Lucas Heights 2

Licence Number: 6345

Licence Holder: EDL LFG (NSW) PTY LTD

Licensee Address: Lucas Heights 2

Testing year 2017

Testing Required Engine 2,5, 7, 11 LFG supply line and Flare

Tesing Frequency Engines (1-20) and the Flare are required to be tested once every 5 years. The Gas Supply Line is required to be tested whenever engines are also tested.

Location of Monitoring Point	Sampled	Obtained	Published	Pollutant	Units of Measure	No. Samples Required	No. Samples collected	Min. Value	Mean Value	Max. Value	Licence Limit	Excedance (Yes/No)
Discharge and Monitoring Point 21, Gas Supply Monitoring, LFG Supply Line to gas engines labelled 'LFG SUPPLY LINE' on drawing 840-BA-048, Rev A	28/03/17	26/05/17	26/05/17	Carbon dioxide	%	1	1		35.5			
	28/03/17	26/05/17	26/05/17	Dry gas density	mg/m3	1	1		1507679.0			
	28/03/17	26/05/17	26/05/17	Moisture Content	%	1	1		15			
	28/03/17	26/05/17	26/05/17	Molecular weight of stack gases	g/g-mole	1	1		31.40			
	28/03/17	26/05/17	26/05/17	Oxygen (O2)	%	1	1		2.3			
	28/03/17	26/05/17	26/05/17	Temperature	Degrees Celsius	1	1		55.0			
	28/03/17	26/05/17	26/05/17	Velocity	m/s	1	1		4.32			
	28/03/17	26/05/17	26/05/17	Volatile organic compounds (as n-propane)	mg/m3	1	1		674.0			
	28/03/17	26/05/17	26/05/17	Volumetric flowrate	Nm3/s	1	1		0.3060			
Discharge and Monitoring Point 22, Discharge to air, Landfill gas flare labelled "Flare" on drawing number 840-BA-048,Rev A	28/03/17	26/05/17	26/05/17	Temperature	Degrees Celsius	1	1		900		Lower limit 760	No
	28/03/17	26/05/17	26/05/17	Volumetric flowrate	m3/s	1	1		12.1		Lower limit 0.6	No
Discharge and Monitoring Point 5, Discharge to air, Gas engine exhaust stack labelled 'G105' on drawing number 840-BA-048, Rev A	28/03/17	26/05/17	26/05/17	Carbon dioxide	%	1	1		11.1			
	28/03/17	26/05/17	26/05/17	Carbon monoxide	mg/m3	1	1		1321.949			
	28/03/17	26/05/17	26/05/17	Dry gas density	mg/m3	1	1		1341296			
	28/03/17	26/05/17	26/05/17	Moisture Content	%	1	1		4.15			
	28/03/17	26/05/17	26/05/17	Molecular weight of stack gases	g/g-mole	1	1		30.0			
	28/03/17	26/05/17	26/05/17	Nitrogen oxides	mg/m3	1	1		406.632		450	No
	28/03/17	26/05/17	26/05/17	Oxygen (O2)	%	1	1		6.70			
	28/03/17	26/05/17	26/05/17	Sulfuric acid mist and sulfur trioxide (as SO3)	mg/m3	1	1		0.177		100	No
	28/03/17	26/05/17	26/05/17	Sulphur dioxide	mg/m3	1	1		0.722			
	28/03/17	26/05/17	26/05/17	Temperature	Degrees Celsius	1	1		545			
	28/03/17	26/05/17	26/05/17	Velocity	m/s	1	1		37.3			
	28/03/17	26/05/17	26/05/17	Volumetric flowrate	m^3/s	1	1		1.51			
Discharge and Monitoring Point 7, Discharge to air, Gas engine exhaust stack labelled 'G107' on drawing number 840-BA-048, Rev A	28/03/17	26/05/17	26/05/17	Carbon dioxide	%	1	1		10.8			
	28/03/17	26/05/17	26/05/17	Carbon monoxide	mg/m3	1	1		1353.953			
	28/03/17	26/05/17	26/05/17	Dry gas density	mg/m3	1	1		1339586			
	28/03/17	26/05/17	26/05/17	Moisture Content	%	1	1		3.74			
	28/03/17	26/05/17	26/05/17	Molecular weight of stack gases	g/g-mole	1	1		30.0			
	28/03/17	26/05/17	26/05/17	Nitrogen oxides	mg/m3	1	1		396.988		450	No
	28/03/17	26/05/17	26/05/17	Oxygen (O2)	%	1	1		6.95			
	28/03/17	26/05/17	26/05/17	Sulfuric acid mist and sulfur trioxide (as SO3)	mg/m3	1	1		47.246		100	No
	28/03/17	26/05/17	26/05/17	Sulphur dioxide	mg/m3	1	1		0.766			
	28/03/17	26/05/17	26/05/17	Temperature	Degrees Celsius	1	1		520			
	28/03/17	26/05/17	26/05/17	Velocity	m/s	1	1		27.7			
	28/03/17	26/05/17	26/05/17	Volumetric flowrate	m^3/s	1	1		1.16			
Discharge and Monitoring Point 2, Discharge to air, Gas engine exhaust stack labelled 'G102' on drawing number 840-BA-048, Rev A	28/03/17	26/05/17	26/05/17	Carbon dioxide	%	1	1		10.9			
	28/03/17	26/05/17	26/05/17	Carbon monoxide	mg/m3	1	1		1191.082			
	28/03/17	26/05/17	26/05/17	Dry gas density	mg/m3	1	1		1341059			
	28/03/17	26/05/17	26/05/17	Moisture Content	%	1	1		4.74			
	28/03/17	26/05/17	26/05/17	Molecular weight of stack gases	g/g-mole	1	1		30.0			
	28/03/17	26/05/17	26/05/17	Nitrogen oxides	mg/m3	1	1		424.857		450	No
	28/03/17	26/05/17	26/05/17	Oxygen (O2)	%	1	1		7.31			
	28/03/17	26/05/17	26/05/17	Sulfuric acid mist and sulfur trioxide (as SO3)	mg/m3	1	1		88.166		100	No
	28/03/17	26/05/17	26/05/17	Sulphur dioxide	mg/m3	1	1		0.896			
	28/03/17	26/05/17	26/05/17	Temperature	Degrees Celsius	1	1		500			
	28/03/17	26/05/17	26/05/17	Velocity	m/s	1	1		29.5			
	28/03/17	26/05/17	26/05/17	Volumetric flowrate	m^3/s	1	1		1.25			

Discharge and Monitoring Point 11, Discharge to air, Gas engine exhaust stack labelled 'G111' on drawing number 840-BA-048, Rev A	28/03/17	26/05/17	26/05/17	Carbon dioxide	%	1	1	10.5		
	28/03/17	26/05/17	26/05/17	Carbon monoxide	mg/m3	1	1	1097.872		
	28/03/17	26/05/17	26/05/17	Dry gas density	mg/m3	1	1	1339222		
	28/03/17	26/05/17	26/05/17	Moisture Content	%	1	1	4.30		
	28/03/17	26/05/17	26/05/17	Molecular weight of stack gases	g/g-mole	1	1	30		
	28/03/17	26/05/17	26/05/17	Nitrogen oxides	mg/m3	1	1	408.603	450	No
	28/03/17	26/05/17	26/05/17	Oxygen (O2)	%	1	1	8.06		
	28/03/17	26/05/17	26/05/17	Sulfuric acid mist and sulfur trioxide (as SO3)	mg/m3	1	1	0.203	100	No
	28/03/17	26/05/17	26/05/17	Sulphur dioxide	mg/m3	1	1	2.210		
	28/03/17	26/05/17	26/05/17	Temperature	Degrees Celsius	1	1	498		
	28/03/17	26/05/17	26/05/17	Velocity	m/s	1	1	35.1		
	28/03/17	26/05/17	26/05/17	Volumetric flowrate	m^3/s	1	1	1.50		

Change Log

Date	Change
23/07/2020	Included frequency of sampling into the data sheet
23/07/2020	Updated monitoring points with descriptive locations for points 5, 7, 2 and 11
23/07/2020	Corrected to 'trioxide' from 'trioide'