

RELEASES TO AIR

Operational summary for quarter ending 30-Sep-19

Operator: Tata Steel UK Ltd

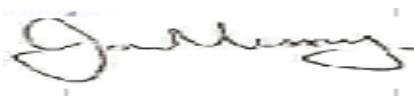
Location: Port Talbot Works

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	56286		
	Month 2	64010		
	Month 3	85136		
A13A BOS convertor 2 gas flare	Month 1	112572		
	Month 2	128021		
	Month 3	170273		
A33 Blast furnace gas flare stack no.1	Month 1	48904		
	Month 2	56974		
	Month 3	103326		
A33C Blast furnace gas flare stack no.2	Month 1	52700		
	Month 2	66927		
	Month 3	65663		
A33A Blast furnace gas main number 4 bleeder	Month 1		6	
	Month 2		9	
	Month 3		25	
A33B Blast furnace gas main number 5 bleeder	Month 1		69	
	Month 2		103	
	Month 3		186	
A59 Coke oven gas triple flare	Month 1	136913		
	Month 2	64117		
	Month 3	24236		
Blast furnaces 4 and 5	Month 1			1219035
	Month 2			1379530
	Month 3			1508823
Coke ovens	Month 1			408073
	Month 2			469902
	Month 3			484776
BOS Plant	Month 1			162441
	Month 2			177001
	Month 3			200985

Signed on behalf of the Operator



Dated 25/02/20

Form Installation gas

WASTE PRODUCTION

Operational summary for quarter ending 30-Sep-19

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)	
BOS	Jul	28060	7919					
	Aug	39010	1704					
	Sep	27305	2648					
Iron and steel installation	Jul			6.6	1078			
	Aug			12.5	689			
	Sep			3.0	2800			
BF4 tapholes	Jul					35010		
	Aug					28966		
	Sep					40329		
BF5 tapholes	Jul					32760		
	Aug					31993		
	Sep					40263		
BF5	Jul							
	Aug							
	Sep							
Coke ovens	Jul						151	
	Aug						185	
	Sep						165	

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

** WID compliant Oil.

Signed on behalf of the Operator



Dated 26/02/20

Form Waste 1

RELEASES INTO AIR

Operational summary for quarter ending

30-Sep-19

Operator: Tata Steel UK Ltd

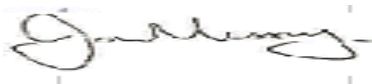
Location: Port Talbot Works

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)	2157	2062	2158	2191	2205	2031	2207
Mean load (%MCR)	54.2	61.6	36.7	83.2	79.7	61.4	44.3
Mean flue gas flow (Nm ³ /hr)	82932	99644	45847	201528	237130	102763	128396
Heavy Fuel Oil							
Average net CV (GJ/t)	40.9	40.9	40.9	40.9	40.9	40.9	
Max. sulphur content (g/Kg)	10	10	10	10	10	10	
Max. asphaltene content (g/Kg)	46	46	46	46	46	46	
Ave.%wt Sulphur	0.995	0.995	0.995	0.995	0.995	0.995	
NOx factor	0.1	0.1	0.1	0.1	0.1	0.1	
Coke Oven Gas							
Average net CV (GJ/km ³)	17.36	17.36	17.36	17.36	17.36	17.36	
Sulphur content (g/m ³)	3.33	3.33	3.33	3.33	3.33	3.33	
NOx factor	0.04	0.04	0.04	0.04	0.04	0.04	
Blast Furnace Gas							
Average net CV (GJ/km ³)	3.67	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/km ³)	37.3	37.3	37.3	37.3	37.3	37.3	37.3
NOx factor	0.04	0.04	0.04	0.04	0.04	0.04	0.04

Signed on behalf of the Operator



Dated

25/02/20

RELEASES INTO AIR

Operational summary for quarter ending

30-Sep-19

Operator: Tata Steel UK Ltd

Location: Port Talbot Works

Permit: BL7108

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

OXIDES OF NITROGEN - NO _x (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		08-Jul-19 09:39			23-Sep-19 09:19	
Flowrate (Nm ³ /hr)		5965			13292	
NO _x measured** conc. (mg/Nm ³)		112 (+/-4.8)			33 (+/-1.8)	
NO _x limit (mg/NM ³)		300 BFG/COG			300 BFG/COG	
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 (%)		84%			93%	
Coke oven gas (%)		16%			7%	
Heavy fuel oil (%)		0%			0%	

A52A, A52B and A62 (Boiler 3) have an annual monitoring requirement. A50A/A50B has a six monthly monitoring requirement. CEMS subject to QAL2 in 2013

* EC - electrochemical cell

** Mitchell boiler unable to sample will resend when sampling is complete.

Signed on behalf of the Operator



Dated

25/02/20

Form LCPD DCM NO_x

RELEASES INTO AIR

Operational summary for quarter ending

30-Sep-19

Operator: Tata Steel UK Ltd

Location: Port Talbot Works

Permit: BL7108 / NP3938GZ

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

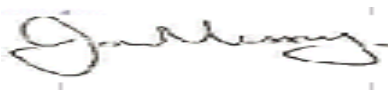
SULPHUR DIOXIDE - SO ₂ (DISCONTINUOUS MONITORING)						
Release Point	A50A&B Service 4&5	A51 A5	A52A No.6	A52B No.7	A53 Mitchell	A62 No.3
Time and date of sampling		08-Jul-19 09:39			23-Sep-19 09:19	
Flowrate (Nm ³ /hr)		5965			13292	
SO ₂ measured conc. (mg/Nm ³)		67 (+/- 3.9)			36 (+/- 3.0)	
SO ₂ limit (mg/NM ³)		800 BFG/COG			800 BFG/COG	
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 (%)		84%			93%	
Coke oven gas (%)		16%			7%	
Heavy fuel oil (%)		0%			0%	

A52A, A52B and A62 (Boiler 3) have an annual monitoring requirement. A50A/A50B have a six monthly monitoring requirement. CEMS subject to QAL2 in 2013

* EC - electrochemical cell

** Mitchell boiler unable to sample will resend when sampling is complete.

Signed on behalf of the Operator



Dated

25/02/20

Form LCPD DCM SO₂

RELEASES INTO AIR

Operational summary for quarter ending

30-Sep-19

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	J	0	27921	51235	6610		85767
	A	0	21238	53216	4378		78832
	S	0	23124	49839	2407		75369
A50B Service Boiler 5	J	0	41954	46357	10273		98584
	A	0	23902	44913	3916		72731
	S	0	38977	48120	2267		89364
A51 Boiler A5	J	422	7996	39220	3847	16	51501
	A	663	7325	35832	2032	0	45852
	S	0	6898	37369	761	84	45112
A52A Boiler 6	J	1907	64272	233003	18353	31059	348593
	A	3844	51615	219394	28813	20690	324355
	S	82	53940	228269	15230	20961	318482
A52B Boiler 7	J	2465	51296	228376	17754	30386	330277
	A	1690	55062	218646	19367	20476	315241
	S	217	50192	228431	9369	21026	309235
A53 Mitchell	J	1286	5562	125806	5847		138502
	A	140	14533	85073	3913		103658
	S	0	5829	113824	1710		121363
A62 Boiler 3	J			116400	15136	46	131581
	A			89657	23691	0	113347
	S			94081	9457	224	103763
Total	J	6080	199000	840397	77820	61507	1184805
	A	6337	173674	746730	86108	41166	1054016
	S	300	178959	799933	41201	42295	1062688

Signed on behalf of the Operator

Dated 25/02/20

Form LCPD Fuels

RELEASES INTO AIR

Operational summary for quarter ending

30-Sep-19

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=20	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	Jul	3.0	19.8	04/07/19 11:00	0.4	2.0	100%
	Aug	2.5	15.0	09/08/19 16:00	0.4	1.8	100%
	Sep	2.1	9.6	14/09/19 13:00	0.4	1.5	100%
A51 Boiler A5	Jul	13.5	89.0	03/07/19 02:00	0.6	8.5	100%
	Aug	14.0	58.8	15/08/19 21:00	2.2	5.2	100%
	Sep	3.3	66.1	03/09/19 22:00	0.4	4.9	74%
A52A Boiler 6	Jul	1.5	44.4	03/07/19 04:00	0.7	2.8	100%
	Aug	1.6	21.1	16/08/19 10:00	0.8	2.5	100%
	Sep	1.2	8.9	18/09/19 01:00	0.9	0.4	100%
A52B Boiler 7	Jul	16.9	102.9	03/07/19 05:00	13.9	5.7	100%
	Aug	16.2	55.5	16/08/19 10:00	13.8	5.0	100%
	Sep	15.0	64.2	18/09/19 01:00	13.4	2.3	100%
A53 Mitchell	Jul	7.8	476.7	12/07/19 23:00	1.3	40.6	100%
	Aug	3.3	38.1	16/08/19 06:00	1.1	5.0	100%
	Sep	2.3	7.0	03/09/19 22:00	1.2	0.5	100%

Signed on behalf of the Operator

Dated

25/02/20

Form LCPD CEM Parts

RELEASES INTO AIR

Operational summary for quarter ending

30-Sep-19

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=20	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	Jul	3.0	19.8	04/07/19 11:00	0.4	2.0	100%
	Aug	2.5	15.0	09/08/19 16:00	0.4	1.8	100%
	Sep	2.1	9.6	14/09/19 13:00	0.4	1.5	100%
A51 Boiler A5	Jul	13.5	89.0	03/07/19 02:00	0.6	8.5	100%
	Aug	14.0	58.8	15/08/19 21:00	2.2	5.2	100%
	Sep	3.3	66.1	03/09/19 22:00	0.4	4.9	74%
A52A Boiler 6	Jul	1.5	44.4	03/07/19 04:00	0.7	2.8	100%
	Aug	1.6	21.1	16/08/19 10:00	0.8	2.5	100%
	Sep	1.2	8.9	18/09/19 01:00	0.9	0.4	100%
A52B Boiler 7	Jul	16.9	102.9	03/07/19 05:00	13.9	5.7	100%
	Aug	16.2	55.5	16/08/19 10:00	13.8	5.0	100%
	Sep	15.0	64.2	18/09/19 01:00	13.4	2.3	100%
A53 Mitchell	Jul	7.8	476.7	12/07/19 23:00	1.3	40.6	100%
	Aug	3.3	38.1	16/08/19 06:00	1.1	5.0	100%
	Sep	2.3	7.0	03/09/19 22:00	1.2	0.5	100%

Signed on behalf of the Operator

Dated

25/02/20

Form LCPD CEM Parts

RELEASES INTO AIR

Operational summary for quarter ending

30-Sep-19

Operator: Tata Steel UK Ltd

Location: Port Talbot Works

Permit: BL7108 / NP3938GZ

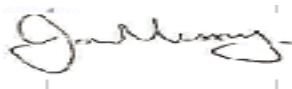
Release Point: A62

PARTICULATE MATTER (mg/Nm3) - CONTINUOUS EMISSIONS MONITORING									
Release point	Month	Maximum daily mean	Monthly mean	Date & time of maximum value	Minimum daily mean	Standard deviation of daily means	% valid monitor reponse	Fuel weighted monthly limit	% Abnormal condtions
A62 Boiler 3	Jul	5.9	2.0	04-Jul-19	0.8	1.2	100.0%	9.2	83.3%
	Aug	5.2	2.3	06-Aug-19	0.7	1.9	100.0%	8.5	70.8%
	Sep	6.9	2.5	18-Sep-19	1.4	1.1	100.0%	9.4	86.4%
SULPHUR DIOXIDE (mg/Nm3) - CONTINUOUS EMISSIONS MONITORING									
Release point	Month	Maximum daily mean	Monthly mean	Date & time of maximum value	Minimum daily mean	Standard deviation of daily means	% valid monitor reponse	Fuel weighted monthly limit	% Abnormal condtions
A62 Boiler 3	Jul	32.2	26.8	14-Jul-19	21.9	2.3	100.0%	172.8	83.3%
	Aug	32.9	26.9	19-Aug-19	21.3	2.6	100.0%	152.1	70.8%
	Sep	34.1	25.6	18-Sep-19	22.0	3.0	100.0%	178.6	86.4%
OXIDES OF NITROGEN (mg/Nm3) - CONTINUOUS EMISSIONS MONITORING									
Release point	Month	Maximum daily mean	Monthly mean	Date & time of maximum value	Minimum daily mean	Standard deviation of daily means	% valid monitor reponse	Fuel weighted monthly limit	% Abnormal condtions
A62 Boiler 3	Jul	62.1	17.5	02-Jul-19	5.4	11.2	100.0%	183.5	83.3%
	Aug	51.5	28.1	10-Aug-19	12.6	10.1	100.0%	171.0	70.8%
	Sep	43.8	28.2	12-Sep-19	11.5	9.1	100.0%	187.1	86.4%

Boiler 3 off from 21 January 2016.

Signed on behalf of the Operator

Dated 25/02/20



Form LCPD CEM A62

Operational summary for quarter ending 30-Sep-19

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

Form LCPD CEMS LOG

RELEASES INTO AIR

Operational summary for quarter ending

30-Sep-19

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/Nm ³)	40	500	500	
Measured conc. according to condition 10.1.3b	155 (+/- 15.8)	284 (+/- 28.9)	213 (+/- 21.8)	6250 (+/- 636.2)
Measured oxygen content (%)	16.6	16.7	16.7	16.7
Measured conc. according to condition 10.1.3a (17%O ₂)	140	264	198	5804
Sampling method used	BS EN 13284	BS 6069	ISO 10849	BS ISO 12039
Analytical method used	Gravimetric	*EC	*EC	*EC
Date of sampling	02-Jul-19	02-Jul-19	02-Jul-19	02-Jul-19
Sample start time	10:48 -	10:43	10:43	10:43
Sample end time	12:59	11:43	11:43	11:43
Sample duration (mins)	60	60	60	60
Limit of detection	0.96	1.6	1.4	0.0
Continuous monitor result over the sampling period	54.2			
Process status at the time of sampling				
Mean sulphur content of sinter blend in use (%)	0.021	0.021	0.021	0.021
Reverts content of sinter blend in use (%)	0.1	0.1	0.1	0.1
Mean chloride content of sinter blend in use (%)	0.03	0.03	0.03	0.03
Throughput during sampling period (% of maximum)	60.0	60.0	60.0	60.0

* EC - electrochemical cell

Signed on behalf of the Operator



Dated 25/02/20

Form Sinter DCM 1

RELEASES INTO AIR

Operational summary for quarter ending

30-Sep-19

Operator: Tata Steel UK Ltd

Location: Port Talbot Works

Permit: BL7108 / AP3330BE

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

Month	Sulphur Dioxide (tonnes)							Oxides of Nitrogen (tonnes)							Particulates (tonnes)						
	A50A	A50B	A51	A52A	A52B	A53	A62	A50A	A50B	A51	A52A	A52B	A53	A62	A50A	A50B	A51	A52A	A52B	A53	A62
January	15.0	15.0	3.9	32.2	32.2	5.7	0.7	5.6	5.6	1.5	21.4	21.4	3.1	5.7	0.00	0.00	0.03	0.3	0.3	0.1	0.20
February	6.7	6.7	4.8	27.9	27.9	5.0	2.7	3.6	3.6	1.5	19.0	19.0	3.9	8.0	0.10	0.10	0.04	0.3	0.3	0.1	0.25
March	10.1	10.1	4.1	28.9	28.9	4.5	4.4	4.3	4.3	1.7	19.0	19.0	4.0	6.2	0.00	0.00	0.04	0.4	0.4	0.2	0.18
April	12.7	12.7	5.20	18.6	18.6	5.1	4.2	5.8	5.8	1.8	20.3	20.3	3.9	6.5	0.1	0.1	0.05	0.4	0.4	0.2	0.20
May	13.7	13.7	4.40	22.2	22.2	3.7	4.5	6.6	6.6	1.7	26.0	26.0	4.2	6.4	0.1	0.1	0.07	0.3	0.3	0.3	0.16
June	13.0	13.0	3.50	37.5	37.5	3.9	0.3	6.5	6.5	1.6	19.3	19.3	4.2	1.6	0.1	0.1	0.09	0.3	0.3	0.2	0.07
July	14.3	14.3	3.40	33.1	33.1	4.1	2.7	6.6	6.6	1.5	15.6	15.6	3.7	5.6	0.1	0.1	0.19	1.3	1.3	0.2	0.11
August	11.1	11.1	4.00	24.0	24.0	4.5	2.4	5.8	5.8	1.3	11.1	11.1	2.6	4.9	0.1	0.1	0.13	1.1	1.1	0.1	0.11
September	12.9	12.9	2.60	29.3	29.3	3.2	1.8	6.1	6.1	1.2	14.8	14.8	3.1	4.8	0.1	0.1	0.13	1.1	1.1	0.1	0.12
October																					
November																					
December																					
Totals	110	110	36	254	254	40	24	51	51	14	167	167	33	50	0.7	0.7	0.8	5.5	5.5	1.5	1.4
	826							531							16						
	Service	A5	Margam C	Mit	3	Service	A5	Mgm C	Mit	3	Service	A5	Mgm C	Mit	3	Service	A5	Mgm C	Mit	3	
Boiler Plant Totals	219	36	507	40	24	102	14	333	33	50	1	1	11	2	1						
NERP Annual Limit (T)	161	79	675	157		192	115	923	231		10	4	40	8							

Signed on behalf of the Operator

Dated

25/02/20

Form LCPD Monthly 1

RELEASES INTO AIR

Operational summary for quarter ending

30-Sep-19

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 - NOx (DISCONTINUOUS MONITORING)							
Release Point	A6	A7	A30	A31	A32	A34A	A34B
Time and date of sampling	15-Aug-19 10:30	23-Jul-19 10:21				05-Sep-19 11:32	17-Sep-19 12:21
Flowrate (Nm3/hr)	247693	132601				140294	188125
NOx measured conc.(mg/Nm3) **	11 (+/-0.9)	22 (+/-1.0)				717 (+/- 27.9)	494 (+/-21.6)
Oxygen content (%)	5.1						
NOx limits (mg/Nm3)	100	100				1800	1800
Sampling method used	ISO 10849	ISO 10849				ISO 10849	ISO 10849
Analytical method used	EC *	EC *				EC *	EC *
Continuous hourly monitoring result over the period							
Fuel usages over the sampling period							
Natural gas (%)	0%	0%				83%	49%
BF gas (%)	77%	99%					
Coke oven gas (%)	0%	1%				17%	51%
BOS Gas (%)	23%						

* EC - electrochemical cell

A30, A31 & A32 are no longer a permit requirement/ non operational

A39 has a 6 monthly monitoring requirement.

Signed on behalf of the Operator

Dated 25/02/20

Form I&S DCM NOx

RELEASES INTO AIR

Operational summary for quarter ending

30-Sep-19

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	15-Aug-19 10:30	23-Jul-19 10:21	05-Sep-19 11:32	17-Sep-19 12:21
Flowrate (Nm ³ /hr)	247693	132601	140294	188125
SO ₂ measured conc.(mg/Nm ³)	171.5 (+/- 5.9)	23 (+/- 1.8)	684 (+/-26.3)	250 (+/-11.2)
SO ₂ limits (mg/Nm ³)	200	200	1400	1400
Sampling method used	BS6069	BS6069	BS6069	BS6069
Analytical method used	EC *	EC *	EC *	EC *
Continuous hourly monitoring result over the period				
Fuel usages over the sampling period				
Natural gas (%)	0%	0%	83%	49%
BF gas (%)	77%	99%		
Coke oven gas (%)	0%	1%	17%	51%
BOS Gas (%)	23%			

* EC - electrochemical cell

A39 has a 6 monthly monitoring requirement

Signed on behalf of the Operator

Dated

25/02/20

Form I&S DCM SO₂

RELEASES INTO AIR

Operational summary for quarter ending

30-Sep-19

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	15-Aug-19 10:30	23-Jul-19 10:21	05-Sep-19 11:32	17-Sep-19 12:21
Flowrate (Nm ³ /hr)	247693	132601	140294	188125
SO ₂ measured conc.(mg/Nm ³)	171.5 (+/- 5.9)	23 (+/- 1.8)	684 (+/-26.3)	250 (+/-11.2)
SO ₂ limits (mg/Nm ³)	200	200	1400	1400
Sampling method used	BS6069	BS6069	BS6069	BS6069
Analytical method used	EC *	EC *	EC *	EC *
Continuous hourly monitoring result over the period				
Fuel usages over the sampling period				
Natural gas (%)	0%	0%	83%	49%
BF gas (%)	77%	99%		
Coke oven gas (%)	0%	1%	17%	51%
BOS Gas (%)	23%			

* EC - electrochemical cell

A39 has a 6 monthly monitoring requirement

Signed on behalf of the Operator

Dated

25/02/20

Form I&S DCM SO₂

RELEASES INTO AIR

Operational summary for quarter ending 30-Sep-19

Operator: Tata Steel UK Ltd

Location: Port Talbot Works

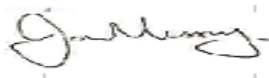
Permit: BL7108

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	Jul	15 Daily mean	2	1.0	0.2	2.5	0.7	0.3	1.3	100%	100%
	Aug		3	2.4	0.1	2.8	0.0	0.1	2.7	100%	100%
	Sep		2	0.9	0.3	13.6	0.6	0.7	1.3	100%	100%
A8B	Jul	15 Daily mean	24	4.7	4.5	67.8	1.5	7.9	9.2	100%	100%
	Aug		31	4.2	6.2	82.6	2.5	10.7	11.4	100%	100%
	Sep		25	11.0	3.9	75.0	1.7	8.8	18.9	100%	100%
A9	Jul	15 Daily mean	4	0.0	1.4	7.3	0.2	1.3	0.5	100%	100%
	Aug		12	0.0	3.9	29.8	0.5	3.7	1.5	100%	100%
	Sep		6	0.0	1.7	13.2	0.3	1.6	0.6	100%	100%
A2*	Jul	30 Daily mean	55	2.8	11.4	94.1	0.0	16.3	33.4	100%	100%
	Aug		47	0.9	12.1	149.9	0.0	17.1	29.8	100%	100%
	Sep		47	0.0	17.5	64.0	0.0	18.2	22.4	100%	100%
A10	Jul	15 Daily mean	2	0.0	1.3	13.8	0.0	0.9	1.0	100%	100%
	Aug		3	0.1	0.8	5.7	0.1	1.4	1.6	100%	100%
	Sep		6	1.4	1.2	11.8	2.7	2.5	2.7	100%	100%
A14	Jul	15 Daily mean	3	2.3	0.3	4.6	2.9	0.4	2.8	100%	100%
	Aug		4	1.0	0.6	5.9	2.1	0.8	2.8	100%	100%
	Sep		4	2.3	0.4	6.4	3.0	0.9	3.0	100%	100%
A15	Jul	15 Daily mean	3	1.8	0.4	4.8	2.6	0.6	2.5	100%	100%
	Aug		3	0.8	0.4	3.7	1.6	0.4	2.1	100%	100%
	Sep		3	1.7	0.3	5.4	2.4	0.6	2.2	100%	100%
A16	Jul	15 Daily mean	8	2.2	1.4	13.8	3.8	2.2	4.3	100%	100%
	Aug		8	0.7	1.5	12.2	1.4	2.6	4.5	100%	100%
	Sep		19	0.5	4.2	49.1	1.0	11.9	3.9	100%	100%

*A2 ELV discussed with NRW as derogation

Signed on behalf of the Operator



Dated

25/02/20

Form I&S CEMS Parts 1 & 2

RELEASES INTO AIR

Operational summary for quarter ending 30-Sep-19

Operator: Tata Steel UK Ltd

Location: Port Talbot Works

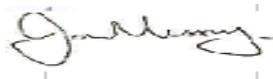
Permit: BL7108 / RP3730BV / BL7108IM (V009)

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	Jul	15	1.1	0.0	1.3	13.8	0.1	0.4	0.5	100%	100%
	Aug	Daily mean	1.9	0.5	0.8	5.7	0.6	0.6	1.1	100%	100%
	Sep		1.6	0.6	1.2	11.8	0.6	0.5	1.0	75%	75%
A63	Jul	25	Inconsistent data during the period - to be investigated.								
	Aug	Hourly mean									
	Sep										

Signed on behalf of the Operator

Dated 25/02/20



Form I&S CEMS Part 3

Operator: Port Talbot Works

Location: Port Talbot Works

Permit: BL7108 / RP3730BV

	NOx (tonnes)	Lead (tonnes)	PM10 (tonnes)	CO2 (k tonnes)
Morfa	454			
Iron & Steel	728	1.6	353	1377
Total	1182	1.6	353	1377

Signed on behalf of the Operator

Dated 26/02/20



Form KPI

RELEASES INTO AIR

Operational Summary for quarter ending 30-Sep-19

Operator: Tata Steel Strip Products UK

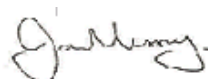
Location: Port Talbot Works

Permit: BL7108

Release Points:

PARTICULATE MATTER (DISCONTINUOUS MONITORING)		
Release Point	A6	A7
Time and date of sampling	15-Aug-19 22:30	23-Jul-19 10:21
Flowrate (Nm3/hr)	146,493	148,646
Particulate measured conc. (mg/Nm3)	2.1 (+/-0.5)	1.8 (+/-0.5)
Particulate limit (mg/Nm3)	10	10
Sampling method used	BS EN 13284	BS EN 13284
Analytical method used	Gravimetric	Gravimetric
Fuel Usage		
Natural gas (%)	0%	0%
BF gas (%)	77%	99%
Coke oven gas (%)	0%	1%
BOS (%)	23%	

Signed on behalf of the Operator



Dated

25/02/2020

Form Blast Furnace DCM Part

RELEASES INTO AIR

Operational Summary for the month Jul-2019

Operator: Tata Steel UK Ltd

Permit: BL7108 / RP3730BV

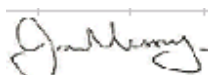
Location: Port Talbot Works

Release Point: A1

Day	% max throughput	% data capture	% EP availability	% UJT availability	Sinter Blend			Daily average	Particulate Matter (mg/m3)							
					Mean sulphur % w/w	Mean chloride % w/w	Mean reverts % w/w		4 hour rolling average				Hourly average			
									Maximum	Mean	Minimum	Standard deviation	Maximum	Mean	Minimum	Standard deviation
01-Jul-19	58	100%	100%	70%	0.021	0.031	8.20%	29	40	29	8	10	69	29	0	16
02-Jul-19	70	100%	100%	32%	0.021	0.031	8.20%	53	102	52	27	23	154	53	27	30
03-Jul-19	73	100%	100%	45%	0.021	0.031	8.20%	44	92	44	24	20	128	44	22	27
04-Jul-19	72	100%	100%	83%	0.020	0.029	7.30%	56	81	53	33	13	155	56	26	25
05-Jul-19	72	100%	100%	45%	0.020	0.029	7.30%	45	93	47	30	15	94	45	26	16
06-Jul-19	76	100%	100%	100%	0.020	0.029	7.30%	45	56	44	28	8	66	45	27	13
07-Jul-19	77	100%	100%	100%	0.020	0.029	7.30%	19	57	22	0	23	76	19	0	25
08-Jul-19	65	100%	100%	100%	0.020	0.025	7.50%	27	50	24	0	20	91	27	0	26
09-Jul-19	69	100%	100%	100%	0.020	0.025	7.50%	77	171	78	30	38	256	77	29	55
10-Jul-19	78	100%	100%	100%	0.020	0.025	7.50%	42	64	41	29	10	77	42	25	15
11-Jul-19	57	100%	100%	100%	0.020	0.025	7.50%	42	115	45	0	31	152	42	0	40
12-Jul-19	77	100%	100%	100%	0.020	0.064	8.40%	44	52	41	24	8	97	44	19	16
13-Jul-19	70	100%	100%	100%	0.020	0.064	8.40%	48	83	49	30	17	127	48	22	26
14-Jul-19	59	100%	100%	100%	0.020	0.064	8.40%	48	103	49	22	24	147	48	0	35
15-Jul-19	71	100%	100%	100%	0.020	0.064	8.40%	28	39	27	20	4	51	28	20	7
16-Jul-19	66	100%	100%	100%	0.020	0.064	8.40%	39	48	40	27	6	58	39	24	9
17-Jul-19	3	100%	100%	100%	0.020	0.054	8.40%	17	68	11	0	20	197	17	0	46
18-Jul-19	49	100%	100%	100%	0.020	0.054	8.40%	31	123	37	0	34	165	31	0	34
19-Jul-19	83	100%	100%	100%	0.020	0.054	8.40%	28	39	28	20	6	47	28	20	7
20-Jul-19	88	100%	100%	100%	0.020	0.054	8.40%	46	66	46	29	12	80	46	31	13
21-Jul-19	90	100%	100%	100%	0.020	0.054	8.40%	49	60	49	39	7	99	49	29	16
22-Jul-19	85	100%	100%	100%	0.019	0.038	8.60%	46	71	47	29	12	137	46	25	22
23-Jul-19	64	100%	100%	19%	0.019	0.038	8.60%	41	62	40	0	17	101	41	0	26
24-Jul-19	80	100%	100%	23%	0.019	0.038	8.60%	36	48	36	19	9	53	36	7	11
25-Jul-19	75	100%	100%	13%	0.019	0.038	8.60%	55	118	55	31	26	189	55	27	38
26-Jul-19	78	100%	100%	4%	0.021	0.024	6.50%	51	67	51	37	8	79	51	32	13
27-Jul-19	79	100%	100%	56%	0.021	0.024	6.50%	59	86	57	39	15	100	59	37	22
28-Jul-19	76	100%	100%	2%	0.021	0.024	6.50%	68	104	63	48	13	239	68	35	43
29-Jul-19	81	100%	100%	7%	0.021	0.024	6.50%	69	131	71	43	26	139	69	42	27
30-Jul-19	78	100%	100%	13%	0.021	0.032	6.90%	74	113	79	39	21	211	74	23	40
31-Jul-19	75	100%	100%	96%	0.021	0.032	6.90%	73	163	75	42	37	212	75	40	41
Month ave	71	100%	100%	70%	0.02	0.04	0.1	45	-	45	-	-	-	45	-	-
Month max.	90	-	-	-	0.02	0.06	0.1	77	171	-	-	-	256	-	-	-
Limit	-	-	-	-	0.06	-	-	40	-	-	-	-	-	-	-	-

* No data available.

Signed on behalf of the Operator



Dated 26/02/2020

Form Sinter CEMS

RELEASES INTO AIR

Operational Summary for the month Aug-2019

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			Daily average	Particulate Matter (mg/m3)							
					Mean sulphur % w/w	Mean chloride % w/w	Mean reverts % w/w		4 hour rolling average				Hourly average			
									Maximum	Mean	Minimum	Standard deviation	Maximum	Mean	Minimum	Standard deviation
01-Aug-19	76	100%	100%	17%	0.021	0.032	6.90%	57	96	59	37	17	118	57	15	26
02-Aug-19	76	100%	100%	6%	0.022	0.026	7.00%	55	108	55	39	21	184	55	25	35
03-Aug-19	82	100%	100%	4%	0.022	0.026	7.00%	50	77	50	37	11	103	50	36	17
04-Aug-19	72	100%	100%	10%	0.022	0.026	7.00%	63	104	64	41	23	178	63	0	39
05-Aug-19	47	100%	100%	10%	0.022	0.026	7.00%	41	100	39	0	30	118	41	0	38
06-Aug-19	76	100%	100%	10%	0.022	0.026	7.00%	51	72	51	35	11	91	51	33	17
07-Aug-19	75	100%	100%	55%	0.019	0.028	7.90%	22	71	26	0	26	93	22	0	29
08-Aug-19	59	100%	100%	88%	0.019	0.028	7.90%	27	61	23	0	21	98	27	0	27
09-Aug-19	72	100%	100%	55%	0.019	0.028	7.90%	41	52	42	31	6	63	41	29	10
10-Aug-19	75	100%	100%	100%	0.019	0.028	7.90%	45	63	45	31	10	86	45	30	19
11-Aug-19	73	100%	100%	100%	0.021	0.024	9.20%	49	66	48	34	10	129	49	30	21
12-Aug-19	76	100%	100%	100%	0.021	0.024	9.20%	52	69	52	34	9	131	52	29	21
13-Aug-19	76	100%	100%	100%	0.021	0.024	9.20%	73	178	63	45	33	299	73	39	63
14-Aug-19	11	100%	100%	100%	0.022	0.024	6.40%	35	183	38	0	55	235	35	0	68
15-Aug-19	41	100%	100%	100%	0.022	0.024	6.40%	71	150	78	0	49	226	71	0	63
16-Aug-19	65	100%	100%	80%	0.022	0.024	6.40%	57	94	58	26	21	137	57	0	35
17-Aug-19	56	100%	100%	26%	0.022	0.024	6.40%	39	55	42	0	14	86	39	0	23
18-Aug-19	63	100%	100%	100%	0.022	0.024	6.40%	46	108	44	0	27	141	46	0	36
19-Aug-19	78	100%	100%	100%	0.022	0.024	6.40%	34	44	32	21	6	55	34	20	9
20-Aug-19	69	100%	100%	100%	0.022	0.024	6.40%	28	47	29	16	10	82	28	0	18
21-Aug-19	63	100%	100%	100%	0.024	0.027	8.20%	21	35	22	6	8	49	21	0	12
22-Aug-19	46	100%	100%	67%	0.024	0.027	8.20%	18	51	19	0	14	113	18	0	25
23-Aug-19	76	100%	100%	98%	0.024	0.027	8.20%	23	27	22	14	3	33	23	14	5
24-Aug-19	69	100%	100%	64%	0.024	0.027	8.20%	33	40	32	22	5	72	33	3	13
25-Aug-19	79	100%	100%	64%	0.022	0.023	10.10%	34	42	33	25	5	55	34	22	9
26-Aug-19	74	100%	100%	74%	0.022	0.023	10.10%	46	71	46	33	11	89	46	27	18
27-Aug-19	74	100%	100%	20%	0.022	0.023	10.10%	40	61	40	29	10	66	40	26	13
28-Aug-19	66	100%	100%	3%	0.022	0.023	10.10%	40	65	41	21	16	144	40	17	28
29-Aug-19	71	100%	100%	74%	0.023	0.024	9.10%	34	52	33	19	9	78	34	18	15
30-Aug-19	75	100%	100%	28%	0.023	0.024	9.10%	35	44	35	30	5	65	35	25	9
31-Aug-19	73	100%	100%	96%	0.023	0.024	9.10%	35	96	54	33	18	157	54	29	23
Month ave	67	100%	100%	63%	0.02	0.03	0.1	42	-	42	-	-	-	42	-	-
Month max.	82	-	-	-	0.02	0.03	0.1	73	183	-	-	-	299	-	-	-
Limit	-	-	-	-	0.06	-	-	40	-	-	-	-	-	-	-	-

* No data available.

Signed on behalf of the Operator

Dated 26/02/2020

Form Sinter CEMS

RELEASES INTO AIR

Operational Summary for the month Sep-2019

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			Daily average	Particulate Matter (mg/m3)							
					Mean sulphur % w/w	Mean chloride % w/w	Mean reverts % w/w		4 hour rolling average				Hourly average			
									Maximum	Mean	Minimum	Standard deviation	Maximum	Mean	Minimum	Standard deviation
01-Sep-19	74	100%	100%	26%	0.023	0.024	9.10%	36	44	36	26	5	62	36	24	9
02-Sep-19	74	100%	100%	60%	0.019	0.027	8.80%	38	45	38	32	4	49	38	30	6
03-Sep-19	12	100%	100%	100%	0.019	0.027	8.80%	24	80	19	0	28	210	24	0	56
04-Sep-19	70	100%	100%	100%	0.019	0.027	8.80%	41	129	47	24	30	191	41	0	38
05-Sep-19	77	100%	100%	100%	0.019	0.027	8.80%	27	35	26	20	5	59	27	18	9
06-Sep-19	74	100%	100%	100%	0.019	0.027	8.80%	38	65	39	22	14	76	38	18	17
07-Sep-19	79	100%	100%	100%	0.019	0.032	8.30%	9	35	11	0	11	26	9	0	11
08-Sep-19	68	100%	100%	100%	0.019	0.032	8.30%	18	43	17	0	15	95	18	0	21
09-Sep-19	67	100%	100%	100%	0.019	0.032	8.30%	30	55	30	15	11	92	30	0	23
10-Sep-19	79	100%	100%	40%	0.019	0.032	8.30%	22	27	22	17	3	41	22	16	5
11-Sep-19	76	100%	100%	53%	0.019	0.021	10.20%	28	36	28	20	6	55	28	19	9
12-Sep-19	77	100%	100%	11%	0.019	0.021	10.20%	39	46	38	27	6	62	39	23	10
13-Sep-19	71	100%	100%	15%	0.019	0.021	10.20%	37	51	38	27	7	84	37	26	12
14-Sep-19	75	100%	100%	69%	0.019	0.021	10.20%	39	46	38	30	4	55	39	31	7
15-Sep-19	52	100%	100%	92%	0.025	0.029	10.80%	38	79	39	11	18	146	38	0	31
16-Sep-19	57	100%	100%	53%	0.025	0.029	10.80%	32	49	31	9	10	82	32	0	19
17-Sep-19	75	100%	100%	38%	0.025	0.029	10.80%	36	43	36	31	4	47	36	27	5
18-Sep-19	71	100%	100%	23%	0.025	0.029	10.80%	43	61	43	29	10	72	43	27	13
19-Sep-19	79	100%	100%	12%	0.02	0.055	7.70%	42	50	42	35	3	72	42	30	9
20-Sep-19	75	100%	100%	44%	0.02	0.055	7.70%	46	77	46	32	13	124	46	30	21
21-Sep-19	54	100%	100%	17%	0.02	0.055	7.70%	49	70	50	33	11	129	49	18	27
22-Sep-19	53	100%	100%	53%	0.02	0.055	7.70%	37	74	37	25	14	155	37	18	28
23-Sep-19	0	100%	100%	15%	0.02	0.055	7.70%	0	31	2	0	8	0	0	0	0
24-Sep-19	0	100%	100%	15%	0.02	0.055	7.70%	0	0	0	0	0	0	0	0	0
25-Sep-19	0	100%	100%	53%	0.02	0.055	7.70%	0	0	0	0	0	0	0	0	0
26-Sep-19	0	100%	100%	8%	0.02	0.055	7.70%	0	0	0	0	0	0	0	0	0
27-Sep-19	0	100%	100%	72%	0.02	0.055	7.70%	0	0	0	0	0	0	0	0	0
28-Sep-19	0	100%	100%	1%	0.02	0.055	7.70%	0	0	0	0	0	0	0	0	0
29-Sep-19	0	100%	100%	36%	0.02	0.055	7.70%	0	0	0	0	0	0	0	0	0
30-Sep-19	0	100%	100%	6%	0.02	0.055	7.70%	0	0	0	0	0	0	0	0	0
Month ave	50	100%	100%	50%	0.02	0.04	0.1	25	-	25	-	-	-	25	-	-
Month max.	79	-	-	-	0.03	0.06	0.1	57	129	-	-	-	210	-	-	-
Limit	-	-	-	-	0.06	-	-	40	-	-	-	-	-	-	-	-

* No data available.

Signed on behalf of the Operator

Dated 25/02/2020

Form Sinter CEMS