



# RELEASES TO AIR

Operational summary for quarter ending 30-Sep-15

**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	40658		
	Month 2	18856		
	Month 3	17846		
A13A BOS convertor 2 gas flare	Month 1	81316		
	Month 2	37712		
	Month 3	35692		
A33 Blast furnace gas flare stack no.1	Month 1	41577		
	Month 2	40584		
	Month 3	168298		
A33C Blast furnace gas flare stack no.2	Month 1	143285		
	Month 2	107312		
	Month 3	214354		
A33A Blast furnace gas main number 4 bleeder	Month 1		389	
	Month 2		58	
	Month 3		102	
A33B Blast furnace gas main number 5 bleeder	Month 1		476	
	Month 2		38	
	Month 3		67	
A37 Coke oven gas triple flare	Month 1	9534		
	Month 2	97995		
	Month 3	15977		
Blast furnaces 4 and 5	Month 1			1588123
	Month 2			1096317
	Month 3			1304293
Coke ovens	Month 1			451143
	Month 2			373568
	Month 3			489021
BOS Plant	Month 1			171578
	Month 2			126929
	Month 3			173309

Signed on behalf of the Operator

.....  .....

Dated

22/10/15

Form Installation gas

# WASTE PRODUCTION

Operational summary for quarter ending 30-Sep-15

**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	Jul	34737	3064					
	Aug	32718	3591					
	Sep	31960	2536					
Iron and steel installation	Jul			8	2098			
	Aug			4	1345			
	Sep			9	3554			
BF4 tapholes	Jul					39487		
	Aug					39594		
	Sep					35335		
BF5 tapholes	Jul					30526		
	Aug					31073		
	Sep					27071		
BF5	Jul							0
	Aug							0
	Sep							0
Coke ovens	Jul						193	**
	Aug						165	**
	Sep						171	**

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

\*\* WID compliant Oil.

Signed on behalf of the Operator  .....

Dated 22/10/15 .....

Form Waste 1

# RELEASES INTO AIR

Operational summary for quarter ending 30-Sep-15

**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)	2184	2146	2165	2156	2184	515	2091
Mean load (%MCR)	52.0	46.0	46.8	84.2	83.8	71.9	70.2
Mean flue gas flow (Nm3/hr)	109920	125853	60519	218501	242467	34465	227868
<b>Heavy Fuel Oil</b>							
Average net CV (GJ/te)	40.9	40.9	40.9	40.9	40.9	40.9	
Max. sulphur content (g/Kg)	97	97	97	97	97	97	
Max. asphaltene content (g/Kg)	45	45	45	45	45	45	
Ave.%wt Sulphur	0.95	0.95	0.95	0.95	0.95	0.95	
NOx factor	0.1	0.1	0.1	0.1	0.1	0.1	
<b>Coke Oven Gas</b>							
Average net CV (GJ/te)	42.4	42.4	42.4	42.4	42.4	42.4	
Sulphur content (g/Nm3)	2.59	2.59	2.59	2.59	2.59	2.59	
NOx factor	0.04	0.04	0.04	0.04	0.04	0.04	
<b>Blast Furnace Gas</b>							
Average net CV (GJ/te)	2.52	2.52	2.52	2.52	2.52	2.52	2.52
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
<b>Natural Gas</b>							
Average net CV (GJ/te)	51.5	51.5	51.5	51.5	51.5	51.5	51.5
NOx factor	0.04	0.04	0.04	0.04	0.04	0.04	0.04

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Signed on behalf of the Operator  .....

Dated 22/10/15 .....

**RELEASES INTO AIR**

Operational summary for quarter ending 30-Sep-15

**Operator:** Tata Steel UK Ltd

**Location:** Port Talbot Works

**Permit:** BL7108

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

<b>OXIDES OF NITROGEN - NOx (DISCONTINUOUS MONITORING)</b>						
<b>Release Point</b>	A50A&B Service 4&5	A51 A5	A52A No.6	A52B No.7	A53 ** Mitchell	A62 No.3
Time and date of sampling	-	09-Jul-15 11:28	-	-	-	-
Flowrate (Nm3/hr)	-	21216	-	-	-	-
NOx measured conc. (mg/Nm3)	-	15	-	-	-	-
NOx limit (mg/NM3)	300 BFG/COG 450 HFO	300 BFG/COG 450 HFO	300 BFG/COG 450 HFO	300 BFG/COG 450 HFO	300 BFG/COG 450 HFO	200 BFG&NG -
Sampling method used	ISO 10849	ISO 10849	ISO 10849	ISO 10849	ISO 10849	ISO 10849
Analytical method used	EC*	EC*	EC*	EC*	EC*	EC*
Continuous hourly monitoring result over the period	-		-	-	-	-
<b>Fuel usages over the sampling period</b>						
Natural gas (%)	-	57%	-	-	-	-
BF gas (%)	-	0%	-	-	-	-
Coke oven gas (%)	-	43%	-	-	-	
Heavy fuel oil (%)	-	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

\*\* A53 not sampled due to being offline during the proposed sampling period.

See email to NRW subject: BL7108IM September Returns - Incomplete Returns 15/10/2015

\* EC - electrochemical cell

Signed on behalf of the Operator .....  .....

Dated 22/10/15 .....

# RELEASES INTO AIR

Operational summary for quarter ending

30-Sep-15

**Operator:** Tata Steel UK Ltd

**Location:** Port Talbot Works

**Permit:** BL7108 / NP3938GZ

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

<b>SULPHUR DIOXIDE - SO<sub>2</sub> (DISCONTINUOUS MONITORING)</b>						
<b>Release Point</b>	A50A&B Service 4&5	A51 A5	A52A No.6	A52B No.7	A53 Mitchell	A62 No.3
Time and date of sampling	-	09-Jul-15 11:28	-	-	-	-
Flowrate (Nm <sup>3</sup> /hr)	-	21216	-	-	-	-
SO <sub>2</sub> measured conc. (mg/Nm <sup>3</sup> )	-	32	-	-	-	-
SO <sub>2</sub> limit (mg/NM <sup>3</sup> )	800 BFG/COG 1700 HFO	800 BFG/COG 1700 HFO	800 BFG/COG 1700 HFO	800 BFG/COG 1700 HFO	800 BFG/COG 1700 HFO	400 BFG&NG -
Sampling method used	BS 6069	BS 6069	BS 6069	BS 6069	BS 6069	BS 6069
Analytical method used	EC*	EC*	EC*	EC*	EC*	EC*
Continuous hourly monitoring result over the period	-		-	-	-	-
<b>Fuel usages over the sampling period</b>						
Natural gas (%)	-	57%	-	-	-	-
BF gas (%)	-	0%	-	-	-	-
Coke oven gas (%)	-	43%	-	-	-	
Heavy fuel oil (%)	-	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

\*\* A53 not sampled due to being offline during the proposed sampling period.

See email to NRW subject: BL7108IM September Returns - Incomplete Returns 15/10/2015

\* EC - electrochemical cell

Signed on behalf of the Operator .....  .....

Dated ..... 22/10/15 .....

**Form LCPD DCM SO<sub>2</sub>**

## RELEASES INTO AIR

Operational summary for quarter ending 30-Sep-15

**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	Jul	0	39923	49163	1785		90871
	Aug	0	35094	26989	3169		65253
	Sep	0	37817	34288	4885		76989
A50B Service Boiler 5	Jul	0	29832	31152	0		60984
	Aug	1845	25109	34591	0		61545
	Sep	2050	41198	36613	0		79861
A51 Boiler A5	Jul	620	5725	58944	2844	0	68133
	Aug	0	3006	48964	1197	0	53167
	Sep	984	2262	55159	2842	0	61247
A52A Boiler 6	Jul	7858	45291	229619	43165	11520	337453
	Aug	0	38888	179269	20344	9968	248469
	Sep	1248	24176	200677	41338	22757	290196
A52B Boiler 7	Jul	7804	31008	230325	39862	11278	320277
	Aug	0	31911	179063	21103	9943	242019
	Sep	13087	25921	208517	49107	23643	320275
A53 Mitchell	Jul	19	4249	47703	2977		54949
	Aug	13	0	0	929		942
	Sep	846	1817	45991	3413		52066
A62 Boiler 3	Jul			172152	10319	0	182471
	Aug			152529	4278	0	156807
	Sep			171469	12332	0	183800
Total	Jul	16301	156028	819059	100953	22798	1115138
	Aug	1858	134008	621405	51021	19911	828203
	Sep	18215	133191	752713	113916	46400	1064435

Signed on behalf of the Operator .....  .....

Dated 22/10/15 .....

Form LCPD Fuels

# RELEASES INTO AIR

Operational summary for quarter ending 30-Sep-15

**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	Jul	3.9	115.8	29/07/15 13:00	0.6	7.4	100%
	Aug	6.2	59.9	08/08/15 10:00	0.6	7.7	100%
	Sep	3.4	84.3	22/09/15 10:00	0.8	5.7	100%
A51 Boiler A5	Jul	1.0	27.5	08/07/15 22:00	0.3	1.8	100%
	Aug	0.6	6.7	28/08/15 07:00	0.2	0.5	99%
	Sep	4.4	214.7	22/09/15 00:00	0.0	23.8	99%
A52A Boiler 6	Jul	2.8	28.3	09/07/15 07:00	0.7	5.6	100%
	Aug	1.2	4.2	11/08/15 01:00	0.8	0.2	99%
	Sep	1.8	18.2	24/09/15 22:00	0.0	1.3	98%
A52B Boiler 7	Jul	2.1	27.2	09/07/15 07:00	0.1	5.3	100%
	Aug	0.7	3.4	11/08/15 01:00	0.4	0.4	100%
	Sep	2.0	46.9	15/09/15 23:00	0.5	5.6	96%
A53 Mitchell	Jul	0.7	30.0	07/07/15 11:00	0.0	1.8	100%
	Aug	0.0	0.0	N/A	0.0	0.0	100%
	Sep	2.3	477.5	22/09/15 09:00	0.0	18.3	100%

Signed on behalf of the Operator .....  .....

Dated ..... 22/10/15 .....

Form LCPD CEM Parts

**RELEASES INTO AIR**

Operational summary for quarter ending

30-Sep-15

**Operator:** Tata Steel UK Ltd

**Location:** Port Talbot Works

**Permit:** BL7108 / BL7108IM (V009)

**Release Points:** A50, A52A & A52B

<b>OXIDES OF NITROGEN (mg/Nm3) - CONTINUOUS EMISSIONS MONITORING</b>							
<b>Release point</b>	<b>Month</b>	<b>Month mean</b> LIMITS: BFG/COG=300	<b>Maximum hourly mean</b>	<b>Date &amp; time of maximum value</b>	<b>Minimum hourly mean</b>	<b>Standard deviation of hourly means</b>	<b>% data capture over month</b>
A52A Boiler 6	Jul	87.0	256.2	09/07/2015 5:00	17.4	32.2	74%
	Aug	106.5	341.2	10/08/2015 17:00	19.8	56.4	100%
	Sep	79.4	356.7	23/09/2015 10:00	0.0	45.2	77%
A52B Boiler 7	Jul	146.3	526.2	08/07/2015 21:00	29.1	91.3	100%
	Aug	154.4	421.2	10/08/2015 17:00	25.8	77.5	100%
	Sep	129.6	506.8	24/09/2015 10:00	22.6	78.5	96%
A50A & A50B Service Boilers	Jul	184.7	724.0	29/07/2015 1:00	12.5	132.8	100%
	Aug	190.9	952.1	27/08/2015 19:00	0.0	159.7	100%
	Sep	146.0	543.2	18/09/2015 3:00	12.8	111.0	100%
<b>SULPHUR DIOXIDE (mg/Nm3) - CONTINUOUS EMISSIONS MONITORING</b>							
<b>Release point</b>	<b>Month</b>	<b>Month mean</b> LIMITS: BFG/COG=800	<b>Maximum hourly mean</b>	<b>Date &amp; time of maximum value</b>	<b>Minimum hourly mean</b>	<b>Standard deviation of hourly means</b>	<b>% data capture over month</b>
A52A Boiler 6	Jul	52.1	509.4	09/07/2015 4:00	0.1	48.1	74%
	Aug	65.8	302.6	11/08/2015 10:00	0.0	60.5	100%
	Sep	40.5	262.9	17/09/2015 18:00	0.0	51.1	77%
A52B Boiler 7	Jul	110.6	891.8	09/07/2015 4:00	3.7	159.3	100%
	Aug	106.7	394.1	10/08/2015 22:00	2.2	80.5	100%
	Sep	92.3	911.3	24/09/2015 10:00	0.0	150.8	96%
A50A & A50B Service Boilers	Jul	312.7	1185.4	10/07/2015 15:00	1.1	241.7	100%
	Aug	389.7	1303.0	11/08/2015 11:00	0.0	283.8	100%
	Sep	295.8	1061.7	22/09/2015 8:00	4.6	204.5	100%

Signed on behalf of the Operator .....  .....

Dated ..... 22/10/15 .....

**Form LCPD CEMS SO2 & NOx**

# RELEASES INTO AIR

Operational summary for quarter ending 30-Sep-15

Operator: Tata Steel UK Ltd

Location: Port Talbot Works

Permit: BL7108 / NP3938GZ

Release Point: A62

<b>PARTICULATE MATTER (mg/Nm3) - CONTINUOUS EMISSIONS MONITORING</b>							
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	Jul	7.9	2.4	09-Jul-15	1.3	1.5	100%
	Aug	1.7	1.0	27-Aug-15	0.3	0.4	100%
	Sep	6.1	1.6	23-Sep-15	0.9	1.2	96%
<b>SULPHUR DIOXIDE (mg/Nm3) - CONTINUOUS EMISSIONS MONITORING</b>							
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	Jul	46.1	15.1	06-Jul-15	2.2	12.3	100%
	Aug	44.5	16.4	08-Aug-15	2.7	11.5	100%
	Sep	56.1	16.2	26-Sep-15	-0.1	11.3	96%
<b>OXIDES OF NITROGEN (mg/Nm3) - CONTINUOUS EMISSIONS MONITORING</b>							
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	Jul	134.9	45.9	08-Jul-15	16.5	26.7	100%
	Aug	53.2	31.5	23-Aug-15	14.3	11.1	100%
	Sep	148.8	44.5	22-Sep-15	14.2	28.4	96%

Signed on behalf of the Operator .....  .....

Dated ..... 22/10/15 .....

Form LCPD CEM A62

**RELEASES INTO AIR**

Operational summary for quarter ending 30-Sep-15

**Operator:** Tata Steel UK Ltd


**Location:** Port Talbot Works

**Permit:** BL7108

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

EMISSIONS TO AIR: CEM INVALIDATION LOG									
Date	Duration of invalid CEM records (hours)	Cumulative invalidated days (in the calendar year)							Comments
		A50	A51	A52A	A52B	A53	A62	TOTAL	
01-Jan-15	13			1					SO2
02-Jan-15	73			5					SO2
06-Jan-15	52			8					NOx / SO2
09-Jan-15	3			9					NOx / SO2
10-Jan-15	44			12 *					NOx / SO2
13-Jan-15	856			48					NOx / SO2
01-Jan-15	874				37 *				NOx / SO2
17-May-15	109						5		Particulates
30-Jun-15	217			58					NOx & SO2
11-Sep-15	149			65					

\* Exceeds 10 day invalidation target. Notification issued.

Signed on behalf of the Operator 

Dated 22/10/15

**RELEASES INTO AIR**

Operational summary for quarter ending

30-Sep-15

**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	6.8	6.8	3.9	19.5	13.8	4.8	0.9	6.1	6.1	2.4	12.2	11.6	4.3	1.4	0.1	0.1	0.0	0.3	0.3	0.2	0.3
February	8.8	8.8	2.8	19.9	13.1	2.7	0.8	5.4	5.4	1.8	10.3	9.2	3.1	1.3	0.1	0.1	0.0	0.3	0.2	0.1	0.3
March	9.9	9.9	3.0	28.6	22.5	3.7	0.5	4.7	4.7	1.8	10.1	9.3	2.8	0.8	0.1	0.1	0.1	0.3	0.2	0.2	0.2
April	7.6	7.6	0.5	3.4	2.8	0.8	0.5	3.4	3.4	0.5	2.4	2.2	0.8	0.8	0.1	0.1	0.1	0.5	0.2	0.2	0.1
May	8.2	8.2	3.1	20.3	18.5	4.0	0.5	4.2	4.2	1.8	9.6	9.6	3.4	1.4	0.1	0.1	0.0	0.3	0.2	0.2	0.2
June	8.4	8.4	2.3	23.9	16.6	4.0	0.7	4.7	4.7	1.8	10.0	8.9	3.4	1.6	0.1	0.1	0.0	0.3	0.1	0.2	0.2
July	9.2	9.2	3.0	22.1	17.4	1.5	0.6	5.7	5.7	2.3	12.7	11.8	1.5	1.6	0.1	0.1	0.0	0.4	0.3	0.0	0.2
August	16.7	16.7	2.1	19.2	16.3	0.0	0.8	8.4	8.4	1.8	9.4	9.1	0.0	1.6	0.3	0.3	0.0	0.2	0.1	0.0	0.1
September	11.7	11.7	1.7	8.6	14.6	1.4	0.8	5.8	5.8	1.7	8.3	10.1	1.4	1.7	0.1	0.1	0.1	0.2	0.3	0.1	0.1
October																					
November																					
December																					
<b>Totals</b>	87	87	22	166	136	23	6	48	48	16	85	82	21	12	1.0	1.0	0.4	2.8	1.8	1.1	1.7
	<b>527</b>							<b>312</b>							<b>10</b>						
	<b>Service</b>	<b>A5</b>	<b>Margam C</b>	<b>Mit</b>	<b>3</b>	<b>Service</b>	<b>A5</b>	<b>Mgm C</b>	<b>Mit</b>	<b>3</b>	<b>Service</b>	<b>A5</b>	<b>Mgm C</b>	<b>Mit</b>	<b>3</b>	<b>Service</b>	<b>A5</b>	<b>Mgm C</b>	<b>Mit</b>	<b>3</b>	
Boiler Plant Totals	175	22	301	23	6	97	16	167	21	12	2	0	5	1	2						
NERP Annual Limit (T)	686	251	2219	575		252	96	929	212		20	4	56	10							

Signed on behalf of the Operator 

Dated 22/10/15

Form LCPD Monthly 1

# RELEASES INTO AIR

Operational summary for quarter ending

30-Sep-15

**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 <sup>3</sup> )	115	500	275	
Measured conc. according to condition 10.1.3b	41	298	243	6250
Measured oxygen content (%)	16.7	16.7	16.7	16.7
Measured conc. according to condition 10.1.3a (17%O <sub>2</sub> )	38	277	226	5804
Sampling method used	BS EN 13284	BS 6069	ISO 10849	BS ISO 12039
Analytical method used	Gravimetric	*EC	*EC	*EC
Date of sampling	28-Sep-15	28-Sep-15	28-Sep-15	28-Sep-15
Sample start time	09:46	09:46	09:46	09:46
Sample end time	10:46	10:46	10:46	10:46
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	48.1			
<b>Process status at the time of sampling</b>				
Mean sulphur content of sinter blend in use (%)	0.029	0.029	0.029	0.029
Reverts content of sinter blend in use (%)	9.1	9.1	9.1	9.1
Mean chloride content of sinter blend in use (%)	0.02	0.02	0.02	0.02
Throughput during sampling period (% of maximum)	60.4	60.4	60.4	60.4

\* EC - electrochemical cell

**Signed on behalf of the Operator** .....



**Dated** ..... 22/10/15 .....

**Form Sinter DCM 1**

## RELEASES INTO AIR

Operational summary for quarter ending 30-Sep-15

**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 <sub>x</sub> (DISCONTINUOUS MONITORING)							
Release Point	A6	A7	A31 ***	A32 ***	A34A	A34B	A39 #
Time and date of sampling	15-Jul-15 10:40	02-Sep-15 14:23	-	-	08-Sep-15 10:39	22-Sep-15 09:47	-
Flowrate (Nm <sup>3</sup> /hr)	265955	130498	-	-	264895	107787	-
NO <sub>x</sub> measured conc.(mg/Nm <sup>3</sup> ) **	22	46	-	-	223	209	-
Oxygen content (%)			-	-			
NO <sub>x</sub> limits (mg/Nm <sup>3</sup> )	145	145	475	475	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							
<b>Fuel usages over the sampling period</b>							
Natural gas (%)	4%	16%	-	-	32%	11%	-
BF gas (%)	73%	77%					-
Coke oven gas (%)	0%	7%			68%	89%	
BOS Gas (%)	22%						

\* EC - electrochemical cell

\*\* A31 & A32 corrected to 10.1.3b

# A39 has a 6 monthly monitoring requirement.

\*\*\* A31 & A32 are not operational

Signed on behalf of the Operator .....



Dated ..... 22/10/15 .....

Form I&S DCM NO<sub>x</sub>

# RELEASES INTO AIR

Operational summary for quarter ending

30-Sep-15

**Operator:** Tata Steel UK Ltd

**Location:** Port Talbot Works

**Permit:** BL7108 / NP3938GZ

**Release Points:** A6, A7, A34A & A34B

<b>SULPHUR DIOXIDE - SO2 (DISCONTINUOUS MONITORING)</b>					
<b>Release Point</b>	A6	A7	A34A	A34B	A39 #
Time and date of sampling	15-Jul-15 10:40	02-Sep-15 14:23	08-Sep-15 10:39	22-Sep-15 09:47	- -
Flowrate (Nm3/hr)	265955	130498	264895	107787	-
SO2 measured conc.(mg/Nm3)	1	47	76	0.6	-
SO2 limits (mg/Nm3)	370	370	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					
<b>Fuel usages over the sampling period</b>					
Natural gas (%)	4%	16%	32%	11%	-
BF gas (%)	73%	77%			-
Coke oven gas (%)	0%	7%	68%	89%	
BOS Gas (%)	22%				

\* EC - electrochemical cell

# A39 has a 6 monthly monitoring requirement

Signed on behalf of the Operator .....



Dated ..... 22/10/15 .....

Form I&S DCM SO2





# RELEASES INTO AIR

Operational summary for quarter ending

30-Sep-15

**Operator:** Tata Steel UK Ltd

**Location:** Port Talbot Works

**Permit:** BL7108 / PP3738SQ

**Release Points:** A6, A7, A21, A22, A24, A39 & A46

VARIOUS DISCONTINUOUS MONITORING							
Release Point	A21/A22**	A6	A7	A39 (6 Monthly)	A46 (annual)	A24	
Parameter	Chloride (as HCl)	Carbon monoxide			Oxides of nitrogen	Sulphur dioxide	Oxides of nitrogen
Time and date of sampling	-	15-Jul-15 11:24	02-Sep-15 14:20	-	-		
Flowrate (Nm3/hr)	-	265955	130498	-	-		
Measured conc.(mg/Nm3)	-	6250	159	-	-		
Emission limits (mg/Nm3)	-				350		
Sampling method used	Isokinetic	BS ISO 12039	BS ISO 12039	BS ISO 12039	ISO 10849		
Analytical method used	BSEN1911	EC *	EC *	EC *	EC *		
Emission limits (kg/quarter)						60000	60000
Releases (kg/qtr)						-	-
Fuel usages over the sampling period							
Natural gas (%)		4%	16%	-	-		
BF gas (%)		73%	77%	-			
Coke oven gas (%)		0%	7%			-	-
Heavy fuel oil (%)		22%					

\* EC - electrochemical cell

\* A21/22 not sampled due to safety issues See email to NRW subject: BL7108IM September Returns - Incomplete Returns 15/10/2015

Signed on behalf of the Operator



Dated 22/10/15

Form I&S DCM Misc

**RELEASES INTO AIR**

Operational summary for quarter ending 30-Sep-15


**Operator:** Tata Steel UK Ltd

**Location:** Port Talbot Works

**Permit:** BL7108

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

PARTICULATE MATTER (mg/Nm <sup>3</sup> ) - 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	3.6	3.3	0.1	3.7	3.0	0.1	3.5	100%	100%
	Aug		3.8	3.3	0.1	4.3	3.1	0.1	3.5	100%	100%
	Sep		3.8	3.3	0.1	4.3	3.1	0.1	3.5	100%	100%
A8B	Jul	15	0.8	0.2	0.2	0.9	0.1	0.2	10.9	100%	100%
	Aug		0.8	0.2	0.1	0.9	0.1	0.2	0.4	100%	100%
	Sep		0.8	0.2	0.1	0.9	0.1	0.2	0.4	100%	100%
A9	Jul	25	1.5	0.0	0.4	4.1	0.0	0.5	1.0	100%	100%
	Aug		1.8	0.5	0.3	8.1	0.0	0.5	1.3	100%	100%
	Sep		3.5	0.2	0.9	6.3	0.0	1.1	1.9	100%	100%
A2	Jul	50	41.5	8.0	6.6	55.8	0.0	9.9	30.7	100%	100%
	Aug		34.2	17.6	4.0	43.9	0.0	6.5	27.8	100%	100%
	Sep		34.2	17.6	4.0	43.9	0.0	6.5	27.8	100%	100%
A10	Jul	50	5.4	2.6	0.8	8.5	3.5	1.5	3.9	100%	100%
	Aug		4.7	3.3	0.4	0.0	0.0	0.9	3.8	100%	100%
	Sep		4.5	1.7	0.7	6.7	2.7	1.0	3.5	100%	100%
A14	Jul	50	14.7	1.7	4.2	21.6	2.9	6.0	5.6	100%	100%
	Aug		18.1	2.8	4.2	32.2	4.0	6.6	7.1	100%	100%
	Sep		15.7	1.5	3.5	25.4	2.3	4.8	10.5	100%	100%
A15	Jul	50	5.7	0.9	1.3	9.2	1.7	2.0	2.7	100%	100%
	Aug		5.5	0.6	1.3	17.5	1.0	3.6	2.8	100%	100%
	Sep		0.5	0.2	0.1	1.2	0.2	0.2	0.3	100%	100%
A16	Jul	50	4.5	1.1	0.9	13.1	2.0	2.4	2.7	100%	100%
	Aug		4.5	2.1	0.7	7.5	3.2	1.1	3.2	100%	100%
	Sep		5.1	0.3	1.2	14.1	1.2	2.5	3.6	100%	100%

Signed on behalf of the Operator .....  .....

Dated ..... 22/10/15 .....

**RELEASES INTO AIR**

Operational summary for quarter ending 30-Sep-15

**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)		
02-Jul-15	08:30	7h 6m	Unplanned	Requirement stop. Main job Mixer s/w support roller renewal. see sinter comments for additional work carried out.
03-Jul-15	10:50	2h 10m	Unplanned	Requirement stop during which mixer repairs carried out.
06-Jul-15	03:39	27m	Unplanned	Pallet change
06-Jul-15	13:21	3h 38m	Unplanned	wheel derailed
07-Jul-15	11:48	4h 6m	Unplanned	BF requirement stop due to demand.
08-Jul-15	07:00	22m	Unplanned	Requirement stop where strand on stop but Cooler running in short sequence to gap Cooler for tray change.
08-Jul-15	08:24	7h 36m	Unplanned	Requirement stop, tray change, 1007 belt change, screen inspections, 1036 snub drum change.
08-Jul-15	20:24	1h 10m	Unplanned	Stopped to avoid breaching
09-Jul-15	11:49	1h 13m	Unplanned	Requirement stop. Repairs to south west support roller due to bearing temps
09-Jul-15	16:04	49m	Unplanned	1049 DFV blocked.
14-Jul-15	03:00	19h 46m	Planned	Planned 18HR stop
15-Jul-15	19:44	2h 19m	Unplanned	1047 952 951 1049 dfv's required repairs
16-Jul-15	03:24	5h 12m	Unplanned	belt parted
16-Jul-15	10:11	21m	Unplanned	lump detector activated no lumps on belt. 1 detector taken out of service.
17-Jul-15	09:17	1h 9m	Unplanned	Lower bed drum fractured northside weld repairs carried out.
18-Jul-15	03:32	1h 17m	Unplanned	belt tracked over causing materail to bury tail end.
15-Jul-15	01:21	1h 9m	Unplanned	01:21 - 01:32 Cooler Wheel 01:35 - 01:45 " " " 01:48 - 02:00 " " " 02:03 - 02:07 " " " 02:10 - 02:42 " " "
14-Jul-15	23:46	1h 26m	Unplanned	23:46 - 01:12 Sintering Through/1008 1009 Shaft Detector
20-Jul-15	08:21	25m	Unplanned	Overload 1028. Tension screw u/s.
20-Jul-15	09:21	4h 28m	Unplanned	opportunity taken to remove component and replace with new.
22-Jul-15	09:36	3h 12m	Unplanned	1026 / 1027 chute repair and removing stringers from 1027 DWT
24-Jul-15	11:17	21m	Unplanned	1026 tracked over to the west side.
27-Jul-15	08:39	45m	Unplanned	1026 tracked over
31-Jul-15	07:19	5h 2m	Unplanned	No requirement opportunity taken
04-Aug-15	07:47	34m	Unplanned	Lost control of lfix due to server error. unable to restart strand after attempted restart.
05-Aug-15	07:30	8h 20m	Planned	8hr stop
09-Aug-15	11:48	28m	Unplanned	Pallet N028 removed and replaced with No65 just to rule out as still issues with strand tripping
11-Aug-15	12:21	24m	Unplanned	Pallet 141 off / 70 on wheel missing.
13-Aug-15	11:30	4h 0m	Planned	4 hour planned stop.
13-Aug-15	16:30	1h 35m	Unplanned	brushes changed on roll feeder motor.
14-Aug-15	12:15	1h 12m	Unplanned	smoke from substation
14-Aug-15	16:36	1h 7m	Unplanned	Close impeller door on no1 cooling fan and replace wheel on 1066
18-Aug-15	15:57	28m	Unplanned	Return fines chute onto 1003 blocked
18-Aug-15	16:38	32m	Unplanned	Return Fines / Ore belt weigher issues. Weigher feeders deselected and reselected fault cleared.
20-Aug-15	09:17	5h 58m	Planned	planned maint 6 hour stop.
17-Aug-15	01:19	30m	Unplanned	Pallet change 25 off 72 on 01.19 - 01.49
24-Aug-15	15:44	31m	Planned	Removed 2 pallets as per stop plan -
25-Aug-15	07:00	10h 20m	Planned	Planned stop
29-Sep-15	20:38	44m	Unplanned	Hood tripped. on restarting x 2 slam shut activated, when sysyem failed to get past step 5 see sinter comments.
30-Aug-15	00:22	23m	Unplanned	Pallet No99 Bars missing from north side from side front row replaced with No133

Signed on behalf of the Operator 

Dated 22/10/15

Form Sinter Operational



**RELEASES INTO AIR**

Operational summary for quarter ending 30-Sep-15

**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	50 Hourly mean									
	Aug										
	Sep										
A63*	Jul	25 Hourly mean									
	Aug										
	Sep										

\*A63 currently non-operational, see NRW email/ Subject: Permit BL7108 - Emissions into Air Monitoring/ Sent: 27/01/2014.

\*A10 currently non-operational, see NRW email/ Subject: Permit BL7108 - Emissions into Air Monitoring/ Sent: 27/01/2014.

**Signed on behalf of the Operator** .....



**Dated** 22/10/15 .....

**Form I&S CEMS Part 3**



# RELEASES INTO AIR

Operational summary for quarter ending

30-Sep-15

**Operator:** Port Talbot Works

**Location:** Port Talbot Works

**Permit:** BL7108 / RP3730BV

	NOx (tonnes)	Lead (tonnes)	PM10 (tonnes)	CO2 (k tonnes)
Morfa	48			
Iron & Steel	585	11.9	508	1260
Total	633	11.9	508	1260

**Signed on behalf of the Operator** .....



**Dated** ..... 22/10/15 .....

**Form KPI**

