

RELEASES TO AIR

Operational summary for quarter ending 31/06/2018

Operator: Tata Steel UK Ltd

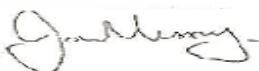
Location: Port Talbot Works

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	17391		
	Month 2	14269		
	Month 3	90338		
A13A BOS convertor 2 gas flare	Month 1	34783		
	Month 2	28538		
	Month 3	180676		
A33 Blast furnace gas flare stack no.1	Month 1	58721		
	Month 2	89546		
	Month 3	67320		
A33C Blast furnace gas flare stack no.2	Month 1	106595		
	Month 2	150114		
	Month 3	113001		
A33A Blast furnace gas main number 4 bleeder	Month 1		102	
	Month 2		129	
	Month 3		232	
A33B Blast furnace gas main number 5 bleeder	Month 1		125	
	Month 2		83	
	Month 3		151	
A59 Coke oven gas triple flare	Month 1	94384		
	Month 2	66306		
	Month 3	45179		
Blast furnaces 4 and 5	Month 1			1548012
	Month 2			1362321
	Month 3			1548928
Coke ovens	Month 1			529281
	Month 2			452527
	Month 3			465535
BOS Plant	Month 1			207048
	Month 2			177707
	Month 3			185887

Signed on behalf of the Operator

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Dated

11/07/18

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Form Installation gas

WASTE PRODUCTION

Operational summary for quarter ending 31/06/2018

Operator: Tata Steel UK Ltd

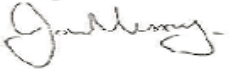
Location: Port Talbot Works

Permit: BL7108

Release point	Month	Steel slag (tonnes)	Desulph slag (tonnes)	Hazardous waste * (tonnes)	Non hazardous waste * (tonnes)	BF slag (tonnes)	Oil used in coke ovens (tonnes)	Waste oil reductant (tonnes)
BOS	Apr	26378	1521					
	May	35246	4898					
	Jun	45932	3884					
Iron and steel installation	Apr			15.2	238			
	May			13.5	218			
	Jun			43.7	353			
BF4 tapholes	Apr					34282		
	May					35506		
	Jun					37103		
BF5 tapholes	Apr					36207		
	May					39462		
	Jun					34489		
BF5	Apr							0.00
	May							0.00
	Jun							0.00
Coke ovens	Apr						192	**
	May						181	**
	Jun						189	**

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

** WID compliant Oil.

Signed on behalf of the Operator 

Dated 11/07/18

Form Waste 1

RELEASES INTO AIR

Operational summary for quarter ending 31/06/2018

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)	2101	1918	2184	2184	2184	1563	1397
Mean load (%MCR)	48.81%	51.43%	44.26%	81.66%	76.61%	57.36%	65.94%
Mean flue gas flow (Nm3/hr)	71232	60163	76396	218894	225751	109004	121395
Heavy Fuel Oil							
Average net CV (GJ/t)	41	41	41	41	41	41	
Max. sulphur content (g/Kg)	10	10	10	10	10	10	
Max. asphaltene content (g/Kg)	?	?	?	?	?	?	
Ave.%wt Sulphur	1	1	1	1	1	1	
NOx factor	0.1	0.1	0.1	0.1	0.1	0.1	
Coke Oven Gas							
Average net CV (GJ/km3)	16.95	16.95	16.95	16.95	16.95	16.95	
Sulphur content (g/m3)	5.01	5.01	5.01	5.01	5.01	5.01	
NOx factor	0.04	0.04	0.04	0.04	0.04	0.04	
Blast Furnace Gas							
Average net CV (GJ/km3)	3.68	3.68	3.68	3.68	3.68	3.68	3.68
Sulphur content (g/Nm3)	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/km3)	37.4	37.4	37.4	37.4	37.4	37.4	37.4
NOx factor	0.04	0.04	0.04	0.04	0.04	0.04	0.04

Signed on behalf of the Operator

Dated 12/07/18

Form LCPD Operating 1

RELEASES INTO AIR

Operational summary for quarter ending 31/06/2018

Operator: Tata Steel UK Ltd

Location: Port Talbot Works

Permit: BL7108

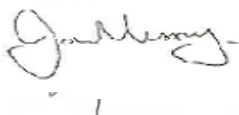
Release Points: A50A/A50B, A51, A52A, A52B, A53 & A62

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	15-May-18 11:13	27-Jun-18 10:53				
Flowrate (Nm3/hr)	109759	78709				
NOx measured** conc. (mg/Nm3)	134 (+/-7.3)	88 (+/-4.3)				
NOx limit (mg/NM3)	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	0					
Fuel usages over the sampling period						
Natural gas (%)	1%	4%			0%	
BF gas (%)	40%	80%			94%	
Coke oven gas (%)	60%	17%			5%	
Heavy fuel oil (%)	0%	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

Signed on behalf of the Operator



Dated 19/07/18

Form LCPD DCM NOx

RELEASES INTO AIR

Operational summary for quarter ending

31/06/2018

Operator: Tata Steel UK Ltd

Location: Port Talbot Works

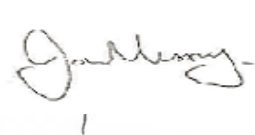
Permit: BL7108 / NP3938GZ

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	15-May-18 11:13	27-Jun-18 10:53				
Flowrate (Nm ³ /hr)	109759	78709				
SO ₂ measured conc. (mg/Nm ³)	378 (+/-20.1)	37 (+/- 3.6)				
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	0					
Fuel usages over the sampling period						
Natural gas (%)	1%	4%			0%	
BF gas (%)	40%	80%			94%	
Coke oven gas (%)	60%	17%			5%	
Heavy fuel oil (%)	0%	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

Signed on behalf of the Operator 

Dated 19/07/18

Form LCPD DCM SO₂

RELEASES INTO AIR

Operational summary for quarter ending

31/06/2018

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	A	0	22530	43321	4175		70026
	M	0	37324	25881	1934		65139
	J	0	40208	33097	1983		75288
A50B Service Boiler 5	A	0	22981	32202	4325		59508
	M	0	40699	26905	1725		69329
	J	0	46502	25411	1683		73596
A51 Boiler A5	A	0	6501	53425	1716	184	61826
	M	0	5380	48606	885	0	54872
	J	0	8601	50776	1166	230	60773
A52A Boiler 6	A	484	44911	233582	11819	31982	322778
	M	492	49821	212626	6387	34744	304069
	J	180	50321	251509	8657	31934	342601
A52B Boiler 7	A	205	41950	241542	7703	33158	324559
	M	103	35636	201409	6892	32165	276205
	J	103	48511	225045	6581	28570	308808
A53 Mitchell	A	0	5608	120396	4205		130210
	M	0	6045	105603	2957		114605
	J	0	1540	14928	165		16633
A62 Boiler 3	A			118100	14624	274	132998
	M			3842	770	0	4612
	J			190771	2687	547	194005
Total	A	689	144481	842569	48566	65598	1101904
	M	595	174905	624872	21551	66909	888832
	J	283	195682	791537	22922	61281	1071704

Signed on behalf of the Operator

Dated 06/07/18

Form LCPD Fuels

RELEASES INTO AIR

Operational summary for quarter ending

31/06/2018

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	Apr	0.8	13.1	14/04/18 10:00	0.1	0.9	100%
	May	2.1	14.2	22/05/18 18:00	0.1	1.7	100%
	Jun	2.1	14.2	22/05/18 18:00	0.1	1.7	100%
A51 Boiler A5	Apr	0.6	11.0	18/04/18 03:00	-0.2	1.2	100%
	May	1.8	10.8	31/05/18 15:00	-0.2	1.9	100%
	Jun	3.7	21.0	02/06/18 19:00	-0.7	4.7	100%
A52A Boiler 6	Apr	1.6	17.7	20/04/18 04:00	0.7	1.0	83%
	May	1.2	8.2	22/05/18 13:00	0.6	0.6	100%
	Jun	1.2	28.7	04/06/18 11:00	0.6	1.3	100%
A52B Boiler 7	Apr	3.1	22.5	06/04/18 00:00	0.5	2.5	94%
	May	0.8	18.8	27/05/18 06:00	0.4	0.9	100%
	Jun	0.7	38.4	04/06/18 11:00	0.3	2.0	100%
A53 Mitchell	Apr	5.0	6.2	12/04/18 05:00	3.6	0.5	100%
	May	4.5	12.4	31/05/18 23:00	3.5	0.9	100%
	Jun	1.7	51.1	02/06/18 18:00	0.0	4.6	100%

Signed on behalf of the Operator

Dated12/07/18.....

Form LCPD CEM Parts

RELEASES INTO AIR

Operational summary for quarter ending

31/06/2018

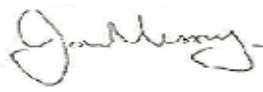
Operator: Tata Steel UK Ltd

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	Apr	202.1	536.9	20/04/2018 5:00	53.3	49.1	97%
	May	226.0	612.3	29/05/2018 2:00	1.8	66.5	100%
	Jun	266.5	838.9	26/06/2018 15:00	0.9	146.4	100%
A52B Boiler 7	Apr	0.0	0.0	N/A	0.0	0.0	0%
	May	0.0	0.0	N/A	0.0	0.0	0%
	Jun	0.0	0.0	N/A	0.0	0.0	0%
A50A & A50B Service Boilers	Apr	172.2	685.8	25/04/2018 2:00	5.6	125.4	100%
	May	253.8	593.3	26/05/2018 18:00	9.9	136.5	100%
	Jun	280.1	730.0	13/06/2018 0:00	26.3	150.7	100%
SULPHUR DIOXIDE (mg/Nm3) - CONTINUOUS EMISSIONS MONITORING							
Release point	Month	Month mean LIMITS: BFG/COG=500	Maximum hourly mean	Date & time of maximum value	Minimum hourly mean	Standard deviation of hourly means	% data capture over month
A52A Boiler 6	Apr	420.8	657.1	20/04/2018 5:00	260.3	55.0	97%
	May	431.7	601.3	22/05/2018 6:00	161.1	48.2	100%
	Jun	434.8	582.4	06/06/2018 21:00	230.3	47.6	100%
A52B Boiler 7	Apr	0.0	0.0	N/A	0.0	0.0	0%
	May	0.0	0.0	N/A	0.0	0.0	0%
	Jun	0.0	0.0	N/A	0.0	0.0	0%
A50A & A50B Service Boilers	Apr	342.2	1714.6	25/04/2018 2:00	39.6	360.1	100%
	May	735.5	2022.5	06/05/2018 13:00	108.9	465.7	100%
	Jun	763.8	2510.3	06/06/2018 17:00	49.1	541.5	100%

Signed on behalf of the Operator 

Dated 12/07/18

Form LCPD CEMS SO2 & NOx

RELEASES INTO AIR

Operational summary for quarter ending

31/06/2018

Operator: Tata Steel UK Ltd

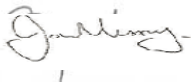
Location: Port Talbot Works

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	Apr	4.7	2.3	23-Apr-18	0.0	1.1	100.00%	9.1	84.2%
	May	4.1	0.1	31-May-18	0.0	0.7	100.00%		98.4%
	Jun	3.9	1.6	14-Jun-18	0.1	1.1	100.00%	9.9	99.9%
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	Apr	33.3	23.1	04-Apr-18	0.0	8.9	100.00%	170.7	84.2%
	May	21.2	0.7	31-May-18	0.0	3.8	100.0%		98.4%
	Jun	21.6	21.4	20-Jun-18	21.1	0.2	100.00%	198.2	99.9%
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	Apr	58.6	26.0	16-Apr-18	0.0	13.9	100.00%	182.3	84.2%
	May	11.0	0.4	31-May-18	0.0	0.2	100.00%		98.4%
	Jun	10.6	8.1	13-Jun-18	5.9	1.2	100.00%	198.9	99.9%

Boiler 3 off from 21 January 2016.

Signed on behalf of the Operator 

Dated 12/07/18

Form LCPD CEM A62

Operational summary for quarter ending 31/06/2018

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

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Johnny

Form LCPD CEMS LOG

RELEASES INTO AIR

Operational summary for quarter ending

31/06/2018

Operator: Tata Steel UK Ltd

Location: Port Talbot Works

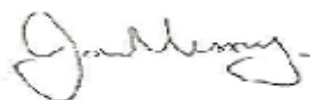
Permit: BL7108 / NP3938GZ

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	104 (+/- 9.7)	210 (+/- 19.2)	407 (+/- 37)	6250 (+/- 492.9)
Measured oxygen content (%)	16.4	16.4	16.4	16.4
Measured conc. according to condition 10.1.3a (17%O2)	90	182	353	5417
Sampling method used	BS EN 13284	BS 6069	ISO 10849	BS ISO 12039
Analytical method used	Gravimetric	*EC	*EC	*EC
Date of sampling	04-Jun-18	04-Jun-18	04-Jun-18	04-Jun-18
Sample start time	10:57	10:57	10:57	10:57
Sample end time	11:57	11:57	11:57	11:57
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	83.4			
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 (%)	12.2	12.2	12.2	12.2
Mean chloride content of sinter blend in use (%)	0.02	0.02	0.02	0.02
Throughput during sampling period (% of maximum)	60.0	60.0	60.0	60.0

* EC - electrochemical cell

Signed on behalf of the Operator



Dated

25/07/18

RELEASES INTO AIR

Operational summary for quarter ending 31/06/2018

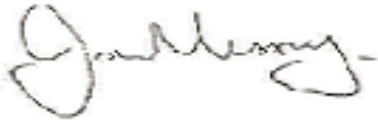
Operator: Tata Steel UK Ltd

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	13.5	13.5	4.7	26.6	28.3	6.3	1.7	3.7	3.7	1.7	9.1	6.9	4.2	1.3	0.0	0.0	0.03	0.3	0.1	0.2	0.12
February	11.2	11.2	6.3	30.6	22.5	6.3	1.4	3.1	3.1	1.7	8.7	6.5	3.3	1.3	0.0	0.0	0.01	0.3	0.4	0.2	0.12
March	10.2	10.2	4.9	26.9	19.2	6.0	1.4	2.5	2.5	1.5	10.0	8.1	3.6	1.0	0.0	0.0	0.20	0.4	0.1	0.3	0.12
April	6.0	6.0	4.30	28.3	26.6	4.6	1.4	0.9	0.9	1.7	9.0	8.9	3.4	1.0	0.0	0.0	0.00	0.3	0.4	0.3	0.17
May	15.1	15.1	2.11	18.8	12.3	3.2	0.1	2.5	2.5	1.5	8.5	7.6	3.0	0.0	0.0	0.0	0.05	0.2	0.1	0.3	0.01
June	13.8	13.8	3.81	21.9	20.4	3.1	1.4	2.5	2.5	1.7	9.5	8.6	0.4	0.4	0.0	0.0	0.03	0.2	0.1	0.0	0.12
July																					
August																					
September																					
October																					
November																					
December																					
Totals	35	35	16	84	70	19	5	9	9	5	28	22	11	4	0.0	0.0	0.2	1.0	0.7	0.7	0.4
	263							87							3						
	Service		A5	Margam C		Mit	3	Service		A5	Mgm C		Mit	3	Service		A5	Mgm C		Mit	3
Boiler Plant Totals	70		16	154		19	5	18		5	49		11	4	0		0	2		1	0
NERP Annual Limit (T)	686		251	2219		575		252		96	929		212		20		4	56		10	

Signed on behalf of the Operator 

Dated 23/07/18

RELEASES INTO AIR

Operational summary for quarter ending

31/06/2018

Operator: Tata Steel UK Ltd**Location:** Port Talbot Works**Permit:** BL7108 / NP3938GZ**Release Points:** A6, A7, A30, A31, A32, A34A, A34B & A39

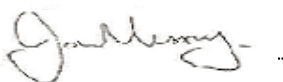
OXIDES OF NITROGEN - NOx (DISCONTINUOUS MONITORING)								
Release Point	A6	A7	A30	A31	A32	A34A	A34B	A39 #
Time and date of sampling	03-May-18 09:29	08-May-18 10:56				09-Apr-18 11:47	09-Apr-18 10:43	29-Jun-18 09:20
Flowrate (Nm3/hr)	287133	145128				132757	128457	29,349
NOx measured conc.(mg/Nm3) **	58 (+/-1.4)	43 (+/-1.7)				628 (+/- 28.7)	631 (+/-25.8)	3 (+/-0.1)
Oxygen content (%)								
NOx limits (mg/Nm3)	100	100				1800	1800	115
Sampling method used	ISO 10849	ISO 10849				ISO 10849	ISO 10849	ISO 10849
Analytical method used	EC *	EC *				EC *	EC *	EC *
Continuous hourly monitoring result over the period								
Fuel usages over the sampling period								
Natural gas (%)	5%	0%				82%	41%	100%
BF gas (%)	67%	100%						0%
Coke oven gas (%)	8%	0%				18%	59%	
BOS Gas (%)	20%							

* 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 18/07/18

Form I&S DCM NOx

RELEASES INTO AIR

Operational summary for quarter ending

31/06/2018

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	A39 #
Time and date of sampling	03-May-18 09:29	08-May-18 10:56	09-Apr-18 11:47	09-Apr-18 10:43	29-Jun-18 09:20
Flowrate (Nm ³ /hr)	287133	145128	132757	128457	29,349
SO ₂ measured conc.(mg/Nm ³)	70.6 (+/- 2.9)	5 (+/- 2)	169 (+/-9.4)	622 (+/-26)	0 (+/- 0.0)
SO ₂ limits (mg/Nm ³)	200	200	1400	1400	260
Sampling method used	BS6069	BS6069	BS6069	BS6069	BS6069
Analytical method used	EC *	EC *	EC *	EC *	EC *
Continuous hourly monitoring result over the period					
Fuel usages over the sampling period					
Natural gas (%)	5%	0%	82%	41%	100%
BF gas (%)	67%	100%			0%
Coke oven gas (%)	8%	0%	18%	59%	
BOS Gas (%)	20%				

* EC - electrochemical cell

A39 has a 6 monthly monitoring requirement

Signed on behalf of the Operator

Dated 18/07/18

Form I&S DCM SO₂

RELEASES INTO AIR

Operational summary for quarter ending 31/06/2018

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	A6	A7	A39 # (6 Monthly)	
Parameter	Chloride (as HCl)	Carbon monoxide			
Time and date of sampling	12-Apr-18 11:06	03-May-18 09:29	08-May-18 10:56	29-Jun-18 09:20	
Flowrate (Nm3/hr)	17,285	287133	145128	29,349	
Measured conc.(mg/Nm3)	4.8 (+/-0.1)	6250 (+/-224.3)	6107 (+/- 265.2)	283 (+/-6.0)	
Emission limits (mg/Nm3)	5				
Sampling method used	Isokinetic	BS ISO 12039	BS ISO 12039	BS ISO 12039	
Analytical method used	BSEN1911	EC *	EC *	EC *	
Fuel usages over the sampling period					
Natural gas (%)		5%	0%		
BF gas (%)		67%	100%		
Coke oven gas (%)		8%	0%		
BOS Gas (%)		20%			

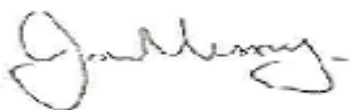
* EC - electrochemical cell

* No limit for A46 in new permit.

A39 has a 6 monthly monitoring requirement - no yet taken for HY2

Signed on behalf of the Operator

Dated 18/07/18

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Form I&S DCM Misc

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RELEASES INTO AIR

Operational summary for quarter ending 31/06/2018

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	Apr	15 Daily mean	3	2.2	0.1	2.9	2.0	0.2	2.4	100%	100%
	May		3	2.4	0.1	2.9	2.1	0.2	2.6	100%	100%
	Jun		3	2.2	0.1	3.0	0.0	0.3	2.7	100%	100%
A8B	Apr	15 Daily mean	9	3.8	1.2	30.6	1.9	2.1	6.5	100%	100%
	May		10	4.8	1.2	30.1	2.7	2.3	6.7	100%	100%
	Jun		13	4.5	2.2	21.5	2.5	3.1	8.1	100%	100%
A9	Apr	15 Daily mean	4	0.0	0.8	74.9	0.1	17.4	0.1	100%	100%
	May		7	0.0	2.1	24.9	0.1	2.8	0.8	100%	100%
	Jun		10	0.0	2.2	26.8	1.9	2.8	0.8	100%	100%
A2*	Apr	30 Daily mean	61	0.0	15.3	113.8	0.0	17.8	24.9	100%	100%
	May		77	9.3	16.9	145.5	0.0	24.0	36.4	100%	100%
	Jun		147	9.5	30.2	189.1	0.0	39.4	43.7	100%	100%
A10	Apr	15 Daily mean	7	2.4	1.2	11.5	3.9	2.0	4.1	100%	100%
	May		5	0.0	1.5	8.2	0.0	2.2	3.0	100%	100%
	Jun		3	0.0	0.8	5.7	0.0	1.5	0.8	100%	100%
A14	Apr	15 Daily mean	4	1.9	0.4	4.8	2.8	0.5	2.9	100%	100%
	May		3	2.3	0.2	4.6	3.1	0.3	2.7	100%	100%
	Jun		3	1.9	0.4	4.9	2.8	0.4	2.9	100%	100%
A15	Apr	15 Daily mean	4	2.0	0.6	5.2	2.5	0.7	3.1	100%	100%
	May		3	1.3	0.3	11.2	2.2	1.7	2.5	100%	100%
	Jun		3	1.7	0.4	5.9	2.3	0.7	2.5	100%	100%
A16	Apr	15 Daily mean	9	2.9	1.4	16.3	4.9	2.8	5.7	100%	100%
	May		14	3.9	2.0	45.0	5.6	6.9	8.1	100%	100%
	Jun		26	3.0	7.4	30.1	3.8	8.9	8.7	100%	100%

*A2 ELV discussed with NRW as derogation

Signed on behalf of the Operator

Dated 06/07/18

Form I&S CEMS Parts 1 & 2

RELEASES INTO AIR

Operational summary for quarter ending 31/06/2018

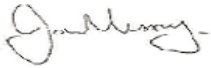
Operator: Tata Steel UK Ltd

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	Apr	15	1.1	0.5	1.2	11.5	0.5	0.2	0.7	100%	100%
	May	Daily mean	0.9	0.1	1.5	8.2	0.1	0.4	0.5	100%	100%
	Jun		0.7	0.1	0.8	5.7	0.1	0.4	0.5	75%	75%
A63	Apr	25	Inconsistent data during the period - to be investigated.								
	May	Hourly mean									
	Jun										

Signed on behalf of the Operator 

Dated 18/07/18

Form I&S CEMS Part 3

RELEASES INTO AIR

Operational summary for quarter ending

31/06/2018

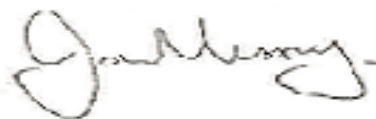
Operator: Port Talbot Works

Location: Port Talbot Works

Permit: BL7108 / RP3730BV

	NOx (tonnes)	Lead (tonnes)	PM10 (tonnes)	CO2 (k tonnes)
Morfa	538			
Iron & Steel	787	1.4	436	1629
Total	1325	1.4	436	1629

Signed on behalf of the Operator



Dated 23/07/18

Form KPI

RELEASES INTO AIR

Operational Summary for quarter ending 31/06/2018

Operator: Tata Steel Strip Products UK

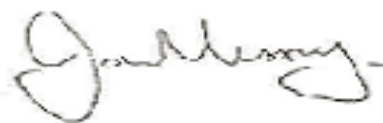
Location: Port Talbot Works

Permit: BL7108

Release Points:

PARTICULATE MATTER (DISCONTINUOUS MONITORING)		
Release Point	A6	A7
Time and date of sampling	03-May-18 10:01	08-May-18 12:26
Flowrate (Nm3/hr)	120,140	160,521
Particulate measured conc. (mg/Nm3)	9.3 (+/-2.9)	1.7 (+/-1.9)
Particulate limit (mg/Nm3)	10	10
Sampling method used	BS EN 13284	BS EN 13284
Analytical method used	Gravimetric	Gravimetric
Fuel Usage		
Natural gas (%)	5%	0%
BF gas (%)	67%	100%
Coke oven gas (%)	8%	0%
BOS (%)	20%	

Signed on behalf of the Operator



Dated

06/07/2018

Form Blast Furnace DCM Part

RELEASES INTO AIR

Operational summary for the six months to 29/06/2018

Operator: Tata Steel Strip Products UK

Location: Port Talbot Works

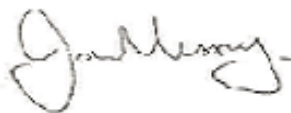
Permit: BL7108 / RP3730BV

Release Points: A39

PARTICULATE MATTER (DISCONTINUOUS MONITORING)		
Release Point	A39 HY1	
Time and date of sampling	29-Jun-18 09:20	
Flowrate (Nm3/hr)	29349	
Particulate measured conc. (mg/Nm3)	5	
Particulate limit (mg/Nm3)	25	
Sampling method used	BS EN 13284	
Analytical method used	Gravimetric	

Form GCI DCM Part

Signed on behalf of the Operator



Dated 18/07/2018

Operational Summary for the month Apr-2018

Permit: BL7108 / RP3730BV

Release Point: A1

* No data available.

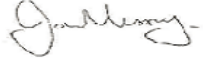
03/04/2017 to the 10/04/2017 Sinter Plant on stop

Signed on behalf of the Operator

Dated 19/07/2018

Form Sinter CEMS

Liquid Iron Plating Operations (Iron Plating Pit)			
Date	Time	Tonnes	Reason
29/06/18	13:57	273	Metallurgy Reasons
29/06/18	12:38	268	Metallurgy Reasons
29/06/18	11:31	171	Metallurgy Reasons
29/06/18	10:09	247	Metallurgy Reasons
29/06/18	04:46	228	Metallurgy Reasons
29/06/18	03:59	240	Metallurgy Reasons
28/06/18	07:05	208	Metallurgy Reasons
28/06/18	06:18	171	Metallurgy Reasons
28/06/18	05:16	240	Metallurgy Reasons
28/06/18	04:39	237	Metallurgy Reasons
28/06/18	01:28	229	Metallurgy Reasons
27/06/18	23:41	300	Metallurgy Reasons
27/06/18	22:35	240	Metallurgy Reasons
27/06/18	22:28	282	Metallurgy Reasons
27/06/18	21:52	188	Metallurgy Reasons
Total		3522	

Signed on behalf of the Operator 

Dated 19/07/18

Form I&S Operational 1

RELEASES INTO AIR

Operational summary for quarter ending

31/06/2018

Operator: Tata Steel UK Ltd

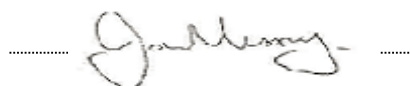
Location: Port Talbot Works

Permit: BL7108

Release Points: Iron plating continued

Liquid Iron Plating Operations (Iron Plating Pit)			
Date	Time	Tonnes	Reason
27/06/18	19:39	288	Metallurgy Reasons
26/06/18	15:50	268	Metallurgy Reasons
26/06/18	14:59	228	Metallurgy Reasons
26/06/18	12:09	217	Metallurgy Reasons
26/06/18	11:13	228	Metallurgy Reasons
26/06/18	10:26	310	Metallurgy Reasons
26/06/18	09:16	188	Metallurgy Reasons
25/06/18	20:48	268	Metallurgy Reasons
25/06/18	18:58	282	Metallurgy Reasons
25/06/18	18:15	96	Metallurgy Reasons
25/06/18	16:54	222	Metallurgy Reasons
25/06/18	09:42	161	Metallurgy Reasons
25/06/18	08:58	247	Metallurgy Reasons
25/06/18	07:13	228	Metallurgy Reasons
22/06/18	05:17	171	Metallurgy Reasons
22/06/18	04:39	180	Metallurgy Reasons
22/06/18	00:38	180	Metallurgy Reasons
21/06/18	23:49	263	Metallurgy Reasons
21/06/18	18:44	268	Metallurgy Reasons
21/06/18	17:43	228	Metallurgy Reasons
17/06/18	17:20	222	Metallurgy Reasons
17/06/18	16:08	164	Metallurgy Reasons
13/06/18	14:28	264	Metallurgy Reasons
12/06/18	20:38	268	Metallurgy Reasons
12/06/18	19:40	228	Metallurgy Reasons
08/06/18	15:03	237	Metallurgy Reasons
08/06/18	07:02	228	Metallurgy Reasons
07/06/18	10:21	228	Metallurgy Reasons
04/06/18	13:50	228	Metallurgy Reasons
04/06/18	10:46	228	Metallurgy Reasons
04/06/18	02:24	216	Metallurgy Reasons
31/05/18	08:18	227	Metallurgy Reasons
31/05/18	07:37	228	Metallurgy Reasons
22/05/18	07:48	62	Metallurgy Reasons
21/05/18	19:39	256	Metallurgy Reasons
21/05/18	18:51	98	Metallurgy Reasons
19/05/18	01:17	247	Metallurgy Reasons
19/05/18	01:08	268	Metallurgy Reasons
18/05/18	20:45	190	Metallurgy Reasons
18/05/18	02:49	194	Metallurgy Reasons
Total		8802	

Signed on behalf of the Operator



Dated 19/07/18

Form I&S Operational 1

RELEASES INTO AIR

Operational summary for quarter ending

31/06/2018

Operator: Tata Steel UK Ltd

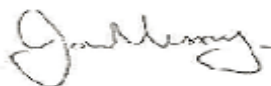
Location: Port Talbot Works

Permit: BL7108

Release Points: Iron plating continued

Liquid Iron Plating Operations (Iron Plating Pit)			
Date	Time	Tonnes	Reason
18/05/18	02:34	228	Metallurgy Reasons
17/05/18	14:47	268	Metallurgy Reasons
17/05/18	12:56	228	Metallurgy Reasons
17/05/18	12:10	190	Metallurgy Reasons
17/05/18	11:52	228	Metallurgy Reasons
17/05/18	09:18	240	Metallurgy Reasons
17/05/18	07:42	230	Metallurgy Reasons
14/05/18	15:15	200	Metallurgy Reasons
14/05/18	11:54	228	Metallurgy Reasons
14/05/18	11:27	180	Metallurgy Reasons
14/05/18	02:25	224	Metallurgy Reasons
14/05/18	00:31	240	Metallurgy Reasons
11/05/18	09:12	254	Metallurgy Reasons
11/05/18	07:59	161	Metallurgy Reasons
11/05/18	02:21	237	Metallurgy Reasons
10/05/18	15:21	153	Metallurgy Reasons
10/05/18	14:54	234	Metallurgy Reasons
10/05/18	10:45	197	Metallurgy Reasons
10/05/18	10:00	174	Metallurgy Reasons
05/05/18	11:35	4	Metallurgy Reasons
04/05/18	11:16	285	Metallurgy Reasons
01/05/18	11:30	218	Metallurgy Reasons
01/05/18	08:28	228	Metallurgy Reasons
29/04/18	15:33	228	Metallurgy Reasons
23/04/18	08:31	208	Metallurgy Reasons
23/04/18	07:45	228	Metallurgy Reasons
22/04/18	23:23	267	Metallurgy Reasons
22/04/18	23:00	285	Metallurgy Reasons
22/04/18	22:32	198	Metallurgy Reasons
22/04/18	21:29	194	Metallurgy Reasons
22/04/18	08:04	228	Metallurgy Reasons
22/04/18	07:08	190	Metallurgy Reasons
22/04/18	06:11	228	Metallurgy Reasons
22/04/18	05:18	228	Metallurgy Reasons
22/04/18	03:29	273	Metallurgy Reasons
22/04/18	03:17	278	Metallurgy Reasons
Total		7862	

Signed on behalf of the Operator



Dated 19/07/18

Form I&S Operational 1

RELEASES INTO AIR

Operational summary for quarter ending

31/06/2018

Operator: Port Talbot Works

Location: Port Talbot Works

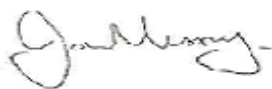
Permit: BL7108

Release Points: Iron plating continued

Liquid Iron Plating Operations (Iron Plating Pit)			
Date	Time	Tonnes	Reason
19/04/18	22:42	240	Metallurgy Reasons
19/04/18	22:08	263	Metallurgy Reasons
19/04/18	21:34	171	Metallurgy Reasons
19/04/18	20:21	206	Metallurgy Reasons
19/04/18	20:13	140	Metallurgy Reasons
19/04/18	19:38	267	Metallurgy Reasons
19/04/18	17:31	171	Metallurgy Reasons
19/04/18	17:05	218	Metallurgy Reasons
17/04/18	07:00	216	Metallurgy Reasons
14/04/18	20:08	208	Metallurgy Reasons
14/04/18	19:12	228	Metallurgy Reasons
12/04/18	15:20	282	Metallurgy Reasons
12/04/18	14:52	278	Metallurgy Reasons
12/04/18	13:31	237	Metallurgy Reasons
12/04/18	12:48	218	Metallurgy Reasons
12/04/18	09:34	237	Metallurgy Reasons
12/04/18	08:58	161	Metallurgy Reasons
12/04/18	06:35	217	Metallurgy Reasons
12/04/18	05:48	228	Metallurgy Reasons
11/04/18	23:27	295	Metallurgy Reasons
11/04/18	20:37	228	Metallurgy Reasons
11/04/18	19:53	190	Metallurgy Reasons
07/04/18	15:26	229	Metallurgy Reasons
07/04/18	14:25	170	Metallurgy Reasons
07/04/18	06:46	135	Metallurgy Reasons
07/04/18	05:10	230	Metallurgy Reasons
05/04/18	04:48	153	Metallurgy Reasons
05/04/18	04:09	228	Metallurgy Reasons
05/04/18	00:12	228	Metallurgy Reasons
04/04/18	23:47	240	Metallurgy Reasons
01/04/18	20:43	217	Metallurgy Reasons
01/04/18	19:53	250	Metallurgy Reasons
01/04/18	00:28	222	Metallurgy Reasons
01/04/18	00:02	208	Metallurgy Reasons
Total		7827	

Signed on behalf of the Operator

Dated 19/07/18



Form I&S Operational 1

RELEASES INTO AIR

Operational Summary for the month Jun-2018

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-Jun-18	78	100%	100%	100%	0.020		11.82%	78	123	74	48	19	175	78	41	31
02-Jun-18	72	100%	100%	100%	0.020		11.82%	86	140	89	45	21	145	86	0	31
03-Jun-18	72	100%	100%	87%	0.021	0.024	12.22%	100	164	101	57	31	202	100	51	43
04-Jun-18	61	100%	100%	100%	0.021	0.024	12.22%	83	117	83	23	29	158	83	0	37
05-Jun-18	71	100%	100%	97%	0.021	0.024	12.22%	82	110	81	63	14	163	82	41	26
06-Jun-18	22	100%	100%	91%	0.021	0.024	12.22%	49	151	45	0	52	256	49	0	84
07-Jun-18	63	100%	100%	17%	0.021	0.024	12.22%	78	247	89	0	98	284	78	0	102
08-Jun-18	76	100%	100%	7%	0.021	0.024	12.22%	51	87	47	0	36	102	51	0	39
09-Jun-18	28	100%	100%	64%	0.018		11.80%	36	133	39	0	44	176	36	0	51
10-Jun-18	55	100%	100%	27%	0.018		11.80%	73	130	65	8	34	187	73	0	50
11-Jun-18	53	100%	100%	30%	0.018		11.80%	63	153	71	30	29	130	63	0	33
12-Jun-18	65	100%	100%	31%	0.018		11.80%	94	128	90	25	24	150	94	33	30
13-Jun-18	58	100%	100%	71%	0.018		11.80%	68	108	68	35	22	115	68	2	29
14-Jun-18	43	100%	100%	99%	0.018		11.80%	52	99	53	3	27	140	52	0	40
15-Jun-18	32	100%	100%	100%	0.018		11.80%	50	126	53	-1	39	253	50	-1	57
16-Jun-18	67	100%	100%	100%	0.021	0.021	11.07%	63	94	59	36	15	125	63	27	23
17-Jun-18	63	100%	100%	100%	0.021	0.021	11.07%	69	109	71	38	20	126	69	32	22
18-Jun-18	52	100%	100%	100%	0.021	0.021	11.07%	48	82	53	0	24	90	48	0	29
19-Jun-18	66	100%	100%	100%	0.021	0.021	11.07%	59	85	55	0	21	103	59	0	22
20-Jun-18	67	100%	100%	100%	0.021	0.021	11.07%	68	110	71	24	28	140	68	14	36
21-Jun-18	66	100%	100%	99%	0.021	0.021	11.07%	89	136	85	16	39	173	89	14	47
22-Jun-18	68	100%	100%	100%	0.025		12.15%	83	122	84	54	18	151	83	0	33
23-Jun-18	77	100%	100%	100%	0.025		12.15%	86	106	86	74	9	168	86	57	21
24-Jun-18	61	100%	100%	98%	0.025		12.15%	56	84	57	0	24	114	56	0	31
25-Jun-18	76	100%	100%	98%	0.025		12.15%	71	84	70	58	7	105	71	51	16
26-Jun-18	54	100%	100%	100%	0.181		12.80%	76	119	74	0	31	152	76	0	45
27-Jun-18	76	100%	100%	38%	0.181		12.80%	83	127	86	58	22	153	83	53	25
28-Jun-18	68	100%	100%	7%	0.181		12.80%	64	86	64	39	11	108	64	10	20
29-Jun-18	61	100%	100%	27%	0.181		12.80%	61	82	62	36	13	116	61	10	27
30-Jun-18	53	100%	100%	28%	0.181		12.80%	52	107	55	0	27	131	52	0	38
Month ave	61	100%	100%	74%	0.05	0.02	0.1	69	-	69	-	-	-	69	-	-
Month max.	78	-	-	-	0.18	0.02	0.1	100	247	-	-	-	284	-	-	-
Limit	-	-	-	-	0.06	-	-	40	-	-	-	-	-	-	-	-

* No data available.

03/04/2017 to the 10/04/2017 Sinter Plant on stop

Signed on behalf of the Operator

Dated 25/07/2018

Form Sinter CEMS

RELEASES INTO AIR

Operational Summary for the month May-2018

Operator: Tata Steel UK Ltd

Permit: BL7108 / RP3730BV

Location: Port Talbot Works

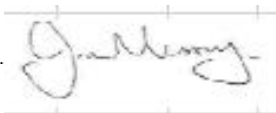
Release Point: A1

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-May-18	61	100%	100%	3%	0.021	0.024	12.77%	41	105	43	21	25	175	41	17	37
02-May-18	61	100%	100%	71%	0.023	0.021	13.59%	64	115	63	41	22	159	64	33	30
03-May-18	66	100%	100%	100%	0.023	0.021	13.59%	55	94	56	27	18	136	55	24	26
04-May-18	76	100%	100%	100%	0.023	0.021	13.59%	72	112	69	34	25	153	72	30	30
05-May-18	76	100%	100%	100%	0.023	0.021	13.59%	79	143	80	47	28	178	79	39	41
06-May-18	74	100%	100%	100%	0.020	0.02	11.59%	75	105	74	48	14	144	75	44	24
07-May-18	72	100%	100%	100%	0.020	0.02	11.59%	26	78	31	0	31	92	26	0	34
08-May-18	35	100%	100%	100%	0.020	0.02	11.59%	25	55	22	0	19	109	25	0	28
09-May-18	36	100%	100%	100%	0.020	0.02	11.59%	49	109	49	0	37	172	49	0	47
10-May-18	52	100%	100%	100%	0.020	0.02	11.59%	55	86	56	38	13	155	55	24	27
11-May-18	71	100%	100%	100%	0.020	0.02	11.59%	43	52	43	22	9	66	43	16	12
12-May-18	77	100%	100%	100%	0.019	0.023	12.24%	59	84	57	25	15	117	59	4	19
13-May-18	77	100%	100%	100%	0.019	0.023	12.24%	78	143	79	43	28	221	78	37	41
14-May-18	80	100%	100%	53%	0.019	0.023	12.24%	75	117	74	48	22	180	75	37	34
15-May-18	79	100%	100%	38%	0.020	0.019	11.04%	56	93	56	37	15	142	56	30	24
16-May-18	39	100%	100%	53%	0.020	0.019	11.04%	62	127	61	0	43	229	62	0	61
17-May-18	70	100%	100%	7%	0.020	0.019	11.04%	29	75	32	16	17	69	29	13	16
18-May-18	77	100%	100%	2%	0.020	0.019	11.04%	39	54	39	25	9	58	39	23	12
19-May-18	75	100%	100%	1%	0.020	0.021	10.77%	47	72	46	29	12	107	47	29	18
20-May-18	71	100%	100%	3%	0.020	0.021	10.77%	68	106	68	38	26	143	68	27	35
21-May-18	55	100%	100%	22%	0.020	0.021	10.77%	39	64	40	13	15	98	39	0	21
22-May-18	42	100%	100%	42%	0.020	0.021	10.77%	29	62	28	0	19	89	29	0	26
23-May-18	39	100%	100%	49%	0.020	0.021	10.77%	49	101	42	0	30	216	49	0	53
24-May-18	57	100%	100%	49%	0.020	0.021	10.77%	38	142	45	13	37	164	38	0	34
25-May-18	69	100%	100%	100%	0.022	0.043	10.75%	69	95	68	44	14	130	69	3	30
26-May-18	66	100%	100%	100%	0.022	0.043	10.75%	75	124	77	31	22	192	75	8	37
27-May-18	72	100%	100%	100%	0.022	0.043	10.75%	75	125	72	35	28	183	75	26	33
28-May-18	75	100%	100%	100%	0.022	0.043	10.75%	90	125	91	66	17	227	90	64	34
29-May-18	67	100%	100%	100%	0.020	NA	11.82%	100	194	101	64	41	236	100	49	51
30-May-18	26	100%	100%	100%	0.020	NA	11.82%	51	153	45	0	45	259	51	0	68
31-May-18	69	100%	100%	100%	0.020	NA	11.82%	51	114	71	51	14	122	71	27	19
Month ave	63	100%	100%	71%	0.02	0.02	0.1	57	-	57	-	-	-	58	-	-
Month max.	80	-	-	-	0.02	0.04	0.1	100	194	-	-	-	259	-	-	-
Limit	-	-	-	-	0.06	-	-	40	-	-	-	-	-	-	-	-

* No data available.

03/04/2017 to the 10/04/2017 Sinter Plant on stop

Signed on behalf of the Operator



Dated 19/07/2018

Form Sinter CEMS

RELEASES INTO AIR

Operational summary for quarter ending

31/06/2018

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

Iron Ore Sintering - Record of strand stoppages > 30 minutes				
Date	Time	Duration (mins)	Planned/	Reason
	Start		Unplanned	
01-Apr-18	01/04/2018 15:30	44m	Mechanical	delay to replace 3 damaged return rollers at head end of 1022
03-Apr-18	03/04/2018 00:49	18m	Mechanical	Pallet change for hole (North side back row) pallet 141 off and 19 on
03-Apr-18	03/04/2018 09:19	24m	Mechanical	check 1047 chain. Found blocked.
03-Apr-18	03/04/2018 10:22	3h 11m	Mechanical	vac out 1047 and check if chain has parted. Hydrant leak fixed.
04-Apr-18	04/04/2018 22:12	34m	Mechanical	Pallet change for wheel off, also shaft had sheered, pallet 47 off 50 on
05-Apr-18	05/04/2018 08:35	28m	Mechanical	pallet change No10 taken off No79 put on. 1022 Joint inspected same time, also inspections of plant chutes looking for missing pallet wheel.
06-Apr-18	06/04/2018 20:29	25m	Electrical	1021 conveyor underspeed fault.. Return roller changed on 1006 during stop.
09-Apr-18	09/04/2018 12:09	29m	Mechanical	Stop to change three damaged return rollers on 1027-conveyor.
10-Apr-18	10/04/2018 09:24	21m	Mechanical	Cenwyn required to check 1022 conv belt condition ahead of planned 18hr stop. Rollers on 1002 also changed.
11-Apr-18	11/04/2018 00:11	2h 34m	Electrical	Power dip. Energy redirected supply, systems reset and plant restarted
11-Apr-18	11/04/2018 03:59	18h 1m	Planned Maintenance	Stop to run off systems ready for planned maintenance.
14-Apr-18	14/04/2018 02:03	19m	Mechanical	Pallet change for holed pallet. 23 off 145 on
14-Apr-18	14/04/2018 08:33	24m	Operational	Motor NDE vertical vibration high, then hood tripped shortly after hood relight extending delay.
15-Apr-18	15/04/2018 03:24	21m	Mechanical	Pallet 87 off /125 on.
15-Apr-18	15/04/2018 07:20	2h 21m	Operational	Blockage in return fines feeder
15-Apr-18	15/04/2018 09:50	54m	Mechanical	1025 screen including hot sinter breaker issues
15-Apr-18	15/04/2018 10:56	18m	Mechanical	Hard material jammed in crusher.
15-Apr-18	15/04/2018 12:38	3h 1m	Mechanical	1006/1007 chute blocked to 1007, possible conveyor stopped?.
15-Apr-18	15/04/2018 15:55	27m	Mechanical	Issues with 1007 shuttle conveyor, parked in middle.
16-Apr-18	16/04/2018 02:32	25m	Mechanical	South motor tripped Nde vertical vibration Slam shut activated when starting hood.
16-Apr-18	16/04/2018 03:02	38m	Mechanical	Nde vertical vibration x 2 slam shuts
16-Apr-18	16/04/2018 04:44	18m	Electrical	Changing underspeed on conveyor due to continued alarms and group stopping in sequence.
17-Apr-18	17/04/2018 09:38	31m	Electrical	Delay to carry out calibration on fines Vega probe
18-Apr-18	18/04/2018 01:26	53m	Mechanical	stop to refill bunkers. 01:26-02:19 Plant stopped to refill bunkers after blender issues on 902 and cross travel.
18-Apr-18	18/04/2018 07:53	20m	Mechanical	Pallet change, No 131 off and 10 on
19-Apr-18	19/04/2018 09:16	16m	Operational	Unknown exact reason for trip due to the usual bank of alarms for hood trip. Possibly low gas flow as the slam shut valve activated on re-light.
19-Apr-18	19/04/2018 19:05	28h 40m	Electrical	Mixer North drive cable fault
20-Apr-18	20/04/2018 23:48	44m	Electrical	underspeed cable damaged
21-Apr-18	21/04/2018 06:16	18m	Mechanical	South fan tripped on NDE vertical vibration
21-Apr-18	21/04/2018 07:14	21m	Mechanical	Motor tripped on NDE horizontal vibration reduced rpm on both fans by 5 rpm each
22-Apr-18	22/04/2018 22:00	1h 0m	Operational	Strand / cooler on stop while running raw / mix mixer empty then sintering through
22-Apr-18	22/04/2018 23:00	100h 19m	Planned Maintenance	Planned 96hrs maintenance stop
27-Apr-18	27/04/2018 09:20	46m	Electrical	inner wheel detector bracket needed welding in position
27-Apr-18	27/04/2018 11:57	26m	Mechanical	pallet change 11 off and 54 on
28-Apr-18	28/04/2018 12:03	17m	Mechanical	South bent beam pallet 25 delay extended craft on blender
29-Apr-18	29/04/2018 00:35	55m	Mechanical	Joint in a poor state, stopped to add clips to stop deterioration
29-Apr-18	29/04/2018 11:47	8h 43m	Mechanical	Belt parted.
29-Apr-18	29/04/2018 20:30	2h 41m	Mechanical	bins onto 1015. Bins full of hearth layer due to hole in pallet which stopped directly under the h/l bin causing the h/l hopper to completely empty.
30-Apr-18	30/04/2018 00:04	46m	Mechanical	Offending pallet which caused hearth layer bin to empty changed. Pallet change 60 off 82 on plus slam shut activated.
30-Apr-18	30/04/2018 01:23	25m	Mechanical	HSB stopped, reversed to clear and restarted.

Signed on behalf of the Operator

Dated 19/07/18

Form Sinter Operational

RELEASES INTO AIR

Form Sinter Operational Cont.

Operational summary for quarter ending

31/06/2018

Operator: Tata Steel UK Ltd
Location: Port Talbot Works
Permit: BL7108 / RP37308V

Iron Ore Sintering - Record of strand stoppages > 30 minutes				
Date	Time	Duration (mins)	Planned/	Reason
	Start		Unplanned	
30-Apr-18	30/04/2018 10:21	2h 29m	Mechanical	Pallet change due to thrust roller. Further delay for gulping out DDV's and 1031 maint.
01-May-18	01/05/2018 02:03	16m	Mechanical	Hood tripping on Gas flow with alarm, on sequence page it was for 462Measuring system FIRC27-103-gas flow OK
27-Apr-18	27/04/2018 04:14	4h 50m	Mechanical	Awaiting cooler fans availability after balancing etc.
27-Apr-18	27/04/2018 09:21	44m	Electrical	Stop 09:21 - 10:05 cooler wheel detector needed adjusting.
27-Apr-18	27/04/2018 11:59	23m	Mechanical	Stop 11:59 - 12:22 pallet change 54on - 11off.
02-May-18	02/05/2018 09:07	1h 19m	Electrical	Ifix issue caused South fan to trip, several issues preventing re-light of hood
02-May-18	02/05/2018 20:05	50m	Mechanical	Pallet 125 on Pallet 68 off.
03-May-18	03/05/2018 02:05	31m	Electrical	hood tripped on FIR 27-103. delay extend due to lock broken on gate. now changed.
04-May-18	04/05/2018 11:51	17m	Mechanical	Patch repair to discharge end of strand 4th floor north side
04-May-18	04/05/2018 12:57	29m	Electrical	Combustion air fan tripped
05-May-18	05/05/2018 04:28	22m	Mechanical	Pallet change for hole, pallet 105 off and 55 on.
05-May-18	05/05/2018 15:05	21m	Mechanical	Pallet change 79 off 90 on
06-May-18	06/05/2018 11:53	25m	Mechanical	Pallet change carried 126 off 141 on. Grate bars middle row.
07-May-18	07/05/2018 23:22	5h 17m	Mechanical	Cooler tray 13 derailed, outer dip rail exit
08-May-18	08/05/2018 14:30	1h 50m	Mechanical	Stop 14:30 - changing 1031 belt.
08-May-18	08/05/2018 18:05	3h 45m	Electrical	al unable to access Tmec Plc. RL contacted for assistance. 1009 running signal not making possible issue with shaft detector which has been forced out, moc created for same.
09-May-18	09/05/2018 07:00	11h 3m	Planned Maintenance	6 hour stop Extended by fractures found in South fan.
09-May-18	09/05/2018 23:40	1h 15m	Planned Maintenance	removing large and small blank from windmain after impellor repairs.
10-May-18	10/05/2018 10:40	2h 29m	Mechanical	delay to inspect and progress repairs on 950 chain conveyor
11-May-18	11/05/2018 22:46	1h 10m	Mechanical	Removing both small and large blank from north fan
11-May-18	11/05/2018 06:22	24m	Mechanical	Delay for pallet change for hole (North side front row) pallet 91 off and 131 on
15-May-18	15/05/2018 03:10	23m	Mechanical	pressure roller missing on north and south same changed.132 off 126-on
16-May-18	16/05/2018 06:16	11h 56m	Planned Maintenance	Stop to inspect fan impellers
17-May-18	17/05/2018 19:08	29m	Mechanical	Pallet Chnage 125 off 21 on
17-May-18	17/05/2018 10:25	1h 0m	Mechanical	pallet change to replace pressure roller. pallet 68 on pallet 69 off
18-May-18	18/05/2018 12:41	20m	Mechanical	Pallet change on the Strand. 71 off and 125 on.
20-May-18	20/05/2018 23:38	34m	Mechanical	Stop taken to change several bacon slicer trough rollers on 1021-con. Restart delay for 1009 run signal fault.
21-May-18	21/05/2018 10:12	52m	Mechanical	Pallet change 115 off 69 on, Wheel off on south side. Also 1009 tripped during startup.
21-May-18	21/05/2018 12:13	20m	Mechanical	Plant stopped as precaution to avoid high product temps as only 3 cooling fans working after no.4 tripped at 10:30 approx
21-May-18	21/05/2018 16:49	3h 7m	Mechanical	Plant stopped as pm10 emissions high due to dust fan off for 1074 repairs being carried out
22-May-18	22/05/2018 06:02	9h 54m	Mechanical	1066 On stop issues with axle fractured from its fixed position.
23-May-18	23/05/2018 09:17	36m	Mechanical	Sinter breaker issues placed into test run in forward and reverse back to sequence.issues then with 1008/1009 see below.
23-May-18	23/05/2018 12:40	9h 32m	Electrical	Cable repairs to No3 de-dust field.
24-May-18	24/05/2018 22:19	1h 27m	Operational	el increased rapidly on startup. revs increased in manual but buried 1026... 1008/1009 fault on startup. starting volts timescale increased by electrical.
24-May-18	24/05/2018 05:24	2h 56m	Mechanical	1066 de-railment
24-May-18	24/05/2018 09:23	1h 37m	Mechanical	Weld repairs
25-May-18	25/05/2018 02:12	2h 0m	Mechanical	1027 Con tail end buried.
25-May-18	25/05/2018 06:29	41m	Mechanical	6:29-07:10 Pallet change (On25 Off37) delay was extended due to ongoing issues trying to bring 1009 in(timer).

Signed on behalf of the Operator

Dated 19/07/18

Form Sinter Operational

RELEASES INTO AIR

Form Sinter Operational Cont.

Operational summary for quarter ending 31/06/2018

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

Iron Ore Sintering - Record of strand stoppages > 30 minutes				
Date	Time	Duration (mins)	Planned/	Reason
27-May-18	27/05/2018 20:14	1h 20m	Mechanical	South Fan tube tank level low.
27-May-18	27/05/2018 21:59	1h 24m	Mechanical	repair to strand tube
27-May-18	27/05/2018 02:50	50m	Mechanical	south fan tripped tube tank low level
27-May-18	27/05/2018 06:36	48m	Mechanical	south fan tripped tube tank low level
26-May-18	26/05/2018 17:42	57m	Mechanical	Stop -17:42 - 18:39 south fan tripped tube tank low level
27-May-18	27/05/2018 06:36	48m	Mechanical	Delay due to South fan tube level low
29-May-18	29/05/2018 10:53	20m	Operational	Stop to take iso from 1026 Conveyor
29-May-18	29/05/2018 12:51	21m	Electrical	Low air pressure at combustion air fan, and slam shut activated
29-May-18	29/05/2018 15:33	28m	Mechanical	SWGF tripped low tube
30-May-18	30/05/2018 19:01	24m	Mechanical	Delay to carry out pallet change for hole pallet 95 off, and 115 on.
30-May-18	30/05/2018 19:25	25m	Electrical	Delay due to issue with 1009 sequence fault, also electrical attending cable fault on blender
30-May-18	30/05/2018 03:50	16m	Operational	Delay to take ISO sample from 1026 due to Denver sampler U/S, sequence issue with 1009 on re-start of plant
30-May-18	30/05/2018 06:59	14h 36m	Inst Maintenance	Planned maintenance
30-May-18	30/05/2018 22:56	30m	Electrical	Combustion air inlet pressure below 30mbar tripping hood, PIR 27 - 202
31-May-18	31/05/2018 05:30	17m	Electrical	combustion inlet pressure below 30mbar
31-May-18	31/05/2018 08:46	44m	Mechanical	1024 screen repairs ankle iron / protection plate secured, 1009 screen failed to come in on restart.
31-May-18	31/05/2018 14:48	17m	Operational	Lost temps along strand due to south fan tripping, along with vares reduced due to low blend bunkers
02-Jun-18	02/06/2018 18:59	2h 26m	Electrical	cold crusher under speed issues / relay / test sequence switch on panel, see night report
03-Jun-18	03/06/2018 12:49	16m	Electrical	extended delay for sequence issue on 1009, along with indication time on strand isolator
04-Jun-18	04/06/2018 06:56	33m	Mechanical	delay due to combustion air fan tripping on (air pressure min)
05-Jun-18	05/06/2018 06:55	27m	Mechanical	wheel off on the North side of pallet 85, pallet 37 on
05-Jun-18	05/06/2018 08:07	33m	Mechanical	Wheel off on the North side of pallet 57, Pallet 79 on
05-Jun-18	05/06/2018 11:08	46m	Mechanical	Side wall bolts failed, same replaced
05-Jun-18	05/06/2018 15:41	30m	Mechanical	pallet change for hole extended due to 1009
06-Jun-18	06/06/2018 04:00	17h 12m	Inst Maintenance	PM
07-Jun-18	07/06/2018 05:07	25m	Electrical	Delay due to combustion air fan low, corrected by electrical
07-Jun-18	07/06/2018 09:42	1h 49m	Mechanical	1040 idr blocked with material see below for full details
07-Jun-18	07/06/2018 16:06	24m	Mechanical	air fan issue, stop button pulled out to start fan, failed to start, when checked electrically all ok, energising contactor, Combustion air fan started on its own accord , electrical panel door open at time, fan stopped to close door and fan restarted??
07-Jun-18	07/06/2018 16:30	1h 8m	Electrical	button pulled out to start fan, failed to start, when checked electrically all ok, energising contactor, Combustion air fan started on its own accord , electrical panel door open at time, fan stopped to close door and fan restarted??
08-Jun-18	08/06/2018 17:28	37m	Mechanical	1028 Con overloaded required to be dia off
09-Jun-18	09/06/2018 03:43	2h 27m	Operational	hot material on cooler
09-Jun-18	09/06/2018 06:43	11h 27m	Operational	1035 to scorched badly, Belt change carried out.
09-Jun-18	09/06/2018 22:52	1h 24m	Operational	Hot spitter temps on cooler
10-Jun-18	10/06/2018 03:52	3h 20m	Mechanical	1036 Con on stop see below for main details of delay, 2x turn holes in belt, areas along belt scorched.
10-Jun-18	10/06/2018 18:46	1h 30m	Electrical	per dropping out / water control to mixer. Times 18:46/19:06 19:08 /19:34 19:36/20:17 all these put as one delay. See below along with sap feedback
10-Jun-18	10/06/2018 20:56	23m	Electrical	Loss of sintering temps due to mixer/water control issues, strand stopped to sinter through.
11-Jun-18	11/06/2018 06:36	2h 30m	Mechanical	Delay due to mixer coupling failure
11-Jun-18	11/06/2018 20:10	17m	Electrical	Low Tube Tank Level

Signed on behalf of the operator
Dated: 19-Jul-18

RELEASES INTO AIR

Form Sinter Operational Cont.

Iron Ore Sintering - Record of strand stoppages > 30 m 31/06/2018

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

Iron Ore Sintering - Record of strand stoppages > 30 minutes				
Date	Time	Duration (mins)	Planned/Unplanned	Reason
11-Jun-18	11/06/2018 20:31	20m	Electrical	Loss of Temps and Issues bringing 1009 in.
11-Jun-18	11/06/2018 21:42	1h 8m	Electrical	South Fan tripped again (Low Lube Tank Level) plant held on stop due to volatile conditions.
11-Jun-18	11/06/2018 23:02	1h 26m	Electrical	South Fan Tripped again 23:02 - 00:28 + 1009 sequence issues.
12-Jun-18	12/06/2018 16:20	26m	Mechanical	pallet change for hole, 26 off and 134 on
12-Jun-18	12/06/2018 21:45	55m	Mechanical	pallet change
13-Jun-18	13/06/2018 00:11	1h 42m	Electrical	Stop for Hot Sinter on cooler + issues with 1009.
13-Jun-18	13/06/2018 02:26	29m	Electrical	Stop for Hot Sinter again + 1009 issues
13-Jun-18	13/06/2018 09:29	1h 39m	Electrical	mixer dropped out with no alarms
13-Jun-18	13/06/2018 15:03	20m	Mechanical	No9 pallet changed pallet 47 on due to tripping North bent beam
14-Jun-18	14/06/2018 01:10	2h 8m	Mechanical	Delay to carry out repairs to South drive coupling
14-Jun-18	14/06/2018 08:15	2h 20m	Mechanical	mixer coupling repairs
14-Jun-18	14/06/2018 17:39	4h 31m	Mechanical	Mixer drive tripped out (coupling repair)
15-Jun-18	15/06/2018 22:10	56m	Electrical	Delay as unable to start mixer due to Vibration alarm, fault traced to South motor D/E/Axial sensor, secured same.
15-Jun-18	15/06/2018 06:00	10h 18m	Mechanical	Changing south motor and gearbox high speed coupling.
15-Jun-18	15/06/2018 18:52	16m	Operational	Hood tripped on max inlet m/bar 135.
15-Jun-18	15/06/2018 18:33	41m	Operational	hot material on cooler
15-Jun-18	15/06/2018 20:10	26m	Operational	material building up in chute
15-Jun-18	15/06/2018 21:00	39m	Operational	material building up in chute
15-Jun-18	15/06/2018 22:32	21m	Operational	material building up in chute
16-Jun-18	16/06/2018 04:12	44m	Operational	stop to cool hot material on cooler
16-Jun-18	16/06/2018 05:27	18m	Operational	No return fines running (wet material cleaned off tiles)
16-Jun-18	16/06/2018 06:39	20m	Operational	Stop - 06:39 - 06:59 = High pressure fan alarm (Hood Tripped)
17-Jun-18	17/06/2018 02:53	20m	Operational	quenched material as a precaution.
17-Jun-18	17/06/2018 04:41	34m	Mechanical	58 off 57 on & cleaning return fines feeder & slamshut
17-Jun-18	17/06/2018 14:43	46m	Operational	fan tripped hood when exceeding 130mb. delay extended by hood stopping on step 5.
18-Jun-18	18/06/2018 10:40	1h 51m	Electrical	Stop -10:40 - 12:31 both w/g fans tripped / slam shut valve tripping
18-Jun-18	18/06/2018 13:04	29m	Operational	Stop -13:04 - 13:33 combustion air fan tripped
18-Jun-18	18/06/2018 19:56	5h 36m	Mechanical	1021 crash spare fitted.
20-Jun-18	20/06/2018 22:06	16m	Mechanical	removing lagging and spraying snub drum.
22-Jun-18	22/06/2018 08:24	2h 23m	nned Maintena	Planned maintenance 1065 clip joint
24-Jun-18	24/06/2018 16:14	5h 10m	Environmental	No3 field cable damaged, loss of field no3. Scaffold needed to access turret on de-dust precipitator
26-Jun-18	26/06/2018 04:00	25m	Operational	Compaction on strand, stopped to sinter through.
26-Jun-18	26/06/2018 04:36	24m	Operational	Hot sinter on cooler
26-Jun-18	26/06/2018 05:00	2h 0m	Mechanical	Changing over lube pump waste gas fans
26-Jun-18	26/06/2018 07:00	2h 30m	Operational	Stop -07:00 - 09:30 continued from previous shift
27-Jun-18	27/06/2018 07:52	16m	Electrical	Trip activated on 1003-con, resulting in loss of raw mix hopper level.
28-Jun-18	28/06/2018 07:35	17m	Electrical	1002-con stopped, unable to restart. Visual inspection nothing seen, conveyor restarted with starting volts. Suspect comm's fault.
29-Jun-18	29/06/2018 04:10	1h 9m	Electrical	cooler tripped on underspeed, found hot sinter breaker underspeed cable damaged.
29-Jun-18	29/06/2018 09:32	2h 9m	Operational	Stopped to unblock the Raw mix hopper, as material had bridged over inside so no material was coming out onto the rollfeeder.
29-Jun-18	29/06/2018 14:20	26m	Mechanical	Pallet change for a hole. Pallet 58 on - 35 off.
29-Jun-18	29/06/2018 19:25	31m	Mechanical	Pallet change for hole north side. 109 off 114 on

Signed on behalf of the operator
 Dated: 19-Jul-18

RELEASES INTO AIR

Operational summary for the six months to 29/06/2018

Operator: Tata Steel Strip Products UK

Location: Port Talbot Works

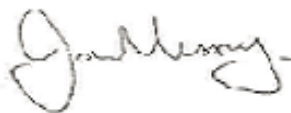
Permit: BL7108 / RP3730BV

Release Points: A39

PARTICULATE MATTER (DISCONTINUOUS MONITORING)		
Release Point	A39 HY1	
Time and date of sampling	29-Jun-18 09:20	
Flowrate (Nm3/hr)	29349	
Particulate measured conc. (mg/Nm3)	5	
Particulate limit (mg/Nm3)	25	
Sampling method used	BS EN 13284	
Analytical method used	Gravimetric	

Form GCI DCM Part

Signed on behalf of the Operator



Dated 19/07/2018

RELEASES INTO AIR

Operational summary for the six months to

30-Jun-18

Operator: Tata Steel UK Ltd

Release Point: A1

Location: Port Talbot Works

Permit: BL7108

Release Point	Sinter Main (A1)							
	Chloride (mg/Nm3)	Fluoride (mg/Nm3)	Lead (mg/Nm3)	VOC's (mg/Nm3)	PAH's * (ug/Nm3)	Dioxins** (ng/Nm3)	Dioxins *** (ng/Nm3)	Mercury (ug/Nm3)
Permit limit	No longer a requirement in the permit					0.4		50
Measured conc. according to condition 10.1.3b					98.0	0.77	0.80	11.9
Measured oxygen (%)					21.7	(+/- 0.13)	(+/- 0.13)	(+/-5.61)
Measured conc. according to condition 10.1.3a (17%O2)					17.0	17.0	17.0	17.0
Cogeners<LoD at zero					98.0	0.8	0.8	11.9
Cogeners<LoD at LoD						0.77	0.80	
Analytical method used						0.77	0.80	
Date of sampling					BS ISO 11338	BS EN 1948	BS EN 1948	BS EN 13211
Sample start time					27-Mar-18	27-Mar-18	27-Mar-18	28-Mar-18
Sample end time					11:46	11:45	11:45	09:34
Limit of detection					13:46	17:02	17:02	11:54
Continuous particulate result during sampling (hourly mean)					0.6	0.001	0.001	0.090
Process status at time of sampling					68	68	68	45
Mean sulphur content of sinter blend in use (%)					0.026	0.026	0.026	0.026
Reverts content of sinter blend in use (%)					11.5	11.5	11.5	11.5
Mean chloride content of sinter blend in use (%)					0.018	0.018	0.018	0.02
Throughput during sampling period (% of maximum)					65	65	65	66

* PAH's as B[a]P

** Dioxins and furans as iTEQ

*** Dioxins and furans as WHO TEQ

Nb: Dioxins and Furans iTEQ ng/m3 Limit on average of all extractive spot sample carried out by the operator during a single calendar year.

Average of all extractive spot samples in 2016 - 0.3875ng/Nm3

Signed on behalf of the Operator

Dated

19/07/2018

Form Sinter DCM 2