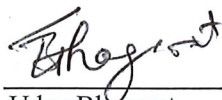


Air Monitoring Data Report

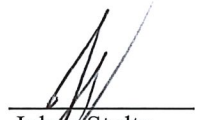
14-Jul-21

The attached report contains the air monitoring data for all the licenced air monitoring points as required by the Environment Protection Licence 10232, for June 2021 as part of the reporting period July 2020 - June 2021.

Authorised by:



Uday Bhagwat
Pulp Mill Manager



Johan Stoltz
General Manager

Latest Publication Date: 14-Jul-21

Monitoring Location No: 1

Environment Protection Licence: 10232

Description: Exit point from Stack 1 to atmosphere

Reporting Period: July 2020 to June 2021

Monitoring Type: Continuous

Sample Type: Air

Month	Date of publication	Pollutant	Unit of measure	Concentration Limit	Data collected (%)	Lowest value	Highest value	Mean	Compliance (Yes/No)	Comment
July	14-Aug	Flow	Nm3/s	100	100.00	70.84	88.02	81.94	Y	
		Hydrogen chloride	mg/m3	50	100.00	0.00	20.98	1.01	Y	
		Moisture	%	N/A	100.00	0.00	26.00	22.71	N/A	
		Nitrogen Oxides (as NO2)	mg/m3	400	100.00	67.27	241.56	197.76	Y	
		Opacity	%	20	99.58	1.18	60.87	5.95	N	Precipitator trip
		Oxygen (O2)	%	N/A	100.00	1.89	6.63	3.15	N/A	
		Sulphur dioxide (SO2)	mg/m3	250	100.00	10.30	222.66	24.48	Y	
		Temperature	°C	N/A	100.00	141.15	236.53	184.92	N/A	
August	14-Sep	TRS (as H2S)	mg/m3	3.6	100.00	0.58	0.87	0.70	Y	
		Flow	Nm3/s	100	100.00	55.97	89.85	82.33	Y	
		Hydrogen chloride	mg/m3	50	100.00	0.00	46.43	1.85	Y	
		Moisture	%	N/A	100.00	0.00	26.11	22.76	N/A	
		Nitrogen Oxides (as NO2)	mg/m3	400	100.00	1.18	365.94	193.87	Y	
		Opacity	%	20	99.66	0.84	90.12	4.50	N	Precipitator trip
		Oxygen (O2)	%	N/A	100.00	1.11	8.19	3.19	N/A	
		The attached report contains	mg/m3	250	100.00	0.68	102.06	23.72	Y	
September	14-Oct	Temperature	°C	N/A	100.00	137.25	250.54	184.78	N/A	
		TRS (as H2S)	mg/m3	3.6	100.00	0.58	0.85	0.71	Y	
		Flow	Nm3/s	100	100.00	68.32	90.93	80.90	Y	
		Hydrogen chloride	mg/m3	50	100.00	0.00	16.59	1.08	Y	
		Moisture	%	N/A	100.00	0.00	26.23	22.65	N/A	
		Nitrogen Oxides (as NO2)	mg/m3	400	100.00	46.41	310.96	196.35	Y	
		Opacity	%	20	99.67	0.91	58.90	4.13	N	Precipitator trip
		Oxygen (O2)	%	N/A	100.00	1.99	6.93	3.31	N/A	
October	14-Nov	Sulphur dioxide (SO2)	mg/m3	250	100.00	2.39	107.64	22.96	Y	
		Temperature	°C	N/A	100.00	138.93	219.61	184.92	N/A	
		TRS (as H2S)	mg/m3	3.6	100.00	0.57	0.90	0.70	Y	
		Flow	Nm3/s	100	100.00	0.51	90.67	61.13	Y	
		Hydrogen chloride	mg/m3	50	99.60	0.00	48.11	3.44	Y	
		Moisture	%	N/A	100.00	0.00	26.79	17.57	N/A	
		Nitrogen Oxides (as NO2)	mg/m3	400	100.00	0.00	219.17	154.06	Y	
		Opacity	%	20	95.95	0.00	19.95	5.27	Y	
November	14-Dec	Oxygen (O2)	%	N/A	100.00	2.24	20.77	7.64	N/A	
		Sulphur dioxide (SO2)	mg/m3	250	99.87	0.44	287.37	39.40	Y	Planned shutdown
		Temperature	°C	N/A	100.00	3.90	236.45	149.78	N/A	
		TRS (as H2S)	mg/m3	3.6	100.00	0.32	1.32	0.91	Y	
		Flow	Nm3/s	100	100.00	72.03	90.72	80.63	Y	
		Hydrogen chloride	mg/m3	50	100.00	0.00	30.33	3.15	Y	
		Moisture	%	N/A	100.00	0.00	26.43	22.90	N/A	
		Nitrogen Oxides (as NO2)	mg/m3	400	99.44	43.61	334.36	194.01	Y	
December	14-Jan	Opacity	%	20	99.56	1.81	47.81	8.01	N	Lime Kiln tripped
		Oxygen (O2)	%	N/A	100.00	2.27	4.88	3.44	N/A	
		Sulphur dioxide (SO2)	mg/m3	250	100.00	0.58	174.74	23.46	Y	
		Temperature	°C	N/A	100.00	128.67	242.27	187.20	N/A	
		TRS (as H2S)	mg/m3	3.6	100.00	0.83	1.08	0.92	Y	
		Flow	Nm3/s	100	100.00	59.35	88.99	80.58	Y	
		Hydrogen chloride	mg/m3	50	100.00	0.00	12.91	1.92	Y	
		Moisture	%	N/A	100.00	0.00	26.73	22.87	N/A	
January	14-Feb	Nitrogen Oxides (as NO2)	mg/m3	400	100.00	114.23	272.47	201.72	Y	
		Opacity	%	20	99.73	1.13	76.19	5.54	N	Lime Kiln tripped
		Oxygen (O2)	%	N/A	100.00	2.35	7.29	3.44	N/A	
		Sulphur dioxide (SO2)	mg/m3	250	100.00	1.17	340.63	20.08	Y	Planned shutdown
		Temperature	°C	N/A	100.00	139.70	227.80	187.91	N/A	
		TRS (as H2S)	mg/m3	3.6	100.00	0.82	1.16	0.94	Y	
		Flow	Nm3/s	100	100.00	69.68	90.38	80.40	Y	
		Hydrogen chloride	mg/m3	50	100.00	0.00	7.61	0.50	Y	
February	14-Mar	Moisture	%	N/A	100.00	0.00	27.24	23.19	N/A	
		Nitrogen Oxides (as NO2)	mg/m3	400	100.00	138.60	251.47	196.31	Y	
		Opacity	%	20	99.68	0.38	90.20	4.74	N	Lime Kiln tripped
		Oxygen (O2)	%	N/A	100.00	2.15	5.17	3.35	N/A	
		Sulphur dioxide (SO2)	mg/m3	250	100.00	2.98	205.97	23.39	Y	
		Temperature	°C	N/A	100.00	127.99	242.96	187.67	N/A	
		TRS (as H2S)	mg/m3	3.6	100.00	0.81	1.13	0.91	Y	
		Flow	Nm3/s	100	100.00	26.36	94.32	80.81	Y	
March	14-Apr	Hydrogen chloride	mg/m3	50	100.00	0.00	11.64	1.29	Y	
		Moisture	%	N/A	100.00	0.00	27.74	23.12	N/A	
		Nitrogen Oxides (as NO2)	mg/m3	400	100.00	36.10	260.86	185.37	Y	
		Opacity	%	20	99.67	0.42	65.03	4.86	N	Lime Kiln tripped
		Oxygen (O2)	%	N/A	100.00	1.99	9.36	3.42	N/A	
		Sulphur dioxide (SO2)	mg/m3	250	100.00	1.10	272.27	33.66	N	SOG/NCG gases diverted
		Temperature	°C	N/A	100.00	148.27	235.92	189.07	N/A	
		TRS (as H2S)	mg/m3	3.6	100.00	0.29	1.13	0.94	Y	
		Flow	Nm3/s	100	99.87	54.39	92.24	80.02	Y	
		Hydrogen chloride	mg/m3	50	100.00	0.00	25.16	3.71	Y	
		Moisture	%	N/A	100.00	0.00	26.49	22.33	N/A	
		Nitrogen Oxides (as NO2)	mg/m3	400	100.00	93.84	264.30	180.93	Y	
		Opacity	%	20	99.65	1.67	60.88	5.96	N	Recovery boiler tripped
		Oxygen (O2)	%	N/A	100.00	0.09	21.05	3.78	N/A	
		Sulphur dioxide (SO2)	mg/m3	250	99.73	0.51	256.52	19.80	N	Burner 3 igniter failure
		Temperature	°C	N/A	100.00	106.02	245.48	187.54	N/A	

Latest Publication Date: 14-Jul-21

Monitoring Location No: 1

Environment Protection Licence: 10232

Description: Exit point from Stack 1 to atmosphere

Reporting Period: July 2020 to June 2021

Monitoring Type: Continuous

Sample Type: Air

Month	Date of publication	Pollutant	Unit of measure	Concentration Limit	Data collected			Mean	Compliance (Yes/No)	Comment
					(%)	Lowest value	Highest value			
April	14-May	TRS (as H2S)	mg/m3	3.6	100.00	0.79	1.21	0.90	Y	
		Flow	Nm3/s	100	100.00	59.78	89.99	81.00	Y	
		Hydrogen chloride	mg/m3	50	100.00	0.00	14.70	2.36	Y	
		Moisture	%	N/A	100.00	0.00	26.23	22.57	N/A	
		Nitrogen Oxides (as NO2)	mg/m3	400	100.00	122.06	264.47	195.21	Y	
		Opacity	%	20	99.68	1.45	90.15	6.25	N	Operational issues
		Oxygen (O2)	%	N/A	100.00	2.10	9.20	3.59	N/A	
		Sulphur dioxide (SO2)	mg/m3	250	100.00	0.58	342.87	17.53	Y	Shutdown/maintenance
		Temperature	°C	N/A	100.00	97.44	237.98	188.03	N/A	
May	14-Jun	TRS (as H2S)	mg/m3	3.6	100.00	0.77	1.10	0.87	Y	
		Flow	Nm3/s	100	100.00	10.99	91.71	83.92	Y	
		Hydrogen chloride	mg/m3	50	100.00	0.00	23.28	0.82	Y	
		Moisture	%	N/A	100.00	0.00	27.01	23.39	N/A	
		Nitrogen Oxides (as NO2)	mg/m3	400	98.66	3.40	274.32	199.42	Y	
		Opacity	%	20	99.68	0.14	89.64	6.33	N	Operational issues
		Oxygen (O2)	%	N/A	100.00	1.81	8.95	3.30	N/A	
		Sulphur dioxide (SO2)	mg/m3	250	100.00	0.44	324.27	17.20	Y	Maintenance
		Temperature	°C	N/A	100.00	127.91	239.44	188.31	N/A	
June	14-Jul	TRS (as H2S)	mg/m3	3.6	100.00	0.58	2.12	0.73	Y	
		Flow	Nm3/s	100	100.00	50.25	92.89	86.08	Y	
		Hydrogen chloride	mg/m3	50	100.00	0.00	11.52	0.58	Y	
		Moisture	%	N/A	100.00	0.00	27.60	23.58	N/A	
		Nitrogen Oxides (as NO2)	mg/m3	400	100.00	63.93	248.06	201.36	Y	
		Opacity	%	20	99.65	1.90	90.09	6.58	N	Operational issues
		Oxygen (O2)	%	N/A	100.00	2.06	9.39	3.37	N/A	
		Sulphur dioxide (SO2)	mg/m3	250	100.00	1.35	350.88	19.56	Y	Maintenance
		Temperature	°C	N/A	100.00	133.88	233.39	187.99	N/A	
		TRS (as H2S)	mg/m3	3.6	100.00	0.57	0.93	0.69	Y	

Latest Publication Date: 14-Jul-21

Monitoring Location No: 1

Environment Protection Licence: 10232

Description: Exit point from Stack 1 to Atmosphere

Reporting Period: July 2020 to June 2021

Monitoring Type: Grab Sample

Sample Type: Air

Pollutant	Unit of measure	Concentration	Sampling Freq	Date of Sample	Date of Report	Report No.	Data	Compliance (Yes/No)	Comment
		Limit							
Chlorine	mg/m3	100	Annual	9-Dec-20	22-Feb-21	R010036	<0.01	Yes	
Sulfuric acid mist & sulfur trioxide (as SO ₃)	mg/m3	20	Annual	9-Dec-20	22-Feb-21	R010036	0.56	Yes	
TCDD (equivalent)	ng/m3	0.1	Annual	9-Dec-20	22-Feb-21	R010036	0.0062	Yes	
Total Solid Particles	mg/m3	50	1st Qrt	25-Aug-20	20-Nov-20	R009720	64	No	
Total Solid Particles	mg/m3	50	2nd Qrt	8-Dec-20	22-Feb-21	R010036	59	No	
Total Solid Particles	mg/m3	50	3rd Qrt	12-Apr-21	21-Apr-21	R010544	84	No	
Total Solid Particles	mg/m3	50	4th Qrt	27-May-21	25-Jun-21	R010928	86	No	
Type 1 and 2 substances	mg/m3	1	Annual	9-Dec-20	22-Feb-21	R010036	<0.038	Yes	

ND- No Data

N/A- Not Applicable

Latest Publication Date:		14-Jul-21		Environment Protection Licence:		10232					
Monitoring Location No:		2		Reporting Period:		July 2020 to June 2021					
Description:		Discharge duct downstream of Recovery Boiler A prior to junction with Stack 1									
Monitoring Type:		Continuous		Sample Type:		Air					
						Data					
Month	Date of publication	Pollutant	Unit of measure	Reporting	Level	collected (%)	Lowest value	Highest value	Mean	Compliance (Yes/No)	Comment
July	14-Aug	Carbon monoxide (CO)	mg/m3	N/A		100.00	1.04	700.15	67.49	N/A	
		Flow	Nm3/s	N/A		100.00	0.03	99.33	30.31	N/A	
		Moisture	%	N/A		100.00	0.00	29.98	21.41	N/A	
		Nitrogen Oxides (as NO2)	mg/m3	250		100.00	27.73	121.20	89.96	Y	
		Opacity	%	N/A		100.00	0.78	38.19	2.90	N/A	
		Oxygen (O2)	%	N/A		100.00	1.88	10.02	3.12	N/A	
		Temperature	°C	N/A		100.00	165.01	181.95	174.65	N/A	
August	14-Sep	Carbon monoxide (CO)	mg/m3	N/A		100.00	2.65	415.12	52.13	N/A	
		Flow	Nm3/s	N/A		100.00	0.03	98.71	29.55	N/A	
		Moisture	%	N/A		100.00	0.00	28.81	20.52	N/A	
		Nitrogen Oxides (as NO2)	mg/m3	250		100.00	12.74	123.69	87.33	Y	
		Opacity	%	N/A		100.00	0.85	57.38	2.20	N/A	
		Oxygen (O2)	%	N/A		100.00	1.83	5.27	3.26	N/A	
		Temperature	°C	N/A		100.00	169.75	182.63	173.98	N/A	
September	14-Oct	Carbon monoxide (CO)	mg/m3	N/A		100.00	6.69	762.45	71.99	N/A	
		The attached report contains the air n	Nm3/s	N/A		100.00	0.03	99.37	29.48	N/A	
		Moisture	%	N/A		100.00	0.00	28.90	22.53	N/A	
		Nitrogen Oxides (as NO2)	mg/m3	250		100.00	17.44	127.85	79.57	Y	
		Opacity	%	N/A		100.00	0.34	22.63	1.73	N/A	
		Oxygen (O2)	%	N/A		100.00	2.17	5.53	3.31	N/A	
		Temperature	°C	N/A		100.00	169.70	178.97	173.98	N/A	
October	14-Nov	Carbon monoxide (CO)	mg/m3	N/A		100.00	0.70	942.02	110.14	N/A	
		Flow	Nm3/s	N/A		100.00	0.00	112.54	21.64	N/A	
		Moisture	%	N/A		100.00	0.00	30.17	16.88	N/A	
		Nitrogen Oxides (as NO2)	mg/m3	250		100.00	0.00	119.17	51.94	Y	
		Opacity	%	N/A		100.00	0.00	64.74	4.09	N/A	
		Oxygen (O2)	%	N/A		100.00	2.14	19.26	8.42	N/A	
		Temperature	°C	N/A		100.00	14.45	186.03	147.18	N/A	
November	14-Dec	Carbon monoxide (CO)	mg/m3	N/A		100.00	14.08	1185.49	126.50	N/A	
		Flow	Nm3/s	N/A		100.00	0.03	97.78	33.32	N/A	
		Moisture	%	N/A		100.00	0.00	30.60	25.04	N/A	
		Nitrogen Oxides (as NO2)	mg/m3	250		100.00	0.73	182.15	83.27	Y	
		Opacity	%	N/A		100.00	1.16	46.28	5.46	N/A	
		Oxygen (O2)	%	N/A		100.00	1.97	6.27	3.42	N/A	
		Temperature	°C	N/A		100.00	168.57	178.74	173.46	N/A	
December	14-Jan	Carbon monoxide (CO)	mg/m3	N/A		100.00	7.29	832.73	92.18	N/A	
		Flow	Nm3/s	N/A		100.00	0.03	98.56	32.13	N/A	
		Moisture	%	N/A		100.00	0.00	29.55	24.12	N/A	
		Nitrogen Oxides (as NO2)	mg/m3	250		100.00	17.79	127.76	91.10	Y	
		Opacity	%	N/A		100.00	0.01	65.51	4.24	N/A	
		Oxygen (O2)	%	N/A		100.00	1.99	12.27	3.43	N/A	
		Temperature	°C	N/A		100.00	121.32	178.57	171.90	N/A	
January	14-Feb	Carbon monoxide (CO)	mg/m3	N/A		100.00	0.70	816.46	89.57	N/A	
		Flow	Nm3/s	N/A		100.00	0.03	99.98	31.85	N/A	
		Moisture	%	N/A		100.00	0.00	29.88	24.84	N/A	
		Nitrogen Oxides (as NO2)	mg/m3	250		100.00	0.34	125.27	85.37	Y	
		Opacity	%	N/A		100.00	0.59	67.41	3.26	N/A	
		Oxygen (O2)	%	N/A		100.00	1.37	6.56	3.30	N/A	
		Temperature	°C	N/A		100.00	149.40	178.97	171.35	N/A	
February	14-Mar	Carbon monoxide (CO)	mg/m3	N/A		100.00	4.04	923.63	105.98	N/A	
		Flow	Nm3/s	N/A		100.00	0.03	98.73	30.97	N/A	
		Moisture	%	N/A		100.00	0.00	32.99	25.08	N/A	
		Nitrogen Oxides (as NO2)	mg/m3	250		100.00	10.72	160.33	85.04	Y	
		Opacity	%	N/A		100.00	0.00	74.85	3.75	N/A	
		Oxygen (O2)	%	N/A		100.00	1.45	14.13	3.31	N/A	
		Temperature	°C	N/A		100.00	162.69	180.44	171.69	N/A	
March	14-Apr	Carbon monoxide (CO)	mg/m3	N/A		100.00	0.70	1894.90	116.77	N/A	
		Flow	Nm3/s	N/A		100.00	0.03	98.41	31.29	N/A	
		Moisture	%	N/A		100.00	0.00	29.14	22.24	N/A	
		Nitrogen Oxides (as NO2)	mg/m3	250		100.00	0.09	108.30	74.30	Y	
		Opacity	%	N/A		100.00	0.20	41.26	4.62	N/A	
		Oxygen (O2)	%	N/A		100.00	1.50	16.73	3.37	N/A	
		Temperature	°C	N/A		100.00	158.13	179.71	172.77	N/A	
April	14-May	Carbon monoxide (CO)	mg/m3	N/A		100.00	0.70	950.41	102.30	N/A	
		Flow	Nm3/s	N/A		100.00	0.03	97.43	39.01	N/A	
		Moisture	%	N/A		100.00	0.00	31.42	20.12	N/A	
		Nitrogen Oxides (as NO2)	mg/m3	250		100.00	0.01	235.44	77.83	Y	
		Opacity	%	N/A		100.00	0.00	63.18	3.77	N/A	
		Oxygen (O2)	%	N/A		100.00	1.88	13.61	3.54	N/A	
		Temperature	°C	N/A		100.00	132.15	181.95	172.60	N/A	
May	14-Jun	Carbon monoxide (CO)	mg/m3	N/A		100.00	13.87	760.15	104.42	N/A	
		Flow	Nm3/s	N/A		100.00	0.03	97.76	31.82	N/A	
		Moisture	%	N/A		100.00	6.98	29.36	26.93	N/A	
		Nitrogen Oxides (as NO2)	mg/m3	250		100.00	14.43	174.77	118.11	Y	
		Opacity	%	N/A		100.00	0.01	59.29	3.64	N/A	
		Oxygen (O2)	%	N/A		100.00	0.00	2.12	3.36	N/A	
		Temperature	°C	N/A		100.00	2.12	166.75	175.40	N/A	
June	14-Jul	Carbon monoxide (CO)	mg/m3	N/A		100.00	3.44	667.36	83.29	N/A	
		Flow	Nm3/s	N/A		100.00	0.01	97.83	30.18	N/A	
		Moisture	%	N/A		100.00	0.87	29.23	26.97	N/A	
		Nitrogen Oxides (as NO2)	mg/m3	250		100.00	30.03	179.75	147.08	Y	
		Opacity	%	N/A		100.00	0.02	58.85	3.65	N/A	



Latest Publication Date:	14-Jul-21	Environment Protection Licence:	10232
Monitoring Location No:	2	Reporting Period:	July 2020 to June 2021
Description:	Discharge duct downstream of Recovery Boiler A prior to junction with Stack 1		
Monitoring Type:	Continuous	Sample Type:	Air

Month	Date of publication	Pollutant	Unit of measure	Reporting	Level	Data collected (%)	Lowest value	Highest value	Mean	Compliance (Yes/No)	Comment
		Oxygen (O2)	%	N/A		100.00	1.68	18.95	3.37	N/A	
		Temperature	°C	N/A		100.00	121.55	190.83	174.43	N/A	



Latest Publication Date: 14-Jul-21

Monitoring Location No: 2

Environment Protection Licence: 10232

Description: Discharge duct downstream of Recovery Boiler A prior to junction with Stack 1

Reporting Period: July 2020 to June 2021

Monitoring Type: Grab Sample

Sample Type: Air

Pollutant	Unit of measure	Reporting Level	Sampling Freq	Date of Sample	Date of Report	Report No.	Data	Compliance (Yes/No)	Comment
Methanol	mg/m3	N/A	Annual	10-Dec-20	22-Feb-21	R010036	<3	Yes	
Total Solid Particles	mg/m3	34	Annual	10-Dec-20	22-Feb-21	R010036	28	Yes	

ND - No Data
N/A - Not applicable

Latest Publication Date: 14-Jul-21

Monitoring Location No: 3

Environment Protection Licence:

10232

Description: Discharge duct downstream of Power Boiler prior to junction with Stack 1

Reporting Period: July 2020 to June 2021

Monitoring Type: Continuous

Sample Type: Air

Month	Date of publication	Pollutant	Unit of measure	Concentration Limits/Reporting Level	Data collected (%)	Lowest value	Highest value	Mean	Compliance (Yes/No)	Comment
July	14-Aug	Carbon monoxide (CO)	mg/m3	140	100.00	5.54	48.13	12.00	Y	
		Flow	Nm3/s	N/A	100.00	0.02	75.99	36.08	N/A	
		Moisture	%	N/A	100.00	0.00	34.95	21.04	N/A	
		Nitrogen Oxides (as NO2)	mg/m3	300	100.00	72.21	195.31	139.24	Y	
		Opacity	%	N/A	100.00	0.72	34.40	4.17	N/A	
		Oxygen (O2)	%	N/A	100.00	0.00	9.49	3.94	N/A	
		Temperature	°C	N/A	100.00	186.05	220.34	209.36	N/A	
August	14-Sep	Carbon monoxide (CO)	mg/m3	140	100.00	3.48	176.44	14.93	Y	Planned shut down
		Flow	Nm3/s	N/A	100.00	0.01	90.92	36.80	N/A	
		Moisture	%	N/A	100.00	0.00	36.26	21.57	N/A	
		Nitrogen Oxides (as NO2)	mg/m3	300	100.00	0.03	180.56	126.33	Y	
		Opacity	%	N/A	100.00	1.20	24.67	4.27	N/A	
		Oxygen (O2)	%	N/A	100.00	0.91	20.82	3.98	N/A	
		Temperature	°C	N/A	100.00	182.57	234.52	209.10	N/A	
September	14-Oct	The attached report contains the e	mg/m3	140	100.00	6.64	73.65	17.74	Y	
		Flow	Nm3/s	N/A	100.00	0.02	96.51	35.41	N/A	
		Moisture	%	N/A	100.00	0.00	34.61	20.36	N/A	
		Nitrogen Oxides (as NO2)	mg/m3	300	100.00	44.48	187.33	119.53	Y	
		Opacity	%	N/A	100.00	1.84	51.34	4.14	N/A	
		Oxygen (O2)	%	N/A	100.00	0.21	20.42	4.04	N/A	
		Temperature	°C	N/A	100.00	186.05	224.19	208.34	N/A	
October	14-Nov	Carbon monoxide (CO)	mg/m3	140	99.73	0.09	179.08	14.19	Y	Planned shut down
		Flow	Nm3/s	N/A	100.00	0.00	76.27	26.97	N/A	
		Moisture	%	N/A	100.00	0.00	36.01	16.14	N/A	
		Nitrogen Oxides (as NO2)	mg/m3	300	100.00	0.00	164.14	106.18	Y	
		Opacity	%	N/A	100.00	1.19	48.74	3.66	N/A	
		Oxygen (O2)	%	N/A	100.00	0.12	21.15	8.00	N/A	
		Temperature	°C	N/A	100.00	15.74	223.34	185.06	N/A	
November	14-Dec	Carbon monoxide (CO)	mg/m3	140	100.00	0.22	117.43	6.85	Y	
		Flow	Nm3/s	N/A	100.00	0.02	78.69	31.97	N/A	
		Moisture	%	N/A	100.00	0.00	37.14	19.43	N/A	
		Nitrogen Oxides (as NO2)	mg/m3	300	100.00	0.30	189.19	126.26	Y	
		Opacity	%	N/A	100.00	0.01	24.81	3.17	N/A	
		Oxygen (O2)	%	N/A	100.00	0.00	8.92	4.09	N/A	
		Temperature	°C	N/A	100.00	181.91	215.64	199.02	N/A	
December	14-Jan	Carbon monoxide (CO)	mg/m3	140	100.00	4.20	34.54	8.32	Y	
		Flow	Nm3/s	N/A	100.00	0.02	96.69	33.24	N/A	
		Moisture	%	N/A	100.00	0.00	37.19	18.58	N/A	
		Nitrogen Oxides (as NO2)	mg/m3	300	100.00	0.10	169.17	119.88	Y	
		Opacity	%	N/A	100.00	1.56	24.42	3.50	N/A	
		Oxygen (O2)	%	N/A	100.00	1.26	13.26	4.23	N/A	
		Temperature	°C	N/A	100.00	179.56	217.99	201.98	N/A	
January	14-Feb	Carbon monoxide (CO)	mg/m3	140	100.00	4.08	40.16	8.35	Y	
		Flow	Nm3/s	N/A	100.00	0.03	95.35	34.10	N/A	
		Moisture	%	N/A	100.00	0.00	34.65	18.81	N/A	
		Nitrogen Oxides (as NO2)	mg/m3	300	100.00	75.33	154.74	121.28	Y	
		Opacity	%	N/A	100.00	1.11	34.70	3.81	N/A	
		Oxygen (O2)	%	N/A	100.00	1.03	8.04	3.91	N/A	
		Temperature	°C	N/A	100.00	179.56	221.00	204.25	N/A	
February	14-Mar	Carbon monoxide (CO)	mg/m3	140	100.00	3.77	38.26	11.43	Y	
		Flow	Nm3/s	N/A	100.00	0.03	80.00	35.23	N/A	
		Moisture	%	N/A	100.00	0.00	34.83	18.94	N/A	
		Nitrogen Oxides (as NO2)	mg/m3	300	100.00	0.11	205.72	115.70	Y	
		Opacity	%	N/A	100.00	1.07	29.02	4.32	N/A	
		Oxygen (O2)	%	N/A	100.00	0.76	15.97	4.02	N/A	
		Temperature	°C	N/A	100.00	183.23	224.56	206.79	N/A	
March	14-Apr	Carbon monoxide (CO)	mg/m3	140	99.87	0.20	313.51	31.89	N	Operational issues
		Flow	Nm3/s	N/A	100.00	0.00	85.11	32.97	N/A	
		Moisture	%	N/A	100.00	0.00	31.98	16.93	N/A	
		Nitrogen Oxides (as NO2)	mg/m3	300	100.00	0.00	236.42	148.11	Y	
		Opacity	%	N/A	100.00	0.97	68.72	4.74	N/A	
		Oxygen (O2)	%	N/A	100.00	0.10	21.35	5.85	N/A	
		Temperature	°C	N/A	100.00	16.97	234.52	193.80	N/A	
April	14-May	Carbon monoxide (CO)	mg/m3	140	100.00	7.64	313.27	63.33	N	Operational issues
		Flow	Nm3/s	N/A	100.00	0.00	86.80	34.83	N/A	
		Moisture	%	N/A	100.00	0.00	30.29	16.14	N/A	
		Nitrogen Oxides (as NO2)	mg/m3	300	100.00	0.00	249.77	167.41	Y	
		Opacity	%	N/A	100.00	0.51	59.66	4.91	N/A	
		Oxygen (O2)	%	N/A	100.00	0.59	21.53	5.26	N/A	
		Temperature	°C	N/A	100.00	28.24	225.51	192.53	N/A	
May	14-Jun	Carbon monoxide (CO)	mg/m3	140	100.00	0.33	68.08	11.98	Y	
		Flow	Nm3/s	N/A	100.00	0.03	87.88	43.38	N/A	
		Moisture	%	N/A	100.00	0.00	13.68	5.29	N/A	
		Nitrogen Oxides (as NO2)	mg/m3	300	100.00	0.87	117.38	32.55	Y	
		Opacity	%	N/A	100.00	2.24	26.95	6.41	N/A	
		Oxygen (O2)	%	N/A	100.00	0.56	8.85	4.44	N/A	
		Temperature	°C	N/A	100.00	190.19	226.83	211.59	N/A	
June	14-Jul	Carbon monoxide (CO)	mg/m3	140	100.00	0.50	255.72	17.09	N	Operational issues
		Flow	Nm3/s	N/A	100.00	0.07	89.06	46.09	N/A	
		Moisture	%	N/A	100.00	0.00	29.21	5.27	N/A	
		Nitrogen Oxides (as NO2)	mg/m3	300	100.00	0.00	235.13	23.98	Y	
		Opacity	%	N/A	100.00	2.18	27.34	5.23	N/A	
		Oxygen (O2)	%	N/A	100.00	0.38	13.45	4.88	N/A	
		Temperature	°C	N/A	100.00	191.41	229.17	213.32	N/A	

Note 1-Reporting Levels in accordance with Clause L3.9

Latest Publication Date: 14-Jul-21

Monitoring Location No: 3

Environment Protection Licence:

10232

Description: Discharge duct downstream of Power Boiler prior to junction with Stack 1

Reporting Period: July 2020 to June 2021

Monitoring Type: Grab Sample

Sample Type: Air

Pollutant	Unit of measure	Concentration Limit	Sampling Freq	Date of Sample	Date of Report	Report No.	Data	Compliance (Yes/No)	Comment
Cadmium	mg/m3	0.06	1st Qrt					Yes	Note
Mercury	mg/m3	0.06	1st Qrt					Yes	Note
TCDD (equivalent)	ng/m3	0.1	1st Qrt					Yes	Note
Type 1 and 2 substances	mg/m3	0.6	1st Qrt					Yes	Note
Cadmium	mg/m3	0.06	2nd Qrt					Yes	Note
Mercury	mg/m3	0.06	2nd Qrt					Yes	Note
TCDD (equivalent)	ng/m3	0.1	2nd Qrt					Yes	Note
Total Solid Particles	mg/m3	30	Annual	10-Dec-20	22-Feb-21	R010036	58	No	Note
Type 1 and 2 substances	mg/m3	0.6	2nd Qrt					Yes	Note
Cadmium	mg/m3	0.06	3rd Qrt					Yes	Note
Mercury	mg/m3	0.06	3rd Qrt					Yes	Note
TCDD (equivalent)	ng/m3	0.1	3rd Qrt					Yes	Note
Type 1 and 2 substances	mg/m3	0.6	3rd Qrt					Yes	Note
Cadmium	mg/m3	0.06	4th Qrt					Yes	Note
Mercury	mg/m3	0.06	4th Qrt					Yes	Note
TCDD (equivalent)	ng/m3	0.1	4th Qrt					Yes	Note
Type 1 and 2 substances	mg/m3	0.6	4th Qrt					Yes	Note

ND- No Data

N/A- Not Applicable

Note: Quarterly when non-standard fuels are being burnt in the Power Boiler, and not required at other times

Note 2: Concentration Limit only applicable when non-standard fuel is being burnt in the Power Boiler

Latest Publication Date: 14-Jul-21

Monitoring Location No: 4

Environment Protection Licence:

10232

Description: Discharge duct downstream of Lime Kiln A
prior to junction with Stack 1

Reporting Period:

July 2020 to June 2021

Monitoring Type: Continuous

Sample Type: Air

Month	Date of publication	Pollutant	Unit of measure	Reporting Level	Data collected (%)	Lowest value	Highest value	Mean	Compliance (Yes/No)	Comment
July	14-Aug	Carbon monoxide (CO)	mg/m3	N/A	100.00	0.97	2503.77	551.58	N/A	
		Moisture	%	N/A	100.00	0.00	46.69	30.84	N/A	
		Nitrogen Oxides (as NO2)	mg/m3	400	100.00	7.40	338.29	192.21	Y	
		Opacity	%	N/A	100.00	0.80	88.56	13.26	N/A	
		Oxygen (O2)	%	N/A	100.00	0.01	21.09	1.87	N/A	
		Temperature	°C	N/A	100.00	241.63	302.23	271.00	N/A	
August	14-Sep	Carbon monoxide (CO)	mg/m3	N/A	100.00	0.97	2503.77	666.04	N/A	
		Moisture	%	N/A	100.00	0.00	34.68	30.56	N/A	
		Nitrogen Oxides (as NO2)	mg/m3	400	100.00	5.57	325.46	177.50	Y	
		Opacity	%	N/A	100.00	0.51	60.78	12.17	N/A	
		Oxygen (O2)	%	N/A	100.00	0.08	21.13	1.74	N/A	
		Temperature	°C	N/A	100.00	233.90	302.23	270.57	N/A	
September	14-Oct	Carbon monoxide (CO)	mg/m3	N/A	100.00	0.97	2501.93	372.40	N/A	
		Moisture	%	N/A	100.00	0.00	35.95	30.26	N/A	
		The attached report contains 1	mg/m3	400	100.00	47.38	277.22	187.29	Y	
		Opacity	%	N/A	100.00	0.52	71.67	10.27	N/A	
		Oxygen (O2)	%	N/A	100.00	0.07	20.79	1.84	N/A	
		Temperature	°C	N/A	100.00	236.17	299.77	268.49	N/A	
October	14-Nov	Carbon monoxide (CO)	mg/m3	N/A	100.00	0.97	2501.93	519.60	N/A	
		Moisture	%	N/A	100.00	0.00	35.17	22.39	N/A	
		Nitrogen Oxides (as NO2)	mg/m3	400	100.00	0.12	384.65	152.39	Y	
		Opacity	%	N/A	100.00	0.03	90.10	8.52	N/A	
		Oxygen (O2)	%	N/A	100.00	0.07	21.47	7.14	N/A	
		Temperature	°C	N/A	100.00	1.81	566.01	232.69	N/A	
November	14-Dec	Carbon monoxide (CO)	mg/m3	N/A	100.00	0.97	2501.93	660.73	N/A	
		Moisture	%	N/A	100.00	0.00	35.12	29.80	N/A	
		Nitrogen Oxides (as NO2)	mg/m3	400	100.00	19.68	368.77	185.59	Y	
		Opacity	%	N/A	100.00	0.40	65.79	9.92	N/A	
		Oxygen (O2)	%	N/A	100.00	0.00	21.06	1.53	N/A	
		Temperature	°C	N/A	100.00	231.44	289.76	267.54	N/A	
December	14-Jan	Carbon monoxide (CO)	mg/m3	N/A	100.00	0.97	2501.93	668.85	N/A	
		Moisture	%	N/A	100.00	0.00	35.00	30.07	N/A	
		Nitrogen Oxides (as NO2)	mg/m3	400	100.00	10.16	293.58	151.15	Y	
		Opacity	%	N/A	100.00	1.25	87.99	8.93	N/A	
		Oxygen (O2)	%	N/A	100.00	0.00	19.65	1.60	N/A	
		Temperature	°C	N/A	100.00	228.99	296.00	265.20	N/A	
January	14-Feb	Carbon monoxide (CO)	mg/m3	N/A	100.00	0.97	1635.62	130.64	N/A	
		Moisture	%	N/A	100.00	0.00	34.88	30.34	N/A	
		Nitrogen Oxides (as NO2)	mg/m3	400	100.00	2.49	301.79	188.46	Y	
		Opacity	%	N/A	100.00	0.15	77.06	6.98	N/A	
		Oxygen (O2)	%	N/A	100.00	0.00	20.84	2.84	N/A	
		Temperature	°C	N/A	100.00	215.03	294.68	256.00	N/A	
February	14-Mar	Carbon monoxide (CO)	mg/m3	N/A	100.00	0.97	1868.68	175.46	N/A	
		Moisture	%	N/A	100.00	0.00	37.55	28.69	N/A	
		Nitrogen Oxides (as NO2)	mg/m3	400	100.00	0.01	216.33	119.45	Y	
		Opacity	%	N/A	100.00	0.26	88.82	7.31	N/A	
		Oxygen (O2)	%	N/A	100.00	0.00	21.73	2.91	N/A	
		Temperature	°C	N/A	100.00	206.16	299.77	261.51	N/A	
March	14-Apr	Carbon monoxide (CO)	mg/m3	N/A	0.00	0.00	0.00	0.00	N/A	
		Moisture	%	N/A	100.00	0.00	29.58	25.00	N/A	
		Nitrogen Oxides (as NO2)	mg/m3	400	100.00	1.12	201.62	91.25	Y	
		Opacity	%	N/A	100.00	1.27	77.43	10.00	N/A	
		Oxygen (O2)	%	N/A	100.00	0.01	20.38	1.76	N/A	
		Temperature	°C	N/A	100.00	220.12	301.09	270.37	N/A	
April	14-May	Carbon monoxide (CO)	mg/m3	N/A	100.00	0.97	0.97	0.97	N/A	
		Moisture	%	N/A	100.00	0.00	29.82	25.13	N/A	
		Nitrogen Oxides (as NO2)	mg/m3	400	100.00	0.35	237.92	127.07	Y	
		Opacity	%	N/A	100.00	2.13	36.05	10.89	N/A	
		Oxygen (O2)	%	N/A	100.00	0.00	18.75	2.20	N/A	
		Temperature	°C	N/A	100.00	227.67	302.23	270.33	N/A	
May	14-Jun	Carbon monoxide (CO)	mg/m3	N/A	100.00	0.97	0.97	0.97	N/A	
		Moisture	%	N/A	100.00	0.00	29.65	24.75	N/A	
		Nitrogen Oxides (as NO2)	mg/m3	400	100.00	1.35	236.16	131.43	Y	
		Opacity	%	N/A	100.00	0.12	44.09	9.40	N/A	
		Oxygen (O2)	%	N/A	100.00	0.00	17.20	2.50	N/A	
		Temperature	°C	N/A	100.00	225.21	285.81	262.68	N/A	
June	14-Jul	Carbon monoxide (CO)	mg/m3	N/A	100.00	0.97	0.97	0.97	N/A	
		Moisture	%	N/A	100.00	0.00	30.59	26.49	N/A	
		Nitrogen Oxides (as NO2)	mg/m3	400	0.00	18.21	250.73	140.51	Y	



Latest Publication Date:	14-Jul-21	Environment Protection Licence:	10232
Monitoring Location No:	4	Reporting Period:	July 2020 to June 2021
Description:	Discharge duct downstream of Lime Kiln A prior to junction with Stack 1	Sample Type:	Air
Monitoring Type:	Continuous		

Month	Date of publication	Pollutant	Unit of measure	Reporting Level	Data collected (%)	Lowest value	Highest value	Mean	Compliance (Yes/No)	Comment
		Opacity	%	N/A	100.00	3.61	87.19	9.93	N/A	
		Oxygen (O2)	%	N/A	100.00	0.00	20.33	2.75	N/A	
		Temperature	°C	N/A	100.00	215.03	282.04	257.17	N/A	

Latest Publication Date: 14-Jul-21

Monitoring Location No: 4

Environment Protection Licence: 10232

Description: Discharge duct downstream of Lime Kiln A prior to junction with Stack 1

Reporting Period: July 2020 to June 2021

Monitoring Type: Grab Sample

Sample Type: Air

Pollutant	Unit of measure	Reporting Level	Sampling Freq	Date of Sample	Date of Report	Report No.	Data	Compliance (Yes/No)	Comment
Total Solid Particles	mg/m3	23	Annual	10-Dec-20	22-Feb-21	R010036	180	No	

ND - No Data

N/A - Not applicable

Latest Publication Date: 14-Jul-21

Monitoring Location No: 21

Environment Protection Licence:

10232

Description: Discharge duct downstream of Lime Kiln B prior to junction with Stack 1

Reporting Period: July 2020 to June 2021

Monitoring Type: Continuous

Sample Type: Air

Month	Date of publication	Pollutant	Unit of measure	Data collected (%)	Lowest value	Highest value	Mean	Compliance (Yes/No)	Comment
July	14-Aug	Carbon monoxide (CO)	mg/m3	100.00	0.26	6000.00	62.01	N/A	
		Moisture	%	100.00	0.00	51.67	21.48	N/A	
		Nitrogen Oxides (as NO2)	mg/m3	100.00	0.00	1000.00	351.59	N/A	
		Opacity	%	100.00	0.02	74.49	6.78	N/A	
		Oxygen (O2)	%	100.00	0.05	19.59	2.02	N/A	
		Temperature	°C	100.00	67.51	500.00	278.98	N/A	
August	14-Sep	Carbon monoxide (CO)	mg/m3	100.00	0.49	6000.00	250.98	N/A	
		Moisture	%	100.00	0.00	49.42	23.76	N/A	
		Nitrogen Oxides (as NO2)	mg/m3	100.00	0.00	966.85	391.80	N/A	
		Opacity	%	100.00	0.01	71.87	6.69	N/A	
		Oxygen (O2)	%	100.00	0.05	21.00	1.62	N/A	
		Temperature	°C	100.00	105.72	484.55	278.72	N/A	
September	14-Oct	Carbon monoxide (CO)	mg/m3	100.00	0.26	6000.00	125.43	N/A	
		Moisture	%	100.00	0.00	43.23	31.56	N/A	
		Nitrogen Oxides (as NO2)	mg/m3	100.00	0.03	1000.00	457.86	N/A	
		Opacity	%	100.00	0.01	72.02	6.54	N/A	
		Oxygen (O2)	%	100.00	0.04	19.81	1.60	N/A	
		Temperature	°C	100.00	61.97	452.70	277.05	N/A	
October	14-Nov	Carbon monoxide (CO)	mg/m3	100.00	0.26	6000.00	131.56	N/A	
		Moisture	%	100.00	0.00	39.18	22.98	N/A	
		Nitrogen Oxides (as NO2)	mg/m3	100.00	0.00	1000.00	311.64	N/A	
		Opacity	%	100.00	0.05	71.95	6.14	N/A	
		Oxygen (O2)	%	100.00	0.04	20.68	6.93	N/A	
		Temperature	°C	100.00	10.57	441.29	264.99	N/A	
November	14-Dec	Carbon monoxide (CO)	mg/m3	100.00	0.51	5763.03	37.72	N/A	
		Moisture	%	100.00	0.00	43.88	29.27	N/A	
		Nitrogen Oxides (as NO2)	mg/m3	100.00	0.02	740.79	406.96	N/A	
		Opacity	%	100.00	0.01	73.05	8.34	N/A	
		Oxygen (O2)	%	100.00	0.04	20.03	2.81	N/A	
		Temperature	°C	100.00	63.06	445.78	270.49	N/A	
December	14-Jan	Carbon monoxide (CO)	mg/m3	100.00	0.49	6000.00	174.82	N/A	
		Moisture	%	100.00	0.00	49.58	25.89	N/A	
		Nitrogen Oxides (as NO2)	mg/m3	100.00	0.00	664.13	277.91	N/A	
		Opacity	%	100.00	0.01	100.00	14.29	N/A	
		Oxygen (O2)	%	100.00	0.03	20.55	2.38	N/A	
		Temperature	°C	100.00	64.64	438.80	268.04	N/A	
January	14-Feb	Carbon monoxide (CO)	mg/m3	100.00	0.50	6000.00	159.61	N/A	
		Moisture	%	100.00	0.00	49.30	28.69	N/A	
		Nitrogen Oxides (as NO2)	mg/m3	100.00	0.00	546.36	265.29	N/A	
		Opacity	%	100.00	0.01	90.74	9.66	N/A	
		Oxygen (O2)	%	100.00	0.02	21.00	2.48	N/A	
		Temperature	°C	100.00	66.25	455.41	251.48	N/A	
February	14-Mar	Carbon monoxide (CO)	mg/m3	100.00	0.49	6000.00	91.97	N/A	
		Moisture	%	100.00	0.00	53.65	27.26	N/A	
		Nitrogen Oxides (as NO2)	mg/m3	100.00	0.01	1000.00	270.06	N/A	
		Opacity	%	100.00	0.01	90.57	7.81	N/A	
		Oxygen (O2)	%	100.00	0.04	19.47	2.26	N/A	
		Temperature	°C	100.00	64.29	490.41	260.63	N/A	
March	14-Apr	Carbon monoxide (CO)	mg/m3	100.00	0.49	6000.00	143.06	N/A	
		Moisture	%	100.00	0.00	47.88	30.49	N/A	
		Nitrogen Oxides (as NO2)	mg/m3	100.00	0.00	1000.00	374.07	N/A	
		Opacity	%	100.00	0.01	90.60	7.29	N/A	
		Oxygen (O2)	%	100.00	0.04	21.00	2.40	N/A	
		Temperature	°C	100.00	70.57	500.00	276.86	N/A	
April	14-May	Carbon monoxide (CO)	mg/m3	100.00	0.49	6000.00	48.16	N/A	
		Moisture	%	100.00	0.00	41.74	30.63	N/A	
		Nitrogen Oxides (as NO2)	mg/m3	100.00	0.00	744.03	478.10	N/A	
		Opacity	%	100.00	0.01	90.64	9.06	N/A	
		Oxygen (O2)	%	100.00	0.04	20.51	2.28	N/A	
		Temperature	°C	100.00	80.76	455.58	268.53	N/A	
May	14-Jun	Carbon monoxide (CO)	mg/m3	100.00	0.49	5023.90	13.01	N/A	
		Moisture	%	100.00	0.00	37.33	29.68	N/A	
		Nitrogen Oxides (as NO2)	mg/m3	100.00	0.01	1000.00	474.83	N/A	
		Opacity	%	100.00	0.01	90.60	7.67	N/A	
		Oxygen (O2)	%	100.00	0.05	21.00	2.43	N/A	
		Temperature	°C	100.00	76.43	496.66	280.80	N/A	

June	14-Jul	Carbon monoxide (CO)	mg/m3	100.00	0.49	2820.54	107.89	N/A
		Moisture	%	100.00	0.00	37.44	28.67	N/A
		Nitrogen Oxides (as NO2)	mg/m3	100.00	0.00	706.83	431.73	N/A
		Opacity	%	100.00	0.01	87.57	8.31	N/A
		Oxygen (O2)	%	100.00	0.05	20.64	2.04	N/A
		Temperature	°C	100.00	77.31	424.89	262.60	N/A

Latest Publication Date: 14-Jul-21
Monitoring Location No: 21
Environment Protection Licence: 10232
Description: Discharge duct downstream of Lime Kiln B prior to junction with Stack 1
Reporting Period: July 2020 to June 2021
Monitoring Type: Grab Sample
Sample Type: Air

Pollutant	Unit of measure	Sampling Freq	Date of Sample	Date of Report	Report No.	Data	Comment
Total Solid Particles	mg/m3	Annual	10-Dec-20	22/0/2021	R010036	330	

General Note: Limits are not applicable to this monitoring point

Latest Publication Date: 14-Jul-21

Monitoring Location No: 22

Environment Protection Licence: 10232

Description: Exit point from Stack 2 to atmosphere

Reporting Period: July 2020 to June 2021

Monitoring Type: Continuous

Sample Type: Air

Month	Date of publication	Pollutant	Unit of measure	Concentration Limit	Data collected	Lowest value	Highest value	Mean	Compliance (Yes/No)	Comment
July	14-Aug	Flow	Nm3/s	N/A	100.00	0.02	57.59	35.90	N/A	
		Hydrogen chloride	mg/m3	50	100.00	0.16	0.16	0.16	Y	
		Moisture	%	N/A	100.00	0.00	28.51	12.79	N/A	
		Nitrogen Oxides (as NO2)	mg/m3	400	100.00	3.28	177.74	141.84	Y	
		Opacity	%	20	99.61	2.30	26.93	6.56	N	Precipitator trip
		Oxygen (O2)	%	N/A	100.00	1.34	22.04	11.07	N/A	
		Sulphur dioxide (SO2)	mg/m3	250	100.00	0.38	45.75	1.71	Y	
		Temperature	°C	N/A	100.00	83.74	174.88	167.25	N/A	
August	14-Sep	TRS (as H2S)	mg/m3	3.6	100.00	1.68	12.92	2.14	Y	Auto calibration
		Flow	Nm3/s	100	100.00	0.01	47.19	37.08	N/A	
		Hydrogen chloride	mg/m3	50	100.00	0.00	8.00	2.92	Y	
		Moisture	%	N/A	100.00	0.00	0.01	0.01	N/A	
		Nitrogen Oxides (as NO2)	mg/m3	400	100.00	34.11	224.06	150.41	Y	
		Opacity	%	20	99.66	2.60	26.94	7.25	Y	Auto calibration
		Oxygen (O2)	%	N/A	100.00	8.34	22.07	10.84	N/A	
		The attached report contains II	mg/m3	250	100.00	1.04	50.59	1.90	Y	
September	14-Oct	Temperature	°C	N/A	100.00	146.69	183.43	165.39	N/A	
		TRS (as H2S)	mg/m3	3.6	98.12	1.41	17.59	2.26	N	
		Flow	Nm3/s	N/A	100.00	0.01	48.59	37.02	N/A	
		Hydrogen chloride	mg/m3	50	100.00	0.00	13.18	0.88	Y	
		Moisture	%	N/A	100.00	0.01	0.01	0.01	N/A	
		Nitrogen Oxides (as NO2)	mg/m3	400	100.00	2.05	170.08	137.22	Y	
		Opacity	%	20	99.67	2.65	27.56	7.91	N	Precipitator trip
		Oxygen (O2)	%	N/A	100.00	7.76	21.82	10.82	N/A	
October	14-Nov	Sulphur dioxide (SO2)	mg/m3	250	100.00	0.31	55.38	1.70	Y	
		Temperature	°C	N/A	100.00	133.50	173.38	165.26	N/A	
		TRS (as H2S)	mg/m3	3.6	98.19	1.66	10.89	2.22	Y	Auto calibration
		Flow	Nm3/s	N/A	100.00	0.02	67.11	26.38	N/A	
		Hydrogen chloride	mg/m3	50	100.00	6.40	7.71	6.94	Y	
		Moisture	%	N/A	0.00	0.00	0.00	0.00	N/A	
		Nitrogen Oxides (as NO2)	mg/m3	400	100.00	1.84	195.51	51.05	Y	
		Opacity	%	20	98.86	3.06	80.68	8.63	Y	Planned shutdown
November	14-Dec	Oxygen (O2)	%	N/A	100.00	4.59	22.23	13.42	N/A	
		Sulphur dioxide (SO2)	mg/m3	250	100.00	0.31	46.13	1.50	Y	
		Temperature	°C	N/A	100.00	13.82	176.80	134.97	N/A	
		TRS (as H2S)	mg/m3	3.6	62.50	0.70	8.42	2.01	Y	Auto calibration
		Flow	Nm3/s	100	100.00	0.02	90.42	32.53	N/A	
		Hydrogen chloride	mg/m3	50	99.58	0.01	24.03	1.98	Y	
		Moisture	%	N/A	100.00	11.16	44.98	20.01	N/A	
		Nitrogen Oxides (as NO2)	mg/m3	400	100.00	0.00	330.32	110.43	Y	
December	14-Jan	Opacity	%	20	99.65	0.16	70.87	9.93	N	Fan interlock issue
		Oxygen (O2)	%	N/A	100.00	0.51	25.00	12.07	N/A	
		Sulphur dioxide (SO2)	mg/m3	250	100.00	0.04	87.10	1.93	Y	
		Temperature	°C	N/A	100.00	157.20	177.98	167.77	N/A	
		TRS (as H2S)	mg/m3	3.6	90.00	0.00	8.92	1.89	Y	Auto calibration
		Flow	Nm3/s	100	100.00	0.01	37.71	17.93	N/A	
		Hydrogen chloride	mg/m3	50	100.00	0.00	14.40	0.61	Y	
		Moisture	%	N/A	100.00	11.16	45.00	39.48	N/A	
January	14-Feb	Nitrogen Oxides (as NO2)	mg/m3	400	100.00	20.18	171.00	129.79	Y	
		Opacity	%	20	99.58	3.32	26.87	9.32	Y	Instrument error
		Oxygen (O2)	%	N/A	100.00	8.83	22.49	12.94	N/A	
		Sulphur dioxide (SO2)	mg/m3	250	100.00	0.33	45.28	1.06	Y	
		Temperature	°C	N/A	100.00	110.46	171.65	165.41	N/A	
		TRS (as H2S)	mg/m3	3.6	99.46	0.58	1.69	1.10	Y	
		Flow	Nm3/s	100	100.00	0.01	34.88	17.08	N/A	
		Hydrogen chloride	mg/m3	50	100.00	6.61	13.95	10.46	Y	
February	14-Mar	Moisture	%	N/A	100.00	18.31	45.00	40.36	N/A	
		Nitrogen Oxides (as NO2)	mg/m3	400	100.00	0.94	175.42	123.00	Y	
		Opacity	%	20	99.65	3.00	26.74	8.84	Y	Planned maintenance
		Oxygen (O2)	%	N/A	100.00	7.69	22.43	12.87	N/A	
		Sulphur dioxide (SO2)	mg/m3	250	100.00	0.05	44.58	1.11	Y	
		Temperature	°C	N/A	100.00	152.69	170.58	164.82	N/A	
		TRS (as H2S)	mg/m3	3.6	99.46	0.58	3.55	1.10	Y	
		Flow	Nm3/s	100	100.00	0.01	45.81	19.88	N/A	
March	14-Apr	Hydrogen chloride	mg/m3	50	100.00	0.03	18.73	0.58	Y	
		Moisture	%	N/A	100.00	0.38	45.00	34.67	N/A	
		Nitrogen Oxides (as NO2)	mg/m3	400	100.00	0.00	374.86	93.99	Y	
		Opacity	%	20	99.66	0.15	72.80	8.77	N	Precipitator trip
		Oxygen (O2)	%	N/A	100.00	4.96	23.11	12.21	N/A	
		Sulphur dioxide (SO2)	mg/m3	250	100.00	0.00	104.23	1.10	Y	
		Temperature	°C	N/A	100.00	119.47	171.00	164.24	N/A	
		TRS (as H2S)	mg/m3	3.6	100.00	0.00	2.20	0.83	Y	

April	14-May	Moisture	%	N/A	100.00	16.30	16.53	16.43	N/A	Auto-Calibration
		Nitrogen Oxides (as NO2)	mg/m3	400	100.00	29.85	182.32	141.10	Y	
		Opacity	%	20	99.66	3.66	26.93	9.24	Y	
		Oxygen (O2)	%	N/A	100.00	7.68	22.87	9.90	N/A	
		Sulphur dioxide (SO2)	mg/m3	250	100.00	0.00	34.24	0.35	Y	
		Temperature	°C	N/A	100.00	158.57	174.77	164.47	N/A	
		TRS (as H2S)	mg/m3	3.6	100.00	0.00	0.45	0.20	Y	
		Flow	Nm3/s	100	100.00	0.02	39.79	31.25	N/A	
May	14-Jun	Hydrogen chloride	mg/m3	50	100.00	0.00	3.34	0.03	Y	Auto-Calibration
		Moisture	%	N/A	100.00	16.19	19.74	16.62	N/A	
		Nitrogen Oxides (as NO2)	mg/m3	400	100.00	5.23	175.82	139.59	Y	
		Opacity	%	20	99.85	3.65	27.92	9.76	Y	
		Oxygen (O2)	%	N/A	100.00	7.86	22.94	10.53	N/A	
		Sulphur dioxide (SO2)	mg/m3	250	100.00	0.02	1.50	0.24	Y	
		Temperature	°C	N/A	100.00	149.81	172.18	164.47	N/A	
		TRS (as H2S)	mg/m3	3.6	100.00	0.02	0.52	0.25	Y	
May	14-Jun	Flow	Nm3/s	100	100.00	0.02	38.74	30.69	N/A	Auto-Calibration
		Hydrogen chloride	mg/m3	50	100.00	0.00	0.17	0.01	Y	
		Moisture	%	N/A	100.00	16.15	17.65	16.68	N/A	
		Nitrogen Oxides (as NO2)	mg/m3	400	100.00	28.89	171.73	150.66	Y	
		Opacity	%	20	99.64	4.06	28.81	11.08	Y	
		Oxygen (O2)	%	N/A	100.00	8.51	22.65	10.79	N/A	
		Sulphur dioxide (SO2)	mg/m3	250	100.00	0.05	0.90	0.22	Y	
		Temperature	°C	N/A	100.00	137.90	174.12	165.74	N/A	
June	14-Jul	TRS (as H2S)	mg/m3	3.6	100.00	0.02	0.44	0.28	Y	ESP 2 - Field 1 Tripped
		Flow	Nm3/s	100	100.00	0.02	37.45	29.48	N/A	
		Hydrogen chloride	mg/m3	50	100.00	0.00	0.55	0.16	Y	
		Moisture	%	N/A	100.00	14.31	17.75	16.80	N/A	
		Nitrogen Oxides (as NO2)	mg/m3	400	100.00	59.38	179.33	146.87	Y	
		Opacity	%	20	99.72	3.67	52.03	12.47	N	
		Oxygen (O2)	%	N/A	100.00	8.61	22.69	11.09	N/A	
		Sulphur dioxide (SO2)	mg/m3	250	100.00	0.01	0.48	0.16	Y	
		Temperature	°C	N/A	100.00	139.51	173.49	165.84	N/A	
		TRS (as H2S)	mg/m3	3.6	100.00	0.01	0.44	0.28	Y	

Latest Publication Date: 14-Jul-21

Monitoring Location No: 22

Environment Protection Licence: 10232

Description: Exit point from Stack 2 to atmosphere

Reporting Period: July 2020 to June 2021

Monitoring Type: Grab Sample

Sample Type: Air

Pollutant	Unit of measure	Concentration Limit	Sampling Freq	Date of Sample	Date of Report	Report No.	Data	Compliance (Yes/No)	Comments
Chlorine	mg/m3	100	Annual	9-Dec-20	22-Feb-21	R010036	<0.001	Yes	
Sulfuric acid mist & sulfur trioxide (as SO3)	mg/m3	20	Annual	9-Dec-20	22-Feb-21	R010036	0.085	Yes	
TCDD (equivalent)	ng/m3	0.1	Annual	9-Dec-20	22-Feb-21	R010036	0.00087	Yes	
Total Solid Particles	mg/m3	50	1st Qrt	26-Aug-20	20-Nov-20	R009720	18	Yes	
Total Solid Particles	mg/m3	50	2nd Qrt	9-Dec-20	22-Feb-21	R010036	15	Yes	
Total Solid Particles	mg/m3	50	3rd Qrt	25-Mar-21	21-Apr-21	R010544	7.3	Yes	
Total Solid Particles	mg/m3	50	4th Qrt	26-May-21	25-Jun-21	R010928	15	Yes	
Type 1 and 2 substances	mg/m3	1	Annual	9-Dec-20	22-Feb-21	R010036	<0.02	Yes	

ND- No Data

N/A- Not Applicable