AGL UPSTREAM INVESTMENTS PTY LTD
Newcastle Gas Storage Facility
Annual Noise Monitoring Report

Reporting Period: June 2016

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Foreword

PREMISES	Newcastle Gas Storage Facility 5 Old Punt Road TOMAGO NSW 2322
LICENCE DETAILS	Environment Protection Licence 20130
LICENCEE	AGL Upstream Investments Pty Limited
LICENCEE'S ADDRESS	Locked Bag 1837, St Leonards, NSW 2065
MONITORING DATE	29 June 2016
MONITORING BY	Bridges Acoustics
ANALYSIS BY	Bridges Acoustics (report number J0215-08-R1)
OBTAINED DATA DATE	26 July 2016
REPORT DATE	05 August 2016
REPORT PREPARED BY	Aaron Clifton Environment Business Partner

SUMMARY OF ACTIVITY

The Newcastle Gas Storage Facility (NGSF) is located in Tomago, New South Wales.

The NGSF includes:

- A processing plant that converts pipeline natural gas to liquefied natural gas (LNG) by cooling it to -162°C. It is capable of processing up to 66,500 tonnes of LNG per year.
- An insulated, non-pressurised LNG storage tank capable of containing 30,000 tonnes or 63,000 m^3 of LNG, equivalent to 1.5 petajoules (PJ) of natural gas, and an associated containment area.
- A re-gasification unit to convert the LNG in the storage tank back into natural gas.
- A flare stack with a height of approximately 15m to combust hydrocarbons discharged from the process.

- A truck loading facility to allow the dispatch of up to 1,000 tankers of LNG per year.
- Infrastructure and utility connection and an emergency access road.

This Monitoring Report relates to those noise monitoring activities specified in Part 5, Monitoring and Recording Conditions, of the Environment Protection Licence. The Licence conditions stipulate noise monitoring is required to be carried out as per the assessment periods at the locations and frequency set out in the table below.

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

NOISE MONITORING LOCATIONS

Point	Location	Assessment Period	Minimum Duration	Minimum Frequency
2	Hunter Botanical Gardens	Day, Evening, Night	15 minutes	Yearly
3	5 Grahame Drive Tomago	Day, Evening, Night	15 minutes	Yearly
5	45 School Drive Tomago	Day, Evening, Night	15 minutes	Yearly
6	Tomago Village Van Park	Day, Evening, Night	15 minutes	Yearly
9	Tomago Aluminium Company Meteorological Station	N/A	N/A	N/A

NOISE MONITORING MEASUREMENT PARAMETERS

Point	Time Period	Measurement Parameter
2	Day	Day – LAeq (15 minute)
	Evening	Evening – LAeq (15 minute)
	Night	Night – LAeq (15 minute)
3, 5, 6	Day	Day – LAeq (15 minute)
	Evening	Evening – LAeq (15 minute)
	Night	Night – LAeq (15 minute)
	Night	Night – LAeq (1 minute)

Noise Monitoring Results Summary, 29 June 2016

Monitoring Point	Monitoring Location Description	Period	Start time	Total Measured Noise Level			Project Contribution[1]		EPL Noise Level	
				LA1	LAeq	LA90	LA1	LAeq	LA1	LAeq
2 – Hunter Botanical Gardens	A point along the NGSF northern access road at a similar distance from the NGSF as the nearest corner of Botanic Gardens.	Day	14:02	60	44	36	-	<35	-	50
		Evening	21:24	53	47	45	-	<40	-	50
		Night	22:11	52	46	44	-	<40	-	50
3 – Grahame Drive Tomago	In front of 5 Grahame Drive	Day	15:23	68	58	47	<45	<40	45	35
		Evening	20:47	66	55	42	<40	<35	45	35
		Night	23:43	62	48	39	<40	<35	45	35
5 – 45 School Drive Tomago	In front of 45 School Drive	Day	15:03	73	64	54	<50	<50	45	35
		Evening	20:27	77	63	46	<45	<40	45	35
		Night	23:23	71	56	47	<45	<40	45	35
6 – Tomago Village Van Park	Adjacent to Old Punt Road on Tomago Village Van Park boundary	Day	14:35	77	61	46	<45	<40	45	35
		Evening	20:03	61	54	52	<50	<45	45	35
		Night	22:45	68	57	55	<55	<50	45	35

[1]The actual project noise contributions would generally be significantly lower than the upper limits listed in the table, however could not be determined accurately in the absence of audible project noise at the monitoring locations.

Weather conditions were recorded at Monitoring Point 9 during the noise survey were determined suitable for noise monitoring.

CONCLUSION

Results show noise from the project is inaudible at all specified noise monitoring points and therefore Bridges Acoustics determined compliance with the noise levels in Condition L5.1 of the EPL.