AGL UPSTREAM INVESTMENTS PTY LTD CAMDEN GAS PROJECT

Monthly Flare Pit Water Quality Monitoring Report

Reporting Period: November 2022

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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 (AGL)		
LICENCEE'S ADDRESS	Locked Bag 14120, Melbourne, VIC 8001		
MONITORING DATE	November 2022 (21 November 2022)		
MONITORING BY	AGL		
ANALYSIS BY	ALS Laboratory, Smithfield (Work order Number: ES2241951)		
DATE DATA OBTAINED	28 November 2022		
REPORT DATE	29 November 2022		
REPORT PREPARED BY	Aaron Clifton, Lead - Environment Programs and Projects		



1. Introduction

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. 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 water monitoring activities specified in Part 5, Monitoring and Recording Conditions, of the Environment Protection Licence, specifically monitoring point 16 (Rosalind Park Gas Plant Flare Pit) (Table 1). The Licence conditions stipulate water monitoring is required to be carried out at the locations, at the frequency and using the test methods as set out in Table 2.

Table 3 presents the results of this month's water monitoring. This report is prepared in accordance with the Requirements for Publishing Pollution Monitoring Data (EPA, October, 2013) (**Publication Requirements**).

The water quality samples are analysed by an external NATA certified laboratory (ALS Environmental, Smithfield), in accordance with the EPA Approved Methods Publication "Approved Methods for the Sampling and Analysis of Water Pollutants in New South Wales" (EPA, 2004), with the exception of phenols and PAHs, which were analysed with an alternate method following written approval from the EPA (EPA, 2014) (refer to Table 2 for analytical methodology).

Table 1 – Flare Pit water quality monitoring point location

EPA monitoring point	Location	Latitude	Longitude
16	RPFP	34°07'17.0"S	150°46'08.1"E

Coordinate reference system: Map Grid of Australia 1994 Zone 56

Table 2 – Analytes monitored, Frequency (as per EPL 12003) and methodology

Analyte	Units of measure	Frequency	Sampling Method	Analytical method
Electrical Conductivity	Microsiemens per centimetre	Monthly	Grab sample	APHA (1998) section 2510 B
Total Suspended Solids	milligrams per litre	Monthly	Grab sample	APHA 2540 D
Total Organic Carbon	milligrams per litre	Monthly	Grab sample	APHA 5310 B
Oil and Grease	milligrams per litre	Monthly	Grab sample	APHA 5520 B
Biochemical Oxygen Demand (BOD)	milligrams per litre	Monthly	Grab sample	APHA 5210 B using APHA 4500- O G for the determination of dissolved oxygen
Total petroleum hydrocarbons	micrograms per litre	Monthly	Grab sample	USEPA (1996h) method 8015B
Phenols	micrograms per litre	Monthly	Grab sample	USEPA (1996a) method 8270 D
Total PAH's	micrograms per litre	Monthly	Grab sample	USEPA (1996a) method 8270 D



Table 3 – Flare Pit water Monitoring Results

		Monitoring Point	16
		Location	RPFP
		Sampled Date	21/11/2022
		Data Obtained	28/11/2022
Analyte	Units	Limit of Reporting	
Electrical Conductivity	μS/cm	1	1820
Total Suspended Solids	mg/L	5	56
Total Organic Carbon	mg/L	1	9
Oil and Grease	mg/L	5	< 5
Biochemical Oxygen Demand (BOD)	mg/L	2	2
Total Petroleum Hydrocarbons			
C6 - C9 Fraction	µg/L	20	< 20
C10 - C14 Fraction	μg/L	50	< 50
C15 - C28 Fraction	µg/L	100	< 100
C29 - C36 Fraction	µg/L	50	< 50
C10 - C36 Fraction (sum)	μg/L	50	< 50
Phenois			
Phenol	µg/L	1	< 1.0
2-Chlorophenol	µg/L	1	< 1.0
2-Methylphenol	µg/L	1	< 1.0
3- & 4-Methylphenol	µg/L	2	< 2.0
2-Nitrophenol	µg/L	1	< 1.0
2.4-Dimethylphenol	µg/L	1	< 1.0
2.4-Dichlorophenol	µg/L	1	< 1.0
2.6-Dichlorophenol	µg/L	1	< 1.0
4-Chloro-3-methylphenol	µg/L	1	< 1.0
2.4.6-Trichlorophenol	μg/L	1	< 1.0
2.4.5-Trichlorophenol	μg/L	1	< 1.0
Pentachlorophenol	μg/L	2	< 2.0



		Monitoring Point	16
		Location	RPFP
		Sampled Date	21/11/2022
		Data Obtained	28/11/2022
Analyte	Units	Limit of Reporting	
Total PAH's			
Naphthalene	µg/L	1	< 1.0
Acenaphthylene	µg/L	1	< 1.0
Acenaphthene	µg/L	1	< 1.0
Fluorene	µg/L	1	< 1.0
Phenanthrene	μg/L	1	< 1.0
Anthracene	µg/L	1	< 1.0
Fluoranthene	µg/L	1	< 1.0
Pyrene	µg/L	1	< 1.0
Benz(a)anthracene	μg/L	1	< 1.0
Chrysene	μg/L	1	< 1.0
Benzo(b+j)fluoranthene	μg/L	1	< 1.0
Benzo(k)fluoranthene	μg/L	1	< 1.0
Benzo(a)pyrene	μg/L	0.5	< 0.5
Indeno(1.2.3.cd)pyrene	μg/L	1	< 1.0
Dibenz(a.h)anthracene	μg/L	1	< 1.0
Benzo(g.h.i)perylene	μg/L	1	< 1.0
Sum of polycyclic aromatic hydrocarbons	μg/L	0.5	< 0.5
Benzo(a)pyrene TEQ (zero)	µg/L	0.5	< 0.5

References

Environment Protection Authority (EPA), 2014. Letter correspondence to AGL Upstream Investments Pty Ltd., titled: *Environment Protection Licence 12003*, EPA reference: EF13/2522:DOC14/95163-07:CK, dated 28 August 2014, signed: Greg Newman (Acting Manager Illawarra).

Environment Protection Authority (EPA), 2004. Approved Methods for the Sampling and Analysis of Water Pollutants in New South Wales, The Department of Environment and Conservation, Sydney, Australia. Available online: <u>http://www.environment.nsw.gov.au/resources/water/approvedmethods-water.pdf</u>

The State of NSW and Environment Protection Authority (EPA), 2013. Requirements for publishing pollution monitoring data. Environment Protection Authority, Sydney, Australia. Available online: <u>http://www.epa.nsw.gov.au/resources/licensing/130742reqpubpmdata.pdf</u>