

The logo consists of the text "Energy in action.™" in a blue sans-serif font, positioned within a large, light brown rounded rectangle. Below this rectangle are three smaller, overlapping light brown shapes: a small square on the left, a larger square in the middle, and a small square on the right. At the bottom right of these shapes is the AGL logo, which features a blue square with a white sunburst icon and the letters "AGL" in white.

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

Reporting Period: January 2014

AGL Upstream Investments Pty Ltd
ABN 58 115 063 744
Locked Bag 1837, St Leonards NSW 2065
Level 22, 101 Miller Street, North Sydney NSW 2060
Telephone: 02 9921 2999 Facsimile: 02 9921 2474
Complaints Line (24 hours): 02 9963 1318



Foreword

PREMISES	Rosalind Park Gas Plant Lot 35 Medhurst Road GILEAD NSW 2560
LICENCE DETAILS	<u>Environment Protection Licence 12003</u>
LICENCEE	AGL Upstream Investments Pty Limited
LICENCEE'S ADDRESS	Locked Bag 1837, North Sydney, NSW 2060
REPORTING PERIOD	01 January 2014 to 31 January 2014
REPORT DATE	13 February 2014 (version 0) 07 August 2014 (version 1)
REPORT PREPARED BY	Aaron Clifton Environmental Manager

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 covered by this Environment Protection Licence also 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, March 2012) (**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

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	milligrams per cubic metre	7% oxygen	CEM-2	Continuous	<i>Compressor Engine was not operating from 1 to 31 January 2014.</i>	-	-	-	461
		Temperature	degrees Celsius		TM-2	Continuous		-	-	-	
		Moisture	percent		Method approved by EPA	Continuous		-	-	-	
		Volumetric flow rate	cubic metres per second		CEM-6	Continuous		-	-	-	
		Oxygen	percent		CEM-3	Continuous		-	-	-	
2	Compressor Engine 2	Oxides of Nitrogen	milligrams per cubic metre	7% oxygen	CEM-2	Continuous	<i>Compressor Engine 2 operated from 1-31 January 2014. The CEMS of Compressor Engine 2 was operating for 45 minutes of every one hour period. The remaining 15 minute period was down time for cleaning purposes. See Note 1.</i>	49.62	78.27	93.59	461
		Temperature	degrees Celsius		TM-2	Continuous		375.38	502.84	513.34	
		Moisture	percent		Method approved by EPA	Continuous		See Note 1	See Note 1	See Note 1	
		Volumetric flow rate	cubic metres per second		CEM-6	Continuous		See Note 1	See Note 1	See Note 1	
		Oxygen	percent		CEM-3	Continuous		0.40	0.43	0.64	
3	Compressor Engine 3	Oxides of Nitrogen	milligrams per cubic metre	7% oxygen	CEM-2	Continuous	<i>Compressor Engine 3 operated on 1-31 January 2014. The CEMS of Compressor Engine 3 was operating for 45 minutes of every one hour period. The remaining 15 minute period was down time for cleaning purposes. See Note 2.</i>	45.8	76.0	89.4	461
		Temperature	degrees Celsius		TM-2	Continuous		382.7	511.8	521.8	
		Moisture	percent		Method approved by EPA	Continuous		See Note 2	See Note 2	See Note 2	
		Volumetric flow rate	cubic metres per second		CEM-6	Continuous		See Note 2	See Note 2	See Note 2	
		Oxygen	percent		CEM-3	Continuous		0.60	0.60	1.1	

Air Monitoring Results

Emission Testing Consultants has been engaged by AGL to undertake independent monitoring each month in accordance with condition U1 of EPL 12003. Results for monitoring undertaken by Emission Testing Consultants (Report 140024r) on 14 and 15 January 2014 are as follows:

Monitoring Point	Description	Pollutant	Units of measure	Oxygen correction	Sampling method	Monitoring frequency required by licence	Result	Concentration limit
1	Compressor Engine 1	Oxides of Nitrogen	milligrams per cubic metre	7% oxygen	TM-11	Monthly	No Result*	461
		Temperature	degrees Celsius		TM-2	Monthly	No Result*	
		Moisture	percent		TM-22	Monthly	No Result*	
		Volumetric flow rate	cubic metres per second		TM-2	Monthly	No Result*	
		Oxygen	percent		TM-25	Monthly	No Result*	
2	Compressor Engine 2	Oxides of Nitrogen	milligrams per cubic metre	7% oxygen	TM-11	Monthly	130	461
		Temperature	degrees Celsius		TM-2	Monthly	509	
		Moisture	percent		TM-22	Monthly	17	
		Volumetric flow rate	cubic metres per second		TM-2	Monthly	1.0	
		Oxygen	percent		TM-25	Monthly	0.51	
3	Compressor Engine 3	Oxides of Nitrogen	milligrams per cubic metre	7% oxygen	TM-11	Monthly	130	461
		Temperature	degrees Celsius		TM-2	Monthly	507	
		Moisture	percent		TM-22	Monthly	18	
		Volumetric flow rate	cubic metres per second		TM-2	Monthly	1.0	
		Oxygen	percent		TM-25	Monthly	0.58	

*Due to mechanical issues, Compressor Engine 1 was not operating on 14 and 15 January 2014.



Notes:

1. 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 collected is incorrect. The data is incorrect because the component of the equipment measuring the relevant parameter has either failed or was not operating. AGL has taken and is currently taking actions to rectify the issue (e.g. replacement of failed components of measuring equipment).

Date	Approximate total hours	Pollutant
1-31 January 2014	734	Volumetric Flow Rate, Moisture
29 January 2014	3	Oxides of Nitrogen

2. 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 collected is incorrect. The data is incorrect because the component of the equipment measuring the relevant parameter has either failed or was not operating. AGL has taken and is currently taking actions to rectify the issue (e.g. replacement of failed components of measuring equipment).

Date	Approximate total hours	Pollutant
1-31 January 2014	737	Volumetric Flow Rate, Moisture
23 January 2014	2	Oxides of Nitrogen, Oxygen, Temperature