

RELEASES INTO AIR

Operational summary for the month

January-21

Operator: Tata Steel UK Ltd
Location: Port Talbot Works

Release Point: A55
Permit: BL7108/AP3330BE

Obscuration (%)	Day																												Month			
																													Mean			
	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Daily Mean	16.6	16.6	13.1	13.2	14.1	12.6	11.2	11.3	17.9	16.8	17.0	16.9	20.5	17.3	18.9	24.4	27.7	18.6	15.6	24.5	24.0	18.9	18.6	19.1	15.8	12.9	15.3	16.4	19.6	23.6	21.4	17.8
Weekly Mean Limit=25%			19.7							13.9							20.4							19.9							17.9	
Max Hourly	26	27	19	18	21	24	25	18	26	31	29	30	37	28	31	49	41	32	25	36	41	30	33	32	29	23	27	25	30	35	32	
Time greater than R1 (mins)	125	170	7	13	56	61	43	12	246	210	283	150	443	279	214	595	955	413	136	575	627	405	217	315	169	69	105	121	239	239	330	Total 7822

Ringelmann 1 (R1) equivalent to smoke opacity of 25%
Ringelmann 2 (R2) equivalent to smoke opacity of 50%
Ringelmann 3 (R3) equivalent to smoke opacity of 75%
Ringelmann 4 (R4) equivalent to smoke opacity of 100%

Dated: 27-Apr-2021

Form Coke CEMS Smoke

RELEASES INTO AIR

Operational summary for the month

February-21

Operator: Tata Steel UK Ltd

Release Point: A55

Location: Port Talbot Works

Permit: BL7108/AP3330BE

Obscuration (%)	Day																												Month Mean
	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	
Daily Mean	16.6	20.4	21.6	20.5	20.3	22.8	19.4	15.9	15.3	15.0	16.8	20.2	21.4	21.0	24.0	22.5	17.4	21.4	23.1	28.6	23.9	18.8	12.2	15.0	28.7	30.3	21.3	19.2	20.5
Weekly Mean Limit=25%							20.2							17.9							23.0							20.8	
Max Hourly	31	36	37	28	32	41	30	21	26	22	22	33	37	31	36	31	27	35	34	37	38	28	23	25	44	51	37	35	
Time greater than R1 (mins)	192	283	391	433	413	473	406	18	44	22	35	388	325	338	595	368	217	484	539	939	581	299	63	154	910	565	442		Total 10876

Ringelmann 1 (R1) equivalent to smoke opacity of 25%
Ringelmann 2 (R2) equivalent to smoke opacity of 50%
Ringelmann 3 (R3) equivalent to smoke opacity of 75%
Ringelmann 4 (R4) equivalent to smoke opacity of 100%

Dated: 27-Apr-2021

Form Coke CEMS Smoke

RELEASES INTO AIR

Operational summary for the month

March-21

Operator: Tata Steel UK Ltd

Release Point: A55

Location: Port Talbot Works

Permit: BL7108/AP3330BE

Obscuration (%)	Day																															Month	
	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean	
Daily Mean	14.3	14.2	12.2	14.3	22.1	17.6	19.5	15.1	14.7	25.5	19.4	17.6	31.9	24.7	28.4	27.5	24.5	11.9	15.3	11.5	12.0	15.0	19.0	22.6	12.5	15.2	20.1	21.0	20.3	17.6	15.6	18.5	
Weekly Mean Limit=25%							16.3							21.3							18.7							17.9					
Max Hourly	27	26	26	25	32	30	34	22	24	34	38	33	45	34	41	51	40	26	36	16	27	25	42	35	18	24	32	33	27	33	32		
Time greater than R1 (mins)	112	123	66	143	567	294	367	96	139	678	446	353	1115	685	962	846	606	71	183	26	50	116	319	566	25	81	307	331	283	263	Total 10502		

Ringelmann 1 (R1) equivalent to smoke opacity of 25%

Ringelmann 2 (R2) equivalent to smoke opacity of 50%

Ringelmann 3 (R3) equivalent to smoke opacity of 75%

Ringelmann 4 (R4) equivalent to smoke opacity of 100%

Dated: 27-Apr-2021

Form Coke CEMS Smoke

RELEASES INTO AIR

Release summary for quarter ending

31-Mar-21

Operator: Tata UK Ltd

Release Point: A54

Location: Port Talbot Works

Permit: BL7108

Criteria	% leaking doors	% leaking tops	
Monthly average limit	10.00	1.00	
January	5.46	0.74	
February	6.52	0.77	
March	5.95	0.66	

Dated: 27-Apr-2021

Form Coke DCM CF

RELEASES INTO AIR

Release summary for quarter ending

31-Mar-21

Operator: Tata UK Ltd

Release Point: A56

Location: Port Talbot Works

Permit: BL7108 / BL7108IM

Month	No. ovens discharged with Minister Stein in the month	Total no. ovens discharged in the month	% of ovens discharged with the Minister Stein in the month
January	Not operational in Q1 2021	2811	0.00%
February		2569	0.00%
March		2821	0.00%
April			
May			
June			
July			
August			
September			
October			
November			
December			
Total	0	8201	0.0%

Limits 98% availability (unplanned outages) - annual.

Limits 94% availability (all outages) - annual.

Dated: 27-Apr-2021

**Form Coke Minister Stein
(Revision 1)**

RELEASES INTO AIR

Release summary for quarter ending

31-Mar-21

Operator: Tata UK Ltd

Release Point: A57

Location: Port Talbot Works

Permit: BL7108

Substance	Sulphur dioxide	Oxides of Nitrogen
Permit limit (mg/m3)	2000	200
Measured conc (mg/m3) **	1703 (+/-63.2)	145 (+/-5.4)
Sampling method used	BS 6069	ISO 10849
Analytical method used	EC *	EC *
Date of sampling	29-Mar-21	29-Mar-21
Sampling start time	11:14	11:14
Sampling end time	12:15	12:15
Date of analysis	29-Mar-21	29-Mar-21
Limit of detection	1.6	1.4
Process status during sampling	2 stills & 2 incinerators on	2 stills & 2 incinerators on
Annual release limit (kg)	750,000	140,000
Annual release (kg)		
Fuel usages over the sampling period		
Natural gas %		
Blast furnace gas %		
Coke oven gas %	100	100
Heavy fuel oil %		

Mass release limits are annual mass release limits and are to be reported annually.

* EC - electrochemical cell

Dated: 27-Apr-2021

Form DCM SO2 & NOx

RELEASES INTO AIR

Operational Summary for the month Jan-2021

Operator: Tata Steel UK Ltd

Permit: BL7108 / RP3730BV

Location: Port Talbot Works

Release Point: A1

Day	% max throughput	% data capture	% EP availability	% UIT availability	Sinter Blend			Particulate Matter (mg/m3)								
					Mean sulphur % w/w	Mean chloride % w/w	Mean reverts % w/w	Daily average	4 hour rolling average				Hourly average			
									Maximum	Mean	Minimum	Standard deviation	Maximum	Mean	Minimum	Standard deviation
01-Jan-21	70	100%	100%	100%	0.016		6.24%	65	127	66	40	28	196	65	23	36
02-Jan-21	70	100%	100%	100%	0.016		6.24%	57	78	57	41	10	104	57	22	17
03-Jan-21	56	100%	100%	100%	0.016		6.24%	41	67	45	6	13	75	41	0	22
04-Jan-21	59	100%	100%	100%	0.018		5.66%	50	76	47	0	21	147	50	0	32
05-Jan-21	70	100%	100%	93%	0.018		5.66%	60	79	60	39	8	150	60	0	25
06-Jan-21	66	100%	100%	100%	0.018		5.66%	43	51	42	23	7	101	43	0	19
07-Jan-21	57	100%	100%	100%	0.018		5.66%	22	63	26	0	26	77	22	0	29
08-Jan-21	68	100%	100%	100%	0.019	0.008	6.19%	30	60	28	0	23	63	30	0	24
09-Jan-21	52	100%	100%	100%	0.019	0.008	6.19%	32	53	31	0	15	106	32	0	24
10-Jan-21	71	100%	100%	100%	0.019	0.008	6.19%	54	67	55	32	10	92	54	0	18
11-Jan-21	74	100%	100%	96%	0.015	0.006	6.58%	54	66	51	34	11	98	54	31	16
12-Jan-21	59	100%	100%	100%	0.015	0.006	6.58%	48	86	50	29	15	135	48	0	27
13-Jan-21	70	100%	100%	100%	0.015	0.006	6.58%	47	80	48	25	15	105	47	0	21
14-Jan-21	37	100%	100%	100%	0.015	0.006	6.58%	21	44	22	0	17	68	21	0	22
15-Jan-21	4	100%	100%	100%	0.015	0.006	6.58%	17	103	7	0	23	219	17	0	56
16-Jan-21	50	100%	100%	100%	0.014	0.008	5.88%	39	132	48	7	33	115	39	0	30
17-Jan-21	67	100%	100%	100%	0.014	0.008	5.88%	46	58	46	32	8	73	46	1	17
18-Jan-21	63	100%	100%	100%	0.014	0.008	5.88%	45	63	44	27	10	77	45	5	14
19-Jan-21	64	100%	100%	100%	0.014	0.008	5.88%	45	72	48	26	12	97	46	0	21
20-Jan-21	62	100%	100%	97%	0.014	0.009	6.98%	45	44	35	19	7	50	36	22	8
21-Jan-21	37	100%	100%	100%	0.014	0.009	6.98%	45	93	35	0	26	152	34	0	36
22-Jan-21	53	100%	100%	100%	0.014	0.009	6.98%	45	44	31	13	8	56	29	0	14
23-Jan-21	58	100%	100%	100%	0.014	0.009	6.98%	47	42	26	8	10	47	28	1	12
24-Jan-21	58	100%	100%	100%	0.014	0.009	6.98%	48	51	38	14	9	69	38	0	18
25-Jan-21	68	100%	100%	100%	0.014	0.005	6.94%	49	47	39	32	5	70	40	22	10
26-Jan-21	63	100%	100%	100%	0.014	0.005	6.94%	49	62	47	25	11	72	48	0	18
27-Jan-21	33	100%	100%	100%	0.014	0.005	6.94%	49	46	24	0	14	57	21	0	20
28-Jan-21	7	100%	100%	100%	0.014	0.005	6.94%	50	46	8	0	15	111	8	0	23
29-Jan-21	39	100%	100%	100%	0.014	0.005	6.94%	52	82	32	0	23	202	33	0	42
30-Jan-21	43	100%	100%	100%	0.014	0.007	8.01%	52	21	13	2	5	31	13	0	9
31-Jan-21	64			100%	0.014	0.007	8.01%	52	37	24	12	8	70	24	0	10
Month ave	55	100%	100%	100%	0.02	0.01	0.1	45	-	38	-	-	-	38	-	-
Month max.	74	-	-	-	0.02	0.01	0.1	65	132	-	-	-	219	-	-	-
Limit	-	-	-	-	0.06	-	-	40	-	-	-	-	-	-	-	-

Dated 27/04/2021

Form Sinter CEMS

Operational Summary for the month Feb-2021

Permit: BL7108 / RP3730BV

Release Point: A1

Form Sinter CEMS

RELEASES INTO AIR

Operational Summary for the month Mar-2021

Operator: Tata Steel UK Ltd

Permit: BL7108 / RP3730BV

Location: Port Talbot Works

Release Point: A1

Day	% max throughput	% data capture	% EP availability	% UIT availability	Sinter Blend			Particulate Matter (mg/m3)									
								Mean sulphur % w/w	Mean chloride % w/w	Mean reverts % w/w	Daily average	4 hour rolling average				Hourly average	
					Maximum	Mean	Minimum					Standard deviation	Maximum	Mean	Minimum	Standard deviation	
01-Mar-21	0	100%	100%	100%	0.0148		0.089	0	0	0	0	0	0	0	0	0	0
02-Mar-21	0	100%	100%	100%	0.0148		0.089	0	0	0	0	0	0	0	0	0	0
03-Mar-21	1	100%	100%	100%	0.0148		0.089	0	0	0	0	0	0	0	0	0	0
04-Mar-21	10	100%	100%	85%	0.0148		0.089	44	150	35	0	48	250	44	0	72	
05-Mar-21	18	100%	100%	75%	0.0148		0.089	24	125	33	0	36	101	24	0	32	
06-Mar-21	29	100%	100%	79%	0.0148		0.089	19	43	17	0	13	48	19	0	17	
07-Mar-21	61	100%	100%	100%	0.0148		0.089	9	34	11	0	12	29	9	0	11	
08-Mar-21	50	100%	100%	100%	0.0147	0.009	0.077	14	32	14	0	12	71	14	0	18	
09-Mar-21	23	100%	100%	100%	0.0147	0.009	0.077	12	28	11	0	10	59	12	0	15	
10-Mar-21	62	100%	100%	100%	0.0147	0.009	0.077	18	25	18	13	3	32	18	13	4	
11-Mar-21	60	100%	100%	100%	0.0147	0.009	0.077	29	42	28	16	7	55	29	17	10	
12-Mar-21	65	100%	100%	100%	0.0201		0.108	39	56	37	27	10	73	39	24	15	
13-Mar-21	61	100%	100%	100%	0.0201		0.108	48	77	49	32	14	178	48	26	30	
14-Mar-21	66	100%	100%	100%	0.0201		0.108	47	67	47	34	8	82	47	5	16	
15-Mar-21	61	100%	100%	88%	0.0201		0.108	41	51	40	23	7	67	41	0	15	
16-Mar-21	69	100%	100%	97%	0.018	0.008	0.105	59	85	58	43	12	109	59	37	19	
17-Mar-21	67	100%	100%	100%	0.018	0.008	0.105	63	135	64	40	27	184	63	33	37	
18-Mar-21	65	100%	100%	100%	0.018	0.008	0.105	47	56	46	30	7	85	47	0	17	
19-Mar-21	59	100%	100%	100%	0.018	0.008	0.105	48	73	52	11	16	114	52	0	26	
20-Mar-21	71	100%	100%	100%	0.0175		0.096	49	67	58	46	5	76	58	38	8	
21-Mar-21	69	100%	100%	99%	0.0175		0.096	50	87	54	42	14	129	54	40	19	
22-Mar-21	70	100%	100%	100%	0.0175		0.096	50	81	60	37	11	102	61	29	16	
23-Mar-21	44	100%	100%	100%	0.0199	0.006	0.12	50	64	32	9	15	85	30	0	21	
24-Mar-21	65	100%	100%	100%	0.0199	0.006	0.12	47	39	32	24	5	52	33	23	7	
25-Mar-21	63	100%	100%	100%	0.0199	0.006	0.12	45	44	33	20	6	47	33	2	9	
26-Mar-21	68	100%	100%	98%	0.0199	0.006	0.12	43	66	49	37	8	90	49	31	12	
27-Mar-21	71	100%	100%	100%	0.02	0.006	0.132	45	72	54	35	13	113	55	27	18	
28-Mar-21	62	100%	100%	100%	0.02	0.006	0.132	46	61	43	30	8	61	41	2	12	
29-Mar-21	67	100%	100%	100%	0.02	0.006	0.132	44	72	51	37	11	102	51	25	17	
30-Mar-21	69	100%	100%	100%	0.02	0.006	0.132	44	72	53	39	10	88	53	35	15	
31-Mar-21	58	100%	100%	100%	0.0224	0.006	0.128	46	90	42	3	19	112	42	0	22	
Month ave	52	100%	100%	97%	0.02	0.01	0.1	36	-	36	-	-	-	36	-	-	
Month max.	71	-	-	-	0.02	0.01	0.1	63	150	-	-	-	250	-	-	-	
Limit	-	-	-	-	0.06	-	-	40	-	-	-	-	-	-	-	-	

Dated 27/04/2021

Form Sinter CEMS

RELEASES TO AIR

Operational summary for quarter ending 31-Mar-21

Operator: Tata Steel UK Ltd

Location: Port Talbot Works

Permit: BL7108 / BL7108IM (V009)

Operational parameters: Raw materials - Gas production and usage

Release point	Month	Gas flared (GJ)	Gas vented (GJ)	Gas produced (GJ)
A12A BOS convertor 1 gas flare	Month 1	13319		
	Month 2	17603		
	Month 3	31213		
A13A BOS convertor 2 gas flare	Month 1	13319		
	Month 2	17603		
	Month 3	31213		
A33 Blast furnace gas flare stack no.1	Month 1	36606		
	Month 2	53428		
	Month 3	123049		
A33C Blast furnace gas flare stack no.2	Month 1	58641		
	Month 2	120387		
	Month 3	174076		
A33A Blast furnace gas main number 4 bleeder	Month 1		6	
	Month 2		28	
	Month 3		18	
A33B Blast furnace gas main number 5 bleeder	Month 1		70	
	Month 2		339	
	Month 3		131	
A59 Coke oven gas triple flare	Month 1	36537		
	Month 2	25657		
	Month 3	58736		
Blast furnaces 4 and 5	Month 1			1535061
	Month 2			1288766
	Month 3			1671168
Coke ovens	Month 1			447009
	Month 2			411484
	Month 3			456968
BOS Plant	Month 1			200152
	Month 2			166207
	Month 3			213776

Dated 27/04/21

Form Installation gas

WASTE PRODUCTION

Operational summary for quarter ending 31-Mar-21

Operator: Tata Steel UK Ltd

Location: Port Talbot Works

Permit: BL7108

Release point	Month	Steel slag (tonnes)	Desulph slag (tonnes)	Hazardous waste * (tonnes)	Non hazard waste * (tonnes)	BF slag (tonnes)	Oil used in coke ovens (tonnes)	Waste oil reductant (tonnes)
BOS	Jan	38030	440					
	Feb	19620	1845					
	Mar	20980	329					
Iron and steel installation	Jan			5	412			
	Feb			18	683			
	Mar			4	731			
BF4 tapholes	Jan					36603		
	Feb					33048		
	Mar					37902		
BF5 tapholes	Jan					43125		
	Feb					27034		
	Mar					32368		
BF5	Jan							
	Feb							
	Mar							
Coke ovens	Jan						175	
	Feb						183	
	Mar						205	

* Disposal to Morfa landfill site non-hazardous and hazardous cells.

Dated 27/04/21

Form Waste 1

RELEASES INTO AIR

Operational summary for quarter ending 31-Mar-21

Operator: Tata Steel UK Ltd
Location: Port Talbot Works
Permit: BL7108 / RP3730BV / BL7108IM (V009)
Release Points: A10A & A63

PARTICULATE MATTER (mg/Nm3) - CONTINUOUS EMISSIONS MONITORING											
Release point	Month	Limit	Maximum daily mean	Minimum daily mean	Standard deviation of daily means	Maximum hourly mean	Minimum hourly mean	Standard deviation of hour means	Monthly mean	abatement availability %	% data capture over month
A10A	Jan	15	1.0	0.6	0.1	8.0	0.6	0.2	0.8	100%	100%
	Feb	Daily mean	1.1	0.5	0.2	7.7	0.0	0.4	0.7	100%	100%
	Mar		1.9	0.5	0.4	9.1	0.7	1.0	0.9	100%	100%
A63*	Jan	25	2.8	0.8	0.6	12.7	1.2	2.5	1.5	100%	100%
	Feb	Hourly mean	3.2	0.7	0.6	15.0	1.1	2.6	1.5	100%	100%
	Mar		0.9	0.3	0.1	4.0	0.0	0.8	0.5	100%	100%

Dated 27/04/21

RELEASES INTO AIR

Operational summary for quarter ending 31-Mar-21

Operator: Tata Steel UK Ltd

Location: Port Talbot Works

Permit: BL7108

Release Points: A2, A8A, A8B, A9, A10, A14, A15 & A16

PARTICULATE MATTER (mg/Nm3) - CONTINUOUS EMISSIONS MONITORING											
Release point	Month	Limit	Maximum daily mean	Minimum daily mean	Standard deviation of daily means	Maximum hourly mean	Minimum hourly mean	Standard deviation of hour means	Monthly mean	abatement availability %	% data capture over month
A8A	Jan	15 Daily mean	2.9	0.6	0.6	6.3	0.1	1.0	1.8	100%	100%
	Feb		6.6	0.4	1.8	11.3	0.1	2.1	1.8	100%	100%
	Mar		8.7	0.6	1.7	17.2	0.2	2.4	5.9	100%	100%
A8B	Jan	15 Hourly mean	0.7	0.2	0.2	1.0	0.0	0.2	0.5	100%	100%
	Feb		2.1	0.3	0.3	2.4	0.0	0.3	0.5	100%	100%
	Mar		2.6	0.5	0.4	3.1	0.0	0.6	1.7	100%	100%
A9	Jan	15 Hourly mean	5.8	0.0	1.7	13.2	0.7	1.6	0.6	100%	100%
	Feb		4.9	0.0	1.4	8.4	0.4	1.7	0.5	100%	100%
	Mar		3.2	0.0	0.9	8.3	0.4	1.4	0.4	100%	100%
A2	Jan	50 Daily mean	49.8	1.0	11.2	69.6	0.0	16.1	23.0	100%	100%
	Feb		36.7	8.3	5.9	111.3	0.0	14.7	22.4	100%	100%
	Mar		50.8	0.0	12.6	86.9	0.0	16.3	25.6	100%	100%
A10	Jan	15 Daily mean	4.6	1.3	0.8	8.0	2.1	1.6	3.3	100%	100%
	Feb		4.7	2.4	0.8	7.7	3.3	1.2	3.3	100%	100%
	Mar		5.4	1.1	1.1	9.1	1.3	1.8	3.2	100%	100%
A14	Jan	15 Daily mean	3.9	2.2	0.3	9.0	2.8	1.2	2.8	100%	100%
	Feb		3.2	1.4	0.5	3.9	2.0	0.5	4.0	100%	100%
	Mar		2.3	1.6	0.2	3.9	2.1	0.5	1.9	100%	100%
A15	Jan	15 Daily mean	3.1	1.5	0.4	8.7	2.2	1.2	2.5	100%	100%
	Feb		3.8	1.3	0.7	4.8	2.4	0.8	2.2	100%	100%
	Mar		4.0	2.7	0.3	6.8	3.4	0.7	3.1	100%	100%
A16	Jan	15 Daily mean	4.6	1.7	0.7	13.9	2.2	2.7	2.6	100%	100%
	Feb		4.2	1.1	0.7	6.0	2.1	1.1	5.7	100%	100%
	Mar		4.0	2.4	0.4	5.4	2.8	0.6	3.2	100%	100%

Dated 27/04/21

Form I&S CEMS Parts 1 & 2

RELEASES INTO AIR

Operational summary for quarter ending 31-Mar-21

Operator: Tata Steel UK Ltd

Location: Port Talbot Works

Permit: BL7108 / PP3738SQ

Release Points: A6, A7, A21, A22, A24 & A46

VARIOUS DISCONTINUOUS MONITORING			
Release Point	A21/A22	A6	A7
Parameter	Chloride (as HCl)	Carbon monoxide	
Time and date of sampling	11:08 10/02/2021	12:23 23/03/2021	13:16 02/02/2021
Flowrate (Nm3/hr)		122,777	169,125
Measured conc.(mg/Nm3)	0.03	6,250	6,250
Emission limits (mg/Nm3)	5	None	None
Sampling method used	Isokinetic		
Analytical method used	BSEN1911		
Emission limits (kg/quarter)			
Releases (kg/qtr)			
Fuel usages over the sampling period			
Natural gas (%)		13%	0%
BF gas (%)		70%	90%
Coke oven gas (%)		9%	10%
Heavy fuel oil (%)		8%	

Dated

28/04/21

Form I&S DCM Misc

RELEASES INTO AIR

Operational summary for quarter ending

31-Mar-21

Operator: Tata Steel UK Ltd

Location: Port Talbot Works

Permit: BL7108 / NP3938GZ

Release Points: A6, A7, A30, A31, A32, A34A, A34B & A39

OXIDES OF NITROGEN - NO _x (DISCONTINUOUS MONITORING)							
Release Point	A6	A7	A30	A31 ***	A32 ***	A34A	A34B
Time and date of sampling	12:23 23/03/2021	10:50 02/02/2021				10:00 05/02/2021	10:07 05/02/2021
Flowrate (Nm ³ /hr)	122,777	169,125					
NO _x measured conc.(mg/Nm ³) **	85 +/- 3.0	69 +/- 2.5				422	456
Oxygen content (%)							
NO _x limits (mg/Nm ³)	100	100				1800	1800
Sampling method used	ISO 10849	ISO 10849					
Analytical method used	EC *	EC *					
Continuous hourly monitoring result over the period							
Fuel usages over the sampling period							
Natural gas (%)	13%	0%		-	-	57%	100%
BF gas (%)	70%	90%					
Coke oven gas (%)	9%	10%				43%	0%
BOS Gas (%)	8%						

* EC - electrochemical cell

*** A31 & A32 are not operational

Dated 28/04/21

Form I&S DCM NO_x

RELEASES INTO AIR

Operational summary for quarter ending

31-Mar-21

Operator: Tata Steel UK Ltd

Location: Port Talbot Works

Permit: BL7108 / NP3938GZ

Release Points: A6, A7, A34A & A34B

SULPHUR DIOXIDE - SO ₂ (DISCONTINUOUS MONITORING)					
Release Point	A6	A7	A34A	A34B	
Time and date of sampling	12:23 23/03/2021	10:50 02/02/2021	10:00 05/02/2021	10:07 05/02/2021	
Flowrate (Nm ³ /hr)	122,777	169,125			
SO ₂ measured conc.(mg/Nm ³)	3 +/- 1.9	35 +/- 2.2	425	0	
SO ₂ limits (mg/Nm ³)					
Sampling method used	100	100	1400	1400	
Analytical method used					
Continuous hourly monitoring result over the period					
Fuel usages over the sampling period					
Natural gas (%)	13%	0%	57%	100%	
BF gas (%)	70%	90%			
Coke oven gas (%)	9%	10%	43%	0%	
BOS Gas (%)	8%				

* EC - electrochemical cell

A39 has a 6 monthly monitoring requirement

Dated

28/04/21

Form I&S DCM SO₂

RELEASES INTO AIR

Operational summary for quarter ending 31-Mar-21

Operator: Tata Steel UK Ltd

Location: Port Talbot Works

Permit: BL7108

Release Points: Iron plating continued

Liquid Iron Plating Operations (Iron Plating Pit)			
Date	Time	Tonnes	Reason
03/01/2021	12:35	20	Torp coming off flare
03/01/2021	14:42	30	Torp coming off flare
04/01/2021	14:2	228	Bos on stop
04/01/2021	15:23	228	Bos on stop
04/01/2021	15:46	192	Bos on stop
04/01/2021	16:18	228	Bos on stop
04/01/2021	17:0	172	Bos on stop
05/01/2021	16:30	236	issues in bos
05/01/2021	17:28	184	Bos on stop
05/01/2021	19:18	161	Bos on stop
05/01/2021	19:49	237	Bos on stop
05/01/2021	20:10	208	Bos on stop
05/01/2021	20:34	237	Bos on stop
09/01/2021	9:40	236	Bos slow
11/01/2021	4:55	249	Poor Quality
12/01/2021	4:30	236	High Silicon
12/01/2021	4:55	200	Poor Quality
13/01/2021	9:10	216	bos down
13/01/2021	9:55	254	bos down
13/01/2021	10:50	208	bos down
13/01/2021	11:50	180	bos down
14/01/2021	21:31	270	Poor Quality
15/01/2021	18:55	197	poor qaulity
15/01/2021	19:40	250	poor qaulity
15/01/2021	20:40	285	poor qaulity
15/01/2021	21:10	180	poor qaulity
17/01/2021	10:0	161	Bos on stop
17/01/2021	10:28	190	Bos on stop
17/01/2021	15:30	230	Bos slow
17/01/2021	15:35	240	Bos slow
18/01/2021	7:10	168	Bos slow
18/01/2021	8:10	224	Bos slow
18/01/2021	12:35	184	Bos sl;ow
18/01/2021	13:10	180	Bos slow
23/01/2021	19:35	228	bos slow
23/01/2021	21:10	180	bos slow
08/02/2021	9:0	171	High Silicon
08/02/2021	9:0	171	High Silicon
08/02/2021	9:35	190	High Silicon
08/02/2021	19:40	228	high silica
Total		8,067	

Dated 28/04/21

Form I&S Operational 1

RELEASES INTO AIR

Operational summary for quarter ending 31-Mar-21

Operator: Tata Steel UK Ltd

Location: Port Talbot Works

Permit: BL7108

Release Points: Iron plating continued

Liquid Iron Plating Operations (Iron Plating Pit)			
Date	Time	Tonnes	Reason
08/02/2021	23:10	162	high silica
09/02/2021	23:50	104	torp coming off flare
10/02/2021	6:50	130	torp coming off flare
10/02/2021	15:40	195	Torpedo reacting under furnace
12/02/2021	14:32	247	Standage
12/02/2021	14:58	237	Standage
13/02/2021	17:40	228	poor quality
14/02/2021	20:51	228	Poor Quality
14/02/2021	22:20	218	Poor Quality
15/02/2021	1:23	228	Poor Quality
15/02/2021	2:4	279	Poor Quality
16/02/2021	9:0	218	BOS on stop
17/02/2021	8:50	207	BOS on stop
17/02/2021	13:10	219	BOS on stop
17/02/2021	14:10	268	BOS on stop
17/02/2021	14:10	268	BOS on stop
19/02/2021	8:50	171	high standage
19/02/2021	11:0	190	high standage
19/02/2021	11:20	218	high standage
19/02/2021	12:25	224	high standage
20/02/2021	6:50	170	high silicone
20/02/2021	7:5	240	high silicone
21/02/2021	13:25	150	torp coming off flare
21/02/2021	16:45	294	bos slow
21/02/2021	17:35	190	bos slow
21/02/2021	17:35	190	bos slow
22/02/2021	4:50	270	high standage
22/02/2021	6:30	237	bos slow
22/02/2021	7:35	207	bos slow
22/02/2021	10:15	190	high standage (bos slow)
22/02/2021	11:40	208	High Standage (bos slow)
23/02/2021	12:20	282	High Standage (bos slow)
25/02/2021	11:20	228	BOS Down
25/02/2021	11:20	228	BOS Down
25/02/2021	12:20	243	BOS Down
03/03/2021	21:43	285	Standage
Total		7,851	

Dated 28/04/21

Form I&S Operational 1

Operational summary for quarter ending 31-Mar-21

Release Points: Iron plating continued

Dated 28/04/21 **Form I&S Operational 1**

RELEASES INTO AIR

Operational summary for quarter ending

31-Mar-21

Operator: Tata Steel UK Ltd

Location: Port Talbot Works

Permit: BL7108 / NP3938GZ

Release Point: A62

PARTICULATE MATTER (mg/Nm3) - CONTINUOUS EMISSIONS MONITORING							
Release point	Month	Maximum daily mean LIMIT=30	Monthly mean	Date & time of maximum value	Minimum daily mean	Standard deviation of daily means	% data capture
A62 Boiler 3	JAN	3.6	2.3	18-Jan-21	1.8	0.5	100.0%
	FEB	6.5	3.5	17-Feb-21	1.4	1.2	100.0%
	MAR	9.5	3.8	13-Mar-21	2.6	1.4	100.0%
SULPHUR DIOXIDE (mg/Nm3) - CONTINUOUS EMISSIONS MONITORING							
Release point	Month	Maximum daily mean LIMIT=400	Monthly mean	Date & time of maximum value	Minimum daily mean	Standard deviation of daily means	% data capture
A62 Boiler 3	JAN	175.1	113.6	14-Jan-21	68.5	23.8	100.0%
	FEB	248.3	11.4	17-Feb-21	16.7	49.1	100.0%
	MAR	201.4	91.9	30-Mar-21	17.5	52.0	100.0%
OXIDES OF NITROGEN (mg/Nm3) - CONTINUOUS EMISSIONS MONITORING							
Release point	Month	Maximum daily mean LIMIT=200	Monthly mean	Date & time of maximum value	Minimum daily mean	Standard deviation of daily means	% data capture
A62 Boiler 3	JAN	148.4	70.7	29-Jan-21	16.3	30.0	100.0%
	FEB	113.9	119.9	24-Feb-21	27.9	21.3	100.0%
	MAR	237.2	114.7	13-Mar-21	60.4	46.7	100.0%

Dated 27/04/21

Form LCPD CEM A62

RELEASES INTO AIR

Operational summary for quarter ending

31-Mar-21

Operator: Tata Steel UK Ltd

Location: Port Talbot Works

Permit: BL7108

Release Points: A50A, A50B, A51, A52A, A52B & A53

PARTICULATE MATTER (mg/Nm3) - CONTINUOUS EMISSIONS MONITORING							
Release point	Month	Monthly mean LIMIT=50	Maximum hourly mean	Date & time of maximum value	Minimum hourly mean	Standard deviation of hourly means	% data capture over month
A50A & A50B Service Boilers 4&5	JAN	7.4	63.9	24/01/2021 22:00	2.9	4.2	100.0%
	FEB	6.6	80.3	25/02/2021 8:00	2.2	4.3	100.0%
	MAR	5.4	27.5	16/03/2021 12:00	1.3	1.7	100.0%
A51 Boiler A5	JAN	1.0	5.5	13/01/2021 20:00	0.5	0.4	100.0%
	FEB	1.0	12.3	04/02/2021 7:00	0.5	0.6	100.0%
	MAR	1.0	6.5	18/03/2021 13:00	0.4	0.4	100.0%
A52A Boiler 6	JAN	N/D					0.0%
	FEB	N/D					0.0%
	MAR	N/D					0.0%
A52B Boiler 7	JAN	N/D					0.0%
	FEB	N/D					0.0%
	MAR	N/D					0.0%
A53 Mitchell	JAN	2.9	30.5	14/11/2020 3:00	1.9	1.2	100.0%
	FEB	3.0	20.5	19/02/2021 6:00	1.5	1.2	100.0%
	MAR	2.7	6.9	20/03/2021 19:00	1.1	0.4	100.0%

Dated 27/04/21

Form LCPD CEM Parts

Operational summary for quarter ending 31-Mar-21

Location: Port Talbot Works

Permit: BL7108

Release Points: A50A, A50B, A51, A52A, A52B, A53 & A62

[illegible]

Dated

27/04/21

Form LCPD CEMS LOG

RELEASES INTO AIR

Operational summary for quarter ending

31-Mar-21

Operator: Tata Steel UK Ltd

Location: Port Talbot Works

Permit: BL7108 / BL7108IM (V009)

Release Points: A50, A52A & A52B

OXIDES OF NITROGEN (mg/Nm3) - CONTINUOUS EMISSIONS MONITORING							
Release point	Month	Month mean LIMITS: BFG/COG=300	Maximum hourly mean	Date & time of maximum value	Minimum hourly mean	Standard deviation of hourly means	% data capture over month
A52A Boiler 6	JAN	N/D					0.0%
	FEB	N/D					0.0%
	MAR	N/D					0.0%
A52B Boiler 7	JAN	N/D					0.0%
	FEB	N/D					0.0%
	MAR	N/D					0.0%
A50A & A50B Service Boilers	JAN	210.6	861.3	10/01/2021 12:00	6.7	137.3	100.0%
	FEB	175.3	525.5	14/02/2021 2:00	9.2	90.9	100.0%
	MAR	138.0	459.2	20/03/2021 19:00	27.4	64.0	100.0%
SULPHUR DIOXIDE (mg/Nm3) - CONTINUOUS EMISSIONS MONITORING							
Release point	Month	Month mean LIMITS: BFG/COG=800	Maximum hourly mean	Date & time of maximum value	Minimum hourly mean	Standard deviation of hourly means	% data capture over month
A52A Boiler 6	JAN	N/D					0.0%
	FEB	N/D					0.0%
	MAR	N/D					0.0%
A52B Boiler 7	JAN	N/D					0.0%
	FEB	N/D					0.0%
	MAR	N/D					0.0%
A50A & A50B Service Boilers	JAN	410.9	2272.1	27/12/2020 4:00	26.0	371.0	100.0%
	FEB	394.9	1576.6	25/02/2021 13:00	16.2	277.4	100.0%
	MAR	257.0	1162.1	20/03/2021 3:00	15.9	180.3	100.0%

Dated 27/04/21

Form LCPD CEMS SO2 & NOx

RELEASES INTO AIR

Operational summary for quarter ending 31-Mar-21

Operator: Tata Steel UK Ltd

Location: Port Talbot Works

Permit: BL7108

Release Points: A50A/A50B, A51, A52A, A52B, A53 & A62

OXIDES OF NITROGEN - NOx (DISCONTINUOUS MONITORING)						
Release Point	A50A&B Service 4&5	A51 A5	A52A No.6	A52B No.7	A53 Mitchell	A62 No.3
Time and date of sampling		12-Feb-21 10:29			19-Mar-21 09:48	
Flowrate (Nm3/hr)						
NOx measured conc. (mg/Nm3)		103 +/- 4.7			71 +/- 3.6	
NOx limit (mg/NM3)		300			300	
Sampling method used		ISO 10849			ISO 10849	
Analytical method used		EC*			EC*	
Continuous hourly monitoring result over the period						
Fuel usages over the sampling period						
Natural gas (%)		0%			0%	
BF gas (%)		87%			94%	
Coke oven gas (%)		13%			6%	
Heavy fuel oil (%)		0%			0%	

A52A, A52B and A62 (Boiler 3) have an annual monitoring requirement. A50A/A50B has a six monthly monitoring requirement.

* EC - electrochemical cell

Dated 27/04/21

Form LCPD DCM NOx

RELEASES INTO AIR

Operational summary for quarter ending

31-Mar-21

Operator: Tata Steel UK Ltd

Location: Port Talbot Works

Permit: BL7108 / NP3938GZ

Release Points: A50A/A50B, A51, A52A, A52B, A53 & A62

SULPHUR DIOXIDE - SO ₂ (DISCONTINUOUS MONITORING)						
Release Point	A50A&B Service 4&5	A51 A5	A52A No.6	A52B No.7	A53 Mitchell	A62 No.3
Time and date of sampling		12-Feb-21 10:29			19-Mar-21 09:48	
Flowrate (Nm ³ /hr)						
SO ₂ measured conc. (mg/Nm ³)		55 +/- 3.8			85 +/- 5.0	
SO ₂ limit (mg/NM ³)		226			211	
Sampling method used		BS 6069			BS 6069	
Analytical method used		EC*			EC*	
Continuous hourly monitoring result over the period						
Fuel usages over the sampling period						
Natural gas (%)		0%			0%	
BF gas (%)		87%			94%	
Coke oven gas (%)		13%			6%	
Heavy fuel oil (%)		0%			0%	

A52A, A52B and A62 (Boiler 3) have an annual monitoring requirement. A50A/A50B have a six monthly monitoring requirement.

* EC - electrochemical cell

Dated

27/04/21

Form LCPD DCM SO₂

RELEASES INTO AIR

Operational summary for quarter ending

31-Mar-21

Operator: Tata Steel UK Ltd

Location: Port Talbot Works

Permit: BL7108

Release Points: A50A, A50B, A51, A52A, A52B, A53 & A62

Release point	Month	Fuel oil (GJ)	Coke oven gas (GJ)	Blast furnace gas (GJ)	Natural gas (GJ)	BOS gas (GJ)	All fuels (GJ)
A50A Service Boiler 4	Jan	0	15712	19851	3187		38751
	Feb	0	29341	36324	3191		68857
	Mar	0	31620	51224	4203		87047
A50B Service Boiler 5	Jan	0	23384	51511	4396		79291
	Feb	0	19223	43561	4533		67317
	Mar	0	18013	50984	4779		73776
A51 Boiler A5	Jan	0	6364	55001	1338	833	63537
	Feb	0	4308	43648	5504	45	53504
	Mar	0	978	49428	13758	2	64166
A52A Boiler 6	Jan	1709	42268	246509	19395	37978	347859
	Feb	1366	28434	159498	15452	18054	222803
	Mar	0	31945	246120	14758	26327	319149
A52B Boiler 7	Jan	801	35225	252828	18500	38921	346274
	Feb	366	30742	218306	17732	24542	291688
	Mar	0	25090	250250	15544	26696	317581
A53 Mitchell	Jan	249	9634	123609	3329		136820
	Feb	184	4667	104170	1236		110258
	Mar	0	7806	102978	1723		112507
A62 Boiler 3	Jan		3799	176541	13322	2989	196652
	Feb		7206	96722	14337	117	118382
	Mar		2984	90582	14045	4	107615
Total	Jan	2759	136386	925850	63468	80721	1209184
	Feb	1916	123922	702228	61984	42759	932808
	Mar	0	118436	841566	68809	53029	1081841

Dated 27/04/21

Form LCPD Fuels

RELEASES INTO AIR

Operational summary for quarter ending

31-Mar-21

Operator: Tata Steel UK Ltd

Location: Port Talbot Works

Permit: BL7108

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

Operating details	BOILERS						
	A50A Service 4	A50B Service 5	A51 A5	A52A No.6	A52B No.7	A53 Mitchell	A62 No.3
Operating time (hours)	1843	2158	2157	2016	2160	2160	2160
Mean load (%MCR)	51.5	49.8	46.7	81.2	81.4	57.1	54.9
Mean flue gas flow (Nm ³ /hr)	67028	105101	53686	202927	248348	116451	141463
Heavy Fuel Oil							
Average net CV (GJ/te)	41	41	41	41	41	41	
Max. sulphur content (g/Kg)	5	5	5	5	5	5	
Max. asphaltene content (g/Kg)	48	48	48	48	48	48	
Ave.%wt Sulphur	0.5	0.5	0.5	0.5	0.5	0.5	
NOx factor	0.1	0.1	0.1	0.1	0.1	0.1	
Coke Oven Gas							
Average net CV (GJ/km ³)	17.46	17.46	17.46	17.46	17.46	17.46	17.46
Sulphur content (g/te)	4.00	4.00	4.00	4.00	4.00	4.00	4.00
NOx factor	0.04	0.04	0.04	0.04	0.04	0.04	0.04
Blast Furnace Gas							
Average net CV (GJ/te)	3.63	3.67	3.67	3.67	3.67	3.67	3.67
Sulphur content (g/Nm ³)	0.024	0.024	0.024	0.024	0.024	0.024	0.024
NOx factor	0.025	0.025	0.025	0.025	0.025	0.025	0.025
Natural Gas							
Average net CV (GJ/te)	37.016	37.016	37.016	37.016	37.016	37.016	37.016
NOx factor	0.04	0.04	0.04	0.04	0.04	0.04	0.04

Dated

27/04/21

172129

Form LCPD Operating 1

RELEASES INTO AIR

Operational summary for quarter ending

31-Mar-21

Operator: Tata Steel UK Ltd

Location: Port Talbot Works

Permit: BL7108 / NP3938GZ

Release Point: A1

Substance	Particulates	Sulphur Dioxide	Oxides of Nitrogen	Carbon Monoxide
Permit limit (mg/Nm3)	40	500	500	
Measured conc. according to condition 10.1.3b	101 +/- 11.8	267 +/- 31.1	252 +/- 29.3	6,250 +/- 839.5
Measured oxygen content (%)	17.5	17.5	17.5	17.5
Measured conc. according to condition 10.1.3a (17%O2)	115	306	288	7,169
Sampling method used	BS EN 13284	BS 6069	ISO 10849	BS ISO 12039
Analytical method used	Gravimetric	*EC	*EC	*EC
Date of sampling	16-Mar-21	16-Mar-21	16-Mar-21	16-Mar-21
Sample start time	10:34	11:44	11:44	11:44
Sample end time	12:53	12:44	12:44	12:44
Sample duration (mins)	139	60	60	60
Limit of detection				
Continuous monitor result over the sampling period	57.4			
Process status at the time of sampling				
Mean sulphur content of sinter blend in use (%)	0.018	0.018	0.018	0.018
Reverts content of sinter blend in use (%)	0.1	0.1	0.1	0.1
Mean chloride content of sinter blend in use (%)	0.01	0.01	0.01	0.01
Throughput during sampling period (% of maximum)				

Dated 27/04/21

Form Sinter DCM 1

Operational summary for quarter ending 31-Mar-21

Release Points: A4A, A5A, & iron plating

Dated 28/04/21

RELEASES INTO AIR

Operational summary for quarter ending 31-Mar-21

Operator: Tata Steel UK Ltd
Location: Port Talbot Works
Permit: BL7108 / RP3730BV

Iron Ore Sintering - Record of strand stoppages > 30 minutes				
Date	Time		Planned/ Unplanned	Reason
	Start	Duration (mins)		
01-Jan-21	11:15	1h 27m	Mechanical	limestone deviated @ 93.50. /replenishing low ore bunkers.
03-Jan-21	20:00	7h 0m	Mechanical	Motor failure
04-Jan-21	08:19	39m	Electrical	Boggie flex trip activated, elect reconnected to limit box. TEMP REPAIR until plant onstop
04-Jan-21	11:00	40m	Mechanical	Roller changed also 1027 tail end tracking return roller changed same time..
06-Jan-21	19:00	1h 36m	Operational	Delay to carry out down day rap to assist with waste gas emissions
06-Jan-21	08:33	2h 52m	Operational	Stopped due to height of 1028 stockpile, resulting in conveyor having to be dug off along with head end of 1027 and gtu area.
07-Jan-21	10:22	2h 21m	Electrical	Stop taken to split de-dust field stop extended due to 1047 ddv and 950ddv see below.
07-Jan-21	14:16	1h 34m	Electrical	Power dip to plant on 11kv incoming supply energy involved see below.
09-Jan-21	04:27	7h 8m	Electrical	1026 Con stopped
12-Jan-21	03:00	1h 48m	Operational	1028 stockpile rammed
12-Jan-21	12:51	2h 32m	Environmental	rap down PRECIP's
13-Jan-21	22:20	3h 43m	Operational	Delay due to no sinter route available
14-Jan-21	11:30	49m	Operational	Limestone bunker went empty at 94%
14-Jan-21	14:03	31h 57m	Mechanical	Cooler tray /axle failed in dip rail /1020 hopper cooler. Tray change ongoing
15-Jan-21	22:00	41m	Mechanical	1006 tracking.
16-Jan-21	00:28	1h 33m	Mechanical	1024 screen stopped Plate in 1026 chute
19-Jan-21	22:14	2h 33m	Electrical	SLC link unavailable...comms issue
21-Jan-21	08:18	8h 1m	Mechanical	belt parted
21-Jan-21	16:40	32m	Mechanical	1026 snub drum built up
22-Jan-21	14:47	39m	Electrical	Both cooler drives tripped, both bent beams tripped, south & north fan trips along with rappers on both precipis
22-Jan-21	21:46	3h 1m	Electrical	Lost all power to plant and 1028 conv buried as a result.
23-Jan-21	01:07	2h 53m	Mechanical	issues with 1026
23-Jan-21	10:02	31m	Electrical	Both waste gas fans tripped, electrical carried out checks, during this delay r/rollers changed on 1027 con.
24-Jan-21	23:30	43m	Mechanical	Limestone bunker holding up at 96.9%
27-Jan-21	01:20	1h 40m	Operational	1047 and 1049 blocked with material
27-Jan-21	12:00	6h 10m	Operational	Stop in line with blending plant break down
27-Jan-21	19:15	18h 4m	Mechanical	Cooler on stop, found North Drive u/s
28-Jan-21	16:34	9h 43m	Mechanical	1072 issues Blocked with material,
29-Jan-21	08:57	1h 11m	Environmental	dedust compressor fault
29-Jan-21	20:41	34m	Mechanical	Side wall re-bolted back into position
29-Jan-21	23:42	43m	Electrical	reset associated cooler panel drive fault
30-Jan-21	01:04	37m	Environmental	Compressor not revving high not giving maximum output that we need to remove material.
30-Jan-21	02:45	35m	Environmental	Compressor issues again, Blocked pipework, Scaffolding req to open up pipework to unblock.
30-Jan-21	03:42	4h 19m	Environmental	Plant offline awaiting scaffolding to free blockages in pipework
30-Jan-21	08:42	3h 43m	Mechanical	Pipework blocked issues with static compressor and mobile not giving enough pressure.
02-Feb-21	09:21	37m	Mechanical	Check 1027 snub drum/bearing
03-Feb-21	18:54	44m	Operational	1049 blocked
04-Feb-21	22:30	1h 30m	Electrical	Cooler tripping
05-Feb-21	02:19	4h 41m	Mechanical	Chain snapped
08-Feb-21	05:40	1h 49m	Mechanical	1003 Con stopped under load. Belt reversed and tensioned.

Dated

27/04/21

Form Sinter Operational

RELEASES INTO AIR

Form Sinter Operational Cont.

Operational summary for quarter ending 31-Mar-21

Operator: Tata Steel UK Ltd
Location: Port Talbot Works
Permit: BL7108 / RP3730BV

Iron Ore Sintering - Record of strand stoppages > 30 minutes				
Date	Time		Planned/ Unplanned	Reason
	Start	Duration (mins)		
08-Feb-21	12:33	1h 40m	Mechanical	Stop to lift shuttle back onto rail in area of North east axle, during this stop holes over plated on mixer.
12-Feb-21	03:35	32m	Mechanical	Pallet change for hole North side, pallet 95 off, 9 on
14-Feb-21	02:15	3h 6m	Operational	Loss of ore bunkers. Dockers unable to keep the tonnage up whilst feeding 881 static chute, all due to 902 conveyor parting.
15-Feb-21	11:37	1h 42m	Mechanical	Stop to change springs, further work picked up all detailed below.
15-Feb-21	23:15	4h 32m	Mechanical	Stringer wrapped around head end drum. X14 R/Rollers changed also
17-Feb-21	12:04	1h 34m	Mechanical	Delay to carry out patch repairs on 1025
18-Feb-21	09:50	31m	Operational	Delay to unblock 1049 chute
18-Feb-21	13:01	50m	Mechanical	Delay to replace damaged clips on 1021
18-Feb-21	20:00	32m	Mechanical	Pallet 17 off 89 On
19-Feb-21	10:45	2h 2m	Operational	Roller maintenance
19-Feb-21	17:27	1h 25m	Electrical	Delay from energy requesting both North and South fan stop due to 2 x transformer issue
02-Mar-21	07:00	12h 0m	Planned Maintenance	9 day stop
01-Mar-21	19:00	12h 0m	Planned Maintenance	Sinter stop on going, night pass on progressed, gas test taken also
02-Mar-21	07:00	12h 0m	Planned Maintenance	9 day stop ongoing
28-Feb-21	19:00	12h 0m	Planned Maintenance	9 day stop on going
28-Feb-21	07:00	12h 0m	Planned Maintenance	9 day stop
27-Feb-21	19:00	12h 0m	Planned Maintenance	9 day stop
27-Feb-21	07:00	12h 0m	Planned Maintenance	9 stop
02-Mar-21	07:00	12h 0m	Planned Maintenance	9 day stop
02-Mar-21	19:00	12h 0m	Planned Maintenance	9day stop ongoing
03-Mar-21	07:00	12h 0m	Planned Maintenance	Maint stop ongoing
04-Mar-21	19:00	1h 44m	Mechanical	1049 chain parted
05-Mar-21	01:22	1h 31m	Mechanical	1004 tracked over
04-Mar-21	13:34	1h 13m	Access to restricted area	sinter through
04-Mar-21	15:50	3h 10m	Mechanical	1049 parted
05-Mar-21	07:10	7h 58m	Mechanical	Delay to carry out repairs to mixer.
06-Mar-21	16:20	7h 33m	Mechanical	Delay to replace G/Box on roll feeder
06-Mar-21	00:48	8h 12m	Electrical	Delay due to 1066 failing to travel
06-Mar-21	09:08	42m	Mechanical	Delay to remove section of raw mix hopper grid from raw mix hopper
06-Mar-21	10:57	2h 11m	Electrical	Delay to split no 2 field.
06-Mar-21	20:41	36m	Operational	Pallet change
07-Mar-21	00:00	34m	Operational	Pallet change
08-Mar-21	10:13	2h 51m	Mechanical	Hole repaired on 1023 chute. Also cold crusher door welded in place.
08-Mar-21	21:05	16h 53m	Mechanical	Delay due to cooler jammed with tray 33 inner wheel collapsed
09-Mar-21	14:00	1h 21m	Operational	1006 Con did not come in 1005/1006 large volume of material when running off in test, blobbed 1007 chute
14-Mar-21	16:53	1h 27m	Electrical	delay to replace damaged trip on 1021
15-Mar-21	03:51	3h 2m	Operational	1049 Chain parted - found section of running rail has come away and jammed in chute.
17-Mar-21	10:43	47m	Mechanical	Stop to check gear mesh on south west pinion.

Dated

27/04/21

Form Sinter Operational

RELEASES INTO AIR Form Sinter Operational Cont.

Form Sinter Operational Cont.

Operational summary for quarter ending 31-Mar-21

Operator: Tata Steel UK Ltd

Location: Port Talbot Works

Permit: BL7108 / RP3730BV

[illegible]

Dated: 27-Apr-21

Form Sinter Operational

Releases to Controlled Waters

Release summary for the month

February-21

Operator: Tata Steel UK Ltd
Location: Port Talbot

Release Point: W1 (LSO)
Perrnit: BL7108

	S.Solids* Conc. (mg/l)	COD Conc. (mg/l)	BOD Conc. (mg/l)	Sulphides Conc. (mg/l)	Thiocyanate** Conc. (mg/l)	Cyanide Conc. (mg/l)	PAH Conc. (mg/l)	Phenols Conc. (mg/l)	A+N+N Conc. (mg/l)	Iron Conc. (mg/l)	Lead Conc. (mg/l)	Zinc Conc. (mg/l)	Nickel Conc. (mg/l)	Chromium Conc. (mg/l)	Oil Conc. (mg/l)	Date	Discharge (m3/hr)	Discharge (m3)
Week 1	24.6	36.0		0.1	2.1	0.05	0.016	0.050	21	1.1	0.1	0.8	0.1	0.050	4.4	01-Feb-21	2133.15	51196.0
																02-Feb-21	2596.954	62067.0
																03-Feb-21	1690.908	40582.0
																04-Feb-21	3143.708	75449.0
																05-Feb-21	3151.947	75647.0
																06-Feb-21	2788.72	66929.0
																07-Feb-21	2872.922	69950.0
																08-Feb-21	2997.95	71951.0
Week 2	27.4	26.0		0.0	3.1	0.09	0.008	0.090	14	0.8	0.1	0.8	0.2	0.090	4.4	09-Feb-21	2556.376	61353.0
																10-Feb-21	2761.126	66267.0
																11-Feb-21	2200.097	52802.0
																12-Feb-21	2076.119	49827.0
																13-Feb-21	2383.846	57212.0
Week 3	21.7	165.0		0.1	2.6	0.09	0.004	0.090	11	1.4	0.1	0.8	0.1	0.090	3.2	14-Feb-21	2235.026	53641.0
																15-Feb-21	2380.179	57124.0
																16-Feb-21	1732.757	41586.0
																17-Feb-21	1732.603	41582.0
																18-Feb-21	1480.028	35521.0
																19-Feb-21	2916.336	69952.0
																20-Feb-21	2410.243	57846.0
																21-Feb-21	0	0.0
																22-Feb-21	2631.459	63155.0
																23-Feb-21	3259.749	76234.0
																24-Feb-21	2873.119	69955.0
																25-Feb-21	1613.673	43553.0
																26-Feb-21	0.139975	3.0
																27-Feb-21	910.2197	21845.0
																28-Feb-21	2396.086	57506.0
																01-Mar-21	1132.7	27184.1
Mean Weekly ave. limit	150	220	20	0.1	4	0.1	0.05	0.5	50	5	0.5	2.0	0.5	0.5	5.0		2181.0	52343.4
																	6000	-

Dated

28-Apr-2021

Form I&S W1 Monthly

Releases to Controlled Waters

Release summary for the month

January-21

Operator: Tata Steel UK Ltd
Location: Port Talbot

Release Point: W1 (LSO)
P permit: BL7108

	S.Solids* Conc. (mg/l)	COD Conc. (mg/l)	BOD Conc. (mg/l)	Sulphides Conc. (mg/l)	Thiocyanate Conc. (mg/l)	Cyanide Conc. (mg/l)	PAH Conc. (mg/l)	Phenols Conc. (mg/l)	A+I+N Conc. (mg/l)	Iron Conc. (mg/l)	Lead Conc. (mg/l)	Zinc Conc. (mg/l)	Nickel Conc. (mg/l)	Chromium Conc. (mg/l)	Oil** Conc. (mg/l)	Date	Discharge (m3/hr)	Discharge (m3)
Week 1	32.6	85		0.1	2.5	0.04	0.008	0.27	15	1.3	0.1	0.9	0.1	0.1	3.7	01-Jan-21	2720.5	65291
																02-Jan-21	2559.7	61432
																03-Jan-21	2759.0	66216
																04-Jan-21	2239.9	53757
																05-Jan-21	1877.0	45048
																06-Jan-21	1869.3	44863
																07-Jan-21	2035.8	48859
																08-Jan-21	2141.4	51393
Week 2	20.0	120		0.21	2.1	0.06	0.005	0.09	15	1.5	0.1	1.1	0.1	0.1	2.4	09-Jan-21	2209.8	53035
																10-Jan-21	1985.9	47661
																11-Jan-21	2358.3	56600
																12-Jan-21	2265.5	54372
																13-Jan-21	2450.3	58807
																14-Jan-21	1685.4	40449
Week 3	33.1	57		0.06	2.3	0.06	0.005	0.05	15	1.9	0.1	0.5	0.1	0.1	2.8	15-Jan-21	2494.2	59850
																16-Jan-21	3607.8	86588
																17-Jan-21	2971.7	71321
																18-Jan-21	2688.4	64523
																19-Jan-21	2698.8	64771
																20-Jan-21	2489.4	59746
Week 4	59.7	0		0.04	2.2	0.05	0.002	0.05	19	2.6	0.1	0.6	0.1	0.1	2.2	21-Jan-21	3046.7	73120
																22-Jan-21	2791.3	66990
																23-Jan-21	3174.4	76186
																24-Jan-21	2576.4	61833
																25-Jan-21	3152.8	75668
																26-Jan-21	2553.8	61291
																27-Jan-21	2130.6	51133
																28-Jan-21	2083.8	50011
																29-Jan-21	1299.9	31198
																30-Jan-21	3144.7	75472
																31-Jan-21	2889.3	69343
Mean Weekly ave. limit	150	220	20	0.1	4	0.1	0.05	0.5	50	5	0.5	2.0	0.5	0.5	5.0		2482.3	59575
																	6000	-

Dated

28-Apr-2021

Form I&S W1 Monthly

Releases to Controlled Waters

Release summary for the month

March-21

Operator: Tata Steel UK Ltd
Location: Port Talbot

Release Point: W1 (LSO)
P Permit: BL7108

	S.Solids* Conc. (mg/l)	COD Conc. (mg/l)	BOD Conc. (mg/l)	Sulphides Conc. (mg/l)	Thiocyanate Conc. (mg/l)	Cyanide Conc. (mg/l)	PAH** Conc. (mg/l)	Phenols Conc. (mg/l)	A+H+N*** Conc. (mg/l)	Iron Conc. (mg/l)	Lead Conc. (mg/l)	Zinc Conc. (mg/l)	Nickel Conc. (mg/l)	Chromium Conc. (mg/l)	Oil*** Conc. (mg/l)	Date	Discharge (m3/hr)	Discharge (m3)
Week 1	44.3	10.0		0.1	3.4	0.09	0.0	0.09	20	2.9	0.1	0.6	0.1	0.1	3.2	01-Mar-21	2395.6	57495.0
																02-Mar-21	2285.8	54138.0
																03-Mar-21	1222.7	29344.0
																04-Mar-21	1825.4	43810.0
																05-Mar-21	1785.3	42846.0
																06-Mar-21	1441.5	34596.0
																07-Mar-21	1591.5	38196.0
Week 2	30.3	35.0		0.1	2.8	0.09	0.0	0.09	19	1.9	0.1	0.7	0.1	0.1	2.1	08-Mar-21	1510.6	36255.0
																09-Mar-21	1210.4	29050.0
																10-Mar-21	1515.1	36362.0
																11-Mar-21	1957.0	46369.0
																12-Mar-21	2001.7	46041.0
																13-Mar-21	2032.4	46779.0
Week 3	21.7	95.0		0.1	3.0	0.09	0.1	0.12	15	2.3	0.1	0.7	0.1	0.1	2.6	14-Mar-21	2206.2	52948.0
																15-Mar-21	2165.4	51970.0
																16-Mar-21	1753.8	42092.0
																17-Mar-21	1316.9	31605.0
																18-Mar-21	1773.2	42566.0
																19-Mar-21	1979.0	47495.0
Week 4	36.0	85.0		0.1	3.0	0.90	0.0	0.09	15	1.8	0.1	1.0	0.1	0.1	2.3	20-Mar-21	1627.9	39069.0
																21-Mar-21	1593.5	39244.0
																22-Mar-21	1500.0	36000.0
																23-Mar-21	1294.7	31073.0
																24-Mar-21	2437.4	56498.0
																25-Mar-21	2498.9	59972.0
																26-Mar-21	1053.4	25282.0
Week 5	38.3	11.0		0.1	2.8	0.90	0.0	0.09	9	1	0	1	0	0.1	2	27-Mar-21	960.1	23043.0
																28-Mar-21	67.5	1620.0
																29-Mar-21	712.7	17105.0
																30-Mar-21	1244.8	29876.0
																31-Mar-21	1031.1	24748.0
Mean																		
Weekly ave. limit	150	220	20	0.1	4	0.1	0.05	0.5	50	5	0.5	2.0	0.5	0.5	5.0		1611.7	38679.9
																	6000	-

Dated

28-Apr-2021

Form I&S W1 Monthly

Releases to Controlled Waters

Release summary for the quarter Jan to Mar-21

Operator: Tata Steel UK Ltd

Release Point: W1

Location: Port Talbot

Permit: BL7108

Parameter	Reporting Units	Jan	Month Feb	Mar	Limit
Phenol	Max load (kg/day)	12.1	0.0	15.9	350
	Mean load (kg/day)	0.5	0.0	0.6	
	Max conc. (mg/l)	0.3	0.0	0.3	
	Mean conc. (mg/l)	0.013	0.0	0.013	2
Soluble chromium	Max load (kg/day)	4.9	4.4	0.0	
	Mean load (kg/day)	0.2	0.2	0.0	
	Load (kg/mth)	4.9	4.35	0.00	200
	Max conc. (mg/l)	0.100	0.10	0.00	
	Mean conc. (mg/l)	0.003	0.004	0.00	0.2
Soluble lead	Max load (kg/day)	0.00	0.00	0.00	
	Mean load (kg/day)	0.00	0.00	0.00	
	Load (kg/mth)	0.00	0.00	0.00	300
	Max conc. (mg/l)	0.00	0.00	0.00	
	Mean conc. (mg/l)	0.00	0.00	0.00	0.3
Soluble iron	Max load (kg/day)	35.0	46.0	21.0	
	Mean load (kg/day)	5.6	5.1	3.1	
	Max conc. (mg/l)	0.5	0.7	0.7	
	Mean conc. (mg/l)	0.1	0.1	0.1	
Free cyanide	Max load (kg/day)	8.70	0.00	5.30	45
	Mean load (kg/day)	0.80	0.00	0.50	
	Max conc. (mg/l)	0.10	0.00	0.1	
	Mean conc. (mg/l)	0.01	0.00	0.01	0.2
PAH's	Load (kg/mth)	3.3	12.4	35	250
	Concentration (mg/l)	0.002	0.008	0.030	1

Dated 28-Apr-2021

Form I&S W1 Quarterly

Releases to Controlled Waters

Release summary for the quarter Jan to Mar

Operator: Tata Steel UK Ltd

Release Point: W3 (ABO)

Location: Port Talbot

Permit: BL7108

Parameter	Reporting Units	Jan	Month Feb	Mar	Limit
Suspended solids	Maximum daily* concentration (mg/)	70	68	175	200 (weekly)
	Mean daily concentration (mg/)	19	18	49	
Oil and grease	Maximum daily concentration (mg/)	11	18	12	20 (weekly)
	Mean daily concentration (mg/)	6	8	7	
Number of days of discharge in the month		22	22	18	

* Breaches now reported as weekly averages same as LSO

Dated 28-Apr-2021

Form I&S W3

Releases to Controlled Waters

Release summary for the quarter Jan to Mar

Operator: Tata Steel UK Ltd

Release Point: W4

Location: Port Talbot

Permit: BL7108 / RP3730BV

Release Point W4: Spot sample results during storm discharge					
Parameter	Reporting Units	Jan	Month Feb	Mar	Limit
pH	Max daily	10.7	9.1	9.2	
	Mean daily	9.4	8.5	9.2	
	Min daily	8.2	7.3	9.2	
Suspended solids (mg/l)	Max daily conc.	400.0	762.0	112.0	
	Mean daily conc.	174.3	292.7	112.0	
Total iron (mg/l)	Max daily conc.	1.4	5.0	3.2	
	Mean daily conc.	0.6	2.1	3.2	
Soluble iron (mg/l)	Max daily conc.	0.5	2.3	0.1	
	Mean daily conc.	0.3	0.9	0.1	
Oil and grease (mg/l)	Max daily conc.	20.4	25.0	0.2	
	Mean daily conc.	5.9	9.6	0.2	
Number of days of discharge in the month (daily rainfall > 15 mm).		5	2	1	

Date of monthly sample	Suspended solids	pH	Total iron	Soluble iron	Oil and grease
18-Jan-21	400	10.7	1.40	0.50	20.40
18-Feb-21	762	9.1	5.00	2.30	25.00
11-Mar-21	112	9.2	3.20	0.10	0.20

Dated 28-Apr-2021

Form I&S W4

Releases to Controlled Waters

Release summary for the quarter Jan to Mar-21

Operator: Tata Steel UK Ltd

Release Point: W5

Location: Port Talbot

Permit: BL7108

Parameter	Reporting Units	Jan	Month Feb	Mar	Limit
Dock Return Suspended solids	Max. monthly conc. of return (mg/l)	25.6 -0.4	11.1 4.1	9.1 -0.9	20 above background
	Max daily back-ground conc. (mg/l)	26.0	7.0	10.0	
	Mean background conc. (mg/l)	12.0	4.0	5.0	
Dock Flow*	Max daily flowrate (m3/day)	197420	182631	181665	350000
	Mean daily flowrate (m3/day)	124839	150727	160407	
	Max flowrate (m3/hour)	8255	7882	7634	16000
	Mean flowrate (m3/hour)	5198	6199	6719	
Abstracted flows (Afan docks feeder)	Max daily abstraction rate (m3/day)	34303	33668	33668	
	Mean daily abstraction rate (m3/day)	28128	28776	29231	
Dock Return Temperature	Max daily discharge temperature (C)	23	20	23	36
	Mean daily discharge temperature (C)	19	18	20	

Dated 28-Apr-2021

Form I&S W5