Permit Number: EP3230BW Operator: Envirowales Limited

Facility: Rassau Recycling Facility Form Number: Air1 / 02/11/17

Reporting of emissions to air for the year 2020

Emission Point	Substance / Parameter	Emission Limit Value	Reference Period	Result [1]	Test Method [2]	Sample Date and Times [3]	Uncertainty [4]
A1	Sulphuric acid mist	1 mg/m^3	Periodic over minimum 30 minutes, maximum 8 hour period	0.82	US EPA Method 8	14:04-15:07 18/3/20	13%
A1	Dust	5 mg/m^3	Periodic over minimum 30 minutes, maximum 8 hour period	1.31	BS EN 13284-1	10:00-11:05 10/9/20	27%
A1	Arsenic, Cadmium, Mercury, Thallium and Selenium and their compounds expressed as As, Cd, Hg, Tl and Se	0.5 mg/m^3	Periodic over minimum 30 minutes, maximum 8 hour period	0.0047	BS EN 14385	11:55-14:00 10/9/20	10%
A1	Antimony, Copper, Lead, Nickel, Tellurium, Tin and Zinc and their compounds expressed as Sb, Cu, Pb, Ni, Te, Sn and Zn	2 mg/m^3	Periodic over minimum 30 minutes, maximum 8 hour period	0.23	BS EN 14385	11:55-14:00 10/9/20	13%
A2	Dust	5 mg/m^3	Periodic over minimum 30 minutes, maximum 8 hour period	0.76	BS EN 13284-1	13:02-14:02 9/9/20	44%
A2	Dust	5 mg/m^3	Monthly average	0.11	BS EN 13284-1 and EN 14181	Continuous	

Emission Point	Substance / Parameter	Emission Limit Value	Reference Period	Result [1]	Test Method [2]	Sample Date and Times [3]	Uncertainty [4]
A2	Dust	10 mg/m^3	Daily average	0.2	BS EN 13284-1 and EN 14181	Continuous	
A2	Sulphur dioxide	500 mg/m^3	Periodic over minimum 30 minutes, maximum 8 hour period	17.46	BS EN 14791	16:10-17:40 19/3/20	3%
A2	Sulphur dioxide	500 mg/m^3	Monthly average	6.67	BS EN 14181	Continuous	
A2	Sulphur dioxide	500 mg/m^3	Daily average	15.8	BS EN 14791	Continuous	
A2	Hydrogen chloride	10 mg/m^3	Periodic over minimum 30 minutes, maximum 8 hour period	0.002	BS EN 1911	13:02-14:02 9/9/20	13%
A2	Arsenic, Cadmium, Mercury, Thallium and Selenium and their compounds expressed as As, Cd, Hg, Tl and Se	0.5 mg/m^3	Periodic over minimum 30 minutes, maximum 8 hour period	0.005	BS EN 14385	10:40-12:40 9/9/20	13%
A2	Antimony, Copper, Lead, Nickel, Tellurium, Tin and Zinc and their compounds expressed as Sb, Cu, Pb, Ni, Te, Sn and Zn	2 mg/m^3	Periodic over minimum 30 minutes, maximum 8 hour period	0.13	BS EN 14385	10:40-12:40 9/9/20	9%
A2	Dioxins and furans (ITEQ)	0.1 ng/m^3	Periodic over minimum 6 hours, maximum 8 hour period	0.0006	BS EN 1948 Parts 1, 2 and 3	10:25-16:25 8/9/20	17%
A2	Oxides of nitrogen	100 mg/m^3	Periodic over minimum 6 hours, maximum 8 hour period	36.24	BS EN 14792	16:10-17:40 19/3/20	2%
A2	Oxides of nitrogen	100 mg/m^3	Monthly average	35.6	BS EN 14181	Continuous	

Emission Point	Substance / Parameter	Emission Limit Value	Reference Period	Result [1]	Test Method [2]	Sample Date and Times [3]	Uncertainty [4]
A2	Oxides of nitrogen	200 mg/m^3	Daily average	45.04	BS EN 14181	Continuous	
A2	Carbon monoxide	1000 mg/m^3	Periodic over minimum 6 hours, maximum 8 hour period	457.26	BS EN 15058	13:-14:30 8/9/20	3%
A2	Carbon monoxide	1000 mg/m^3	Monthly average	727.14	BS EN 15267-3 and EN 14181	Continuous	
A2	Volatile organic compounds (as Carbon)	50 mg/m^3	Periodic over minimum 6 hours, maximum 8 hour period	47.06	BS EN 12619	16:55-17:55 19/3/20	3%
A2	Volatile organic compounds (as Carbon)	50 mg/m^3	Monthly average	22.06	BS EN 12619	Continuous	
A2	Volatile organic compounds (as Carbon)	100 mg/m^3	Daily average	38.11	BS EN 12619	Continuous	
A3	Dust	5 mg/m^3	Periodic over minimum 30 minutes, maximum 8 hour period	0.48	BS EN 13284-1	10:05-11:05 20/3/20	51%
A3	Dust	5 mg/m^3	Monthly average	0.08	BS EN 13284-1 and EN 14181	Continuous	
A3	Dust	10 mg/m^3	Daily average	0.99	BS EN 13284-1 and EN 14181	Continuous	
A3	Sulphur dioxide	500 mg/m^3	Periodic over minimum 30 minutes, maximum 8 hour period	8.79	BS EN 14791	12:45-14:15 9/9/20	3%
A3	Hydrogen chloride	10 mg/m^3	Periodic over minimum 30 minutes, maximum 8 hour period	0.02	BS EN 1911	15:15-16:15 8/9/20	13%

Emission Point	Substance / Parameter	Emission Limit Value	Reference Period	Result [1]	Test Method [2]	Sample Date and Times [3]	Uncertainty [4]
A3	Arsenic, Cadmium, Mercury, Thallium and Selenium and their compounds expressed as As, Cd, Hg, Tl and Se	0.5 mg/m^3	Periodic over minimum 30 minutes, maximum 8 hour period	0.03	BS EN 14385	11:40-13:40 19/3/20	13%
A3	Antimony, Copper, Lead, Nickel, Tellurium, Tin and Zinc and their compounds expressed as Sb, Cu, Pb, Ni, Te, Sn and Zn	2 mg/m^3	Periodic over minimum 30 minutes, maximum 8 hour period	0.015	BS EN 14385	11:40-13:40 19/3/20	9%
A3	Dioxins and furans (ITEQ)	0.1 ng/m^3	Periodic over minimum 6 hours, maximum 8 hour period	0.00018	BS EN 1948 Parts 1, 2 and 3	09:33-15:33 9/9/20	16%
A3	Oxides of nitrogen	100 mg/m^3	Periodic over minimum 30 minutes, maximum 8 hour period	2.79	BS EN 15267	12:45-14:15 9/9/20	3%
A3	Carbon monoxide	150 mg/m^3	Periodic over minimum 30 minutes, maximum 8 hour period	6.01	BS EN 15058	12:45-14:15 9/9/20	4%
A3	Volatile organic compounds (as Carbon)	50 mg/m^3	Periodic over minimum 30 minutes, maximum 8 hour period	25.84	BS EN 12619	13:20-14:20 9/9/20	4%
A4	Dust	5 mg/m^3	Periodic over minimum 30 minutes, maximum 8 hour period	0.67	BS EN 13284-1	12:30-13:30 7/9/20	47%
A4	Dust	5 mg/m^3	Monthly average	1.61	BS EN 13284-1 and EN 14181	Continuous	
A4	Dust	10 mg/m^3	Daily average	4.07	BS EN 13284-1 and EN 14181	Continuous	

Emission Point	Substance / Parameter	Emission Limit Value	Reference Period	Result [1]	Test Method [2]	Sample Date and Times [3]	Uncertainty [4]
A4	Arsenic, Cadmium, Mercury, Thallium and Selenium and their compounds expressed as As, Cd, Hg, Tl and Se	0.5 mg/m^3	Periodic over minimum 30 minutes, maximum 8 hour period	0.0011	BS EN 14385	10:26-12:26 18/3/20	6%
A4	Antimony, Copper, Lead, Nickel, Tellurium, Tin and Zinc and their compounds expressed as Sb, Cu, Pb, Ni, Te, Sn and Zn	2 mg/m^3	Periodic over minimum 30 minutes, maximum 8 hour period	0.08	BS EN 14385	10:26-12:26 18/3/20	10%
A5	Sulphur dioxide	50 mg/m^3	Periodic over minimum 30 minutes, maximum 8 hour period	27.66	BS EN 14791	23:20-00:50 18/3/20	13%
A5	Oxides of nitrogen	100 mg/m^3	Periodic over minimum 30 minutes, maximum 8 hour period	96.15	BS EN 15267	23:20-00:50 18/3/20	3%
A5	Carbon monoxide	150 mg/m^3	Periodic over minimum 30 minutes, maximum 8 hour period	13.20	BS EN 15058	12:20-13:50 10/9/20	3%
A5	Volatile organic compounds (as Carbon)	50 mg/m^3	Periodic over minimum 30 minutes, maximum 8 hour period	20.08	BS EN 12619	05:00-06:00 19/3/20	4%
A6	Lead and its compounds expressed as Pb	2 mg/m^3	Periodic over minimum 30 minutes, maximum 8 hour period	Not installed	BS EN 14385		
A6	Dust	5 mg/m^3	Periodic over minimum 30 minutes, maximum 8 hour period	Not installed	BS EN 13284-1		
A6	Sulphur dioxide	500 mg/m^3	Periodic over minimum 30 minutes, maximum 8 hour period	Not installed	BS EN 14791		

Emission Point	Substance / Parameter	Emission Limit Value	Reference Period	Result [1]	Test Method [2]	Sample Date and Times [3]	Uncertainty [4]
A6	Oxides of nitrogen	100 mg/m^3	Periodic over minimum 30 minutes, maximum 8 hour period	Not installed	BS EN 15267		
A7	Dust	No visible emission	N/A	No visible emission	N/A		
A8	Dust	No visible emission	N/A	No visible emission	N/A		
Ambient air monitor located at Garnlydan School at 316600, 212400	Particulate matter	N/A	Continuous	239.96µg/m^3	EN12341:2014		
Ambient air monitor located at Garnlydan School at 316600, 212400	Lead	N/A	Continuous	0.049 µg/m^3	EN12341:2014		

[1] The result given is the maximum value (or the minimum value in the case of a limit that is expressed as a minimum) obtained during the reporting period, expressed in the same terms as the emission limit value. Where the emission limit value is expressed as a range, the result is given as the 'minimum – maximum' measured values.
[2] Where an internationally recognised standard test method is used the reference number is given. Where another method that has been formally agreed with Natural Resources Wales is used, then the appropriate identifier is given. In other cases the principal technique is stated, for example gas chromatography.
[3] For non-continuous measurements the date and time of the sample that produced the result is given. For continuous measurements the percentage of the process operating time covered by the result is given.
[4] The uncertainty associated with the quoted result at the 95% confidence interval, unless otherwise stated.

Signed: S D Kelly Date: **31/01/2021**

(Authorised to sign as representative of Operator)