

Releases to Controlled Waters

Release summary for the month June-15

Operator: Tata Steel UK Ltd

Release Point:

W1 (LSO)

Location: Port Talbot

Permit:

BL7108

	S.Solids		Oil & grease		Ammonia		Sol Zinc		Flowrate			Temperature		pH		
	Conc. (mg/l)	Load (kg)	Conc. (mg/l)	Load (kg)	Conc. (mg/l)	Load (kg)	Conc. (mg/l)	Load (kg)	Max Hr (m3/hr)	Mean (m3/hr)	Daily (m3)	Max Hr C	Mean C	Max	Min	Mean
01-Jun-15	44	2639	1	54	8	480	0.1	6	2968	2499	59977	27	27	8.6	7.7	8.2
02-Jun-15	86	2097	1	52	9	590	0.6	39	3296	2731	65540	27	26	8.6	7.5	8.1
03-Jun-15	32	2097	1	52	9	590	0.6	39	3156	2065	49570	27	26	8.8	8.0	8.4
04-Jun-15	36	3616	2	117	18	1050	0.1	6	2602	2430	58323	24	22	8.2	7.9	8.1
05-Jun-15	62	3616	2	117	18	1050	0.1	6	2936	2490	59766	24	22	8.7	7.6	8.1
06-Jun-15	46	2267	5	295	9	510	0.0	0	2852	2362	56687	26	25	8.8	7.9	8.4
07-Jun-15	40	2267	5	295	9	510	0.0	0	2831	2229	53490	26	25	8.4	7.5	8.0
08-Jun-15	20	1580	2	105	12	632	0.5	26	2555	2194	52664	25	24	7.7	7.1	7.4
09-Jun-15	30	1580	2	105	12	632	0.5	26	2006	1999	47985	25	24	7.6	7.1	7.4
10-Jun-15	26	1194	1	28	12	551	0.9	41	2079	1913	45913	29	27	7.7	7.1	7.3
11-Jun-15	26	1194	1	28	12	551	0.9	41	1825	2038	48921	29	27	7.5	7.0	7.3
12-Jun-15	36	2290	0	5	14	668	0.6	29	1900	1988	47718	31	29	8.5	7.2	7.6
13-Jun-15	48	2290	0	5	14	668	0.6	29	1621	1982	47575	31	29	9.0	8.4	8.7
14-Jun-15	76	3006	0	6	14	779	0.2	11	1871	2320	55670	29	28	8.8	8.0	8.5
15-Jun-15	54	3006	0	6	14	779	0.2	11	3815	2526	60629	29	28	8.4	7.9	8.1
16-Jun-15	44	994	5	270	15	828	0.2	11	3983	2300	55198	31	28	8.4	7.9	8.1
17-Jun-15	18	994	5	270	15	828	0.2	11	3552	2344	56268	31	28	8.6	7.9	8.3
18-Jun-15	52	2409	0	11	23	1319	0.0	0	3292	2390	57366	31	30	8.4	7.8	8.1
19-Jun-15	42	2409	0	11	23	1319	0.0	0	3287	2375	57005	31	30	8.6	7.5	8.1
20-Jun-15	32	1274	0	6	10	579	0.1	6	3171	2412	57888	35	31	8.6	8.0	8.3
21-Jun-15	22	1274	0	6	10	579	0.1	6	2640	2415	57968	35	31	9.1	8.3	8.5
22-Jun-15	32	2226	0	6	14	779	0.1	6	2403	2319	55655	30	26	8.8	8.1	8.6
23-Jun-15	40	2226	0	6	14	779	0.1	6	2381	2198	52762	30	26	8.1	7.9	8.0
24-Jun-15	48	3009	1	70	18	903	0.0	0	2949	2090	50148	28	24	8.2	7.7	7.9
25-Jun-15	60	3009	1	70	18	903	0.0	0	1973	2353	56464	28	24	8.3	8.1	8.1
26-Jun-15	82	3254	0	6	26	1511	0.0	0	1674	2421	58111	29	28	8.5	7.8	8.1
27-Jun-15	56	3254	0	6	26	1511	0.0	0	1509	2606	62549	29	28	8.2	7.7	7.9
28-Jun-15	52	3536	0	8	13	999	0.1	8	1529	3203	76873	27	27	8.8	8.1	8.5
29-Jun-15	46	3536	0	8	13	999	0.1	8	1579	3201	76822	27	27	8.7	8.1	8.4
30-Jun-15	26	1997	1	69	14	1076	0.1	8	1579	3201	76822	0	0	8.5	8.2	8.4
Mean	44	2338	1	70	15	832	0.2	13	-	2387	57278	27.7	26.0	-	-	8.1
Month limit	150	-	25	-	27.5	-	2.5	-	-	-	-	-	-	-	-	-
Max	-	3616	-	295	-	1511	-	41	3983	-	76873	34.6	31.2	9.1	7.0	8.7
Daily limit	-	27500	-	3150	-	4000	-	-	6000	-	-	45.0	40.0	10	6	-

Month total (kg) 379
 Monthly limit (kg) 2100

Max pH Min pH

Signed on behalf of the Operator

Dated 8-Jul-2015

Form I&S W1 Monthly

Release summary for the month of

JUN

2015

Operator: Tata Steel UK Ltd

Transfer Points: E1, E2, E9

Location: Port Talbot

Permit: BL7108

Effluent transfer point E1: Coke Ovens BET (No.6 sump)

	Average (mg/l)	Minimum (mg/l)	Maximum (mg/l)	Standard deviation
pH	8.9	8.9	8.9	0.0
Suspended Solids	73	36	152	25
Oil & grease	19	6	52	9
Ammoniacal Nitrogen	142	44	261	53
Cyanide	0.8	0.0	1.9	0.4
Monohydric Phenol	0.9	0.1	1.7	0.6

Effluent transfer point E2: Coal stockyards (No.10 sump)

	Average (mg/l)	Minimum (mg/l)	Maximum (mg/l)	Standard deviation
Suspended Solids	492	26	12664	2301
Oil & grease	2	0	6	1

Effluent transfer point E9: Ammonia liquor to BET

	Average (mg/l)	Minimum (mg/l)	Maximum (mg/l)	Standard deviation
Ammonical Nitrogen	660	310	1170	214

Signed on behalf of the Operator



Dated 08/07/2015

Form Effluent 1

Release summary for the month of

JUN

2015

Operator: Tata Steel UK Ltd

Transfer Points: E3, E4, E5

Location: Port Talbot

Permit: BL7108

Effluent transfer point E3: Blast Furnace clarification ponds (No.1 sump)

	Average (mg/l)	Minimum (mg/l)	Maximum (mg/l)	Standard deviation
pH	5.7	5.1	7.4	0.7
Suspended Solids	24	8	44	7
Oil & grease	0	0	6	1
Soluble Zinc	0.4	0.0	1.0	0.2
Total Zinc	0.8	0.1	1.7	0.4

Effluent transfer point E4: Steel Plant clarification ponds (No.5 sump)

	Average (mg/l)	Minimum (mg/l)	Maximum (mg/l)	Standard deviation
pH	9.8	8.0	10.7	1.0
Suspended Solids	51	14	156	33
Oil & grease	1	0	5	1
Soluble Zinc	0.0	0.0	0.5	0.1
Total Zinc	0.1	0.0	0.6	0.1

Effluent transfer point E5: Concast (Concast sump)

	Average (mg/l)	Minimum (mg/l)	Maximum (mg/l)	Standard deviation
pH	7.3	5.5	9.5	0.8
Suspended Solids	31	6	90	21
Oil & grease	6	0	41	9
Soluble Zinc	0.1	0.0	0.3	0.1
Total Zinc	0.1	0.0	0.3	0.1

Signed on behalf of the Operator



Dated 08/07/2015

Form Effluent 2

Release summary for the month of

JUN

2015

Operator: Tata Steel UK Ltd

Transfer Points: E6, E7, E8

Location: Port Talbot

Permit: BL7108

Effluent transfer point E6: Hot rolling mill (HM canals)

	Average (mg/l)	Minimum (mg/l)	Maximum (mg/l)	Standard deviation
pH	7.6	6.9	8.1	0.3
Suspended Solids	50	8	114	28
Oil & grease	7	1	16	3

Effluent transfer point E7: CAPL effluent treatment plant (CAPL sump)

	Average (mg/l)	Minimum (mg/l)	Maximum (mg/l)	Standard deviation
pH	7.2	7.0	7.5	0.1
Suspended Solids	509	66	972	227
Oil & grease	135	39	254	48

Effluent transfer point E8: Cold mill effluent (Final effluent sump)

	Average (mg/l)	Minimum (mg/l)	Maximum (mg/l)	Standard deviation
pH	8.3	7.7	8.6	0.3
Suspended Solids	453	126	1100	228
Oil & grease	10	0	30	9

Signed on behalf of the Operator



Dated 08/07/2015

Form Effluent 3

Releases to Controlled Waters

Release summary for the month June-15

Operator: Tata Steel UK Ltd

Release Point:

W1 (LSO)

Location: Port Talbot

Permit:

BL7108

	S.Solids		Oil & grease		Ammonia		Sol Zinc		Flowrate			Temperature		pH		
	Conc. (mg/l)	Load (kg)	Conc. (mg/l)	Load (kg)	Conc. (mg/l)	Load (kg)	Conc. (mg/l)	Load (kg)	Max Hr (m3/hr)	Mean (m3/hr)	Daily (m3)	Max Hr C	Mean C	Max	Min	Mean
01-Jun-15	44	2639	1	54	8	480	0.1	6	2968	2499	59977	27	27	8.6	7.7	8.2
02-Jun-15	86	2097	1	52	9	590	0.6	39	3296	2731	65540	27	26	8.6	7.5	8.1
03-Jun-15	32	2097	1	52	9	590	0.6	39	3156	2065	49570	27	26	8.8	8.0	8.4
04-Jun-15	36	3616	2	117	18	1050	0.1	6	2602	2430	58323	24	22	8.2	7.9	8.1
05-Jun-15	62	3616	2	117	18	1050	0.1	6	2936	2490	59766	24	22	8.7	7.6	8.1
06-Jun-15	46	2267	5	295	9	510	0.0	0	2852	2362	56687	26	25	8.8	7.9	8.4
07-Jun-15	40	2267	5	295	9	510	0.0	0	2831	2229	53490	26	25	8.4	7.5	8.0
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12-Jun-15	36	2290	0	5	14	668	0.6	29	1900	1988	47718	31	29	8.5	7.2	7.6
13-Jun-15	48	2290	0	5	14	668	0.6	29	1621	1982	47575	31	29	9.0	8.4	8.7
14-Jun-15	76	3006	0	6	14	779	0.2	11	1871	2320	55670	29	28	8.8	8.0	8.5
15-Jun-15	54	3006	0	6	14	779	0.2	11	3815	2526	60629	29	28	8.4	7.9	8.1
16-Jun-15	44	994	5	270	15	828	0.2	11	3983	2300	55198	31	28	8.4	7.9	8.1
17-Jun-15	18	994	5	270	15	828	0.2	11	3552	2344	56268	31	28	8.6	7.9	8.3
18-Jun-15	52	2409	0	11	23	1319	0.0	0	3292	2390	57366	31	30	8.4	7.8	8.1
19-Jun-15	42	2409	0	11	23	1319	0.0	0	3287	2375	57005	31	30	8.6	7.5	8.1
20-Jun-15	32	1274	0	6	10	579	0.1	6	3171	2412	57888	35	31	8.6	8.0	8.3
21-Jun-15	22	1274	0	6	10	579	0.1	6	2640	2415	57968	35	31	9.1	8.3	8.5
22-Jun-15	32	2226	0	6	14	779	0.1	6	2403	2319	55655	30	26	8.8	8.1	8.6
23-Jun-15	40	2226	0	6	14	779	0.1	6	2381	2198	52762	30	26	8.1	7.9	8.0
24-Jun-15	48	3009	1	70	18	903	0.0	0	2949	2090	50148	28	24	8.2	7.7	7.9
25-Jun-15	60	3009	1	70	18	903	0.0	0	1973	2353	56464	28	24	8.3	8.1	8.1
26-Jun-15	82	3254	0	6	26	1511	0.0	0	1674	2421	58111	29	28	8.5	7.8	8.1
27-Jun-15	56	3254	0	6	26	1511	0.0	0	1509	2606	62549	29	28	8.2	7.7	7.9
28-Jun-15	52	3536	0	8	13	999	0.1	8	1529	3203	76873	27	27	8.8	8.1	8.5
29-Jun-15	46	3536	0	8	13	999	0.1	8	1579	3201	76822	27	27	8.7	8.1	8.4
30-Jun-15	26	1997	1	69	14	1076	0.1	8	1579	3201	76822	0	0	8.5	8.2	8.4
Mean	44	2338	1	70	15	832	0.2	13	-	2387	57278	27.7	26.0	-	-	8.1
Month limit	150	-	25	-	27.5	-	2.5	-	-	-	-	-	-	-	-	-
Max	-	3616	-	295	-	1511	-	41	3983	-	76873	34.6	31.2	9.1	7.0	8.7
Daily limit	-	27500	-	3150	-	4000	-	-	6000	-	-	45.0	40.0	10	6	-

Month total (kg) 379
 Monthly limit (kg) 2100

Max pH Min pH

Signed on behalf of the Operator 

Dated 22-Jul-2015

Form I&S W1 Monthly

Releases to Controlled Waters

Release summary for the quarter Apr to Jun-15

Operator: Tata Steel UK Ltd

Release Point: W1

Location: Port Talbot

Permit: BL7108

Parameter	Reporting Units	Apr	Month May	Jun	Limit
Phenol	Max load (kg/day)	285.4	23.9	23.2	350
	Mean load (kg/day)	27.1	3.0	4.3	
	Max conc. (mg/l)	3.1	0.4	0.4	
	Mean conc. (mg/l)	0.3	0.6	0.6	2
Soluble chromium	Max load (kg/day)	7.3	6.3	6.5	
	Mean load (kg/day)	0.2	1.2	0.9	
	Load (kg/mth)	7.26	36.51	26.29	200
	Max conc. (mg/l)	0.10	0.10	0.10	
	Mean conc. (mg/l)	0.00	0.02	0.02	0.2
Soluble lead	Max load (kg/day)	7.26	6.31	5.97	
	Mean load (kg/day)	0.40	0.49	0.51	
	Load (kg/mth)	12.1	15.3	15.4	300
	Max conc. (mg/l)	0.10	0.10	0.10	
	Mean conc. (mg/l)	0.01	0.01	0.01	0.3
Soluble iron	Max load (kg/day)	72.6	8.9	36.2	
	Mean load (kg/day)	5.8	0.5	6.2	
	Max conc. (mg/l)	1.0	0.2	0.7	
	Mean conc. (mg/l)	0.1	0.0	0.1	
Free cyanide	Max load (kg/day)	11.9	12.6	13.2	45
	Mean load (kg/day)	1.9	1.9	3.8	
	Max conc. (mg/l)	0.2	0.2	0.2	
	Mean conc. (mg/l)	0.04	0.04	0.07	0.2
PAH's	Load (kg/mth)	13.0	39.2	54.4	250
	Concentration (mg/l)	0.039	0.007	0.067	1

Signed on behalf of the Operator



Dated 22-Jul-2015

Form I&S W1 Quarterly

Releases to Controlled Waters

Release summary for the quarter Apr to Jun-15

Operator: Tata Steel UK Ltd

Release Point: W5

Location: Port Talbot

Permit: BL7108

Parameter	Reporting Units	Apr	Month May	Jun	Limit
Dock Return	Max. monthly conc. of return (mg/l)	34.0	25.2	5.7	20 above background
Suspended solids	Max daily back-ground conc. (mg/l)	32.0	68.0	24.0	
	Mean background conc. (mg/l)	21.1	18.8	16.8	
Dock Flow	Max daily flowrate (m3/day)	79454	77911	78694	350000
	Mean daily flowrate (m3/day)	72743	72960	76490	
	Max flowrate (m3/hour)	3501	3503	3346	16000
	Mean flowrate (m3/hour)	3031	3040	3187	
Abstracted flows (Afan docks feeder)	Max daily abstraction rate (m3/day)	38541	40832	40678	
	Mean daily abstraction rate (m3/day)	36596	36396	36654	
Dock Return Temperature	Max daily discharge temperature (C)	27	29	29	36
	Mean daily discharge temperature (C)	22	26	27	

Signed on behalf of the Operator



Dated 22-Jul-2015

Form I&S W5

Releases to Controlled Waters

Release summary for the quarter Apr to Jun

Operator: Tata Steel UK Ltd

Release Point: W3 (ABO)

Location: Port Talbot

Permit: BL7108

Parameter	Reporting Units	Apr	Month May	Jun	Limit
Suspended solids	Maximum daily* concentration (mg/)	84	168	0	200
	Mean daily concentration (mg/)	40	25	28	
Oil and grease	Maximum daily concentration (mg/)	2	10	5	20
	Mean daily concentration (mg/)	2	3	2	
Number of days of discharge in the month		7	0	2	

* Potential breach on 15/07 - no breach due to high tide and associated suspended solids related to this. see email to NRW subject: Permit BI7108 Q3 Returns - Incomplete Returns/ Potential Breach: 27/10/2014

Signed on behalf of the Operator

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Dated 22-Jul-2015

Form I&S W3

Releases to Controlled Waters

Release summary for the quarter Apr to Jun

Operator: Tata Steel UK Ltd

Release Point: W4

Location: Port Talbot

Permit: BL7108 / RP3730BV

Release Point W4: Spot sample results during storm discharge					
Parameter	Reporting Units	Apr	Month May	Jun	Limit
pH	Max daily	7.2	7.0	8.7	
	Mean daily	7.2	7.0	8.0	
	Min daily	7.4	8.3	8.0	
Suspended solids (mg/l)	Max daily conc.	8.0	40.0	24.0	
	Mean daily conc.	8.0	32.0	14.0	
Total iron (mg/l)	Max daily conc.	0.3	3.0	1.1	
	Mean daily conc.	0.3	1.6	0.6	
Soluble iron (mg/l)	Max daily conc.	0.1	0.1	0.5	
	Mean daily conc.	0.1	0.1	0.3	
Oil and grease (mg/l)	Max daily conc.	3.8	3.5	2.0	
	Mean daily conc.	3.8	1.8	1.0	
Number of days of discharge in the month (daily rainfall > 15 mm).		0.0	1.0	1.0	

Date of monthly sample	Suspended solids	pH	Total iron	Soluble iron	Oil and grease
28-Apr-15	8	7.20	0.80	0.05	0.10
19-May-15	18	7.00	0.60	0.05	1.60
22-Jun-15	56	7.20	0.12	0.05	0.10

Signed on behalf of the Operator



Dated

22-Jul-2015

Form I&S W4