



SUMMARY OF SUNRICE ENVIRONMENTAL MONITORING DATA

June 2018 to May 2019

Licence Number 1830									
Monitoring Point	Pollutant	Units	100 percentile Concentration Limit	Frequency	No of Samples Required	No of Samples Collected	Min Result	Average Result	Max Result
36†	Phosphine	mg/m3	27	Annually	181	181	0.0	0.7	20.6
	Carbon Dioxide	%		Annually			0.0	0.7	20.0
	Dry gas density	kg/m3		Annually			1.1	1.2	1.3
	Moisture	%		Annually			0.6	8.4	67.0
	Molecular weight of stack gases	g/gram mole		Annually			28.8	28.8	28.9
	Temperature	Degrees C		Annually			0.0	21.2	47.0
	Velocity	m/s		Annually			37.9	41.5	44.2
	Volumetric flow rate	m3/s		Annually			1.2	1.3	1.4
37	Phosphine	mg/m3	29	Annually	8	8	0.9	5.7	13.8
	Carbon Dioxide	%		Annually			1.6	2.6	8.6
	Dry gas density	kg/m3		Annually			1.2	1.2	1.2
	Moisture	%		Annually			3.1	5.4	7.3
	Molecular weight of stack gases	g/gram mole		Annually			28.8	28.8	28.9
	Temperature	Degrees C		Annually			19.9	24.6	27.4
	Velocity	m/s		Annually			5.7	6.0	6.5
	Volumetric flow rate	m3/s		Annually			0.6	0.7	0.7
38	Phosphine	mg/m3	29	Annually	8	8	0.9	5.7	13.8
	Carbon Dioxide	%		Annually			1.6	2.6	8.6
	Dry gas density	kg/m3		Annually			1.2	1.2	1.2
	Moisture	%		Annually			3.1	5.4	7.3
	Molecular weight of stack gases	g/gram mole		Annually			28.8	28.8	28.9
	Temperature	Degrees C		Annually			19.9	24.6	27.4
	Velocity	m/s		Annually			5.7	6.0	6.5
	Volumetric flow rate	m3/s		Annually			0.6	0.7	0.7
39	Phosphine	mg/m3	12	Annually	14	14	0.1	2.7	11.5
	Carbon Dioxide	%		Annually			2.7	5.7	16.9
	Dry gas density	kg/m3		Annually			1.2	1.2	1.2
	Moisture	%		Annually			3.9	6.4	8.7
	Molecular weight of stack gases	g/gram mole		Annually			28.8	28.9	28.9
	Temperature	Degrees C		Annually			19.1	24.1	27.3
	Velocity	m/s		Annually			5.5	6.1	6.8
	Volumetric flow rate	m3/s		Annually			0.7	0.8	0.8
40	Phosphine	mg/m3	10	Annually	10	10	0.0	0.1	1.6
	Carbon Dioxide	%		Annually			1.8	4.1	6.1
	Dry gas density	kg/m3		Annually			1.2	1.2	1.2
	Moisture	%		Annually			3.4	8.7	10.6
	Molecular weight of stack gases	g/gram mole		Annually			29.0	29.0	29.0
	Temperature	Degrees C		Annually			15.5	21.3	23.4
	Velocity	m/s		Annually			3.4	4.5	5.1
	Volumetric flow rate	m3/s		Annually			0.6	0.7	0.8
41	Phosphine	mg/m3	9	Annually	23	23	0.0	0.3	2.0
	Carbon Dioxide	%		Annually			2.1	4.7	15.5
	Dry gas density	kg/m3		Annually			1.2	1.2	1.2
	Moisture	%		Annually			5.0	10.2	11.0
	Molecular weight of stack gases	g/gram mole		Annually			28.9	29.0	29.0
	Temperature	Degrees C		Annually			20.0	23.5	24.0
	Velocity	m/s		Annually			3.1	5.4	5.9
	Volumetric flow rate	m3/s		Annually			0.2	0.4	0.4
42	Phosphine	mg/m3	8	Annually	5	5	0.0	0.1	0.7
	Carbon Dioxide	%		Annually			1.8	2.5	3.2
	Dry gas density	kg/m3		Annually			1.2	1.2	1.2
	Moisture	%		Annually			14.4	14.4	14.4
	Molecular weight of stack gases	g/gram mole		Annually			29.0	29.0	29.0
	Temperature	Degrees C		Annually			28.5	28.5	28.5
	Velocity	m/s		Annually			5.2	5.7	7.5
	Volumetric flow rate	m3/s		Annually			0.7	0.7	0.9

Licence Number* 1832									
Monitoring Point	Pollutant	Units	100 percentile Concentration Limit	Frequency	No of Samples Required	No of Samples Collected	Min Result	Average Result	Max Result
1	Phosphine	mg/m3	29	Annually	0	0	NA	NA	NA
	Carbon Dioxide	%		Annually	0	0	NA	NA	NA
	Dry gas density	kg/m3		Annually	0	0	NA	NA	NA
	Moisture	%		Annually	0	0	NA	NA	NA
	Molecular weight of stack gases	g/gram mole		Annually	0	0	NA	NA	NA
	Temperature	Degrees C		Annually	0	0	NA	NA	NA
	Velocity	m/s		Annually	0	0	NA	NA	NA
	Volumetric flow rate	m3/s		Annually	0	0	NA	NA	NA

Licence Number 1833									
Monitoring Point	Pollutant	Units	100 percentile Concentration Limit	Frequency	No of Samples Required	No of Samples Collected	Min Result	Average Result	Max Result
1	Methyl Bromide	mg/m3	0.35	Annually	1	2	0.01	0.18	0.35
2	Phosphine	mg/m3	29	Annually	27	27	0.00	0.02	0.04
	Carbon Dioxide	%		Annually			2.4	5.1	10.7
	Dry gas density	kg/m3		Annually			1.2	1.2	1.2
	Moisture	%		Annually			4.9	12.0	36.6
	Molecular weight of stack gases	g/gram mole		Annually			28.9	29.1	29.2
	Temperature	Degrees C		Annually			7.3	7.3	7.3
	Velocity	m/s		Annually			13.7	17.3	17.7
	Volumetric flow rate	m3/s		Annually			0.7	0.8	0.9
3#	Phosphine	mg/m3	29	Annually	9	9	0.0	0.0	0.1
	Carbon Dioxide	%		Annually			4.5	4.5	4.5
	Dry gas density	kg/m3		Annually			1.2	1.2	1.2
	Moisture	%		Annually			2.8	2.8	2.8
	Molecular weight of stack gases	g/gram mole		Annually			28.3	29.0	29.2
	Temperature	Degrees C		Annually			13.7	13.7	13.7
	Velocity	m/s		Annually			12.9	14.2	14.7
	Volumetric flow rate	m3/s		Annually			0.6	0.7	0.7
4	Phosphine	mg/m3	29	Annually	51	51	0.00	0.01	0.02
	Carbon Dioxide	%		Annually			3.9	5.5	13.1
	Dry gas density	kg/m3		Annually			1.2	1.2	1.2
	Moisture	%		Annually			5.6	7.8	17.6
	Molecular weight of stack gases	g/gram mole		Annually			29.0	29.2	29.2
	Temperature	Degrees C		Annually			10.9	10.9	10.9
	Velocity	m/s		Annually			11.7	17.8	18.3
	Volumetric flow rate	m3/s		Annually			0.6	0.9	0.9
5#	Phosphine	mg/m3	29	Annually					
	Carbon Dioxide	%		Annually					
	Dry gas density	kg/m3		Annually					
	Moisture	%		Annually					
	Molecular weight of stack gases	g/gram mole		Annually					
	Temperature	Degrees C		Annually					
	Velocity	m/s		Annually					
	Volumetric flow rate	m3/s		Annually					

* Plant Not Operational During Reporting Period

not available at time of reporting

†Velocity and Relative humidity sensors Failure reported from the 29th March

‡Recorded July 2019