017. The	6.81	15.36	40.47	461
		Temperature	Degrees Celsius		TM-2	Continuous	CEMS of Compressor Engine 2 was	317.89	385.37	500.65	Not applicable
		Moisture	Percent		Method approved by EPA	Continuous	operating for 45 minutes of every one	See Note 2	See Note 2	See Note 2	Not applicable
		Volumetric flow rate	Cubic metres per second		CEM-6	Continuous	hour period. The remaining 15 minute period was down time for cleaning purposes.	See Note 2	See Note 2	See Note 2	Not applicable
		Oxygen	Percent		CEM-3	Continuous	See Note 2.	0.38	0.57	1.44	Not applicable
3	Compressor Engine 3	Oxides of Nitrogen (as NO ₂ equivalent)	Milligrams per cubic metre	7% oxygen	CEM-2	Continuous	Compressor Engine 3 occasionally operated on 11 and 17 January	37.00	39.39	41.78	461
		Temperature	Degrees Celsius		TM-2	Continuous	2017. The CEMS of Compressor Engine 3	355.69	409.13	491.80	Not applicable
		Moisture	Percent		Method approved by EPA	Continuous	was operating for 45 minutes of every one	See Note 3	See Note 3	See Note 3	Not applicable
		Volumetric flow rate	Cubic metres per second		CEM-6	Continuous	hour period. The remaining 15 minute	See Note 3	See Note 3	See Note 3	Not applicable
		Oxygen	Percent		CEM-3	Continuous	period was down time for cleaning purposes. See Note 3.	0.57	0.65	0.70	Not applicable



Notes:

 In accordance with Section 3.4.1 of the EPA Publication Requirements, the following data points have not been included for Monitoring Point 1 (Compressor #1 exhaust stack) as AGL knows that the data has been unable to be collected or is incorrect.

Date	Approximate total hours	Pollutant	Justification		
18 January 2017	1	Oxygen, Oxides of Nitrogen, Moisture, Temperature, Volumetric Flow Rate	Data unable to be collected due CEMS maintenance. Data intermittently affected.		
18 January 2017	2	Oxides of Nitrogen, Moisture	Data unable to be collected due CEMS maintenance. Data intermittently affected.		

 In accordance with Section 3.4.1 of the EPA Publication Requirements, the following data points have not been included for Monitoring Point 2 (Compressor #2 exhaust stack) as AGL knows that the data has been unable to be collected or is incorrect.

Date	Approximate total hours	Pollutant	Justification
1-31 January 2017	744	Volumetric Flow Rate, Moisture	Data unable to be collected due to component failure. AGL has been unable to repair the failed component and is trialing alternative monitoring methods in consultation with the EPA.

3. In accordance with Section 3.4.1 of the EPA Publication Requirements, the following data points have not been included for Monitoring Point 3 (Compressor #3 exhaust stack) as AGL knows that the data has been unable to be collected or is incorrect.

Date	Approximate total hours	Pollutant	Justification			
44 1 4 7		V	Data unable to be collected due			
11 and 17	3	Volumetric Flow Rate,	to component failure.			
January 2017		Moisture	AGL has been unable to repair			
			the failed component and is			

			trialing alternative monitoring
			methods in consultation with
			the EPA.
			Data unable to be collected due
11 January	1	Oxides of Nitrogen	to component failure.
2017	1	Oxides of Nitrogen	AGL was able to repair the
			failed component.