

BLUESCOPE STEEL (AIS) PTY. LTD. Port Kembla Steelworks Licence 6092

Link to Environment Protection Licence EPL6092

LICENCE MONITORING DATA MONTHLY SUMMARY REPORT

for

1 May 2018 to 31 May 2018

Monthly (May 2018) Report Published: 17, August, 2018

Date Obtained: 02/08/18



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Bluescope Steel (AIS) Pty Ltd ABN 19 000 019625 Port Kembla Steelworks Five Islands Road Port Kembla 2505 PO Box 1854 Wollongong NSW 2500

Stack Air Monitoring Requirements

EPL6092 Conditions L2.4/M2.2/M2.3/M8.2/E1.4





Point 2:

Pollutant	Units of Measure	Monitoring frequency required by licence	No. of times measured during month	Min. Value	Max Value	100 Percentile Limit	Exceedance (yes / no) *
Solid Particles	Milligrams per cubic metre	Quarterly	1	7	7	50.00	no
Comment:							

Point 105:

Pollutant	Units of Measure	Monitoring frequency required by licence	No. of times measured during month	Min. Value	Max Value	100 Percentile Limit	Exceedance (yes / no) *
Nitrogen Oxides (3% Oxygen correction)	Milligrams per cubic metre	Yearly	1	<5	<5	200.00	no
Comment:							



Point 107:

Pollutant	Units of Measure	Monitoring frequency required by licence	No. of times measured during month	Min. Value	Max Value	100 Percentile Limit	Exceedance (yes / no) *
Dry Gas Density	Kilograms per cubic metre	Quarterly in duplicate	4	1.33	1.33		no
Fine Particulates	Milligrams per cubic metre	Quarterly in duplicate	2	2	2.7		no
Moisture	Percent	Quarterly in duplicate	4	9.6	11		no
Molecular Weight of stack gases	grams per gram mole	Quarterly in duplicate	4	29.9	29.9		no
Solid Particles	Milligrams per cubic metre	Quarterly in duplicate	2	7.9	8.4	20.00	no
Temperature	Degrees Celcius	Quarterly in duplicate	4	138	138		no
Velocity	Metres per second	Quarterly in duplicate	4	15	16		no
Volumetric flowrate	Cubic metres per second	Quarterly in duplicate	4	300	320		no

Point 118:

Pollutant	Units of Measure	Monitoring frequency required by licence	No. of times measured during month	Min. Value	Max Value	100 Percentile Limit	Exceedance (yes / no) *
Solid Particles	Milligrams per cubic metre	Yearly	3	5.4	18	50.00	no
Comment:							



Point 151:

Pollutant	Units of Measure	Monitoring frequency required by licence	No. of times measured during month	Min. Value	Max Value	100 Percentile Limit	Exceedance (yes / no) *
Carbon Dioxide	Percent	Weekly	117	1.7	8.2		no
Dry Gas Density	Kilograms per cubic metre	Daily during testing	135	1.32	1.34		no
Moisture	Percent	Daily during testing	135	13	15		no
Molecular Weight of stack gases	grams per gram mole	Daily during testing	135	29.6	30		no
Nitrogen Oxides	Milligrams per cubic metre	Weekly	117	74	500	2,000.00	no
Oxygen (O2)	Percent	Daily during testing	117	15	19		no
Solid Particles *	Milligrams per cubic metre	Weekly	17	4.6	28 ^	20.00	yes
Sulfuric acid mist and sulphur trioxide (as SO3)	Milligrams per cubic metre	Weekly	1	9.9	9.9	100.00	no
Sulphur Dioxide - UV	Milligrams per cubic metre	Weekly	117	138	346	1,000.00	no
Temperature	Degrees Celcius	Daily during testing	135	154	167		no
Type 1 substance	Milligrams per cubic metre	Weekly	1	0.074	0.074		no
Type 2 substance	Milligrams per cubic metre	Weekly	1	0.083	0.083		no
Velocity	Metres per second	Daily during testing	135	22	26		no
Volumetric flowrate	Cubic metres per second	Daily during testing	135	210	240		no

Comment:

Date Obtained: 02/08/18

^{*} Solid Particle results are a combination of single point indicative testing and licence compliance testing. ^ There was 1 licence non-compliance (28 mg/Nm3)



Point 2:

Pollutant	Units of Measure	Monitoring frequency required by licence	No. of times measured during month	Min. Value	Mean Value	Median Value	Max Value
Opacity	%	Continuous	Continuous	0.0	2.6	2.6	16.4
Comment:							

Point 107:

Pollutant	Units of Measure	Monitoring frequency required by licence	No. of times measured during month	Min. Value	Mean Value	Median Value	Max Value
Total Solid Particles	Milligrams per cubic metre	Continuous	Continuous	0.6	7.5	4.7	50.0
Comment:							

Comment:

Elevated results are associated with plant stop

Point 151:

Pollutant	Units of Measure	Monitoring frequency required by licence	No. of times measured during month	Min. Value	Mean Value	Median Value	Max Value
Solid Particles	Milligrams per cubic metre	Continuous	Continuous	0.6	11.9	8.1	50.0
Comment:							



Ambient Air Monitoring Requirements

EPL6092 Condition M2.2/M2.3/O4.14,O4.15 (Cont.)



O4.13

Pollutant	Monitoring frequency required by licence	No of significant emissions measured during month	100 Percentile Limit	Exceedance (yes/ no) *
Emission - KISH Tipping DER 5	Monthly	0	4	no
Comment:				

04.14

Pollutant	Monitoring frequency required by licence	No of significant emissions measured during month	100 Percentile Limit	Exceedance (yes/ no) *
Emission Torpedo Ladle > DER 4	Monthly	0	4	no
Comment:				



Point 141: Receiver 1 (located south of licensed site)

Pollutant	Units of Measure	Monitoring frequency required by licence	No. of times measured during month	Min. Value	Mean Value	Median Value	Max. Value
Fine Particulates	Micrograms per cubic metre	Continuous	Continuous	5.6	17.2	14.9	39.9
Benzene	Parts per billion	Every 6 days	5	0.028	0.1566	0.0990	0.44
Iron	Micrograms per cubic metre	Every 6 days	5	0.35	1.584	2.00	2.9
Lead	Micrograms per cubic metre	Every 6 days	5	<0.11	<0.11	0.06	<0.11
Particulates - Deposited Matter	Grams per square metre per month	Monthly	1	1.2	1.2	1.20	1.2
Polycyclic aromatic hydrocarbons	Nanograms per cubic metre	24 hour period every 6 days.	5	0.6	1.242	1.40	1.9
Total suspended particles	Micrograms per cubic metre	Every 6 days	5	21	52.2	54.00	83
Zinc	Micrograms per cubic metre	Every 6 days	5	<0.22	<0.22	0.11	0.22



Point 152: Receiver 2 (located north of licensed site)

Pollutant	Units of Measure	Monitoring frequency required by licence	No. of times measured during month	Min. Value	Mean Value	Median Value	Max. Value
Fine Particulates	Micrograms per cubic metre	Continuous	Continuous	7.0	21.9	21.3	41.3
Benzene	Parts per billion	Every 6 days	5	<0.01	0.096	0.1000	0.21
Iron	Micrograms per cubic metre	Every 6 days	5	1.4	4.62	2.70	8.8
Lead	Micrograms per cubic metre	Every 6 days	5	<0.11	<0.11	0.06	<0.11
Particulates - Deposited Matter	Grams per square metre per month	Monthly	1	1.1	1.1	1.10	1.1
Polycyclic aromatic hydrocarbons	Nanograms per cubic metre	24 hour period every 6 days.	5	0.6	0.864	0.91	1.1
Total suspended particles	Micrograms per cubic metre	Every 6 days	5	32	63.8	67.00	85
Zinc	Micrograms per cubic metre	Every 6 days	5	<0.22	0.224	0.11	0.68



Point 153: Receiver 3 (located west of licensed site)

Pollutant	Units of Measure	Monitoring frequency required by licence	No. of times measured during month	Min. Value	Mean Value	Median Value	Max. Value
Iron	Micrograms per cubic metre	Every 6 days	5	1.1	2.5	2.20	3.6
Lead	Micrograms per cubic metre	Every 6 days	5	<0.054	<0.054	0.03	0.077
Total suspended particles	Micrograms per cubic metre	Every 6 days	5	30	51.6	53.00	79
Zinc	Micrograms per cubic metre	Every 6 days	5	<0.11	0.128	0.12	0.24

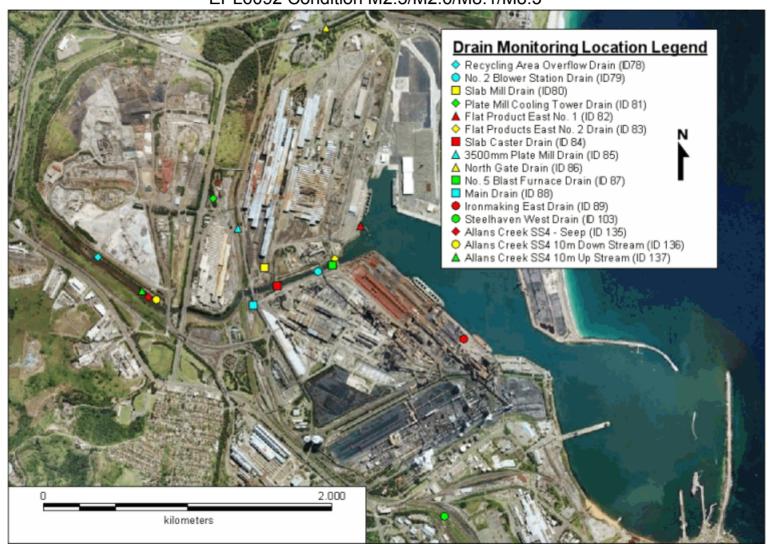


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Water and/or Land Monitoring Requirements

EPL6092 Condition M2.5/M2.6/M8.1/M8.3





Point 78:

Pollutant	Units of Measure	Monitoring frequency required by licence	No. of times measured during month	Min. Value	Mean Value	Median Value	Max. Value
Total Suspended Solids	Milligrams per litre	Daily during any discharge which is not due to Wet Weather Conditions	0				
Volume of Liquids Discharged	Kilolitres per day	Daily	Continuous	0	0	0.00	0
Comment:							

Comment:

Point 79:

Pollutant	Units of Measure	Monitoring frequency required by licence	No. of times measured during month	Min. Value	Max Value	100 percentile Dry limit (Wet limit)	Exceedance (yes / no) *
Ammonia	Milligrams per litre	Every 8 days	4	<0.06	<0.06	5.0 (5.0)	no
Cyanide	Milligrams per litre	Every 8 days	4	<0.02	<0.02	0.30 (0.30)	no
Filtrable Iron	Milligrams per litre	Every 8 days	4	<0.01	0.01	0.3 (0.3)	no
Oil and Grease	Milligrams per litre	Every 8 days	4	<5	<5	20 (50)	no
рН		Every 8 days	4	8.2	8.2	6.5-9.0 (6.5-9.0)	no
Temperature	Degrees Celcius	Every 8 days	4	24	28	40 (40)	no
Total Iron	Milligrams per litre	Every 8 days	4	0.09	0.28	3 (50)	no
Total Suspended Solids	Milligrams per litre	Every 8 days	4	5	16	50 (500)	no
Total Zinc	Milligrams per litre	Every 8 days	4	<0.05	<0.05	3 (3)	no
Volume of Liquids Discharged	Kilolitres per day	Daily	Continuous	567564	740430		

Comment:

Date Obtained: 02/08/18



Point 80:

Pollutant	Units of Measure	Monitoring frequency required by licence	No. of times measured during month	Min. Value	Max Value	100 percentile Dry limit (Wet limit)	Exceedance (yes / no) *
Cyanide	Milligrams per litre	6/yr. Min 50 days apart.	1	<0.02	<0.02	0.20 (0.00)	no
рН		6/yr. Min 50 days apart.	1	7.4	7.4	6.5-9.0 (0.0-0.0)	no
Volume of Liquids Discharged	Kilolitres per day	Daily	Continuous	383	1675		

Comment:

Point 82:

Pollutant	Units of Measure	Monitoring frequency required by licence	No. of times measured during month	Min. Value	Max Value	100 percentile Dry limit (Wet limit)	Exceedance (yes / no) *
Cyanide	Milligrams per litre	Quarterly grab sample . Min 80 days apart	0			0.30 (0.00)	no
Volume of Liquids Discharged	Kilolitres per day	Daily	Continuous	33	168		



Point 83:

Pollutant	Units of Measure	Monitoring frequency required by licence	No. of times measured during month	Min. Value	Max Value	100 percentile Dry limit (Wet limit)	Exceedance (yes / no) *
Cyanide	Milligrams per litre	Quarterly grab sample	0			0.15 (0.00)	no
		. Min 80 days apart					
Volume of Liquids Discharged	Kilolitres per day	Daily	Continuous	0	0		
Comment:							

Point 85:

Pollutant	Units of Measure	Monitoring frequency required by licence	No. of times measured during month	Min. Value	Max Value	100 Percentile Limit	Exceedance (yes / no) *
Oil and Grease	Milligrams per litre	24/year. Min 15 days apart	2	<5	<5	20.0000	no
рН		24/year. Min 15 days apart	2	8.2	8.2	6.5-9.0	no
Temperature	Degrees Celcius	24/year. Min 15 days apart	2	20	23	35.00	no
Total Suspended Solids	Milligrams per litre	24/year. Min 15 days apart	2	3	12	50.00	no
Volume of Liquids Discharged	Kilolitres per day	Daily	Continuous	28001	36165		no



Point 87:

Pollutant	Units of Measure	Monitoring frequency required by licence	No. of times measured during month	Min. Value	Max Value	100 percentile Dry limit (Wet limit)	Exceedance (yes / no) *
Ammonia	Milligrams per litre	Every 8 days	4	<0.06	0.92	10.0 (10.0)	no
Cyanide	Milligrams per litre	Every 8 days	4	<0.02	<0.02	0.30 (0.30)	no
Filtrable Iron	Milligrams per litre	Every 8 days	4	<0.01	0.13	1.5 (1.5)	no
Lead	Milligrams per litre	Every 8 days	4	<0.02	<0.02	0.5 (0.5)	no
Mercury	Micrograms per litre	Every 8 days	4	<0.5	<0.5	1.5 (1.5)	no
рН		Every 8 days	4	8.2	8.2	6.5-11.0 (6.5-11.0)	no
Temperature	Degrees Celcius	Every 8 days	4	19	21	40 (40)	no
Total Iron	Milligrams per litre	Every 8 days	4	0.16	0.5	7 (100)	no
Total Suspended Solids	Milligrams per litre	Every 8 days	4	5	13	70 (500)	no
Volume of Liquids Discharged	Kilolitres per day	Daily	Continuous	1628	2079		



Point 88:

Pollutant	Units of Measure	Monitoring frequency required by licence	No. of times measured during month	Min. Value	Max Value	100 percentile Dry limit (Wet limit)	Exceedance (yes / no) *
Ammonia	Milligrams per litre	Every 8 days	2	<0.06	<0.06	7.5 (7.5)	no
Cyanide	Milligrams per litre	Every 8 days	2	<0.02	<0.02	0.30 (0.30)	no
Oil and Grease	Milligrams per litre	Every 8 days	2	<5	<5	20 (50)	no
рН		Every 8 days	2	8.2	8.2	6.5-9.0 (6.5-9.0)	no
Phenol	Milligrams per litre	Every 8 days	1	<0.2	<0.2	0.45 (0.45)	no
Temperature	Degrees Celcius	Every 8 days	2	18	21	40 (40)	no
Total Suspended Solids	Milligrams per litre	Every 8 days	2	4	13	100 (200)	no
Total Zinc	Milligrams per litre	Every 8 days	2	<0.05	<0.05	3 (3)	no
Volume of Liquids Discharged	Kilolitres per day	Daily	Continuous	27164	28375		



Point 89:

Pollutant	Units of Measure	Monitoring frequency required by licence	No. of times measured during month	Min. Value	Max Value	100 percentile Dry limit (Wet limit)	Exceedance (yes / no) *
Ammonia	Milligrams per litre	Every 8 days	0			7.0 (7.0)	no
Copper	Milligrams per litre	Every 8 days	0			1.000	no
Cyanide	Milligrams per litre	Every 8 days	0			0.20 (0.20)	no
Filtrable Iron	Milligrams per litre	Every 8 days	0			0.5 (0.5)	no
Fluoride	Milligrams per litre	Every 8 days	0			50 (50)	no
Total Iron	Milligrams per litre	Every 8 days	0			7 (20)	no
Total Suspended Solids	Milligrams per litre	Every 8 days	0			100 (200)	no
Total Zinc	Milligrams per litre	Every 8 days	0			3 (3)	no
Volume of Liquids Discharged	Kilolitres per day	Daily	Continuous	0	0		