

Permit Number: EPR/BW9999IG

Operator: Kronospan Limited

Facility: Chirk Particleboard Factory

Form Number: Air1 / 15/09/2023

Reporting of emissions to air for the period from 01/01/2024 to 31/12/2024

Emission Point	Substance / Parameter		Emission Limit Value		Reference Period	Result ^[1]	Test Method ^[2]	Sample Date and Times ^[3]	Uncertainty ^[4]
A1	No testing this quarter								
A5	No testing this quarter								
A6	No testing this quarter								
A16	Oxides of nitrogen (NO and NO ₂ expressed as NO ₂)	200 mgN/m ³	Periodic (average value of three consecutive measurements of at least 30 minutes each)	185.0	BS EN 14792	06/11/2024 11:00 - 11:30 11:30 - 12:00 12:00 - 12:30	10.10		
	Carbon Monoxide	No Limit set		208.0	BS EN 15058	06/11/2024 11:00 - 11:30 11:30 - 12:00 12:00 - 12:30	11.40		
A17	No testing this quarter								
A18	Oxides of nitrogen (NO and NO ₂ expressed as NO ₂)	390 mgN/m ³	Periodic (average value of three consecutive measurements of at least 30 minutes each)	159.0	BS EN 14792	07/11/2024 13:30 - 14:00 14:00 - 14:30 14:30 - 15:00	6.70		
	Carbon Monoxide	No Limit set		1.7	BS EN 15058	07/11/2024 13:30 - 14:00 14:00 - 14:30 14:30 - 15:00	0.08		
A19	Oxides of nitrogen (NO and NO ₂ expressed as NO ₂)	390 mgN/m ³	Periodic (average value of three consecutive measurements of at least 30 minutes each)	187.7	BS EN 14792	01/11/2024 10:10 - 10:40 10:40 - 11:10 11:10 - 11:40	21.90		
	Carbon Monoxide	No Limit set		8.8	BS EN 15058	01/11/2024 10:10 - 10:40 10:40 - 11:10 11:10 - 11:40	1.00		
A20	No testing this quarter								
A21	Oxides of nitrogen (NO and NO ₂ expressed as NO ₂)	280 mgN/m ³	Periodic (average value of three consecutive measurements of at least 30 minutes each)	250.0	BS EN 14792	22/11/2024 11:40 - 12:10 11:10 - 11:40 10:40 - 11:10	15.20		

Emission Point	Emission		Reference Period	Result [1]	Test Method [2]	Sample Date and Times [3]	Uncertainty [4]
	Substance / Parameter	Limit Value					
A22	Carbon Monoxide	No Limit set		319.7	BS EN 15058	22/11/2024 11:40 - 12:10 11:10 - 11:40 10:40 - 11:10	19.70
	Oxides of nitrogen (NO and NO ₂ expressed as NO ₂)	280 mgN/m ³	Periodic (average value of three consecutive measurements of at least 30 minutes each)	218.0	BS EN 14792	22/11/2024 12:25 - 12:55 12:55 - 13:25 13:25 - 13:55	13.70
	Carbon Monoxide	No Limit set		468.0	BS EN 15058	22/11/2024 12:25 - 12:55 12:55 - 13:25 13:25 - 13:55	29.70
A23	Oxides of nitrogen (NO and NO ₂ expressed as NO ₂)	280 mg/Nm ³	Periodic (average value of three consecutive measurements of at least 30 minutes each)	251.0	BS EN 14792	29/10/2024 13:25 - 13:55 13:55 - 14:25 14:25 - 14:55	21.40
	Carbon Monoxide	No Limit set		942.7	BS EN 15058	29/10/2024 13:25 - 13:55 13:55 - 14:25 14:25 - 14:55	78.50
	Not Installed						
A24							
A25							
A26	Oxides of nitrogen (NO and NO ₂ expressed as NO ₂)	250 mg/Nm ³		703.3	BS EN 14792	28/10/2024 11:08 - 11:38 11:42 - 12:12 12:17 - 12:47	53.90
	Carbon Monoxide	150 mg/Nm ³	Periodic (average value of three consecutive measurements of at least 30 minutes each)	11.0	BS EN 15058	28/10/2024 11:08 - 11:38 11:42 - 12:12 12:17 - 12:47	0.85
	Particulate Matter	50 mg/Nm ³		4.4	BS EN 13284-1	28/10/2024 11:08 - 11:38 11:42 - 12:12 12:17 - 12:47	2.20
	Sulphur Dioxide	200 mg/Nm ³		36.2	BS EN 14791	28/10/2024 11:08 - 11:38 11:42 - 12:12 12:17 - 12:47	3.90
	Hydrogen Fluoride	3 mg/Nm ³	Periodic over minimum 1-hour period	< 0.066	CEN TS 17340	01/11/2024 11:34 - 12:36	0.009
A27	Cadmium & thallium and their compounds (total)	0.05 mg/Nm ³	Periodic over minimum 30-minute, maximum 8 hour period	< 0.0045	BS EN 14385	01/11/2024 09:40 - 10:30	0.00082
	Mercury and its compounds	0.5 mg/Nm ³	Periodic over minimum 30-minute, maximum 8 hour period	0.0280	BS EN 13211	01/11/2024 10:41 - 11:31	0.0053
	Heavy Metals (Antimony, Arsenic, Lead, Chromium, Cobalt, Copper, Manganese, Nickel & Vanadium and their compounds (total))	0.5 mg/Nm ³	Periodic over minimum 30-minute, maximum 8 hour period	0.32	BS EN 14385	01/11/2024 09:40 - 10:30	0.067

Emission Point	Emission		Reference Period	Result ^[1]	Test Method ^[2]	Sample Date and Times ^[3]	Uncertainty ^[4]
	Substance / Parameter	Limit Value					
A28	Dioxins and Furans (I-TEQ)	0.1 ng/Nm ³	Periodic over minimum 6 hours, maximum 8 hour period	0.020	BS EN 1948 Parts 1, 2 and 3	05/11/2024 09:26 - 15:26	0.0036
	Particulate Matter	15 mg/Nm ³	Average value of three consecutive measurements of at least 30 minutes each	4.5	BS EN 13284-1	30/10/2024 11:03 - 11:40 11:47 - 12:24 12:31 - 13:08	0.8
	Total Volatile Organic Compounds	30 mg/Nm ³	Average value of three consecutive measurements of at least 30 minutes each	6.2	BS EN 12619	30/10/2024 11:03 - 11:33 11:47 - 12:17 12:31 - 13:01	0.4
	Formaldehyde	5 mg/Nm ³	Average value of three consecutive measurements of at least 30 minutes each	0.75	CEN / TS 17638:2021	30/10/2024 11:03 - 11:40 11:47 - 12:24 12:31 - 13:08	0.15
	Particulate Matter	20 mg/Nm ³	Average value of three consecutive measurements of at least 30 minutes each	2.7	BS EN 13284-1	05/11/2024 11:15 - 11:46 15:03 - 15:34 15:45 - 16:16	0.69
A29 Cyclone 3	Total Volatile Organic Compounds	120 mg/Nm ³	Average value of three consecutive measurements of at least 30 minutes each	67.4	BS EN 12619	05/11/2024 11:15 - 11:46 15:03 - 15:34 15:45 - 16:16	4.50
	Formaldehyde	15 mg/Nm ³	Average value of three consecutive measurements of at least 30 minutes each	12.5	CEN / TS 17638:2021	05/11/2024 11:15 - 11:46 15:03 - 15:34 15:45 - 16:16	2.50
	Oxides of nitrogen (NO & NO ₂ expressed as NO ₂)	100 mg/Nm ³	Average value of three consecutive measurements of at least 30 minutes each	40.8	BS EN 14792	05/11/2024 11:15 - 11:45 11:45 - 12:15 12:15 - 12:45	1.20
	Carbon Monoxide	200 mg/Nm ³	Average value of three consecutive measurements of at least 30 minutes each	27.7	BS EN 15058	05/11/2024 11:15 - 11:45 11:45 - 12:15 12:15 - 12:45	0.90
	Hydrogen chloride	30 mg/Nm ³	Average value of three consecutive measurements of at least 30 minutes each	1.8	BS EN 1911	05/11/2024 11:15 - 11:46 15:03 - 15:34 15:45 - 16:16	0.16
	Hydrogen fluoride	1 mg/Nm ³	Average value of three consecutive measurements of at least 30 minutes each	< 0.041	CEN TS 17340	05/11/2024 11:15 - 11:46 15:03 - 15:34 15:45 - 16:16	0.0043
	Mercury	No limit Set	Average value of three consecutive measurements of at least 30 minutes each	0.00043	EN 13211	05/03/2025 13:44 - 14:15 14:48 - 15:19 04/03/2025 13:11 - 13:42	0.000066
	Metals (Antimony, Arsenic, Cadmium, Cobalt, Chromium, Copper, Manganese, Nickel, Lead, Thallium & Vanadium)	No limit Set	Average value of three consecutive measurements of at least 30 minutes each	0.023	EN 14385	04/03/2025 11:29 - 12:00 12:03 - 12:34 12:37 - 13:08	0.0045

Emission Point	Emission		Reference Period	Result [1]	Test Method [2]	Sample Date and Times [3]	Uncertainty [4]
	Substance / Parameter	Limit Value					
A30	Polychlorinated dibenzo-dioxins and -furans	No limit Set	Average value of three consecutive measurements of at least 30 minutes each	0.011	EN 1948 parts 1, 2 and 3	04/03/2025 09:46 - 10:17 10:20 - 10:51 10:54 - 11:25	0.0016
	Ammonia	No limit Set	Average value of three consecutive measurements of at least 30 minutes each	7.5	EN ISO 21877	04/03/2025 10:54 - 11:24 11:28 - 11:58 12:03 - 12:33	0.66
	Particulate Matter	20 mg/Nm ³	Average value of three consecutive measurements of at least 30 minutes each				
	Total Volatile Organic Compounds	120 mg/Nm ³	Average value of three consecutive measurements of at least 30 minutes each				
	Formaldehyde	15 mg/Nm ³	Average value of three consecutive measurements of at least 30 minutes each				
	Carbon Monoxide	200 mg/m ³	Average value of three consecutive measurements of at least 30 minutes each				
	Oxides of nitrogen (NO & NO ₂ expressed as NO ₂)	100 mg/Nm ³	Average value of three consecutive measurements of at least 30 minutes each				
	Hydrogen Chloride	No limit set	Average value of three consecutive measurements of at least 30 minutes each				
	Hydrogen Fluoride	No limit set	Average value of three consecutive measurements of at least 30 minutes each				
	Mercury	No limit set	Average value of three consecutive measurements of at least 30 minutes each				
	Metals (Antimony, Arsenic, Cadmium, Cobalt, Chromium, Copper, Manganese, Nickel, Lead, Thallium & Vanadium)	No limit set	Average value of three consecutive measurements of at least 30 minutes each				
	Polychlorinated dibenzo-dioxins and -furans	No limit set	Average value of three consecutive measurements of at least 30 minutes each				
	No quarterly testing.						

Emission Point		Emission		Reference Period	Result ^[1]	Test Method ^[2]	Sample Date and Times ^[3]	Uncertainty ^[4]
Substance / Parameter		Limit Value						
	Mercury	No limit set	Average value of three consecutive measurements of at least 30 minutes each					
A31	Particulate Matter	Not in use during this quarter						
	Total Volatile Organic Compounds							
	Formaldehyde							
	Particulate Matter	20 mg/Nm ³	Average value of three consecutive measurements of at least 30 minutes each	0.12	BS EN 13284-1	31/10/2024 11:06 - 12:07 12:14 - 13:15 13:22 - 14:23	0.46	
	Total Volatile Organic Compounds	200 mg/Nm ³	Average value of three consecutive measurements of at least 30 minutes each	184.3	BS EN 12619	31/10/2024 11:06 - 11:36 11:36 - 12:06 12:06 - 12:36	30.60	
	Formaldehyde	10 mg/Nm ³	Average value of three consecutive measurements of at least 30 minutes each	10.5*	CEN / TS 17638:2021	31/10/2024 11:06 - 12:07 12:14 - 13:15 13:22 - 14:23	2.70	
	Oxides of nitrogen (NO & NO ₂ expressed as NO ₂)	200 mg/Nm ³	Average value of three consecutive measurements of at least 30 minutes each	114.0	BS EN 15058	31/10/2024 11:06 - 11:36 11:36 - 12:06 12:06 - 12:36	17.400	
A32	Carbon Monoxide	No limit set	Average value of three consecutive measurements of at least 30 minutes each	78.2	BS EN 14792	31/10/2024 11:06 - 11:36 11:36 - 12:06 12:06 - 12:36	12.700	
	Hydrogen Chloride	No limit set	Average value of three consecutive measurements of at least 30 minutes each	0.131	BS EN 1911	31/10/2024 11:06 - 12:07 12:14 - 13:15 13:22 - 14:23	0.0330	
	Hydrogen Fluoride	No limit set	Average value of three consecutive measurements of at least 30 minutes each	0.057	CEN TS 17340	31/10/2024 11:06 - 12:07 12:14 - 13:15 13:22 - 14:23	0.013	
	Mercury (3)	No limit set	Average value of three consecutive measurements of at least 30 minutes each					
	Metals (Antimony, Arsenic, Cobalt, Chromium, Copper, Manganese, Nickel, Lead & Vanadium) (3)	No limit set	Average value of three consecutive measurements of at least 30 minutes each					
Annual testing not carried out this quarter								

Emission Point		Substance / Parameter		Emission Limit Value		Reference Period		Result ^[1]	Test Method ^[2]	Sample Date and Times ^[3]	Uncertainty ^[4]
		Cadmium & thallium and their compounds (total)	No limit set	Average value of three consecutive measurements of at least 30 minutes each							
		Polychlorinated dibenzo-dioxins and -furans (3)	No limit set	Average value of three consecutive measurements of at least 30 minutes each							
B01 - B31		Particulate Matter	5 mg/Nm ³ to be determined following outcome of IC49	Average value of three consecutive measurements of at least 30 minutes each					BS EN 13284-1		

[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.

*A32 formaldehyde result: recovered wood usage during testing period was 94% therefore the ELV that applies is 15mg/Nm³.

Signed  Date 01/05/25
 (Authorised to sign as representative of Operator)