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

Reporting Period: 1st Quarter – March 2023

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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 14120, Melbourne, VIC 8001
MONITORING DATE	1st Quarter (7-14 March 2023)
MONITORING BY	Ektimo
ANALYSIS BY	Ektimo (laboratory report number R014544)
OBTAINED DATA DATE	05 April 2023 (Ektimo Report R014544)
REPORT DATE	11 April 2023
REPORT PREPARED BY	Aaron Clifton, Lead - Environment Programs and Projects

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 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
2	Exhaust Stack 2 on Compression Engine 2	Quarterly
3	Exhaust Stack 3 on Compression Engine 3	Quarterly
4	Reboiler Flue	Quarterly
5	Reflux Column Vent	Quarterly
6	Carbon Scrubber Vent	Quarterly

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

AIR MONITORING TEST METHODS – POINTS 2, 3, 4 and 5

Parameter	NSW EPA Test Method (Sampling Method)
Carbon dioxide	TM-24
Dry gas density	TM-23
Moisture	TM-22
Molecular weight of stack gases	TM-23
Nitrogen Oxides	TM-11
Oxygen (O_2)	TM-25
Sulfuric acid mist and sulphur trioxide (as SO_3)	TM-3
Sulphur dioxide	TM-4
Temperature	TM-2
Velocity	TM-2
Volumetric flowrate	TM-2

AIR MONITORING TEST METHODS – POINT 6

Parameter	NSW EPA Test Method (Sampling Method)
Carbon dioxide	TM-24
Dry gas density	TM-23
Moisture	TM-22
Molecular weight of stack gases	TM-23
Odour	OM-7
Oxygen (O_2)	TM-25
Temperature	TM-2
Velocity	TM-2
Volumetric flowrate	TM-2

Air Monitoring Results

Monitoring Point	Description	Pollutant	Units of measure	Oxygen correction	Sampling method	Monitoring frequency required by licence	Average Concentration	Concentration limit
2	Compressor Engine 2 (Sampled 14 March 2023)	Carbon dioxide	Percent		TM-24	Quarterly	11.3	Not applicable
		Dry gas density	Kilograms per cubic metre		TM-23	Quarterly	1.34	Not applicable
		Moisture	Percent		TM-22	Quarterly	17	Not applicable
		Molecular weight of stack gases	Grams per gram mole		TM-23	Quarterly	30.0	Not applicable
		Nitrogen Oxides (as NO_2 equivalent)	Milligrams per cubic metre	7% oxygen	TM-11	Quarterly	38	220
		Oxygen (O_2)	Percent		TM-25	Quarterly	0.8	Not applicable
		Sulfuric acid mist and sulphur trioxide (as SO_3)	Milligrams per cubic metre		TM-3	Quarterly	0.13	5.0
		Sulphur dioxide	Milligrams per cubic metre		TM-4	Quarterly	<6	7
		Temperature	Degrees Celsius		TM-2	Quarterly	324	Not applicable
		Velocity	Metres per second		TM-2	Quarterly	12	Not applicable
		Volumetric flowrate	Cubic metres per second		TM-2	Quarterly	0.51	Not applicable

Monitoring Point	Description	Pollutant	Units of measure	Oxygen correction	Sampling method	Monitoring frequency required by licence	Average Concentration	Concentration limit
3	Compressor Engine 3 (Sampled 14 March 2023)	Carbon dioxide	Percent		TM-24	Quarterly	11.2	Not applicable
		Dry gas density	Kilograms per cubic metre		TM-23	Quarterly	1.34	Not applicable
		Moisture	Percent		TM-22	Quarterly	16	Not applicable
		Molecular weight of stack gases	Grams per gram mole		TM-23	Quarterly	29.9	Not applicable
		Nitrogen Oxides (as NO_2 equivalent)	Milligrams per cubic metre	7% oxygen	TM-11	Quarterly	25	220
		Oxygen (O_2)	Percent		TM-25	Quarterly	0.9	Not applicable
		Sulfuric acid mist and sulphur trioxide (as SO_3)	Milligrams per cubic metre		TM-3	Quarterly	0.13	5.0
		Sulphur dioxide	Milligrams per cubic metre		TM-4	Quarterly	<6	7
		Temperature	Degrees Celsius		TM-2	Quarterly	330	Not applicable
		Velocity	Metres per second		TM-2	Quarterly	12	Not applicable
		Volumetric flowrate	Cubic metres per second		TM-2	Quarterly	0.52	Not applicable

**Result from testing completed on 14 March 2023 in accordance with NSW EPA TM-11. Spot testing (which did not meet the requirements of TM-11) carried out on 07 March 2023 identified elevated results of up to 4500mg/m3 and resulted in Compressor Engine 3 being shut down for tuning.*

Monitoring Point	Description	Pollutant	Units of measure	Oxygen correction	Sampling method	Monitoring frequency required by licence	Average Concentration	Concentration limit
4	Reboiler Flue (Sampled 07 March 2023)	Carbon dioxide	Percent		TM-24	Quarterly	3.9	Not applicable
		Dry gas density	Kilograms per cubic metre		TM-23	Quarterly	1.31	Not applicable
		Moisture	Percent		TM-22	Quarterly	7.6	Not applicable
		Molecular weight of stack gases	Grams per gram mole		TM-23	Quarterly	29.3	Not applicable
		Nitrogen Oxides (as NO_2 equivalent)	Milligrams per cubic metre	7% oxygen	TM-11	Quarterly	27	110
		Oxygen (O_2)	Percent		TM-25	Quarterly	13.1	Not applicable
		Sulfuric acid mist and sulphur trioxide (as SO_3)	Milligrams per cubic metre		TM-3	Quarterly	0.081	3.5
		Sulphur dioxide	Milligrams per cubic metre		TM-4	Quarterly	<6	35
		Temperature	Degrees Celsius		TM-2	Quarterly	219	Not applicable
		Velocity	Metres per second		TM-2	Quarterly	3.2	Not applicable
		Volumetric flowrate	Cubic metres per second		TM-2	Quarterly	0.084	Not applicable

Monitoring Point	Description	Pollutant	Units of measure	Oxygen correction	Sampling method	Monitoring frequency required by licence	Average Concentration	Concentration limit
5	Reflux Column Vent (Sampled 07 March 2023)	Carbon dioxide	Percent		TM-24	Quarterly	19.4	Not applicable
		Dry gas density	Kilograms per cubic metre		TM-23	Quarterly	1.40	Not applicable
		Moisture	Percent		TM-22	Quarterly	43	Not applicable
		Molecular weight of stack gases	Grams per gram mole		TM-23	Quarterly	31.3	Not applicable
		Nitrogen Oxides (as NO_2 equivalent)	Milligrams per cubic metre	7% oxygen	TM-11	Quarterly	<3	13
		Oxygen (O_2)	Percent		TM-25	Quarterly	2	Not applicable
		Sulfuric acid mist and sulphur trioxide (as SO_3)	Milligrams per cubic metre		TM-3	Quarterly	0.031	35
		Sulphur dioxide	Milligrams per cubic metre		TM-4	Quarterly	<6	1042
		Temperature	Degrees Celsius		TM-2	Quarterly	78	Not applicable
		Velocity	Metres per second		TM-2	Quarterly	3	Not applicable
		Volumetric flowrate	Cubic metres per second		TM-2	Quarterly	0.01	Not applicable

Monitoring Point	Description	Pollutant	Units of measure	Oxygen correction	Sampling method	Monitoring frequency required by licence	Average Concentration	Concentration limit
6	Carbon Scrubber Vent (Sampled 09 March 2023)	Carbon dioxide	Percent		TM-24	Quarterly	<0.4	Not applicable
		Dry gas density	Kilograms per cubic metre		TM-23	Quarterly	1.29	Not applicable
		Moisture	Percent		TM-22	Quarterly	1.4	Not applicable
		Molecular weight of stack gases	Grams per gram mole		TM-23	Quarterly	29.0	Not applicable
		Odour	Odour Units		OM-7	Quarterly	<30	Not applicable
		Oxygen (O_2)	Percent		TM-25	Quarterly	20.8	Not applicable
		Temperature	Degrees Celsius		TM-2	Quarterly	35	Not applicable
		Velocity	Metres per second		TM-2	Quarterly	5.8	Not applicable
		Volumetric flowrate	Cubic metres per second		TM-2	Quarterly	0.14	Not applicable