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

Reporting Period: March 2014

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# Foreword

| | |
|---|---|
| **PREMISES** | Rosalind Park Gas Plant<br>Lot 35 Medhurst Road<br>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 March 2014 to 31 March 2014 |
| **REPORT DATE** | 11 April 2014 |
| **REPORT PREPARED BY** | Aaron Clifton<br>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 | *Compressor Engine was not operating from 1 to 31 March 2014.* | - | - | - | 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 | *Compressor Engine 2 operated from 1-31 March 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.* | 35.07 | 59.87 | 70.79 | 461 |
| | | Temperature | degrees Celsius | | TM-2 | Continuous | | 487.00 | 507.00 | 514.10 | |
| | | 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 | | 0.00 | 0.40 | 0.58 | |
| 3 | Compressor Engine 3 | Oxides of Nitrogen | milligrams per cubic metre | 7% oxygen | CEM-2 | Continuous | *Compressor Engine 3 operated on 1-31 March 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.* | 76.98 | 105.76 | 127.12 | 461 |
| | | Temperature | degrees Celsius | | TM-2 | Continuous | | 496.32 | 517.44 | 524.32 | |
| | | 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 | | 0.70 | 0.79 | 1.13 | |

**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 March 2014 | 730 | Volumetric Flow Rate, Moisture |
| 10,15,19,22,23,29,30 March 2014 | 39 | Oxides of Nitrogen |
| 10,15,23,29, March 2014 | 34 | Oxygen, Temperature |

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 March 2014 | 743 | Volumetric Flow Rate, Moisture |
| 10,18,29,30 March 2014 | 21 | Oxides of Nitrogen, Oxygen, Temperature |