

Permit Number: EP3230BW

Operator: Envirowales Limited

Facility: Rassau Recycling Facility

Form Number: Air1 / 02/11/17

Reporting of emissions to air for the year 2021

Emission Point	Substance / Parameter	Emission		Result ^[1]	Test Method ^[2]	Sample Date and Times ^[3]	Uncertainty ^[4]
		Limit Value	Reference Period				
A1	Sulphuric acid mist	1 mg/m ³	Periodic over minimum 30 minutes, maximum 8 hour period	0.06	US EPA Method 8	15/12/2021 11:30-12:34	13%
A1	Dust	5 mg/m ³	Periodic over minimum 30 minutes, maximum 8 hour period	1.75	BS EN 13284-1	09/09/2021 11:30-12:33	23%
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	0.013	BS EN 14385	09/09/2021 08:55-10:58	9%
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	0.53	BS EN 14385	09/09/2021 08:55-10:58	12%
A2	Dust	4 mg/m ³	Periodic over minimum 30 minutes, maximum 8 hour period	0.58	BS EN 13284-1	08/09/2021 13:00-14:00	71%
A2	Sulphur dioxide	350 mg/m ³	Periodic over minimum 30 minutes, maximum 8 hour period	32.99	BS EN 14791	24/03/2021 12:45-14:15	3%

Emission Point	Substance / Parameter	Emission		Result ^[1]	Test Method ^[2]	Sample Date and Times ^[3]	Uncertainty ^[4]
		Limit Value	Reference Period				
A2	Hydrogen chloride	10 mg/m ³	Periodic over minimum 30 minutes, maximum 8 hour period	0.40	BS EN 1911	25/03/2021 11:00-12:00	13%
A2	Mercury and its compounds expressed as Hg	0.05 mg/m ³	Periodic over minimum 30 minutes, maximum 8 hour period	0.0031	BS EN 14385	08/09/2021 09:15-11:15	12%
A2	Lead and its compounds expressed as Pb	1 mg/m ³	Periodic over minimum 30 minutes, maximum 8 hour period	0.15	BS EN 14385	26/03/2021 11:45-13:45	12%
A2	Arsenic, Cadmium, Thallium and Selenium and their compounds expressed as As, Cd, Tl and Se	0.5 mg/m ³	Periodic over minimum 30 minutes, maximum 8 hour period	0.012	BS EN 14385	08/09/2021 09:15-11:15	9%
A2	Antimony, Copper, Nickel, Tellurium, Tin and Zinc and their compounds expressed as Sb, Cu, Ni, Te, Sn and Zn	2 mg/m ³	Periodic over minimum 30 minutes, maximum 8 hour period	0.050	BS EN 14385	26/03/2021 11:45-13:45	9%
A2	Dioxins and furans (ITEQ)	0.1 ng/m ³	Periodic over minimum 6 hours, maximum 8 hour period	0.0060ng/m ³	BS EN 1948 Parts 1, 2 and 3	07/09/2021 09:15-15:15	17%
A2	Oxides of nitrogen	100 mg/m ³	Periodic over minimum 6 hours, maximum 8 hour period	54.86	BS EN 14792	24/03/2021 12:45-14:15	4%
A2	Carbon monoxide	1000 mg/m ³	Periodic over minimum 6 hours, maximum 8 hour period	478.13	BS EN 15058	08/09/2021 12:20-13:50	2%
A2	Volatile organic compounds (as Carbon)	40 mg/m ³	Periodic over minimum 30 minutes, maximum 8 hour period	33.27	BS EN 12619	24/03/2021 13:55-14:55	2%

Emission Point	Substance / Parameter	Emission		Result ^[1]	Test Method ^[2]	Sample Date and Times ^[3]	Uncertainty ^[4]
		Limit Value	Reference Period				
A3	Dust	4 mg/m ³	Periodic over minimum 30 minutes, maximum 8 hour period	0.45	BS EN 13284-1	07/09/2021 13:40-14:40	85%
A3	Sulphur dioxide	500 mg/m ³	Periodic over minimum 30 minutes, maximum 8 hour period	6.87	BS EN 14791	25/03/2021 12:30-14:00	3%
A3	Hydrogen chloride	10 mg/m ³	Periodic over minimum 30 minutes, maximum 8 hour period	0.05	BS EN 1911	24/03/2021 12:00-13:00	13%
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	0.013	BS EN 14385	07/09/2021 11:00-13:00	9%
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	0.11	BS EN 14385	07/09/2021 11:00-13:00	10
A3	Dioxins and furans (ITEQ)	0.1 ng/m ³	Periodic over minimum 6 hours, maximum 8 hour period	0.0072ng/m ³	BS EN 1948 Parts 1, 2 and 3	08/09/2021 09:15-15:15	15%
A3	Oxides of nitrogen	100 mg/m ³	Periodic over minimum 30 minutes, maximum 8 hour period	1.00	BS EN 15267	07/09/2021 12:20-13:50	2%
A3	Carbon monoxide	1000 mg/m ³	Periodic over minimum 30 minutes, maximum 8 hour period	9.03	BS EN 15058	07/09/2021 12:20-13:50	3%
A3	Volatile organic compounds (as Carbon)	40 mg/m ³	Periodic over minimum 30 minutes, maximum 8 hour period	22.69	BS EN 12619	07/09/2021 12:20-13:20	2%

Emission Point	Substance / Parameter	Emission		Result ^[1]	Test Method ^[2]	Sample Date and Times ^[3]	Uncertainty ^[4]
		Limit Value	Reference Period				
A4	Dust	4 mg/m ³	Periodic over minimum 30 minutes, maximum 8 hour period	1.13	BS EN 13284-1	06/09/2021 13:45-14:45	32%
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	0.011	BS EN 14385	06/09/2021 11:00-13:00	9%
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	0.26	BS EN 14385	06/09/2021 11:00-13:00	11%
A5	Sulphur dioxide	50 mg/m ³	Periodic over minimum 30 minutes, maximum 8 hour period	11.60	BS EN 14791	29/03/2021 15:15-13:45	3%
A5	Oxides of nitrogen	100 mg/m ³	Periodic over minimum 30 minutes, maximum 8 hour period	97.96	BS EN 15267	06/09/2021 13:40-14:40	3%
A5	Carbon monoxide	150 mg/m ³	Periodic over minimum 30 minutes, maximum 8 hour period	15.55	BS EN 15058	06/09/2021 13:40-14:40	3%
A5	Volatile organic compounds (as Carbon)	50 mg/m ³	Periodic over minimum 30 minutes, maximum 8 hour period	48.98	BS EN 12619	06/09/2021 13:10-14:40	2%
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		

Emission Point	Substance / Parameter	Emission		Result ^[1]	Test Method ^[2]	Sample Date and Times ^[3]	Uncertainty ^[4]
		Limit Value	Reference Period				
A6	Sulphur dioxide	500 mg/m ³	Periodic over minimum 30 minutes, maximum 8 hour period	Not installed	BS EN 14791		
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	338µg/m ³	EN12341:2014		
Ambient air monitor located at Garnlydan School at 316600, 212400	Lead	N/A	Continuous	0.051µg/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. B. Kelly

Date: **18/01/2022**

(Authorised to sign as representative of Operator)