

Permit Reference: BS 39051P  
 Operator: Tata Steel UK  
 Installation: Llanwern Steel Works

Form Number: A1/1

Date of form: 01/09/09

Reporting of Emissions to Air for the period from 01/04/2019 to 30/06/2019							
Emission Point	Substance / Parameter	Emission Limit Value	Result (mg/Nm3)	Test Method	Sample Date and Times	Accreditation / Certification	Uncertainty (+/- mg/Nm3)
A1*	NOx (as NO2)	400 mg/m3	---	Electrochemical Cell - BSEN15058 & BSEN14792	---	Level 2 Mcerts	---
SRF No1	CO	None	---		---		
A2*	NOx (as NO2)	400 mg/m3	---		---		
SRF No2	CO	None	---		---		
A3*	NOx (as NO2)	400 mg/m3	---		---		
SRF No3	CO	None	---		---		
A4*	NOx (as NO2)	400 mg/m3	---		---		
SRF No4	CO	None	---		---		
A5*	NOx (as NO2)	400 mg/m3	---		---		
SRF No5	CO	None	---		---		
None	Gas oil sulphur	0.2 w/w	---	---	---	---	

\*- Emission points not in use during mothball of Hot Mill

Signed:   
 (authorised to sign as a representative of the operator)

Date: 10/07/2019

Permit Reference: BS 3905IP  
 Operator: Tata Steel UK  
 Installation: Llanwern Steel Works

Form Number: A1/2

Date of form: 01/09/09

Reporting of Emissions to Air for the period from 01/04/2019 to 30/06/2019									
Emission Point	Substance / Parameter		Emission Limit Value	Result (mg/Nm3)	Test Method	Sample Date and Times	Accreditation / Certification	Uncertainty (+/- mg/Nm3)	
A11 <small>Zodiac Furnace</small>	NOx (as NO2)		350 mg/m3	134.3	Electrochemical Cell - BSEN15058 & BSEN14792	16/04/2019 11:59 - 12:14	Level 2 Mcerts	7.5	
	CO		None	34				2.9	
A14 <small>Boiler No1</small>	Gas Oil	NOx (as NO2)	200 mg/m3	---		16/04/2019 10:50 - 11:05		---	---
		CO	None	---				---	
	Natural Gas	NOx (as NO2)	140 mg/m3	117.8				4	
		CO	None	0				1.2	
A15 <small>Boiler No2</small>	Gas Oil	NOx (as NO2)	200 mg/m3	---		16/04/2019 11:14 - 11:29		---	---
		CO	None	---				---	
	Natural Gas	NOx (as NO2)	140 mg/m3	118.2				4	
		CO	None	1				1	
A16 <small>Boiler No3</small>	Gas Oil	NOx (as NO2)	200 mg/m3						
		CO	None						
	Natural Gas	NOx (as NO2)	140 mg/m3						
		CO	None						

\* - Boiler 3 offline during sampling

Signed:   
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Date: 10/07/2019

Permit Reference: BS 3905IP  
 Operator: Tata Steel UK  
 Installation: Llanwern Steel Works


Form Number: A1/3

Date of form: 01/09/09

Reporting of Emissions to Air for the period from 01/04/2019 to 30/06/2019							
Emission Point	Substance / Parameter	Emission Limit Value	Result (mg/Nm3)	Test Method	Sample Date and Times	Accreditation / Certification	Uncertainty (+/- mg/Nm3)
A6* Pickle Line No1	HCl	10 mg/m3	---	BS EN 1911	---	Level 2 Mcerts	---
A7 Pickle Line No2	HCl	10 mg/m3	7.3		12/06/2019 11:35 - 12:39		0.3
A8 Pickle Line Roof Vent	HCl	5 mg/m3	---				
A9 Cold Mill Oil Mist Vent	Oil mist	15 mg/m3	---				
A10 Zodiac Cleaner	Particulate matter	5 mg/m3	2.6	BS EN 13284	18/06/2019 10:25 - 12:17	Level 2 Mcerts	---
A12* Zodiac Chromate	Particulate matter	5 mg/m3	---		---		--
A13+ Welder Stack	Particulate matter	5 mg/m3	---		---		---
A17 Pickle Line Scalemaster	Particulate matter	5 mg/m3	3.6		30/04/2019 11:18 - 13:12		1.3

\*Non operational

+Annual sample result - not sampled during Q2

Signed:   
 (authorised to sign as a representative of the operator)

Date: 10/07/2019

Permit Reference: BS3905IP  
 Operator: Tata Steel UK  
 Installation: Llanwern Steelworks

Form number: W1

Date of form: 01/09/09

Reporting of Emissions to Water for the period from 01/04/2019 to 30/06/2019			
Parameter	Limit	Daily Max *	Daily Mean *
Flow Rate	28000 m <sup>3</sup> /day (dry weather)	18,530	13,080
pH min	6	6.9	10
pH max	12	11.3	
Total Hydrocarbon Oil*	5 mg/l	3.8	1
Suspended solids**	100 mg/l	98	32.2
Dissolved iron	10 mg/l	0.351	0.100
Total chromium	0.2 mg/l	0.036	0.008
Dissolved nickel	0.2 mg/l	0.148	0.021
Zinc	2 mg/l	0.318	0.063
Copper	0.1 mg/l	0.009	0.002
Lead	0.8 mg/l	0.012	0.004
Cadmium	0.05 mg/l	0.002	0.001
Mercury	0.05 mg/l	0.001	0.001
Ammoniacal Nitrogen	None	0.200	0.110

\* Includes wet flow conditions

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Date: 10/07/2019