

Operational summary for the year ending 31/12/2020

Operator: Tata Steel UK Ltd

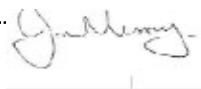
Location: Port Talbot Works

Permit: BL7108

Operational parameters: Raw materials - coal and coal blends

Month	Mean sulphur content of coal blend used to make coke (%)	Max sulphur content of the coals used to make coke (%)
1	0.87	0.88
2	0.87	0.89
3	0.84	0.91
4	0.74	0.76
5	0.74	0.76
6	0.76	0.80
7	0.75	0.83
8	0.80	0.84
9	0.82	0.89
10	0.77	0.80
11	0.77	0.79
12	0.82	0.79
Average KPI	0.80% 0.75%	- -

Signed on behalf of the Operator



Dated 20/01/2021

Form Coke Operational 1

RELEASES INTO AIR

Operational summary for the year ending 31/12/2020

Operator: Tata Steel UK Ltd

Location: Port Talbot Works

Permit: BL7108 / RP3730BV

Release Points: A2, A6 ,A7 ,A8A, A8B, A9, A10, A10A, A11, A12 & A13

PARTICULATE MATTER (DISCONTINUOUS MONITORING)							
Release Point	A2	A8A	A8B	A9	A10	A10A	A11
Time and date of sampling	07-Sep-20 11:15	28-Jul-20 10:56	29-Jul-20 11:10	22-Sep-20 11:11	06-Oct-20 13:39	15-Dec-20 12:18	18-Aug-20 09:48
Flowrate (Nm3/hr)	741730	462374	467578	950582	438809	206074	34369
Particulate measured conc. (mg/Nm3)	69	0.5	2.2	7.4	3.5	3.6	0.4
Particulate limit (mg/Nm3)	30	15	15	15	15	15	50
Sampling method used	BS EN 13284	BS EN 13284	BS EN 13284	BS EN 13284	BS EN 13284	BS EN 13284	BS EN 13284
Analytical method used	Gravimetric	Gravimetric	Gravimetric	Gravimetric	Gravimetric	Gravimetric	Gravimetric
Partic CEM result over monitoring period	32	2.6	0.3	3.9	2.0	0.6	

Signed on behalf of the Operator

Dated 20/01/2021

Form I&S DCM Part 1

RELEASES INTO AIR

Operational summary for the year ending 31/12/2020

Operator: Tata Steel UK Ltd

Location: Port Talbot Works

Permit: BL7108 / RP3730BV

Release Points: A14, A15, A16, A18, A34A, A34B, A35, A37 & A38

PARTICULATE MATTER (DISCONTINUOUS MONITORING)									
Release Point	A14	A15	A16		A34A *	A34B *		A37	A38
Time and date of sampling	29-Sep-20 10:32	25-Sep-20 10:27	23-Sep-20 10:59		01-Dec-20 12:32	01-Dec-20 11:23		15-Oct-20 10:54	16-Dec-20 12:13
Flowrate (Nm3/hr)	333977	316122	310570		193720	220658		20990	22688
Particulate measured conc. (mg/Nm3)	3	1	1		10	11		5.9	5.7
Particulate limit (mg/Nm3)	15	15	15		-	-		20	20
Sampling method used	BS EN 13284	BS EN 13284	BS EN 13284		BS EN 13284	BS EN 13284		BS EN 13284	BS EN 13284
Analytical method used	Gravimetric	Gravimetric	Gravimetric		Gravimetric	Gravimetric		Gravimetric	Gravimetric
Partic CEM result over monitoring period	2.5	1.8	1.2						
Fuel usages over the sampling period									
Natural gas (%)					90	54			
BF gas (%)									
Coke oven gas (%)					10	46			
Heavy fuel oil (%)									

* Sampling only when COG used - unable to take sample due to plant stoppages and no COG use.

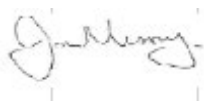
** A35 Remains not operational in 2016 - see email Sent to NRW: Subject: Permit BL7108 - Emissions into Air Monitoring 27/01/2014

A18 Not sampled on safety grounds from 2012 see email Sent to NRW: Subject: Permit BL7108 - Emissions into Air Monitoring 23/01/2013

Signed on behalf of the Operator

Dated

20/01/2021



Form I&S DCM Part 2

Operational summary for the year ending 31/12/2020

Operator: Tata Steel UK Ltd

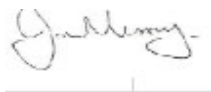
Location: Port Talbot Works

Permit: BL7108

Operational parameters: Raw materials - Blast Furnace blends

Month	Mean Zn load of sinter (g Zn per tonne iron produced)	Max Zn load of sinter (g Zn per tonne iron produced)	Mean Zn load of iron ore blend (g Zn per tonne iron produced)	Max Zn load of iron ore blend (g Zn per tonne iron produced)	Mean Zn load to Blast Furnaces (g Zn per tonne (iron produced))	Max Zn load to Blast Furnaces (g Zn per tonne (iron produced))
Jan	107.00	176	4.05	13	127.00	196
Feb	105.00	212	2.25	11	116.00	227
Mar	157.00	310	2.39	9	170.00	324
Apr	124.00	165	3.08	10	140.00	183
May	182.00	319	4.17	10	203.00	337
Jun	182.00	334	3.58	8	200.00	350
Jul	133.00	204	4.29	36	155.00	273
Aug	129.00	219	4.56	15	152.00	247
Sep	112.00	210	2.59	10	125.00	225
Oct	142.00	235	2.39	8	154.00	248
Nov	127.00	188	2.57	7	140.00	202
Dec	122.00	203	2.63	11	135.00	218
Average	135	-	3	-	151	-
Maximum	-	334	-	36	-	350

Signed on behalf of the Operator



Dated 26/01/2021

Form I&S Operational 2

RELEASES INTO AIR - NATIONAL PLAN REPORT

Operational summary for the year ending 31/12/2020

Operator: Tata Steel UK Ltd

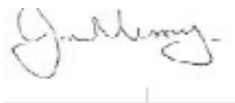
Location: Port Talbot Works

Permit: BL7108

Release Points: A50, A51, A52A, A52B, A53 & A62

Release Point	Sulphur dioxide (Tonnes)	Oxides of Nitrogen (Tonnes)	Particulate Matter (Tonnes)
A50A	120	63	2
A50B	120	63	2
A51	37	18	1
A52A	370	119	2
A52B	181	107	2
A53	49	40	1
All LCPD release points above	877	411	10
Annual limits (A50-A53)	5000	900	150
A62	32.28	40.91	2.19

Signed on behalf of the Operator



Dated 20/01/2021

Form LCPD Annual 1

RELEASES INTO AIR - NATIONAL PLAN REPORT

Operational summary for the year ending 31/12/2020

Operator: Tata Steel UK Ltd

Location: Port Talbot Works

Permit: BL7108

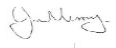
Release Points: A50, A51, A52A, A52B, A53 & A62

Release Point	A50A	A50B	A51	A52A	A52B	A53	A62	A50A	A50B	A51	A52A	A52B	A53	A62	A50A	A50B	A51	A52A	A52B	A53	A62	A50A	A50B	A51	A52A	A52B	A53	A62	A50A	A50B	A51	A52A	A52B	A53	A62	Total of release points (A50-A53) + A62
Parameter	Natural gas							Liquid fuels							Coke oven gas (COG)							Blast furnace gas (BFG)							Steel Plant gas (BOS)							All Fuels
Net CV of fuel burnt (GJ/T)	46.0	46.0	46.0	46.0	46.0	46.0	46.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	42.1	42.1	42.1	42.1	42.1	42.1	42.1	2.6	2.6	2.6	2.6	2.6	2.6	2.6	6.5	6.5	6.5	6.5	6.5	6.5	6.5	
Annual energy usage (TJ)	48	65	23	233	218	31	179	0	0	2	24	27	5	-	309	274	74	713	674	80	-	380	507	561	2467	2844	1404	1774	-	-	6	302	373	0	20	13616
Total annual energy input (TJ)	795							59							2124							9937							701							
	5.8%							0.4%							16%							73%							5%							

Biomass and other solid fuels are not burnt on these combustion plant.

Form LCPD Annual 2

Signed on behalf of the Operator



Dated 20/01/2021

RELEASES INTO AIR

Operational summary for the year ending 31/12/2020

Operator: Tata Steel UK Ltd

Location: Port Talbot Works

Permit: BL7108 / BL7108 IM (V008)

Release Points: A50, A51, A52A, A52B, A53 & A62

PARTICULATE MATTER (DISCONTINUOUS MONITORING)						
Release Point	A50A & A50B Service 4 & 5	A51 A5			A53 Mitchell	A62 No.3
Time and date of sampling	29-Sep-20 12:45	23-Nov-20 15:10			30-Nov-20 15:35	11-Mar-20 13:12
Flowrate (Nm3/hr)	53,784	60,624			83,520	97,380
Particulate measured conc. (mg/Nm3)	0.10	0.59			0.2	1.4
Particulate limit (mg/NM3)	24					60
Sampling method used	BS EN 14181	BS EN 14181			BS EN 14181	BS EN 14181
Analytical method used	Gravimetric	Gravimetric			Gravimetric	Gravimetric
Continuous hourly monitoring result over the period	0.0	0.16			1.39	1.2
Fuel usages over the sampling period						
Natural gas (%)	1%	0%			0%	0%
BF gas (%)	23%	88%			90%	100%
Coke oven gas (%)	77%	12%			10%	
Heavy fuel oil (%)	0%	0%			0%	

A52A A52B results have been calculated via the model

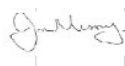
Signed on behalf of the Operator

Dated 26/01/2021

Form LCPD DCM Parts

EMISSION INVENTORY - ANNUAL REPORT TO THE NRW**Operating year:** 31/12/2020**Operator:** Tata Steel UK Ltd**Location:** Port Talbot Works**Authorisation:** BA6321/ CB8401**Release Point:** Sinter Main

Medium to which released	Radionuclide	Annual Release (Giga-Becquerels)	Annual Limit (Giga-Becquerels)
Air	Lead 210	61	160
Air	Polonium 210	75	185

Signed on behalf of the Operator**Dated**

28/01/2021

Schedule 9

Operational summary for the year ending 31/12/2020

Operator: Tata Steel UK Ltd
Location: Port Talbot Works

Permit: BL7108

Energy Source	Annual Energy Consumption		
	Primary energy produced on site (MWh) *	Primary energy imported (MWh) **	CO2 released (tonnes)
Electricity	568983	284160	100024
Natural gas		1611393	Data to follow
Coal ***		15861782	
Oil		16763	Data to follow
Coke***	6635892	1738892	
Steam	3880771		
Energy Source	Secondary energy produced on site (MWh)	Secondary energy imported (MWh)	CO2 released (tonnes)
Coke oven gas	1530513		Data to follow
Blast furnace gas	4651831		Data to follow
Coke (breeze)	922141		Data to follow
BOS gas	638380		Data to follow

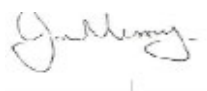
EUETS figures are currently being verified. This information will be sent at earliest convenience

* Reported energy use shall cover 95% of all energy used by the installation. An operational record of the energy use calculation shall be maintained.

** Units of imported electricity should be multiplied by a factor of 2.6 to account for the energy lost in generation and transmission.

*** These are not a direct energy sources. 70% of the coal is used to make coke. The remaining 30% of the coal and all of the coke are used as reductants in the BF ultimately producing BFG.

Signed on behalf of the Operator



Dated 28/01/2021

Form Energy 1