

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

Link to Environment Protection Licence EPL6092

LICENCE MONITORING DATA MONTHLY SUMMARY REPORT

for

1 Jan 2020 to 31 Jan 2020

Monthly (January 2020) Report Published: 27, May, 2020

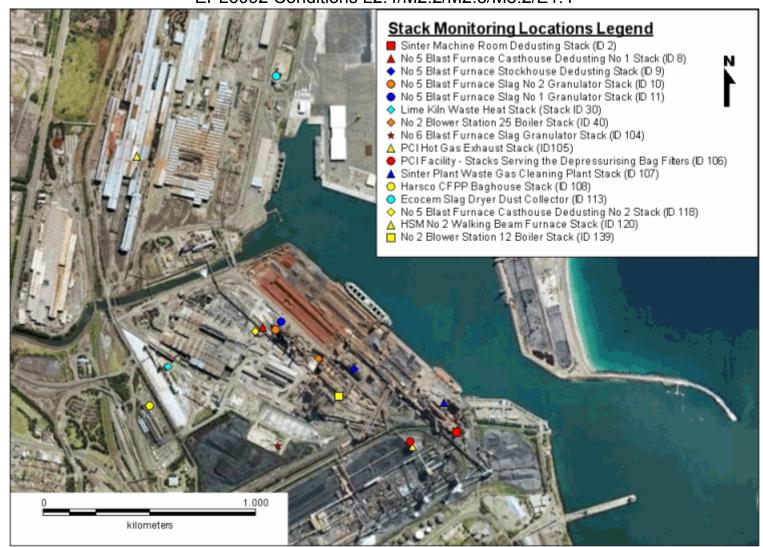


Date Obtained: 08/05/2020

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	Yearly	1	5.0	5.0	50.00	no
Comment:							

Point 30:

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	1	4.9	4.9	50.00	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) *
Arsenic	Milligrams per cubic metre	Quarterly in duplicate	2	0.00046	0.00058		no
Cadmium	Milligrams per cubic metre	Quarterly in duplicate	2	0.0015	0.0021		no
Carbon Dioxide	Percent	Quarterly in duplicate	24	7.2	8.9		no
Dioxins & Furans (15.7% Oxygen correction)	Nanograms per cubic metre	Quarterly in duplicate	2	0.008	0.0082	0.300000	no
Dry Gas Density	Kilograms per cubic metre	Quarterly in duplicate	36	1.33	1.34		no
Fine Particulates	Milligrams per cubic metre	Quarterly in duplicate	2	3.7	4		no
Hydrogen Chloride	Milligrams per cubic metre	Quarterly in duplicate	2	34	34		no
Hydrogen Fluoride	Milligrams per cubic metre	Quarterly in duplicate	2	1.6	1.7		no
Lead	Milligrams per cubic metre	Quarterly in duplicate	2	0.025	0.032		no
Manganese	Milligrams per cubic metre	Quarterly in duplicate	2	0.0038	0.0061		no
Moisture	Percent	Quarterly in duplicate	36	9.4	12		no
Molecular Weight of stack gases	grams per gram mole	Quarterly in duplicate	36	29.9	30.1		no
Nickel	Milligrams per cubic metre	Quarterly in duplicate	2	0.00049	0.0007		no
Nitrogen Oxides	Milligrams per cubic metre	Quarterly	24	279	326	2,000.00	no
Oxygen (O2)	Percent	Quarterly in duplicate	24	15	16		no
Solid Particles	Milligrams per cubic metre	Quarterly in duplicate	2	4.5	5	20.00	no
Sulfuric acid mist and sulphur trioxide (as SO3)	Milligrams per cubic metre	Quarterly in duplicate	2	34	37	100.00	no
Sulphur Dioxide - UV	Milligrams per cubic metre	Quarterly	26	67	99	1,000.00	no
Temperature	Degrees Celcius	Quarterly in duplicate	36	137	138		no
Velocity	Metres per second	Quarterly in duplicate	36	15	18		no



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) *
	Volumetric flowrate	Cubic metres per second	Quarterly in duplicate	36	290	350		no
C	comment:		•		•			

Point 10:

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	8	1.29	1.29		no
Hydrogen Sulphide	Grams per second	Quarterly	1	0.34	0.34	1.20	no
Moisture	Percent	Quarterly	8	5	7.7		no
Molecular Weight of stack gases	grams per gram mole	Quarterly	8	28.9	28.9		no
Temperature	Degrees Celcius	Quarterly	8	33	41		no
Velocity	Metres per second	Quarterly	8	2	2.5		no
Volumetric flowrate	Cubic metres per second	Quarterly	9	21	25		no

Comment:



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	0.3	3.1	2.9	6.9
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	2	10.8	10.3	29.3

Comment:

Elevated results associated with plant shutdown and startup



Ambient Air Monitoring Requirements

EPL6092 Condition M2.2/M2.3/O4.13,O4.14 (Cont.)



04.13

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	1	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
Benzene	Parts per billion	Every 6 days	5	0.052	0.151	0.140	0.29
Fine Particulates	Micrograms per cubic metre	Continuous	Continuous	12	49	44	118
Iron	Micrograms per cubic metre	Every 6 days	4	0.82	4.48	2.05	13
Lead	Micrograms per cubic metre	Every 6 days	4	<0.056	<0.056	0.03	<0.057
Particulates - Deposited Matter	Grams per square metre per month	Monthly	1	2.2	2.2	2.20	2.2
Polycyclic aromatic hydrocarbons	Nanograms per cubic metre	24 hour period every 6 days.	4	0.74	2.19	1.80	4.4
Total suspended particles	Micrograms per cubic metre	Every 6 days	4	68	189.5	125	440
Type 1 and Type 2 substances in aggregate	Micrograms per cubic metre	Quarterly	1	0.025	0.025	0.03	0.025
Zinc	Micrograms per cubic metre	Every 6 days	4	<0.11	<0.11	0.06	0.15

Comment: One sample was not collected in January due to a technical issues with the sampling equipment. Total suspended particle results are high due to bush fires over this period.



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
Benzene	Parts per billion	Every 6 days	5	0.071	0.162	0.160	0.3
Fine Particulates	Micrograms per cubic metre	Continuous	Continuous	21	52	41	117
Iron	Micrograms per cubic metre	Every 6 days	4	1	4.825	4.30	9.7
Lead	Micrograms per cubic metre	Every 6 days	4	<0.056	<0.056	0.03	<0.057
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.	4	0.72	1.58	1.50	2.6
Total suspended particles	Micrograms per cubic metre	Every 6 days	4	74	203.5	145	450
Type 1 and Type 2 substances in aggregate	Micrograms per cubic metre	Quarterly	1	0.052	0.052	0.05	0.052
Zinc	Micrograms per cubic metre	Every 6 days	4	<0.11	<0.11	0.06	0.25

Comment: One sample was not collected in January due to a technical issues with the sampling equipment. Total suspended particle results are high due to bush fires over this period.

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	4	1	4.55	2.10	13
Lead	Micrograms per cubic metre	Every 6 days	4	<0.056	<0.056	0.03	<0.057
Total suspended particles	Micrograms per cubic metre	Every 6 days	4	94	206	125	480
Type 1 and Type 2 substances in aggregate	Micrograms per cubic metre	Quarterly	1	0.066	0.066	0.07	0.066
Zinc	Micrograms per cubic metre	Every 6 days	4	<0.11	<0.11	0.08	0.16

Comment: One sample was not collected in January due to a technical issues with the sampling equipment. Total suspended particle results are high due to bush fires over this period.

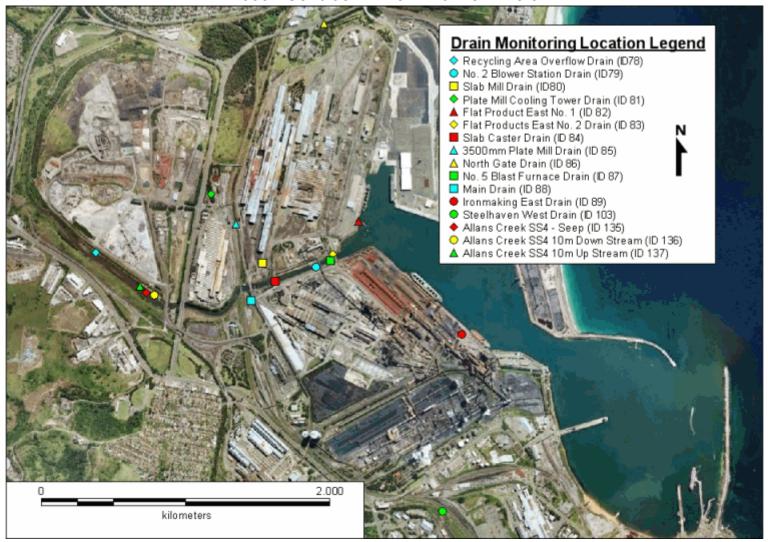


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Water and/or Land Monitoring Requirements

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
рН		Daily during any discharge which is not due to Wet Weather Conditions	0				
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	17	0	540
Comment:							

Point 79:

Milligrams per litre Milligrams per litre Milligrams per litre	Every 8 days Every 8 days	4	<0.06	<0.06	5.0 (5.0)	
	Every 8 days	4		1 5.00	3.0 (5.0)	no
Milligrams per litro		4	<0.02	<0.02	0.30 (0.30)	no
willigrains per litre	Every 8 days	4	<0.01	0.01	0.3 (0.3)	no
Milligrams per litre	Every 8 days	4	<5	<5	20 (50)	no
	Every 8 days	4	8.1	8.2	6.5-9.0 (6.5-9.0)	no
Degrees Celcius	Every 8 days	4	29	32	40 (40)	no
Milligrams per litre	Every 8 days	4	0.06	0.19	3 (50)	no
Milligrams per litre	Every 8 days	4	<3	12	50 (500)	no
Milligrams per litre	Every 8 days	4	<0.05	<0.05	3 (3)	no
Kilolitres per day	Daily	Continuous	622486	785416		
	Milligrams per litre Degrees Celcius Milligrams per litre Milligrams per litre Milligrams per litre	Milligrams per litre Every 8 days Every 8 days Degrees Celcius Every 8 days Milligrams per litre Every 8 days Milligrams per litre Every 8 days Milligrams per litre Every 8 days Every 8 days Every 8 days	Milligrams per litre Every 8 days 4 Every 8 days 4 Degrees Celcius Every 8 days 4 Milligrams per litre Every 8 days 4	Milligrams per litre Every 8 days 4 <5 Every 8 days 4 8.1 Degrees Celcius Every 8 days 4 29 Milligrams per litre Every 8 days 4 0.06 Milligrams per litre Every 8 days 4 <3	Milligrams per litre Every 8 days 4 <5 <5 Every 8 days 4 8.1 8.2 Degrees Celcius Every 8 days 4 29 32 Milligrams per litre Every 8 days 4 0.06 0.19 Milligrams per litre Every 8 days 4 <3	Milligrams per litre Every 8 days 4 <5 <5 20 (50) Every 8 days 4 8.1 8.2 6.5-9.0 (6.5-9.0) Degrees Celcius Every 8 days 4 29 32 40 (40) Milligrams per litre Every 8 days 4 0.06 0.19 3 (50) Milligrams per litre Every 8 days 4 <3



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
pH		6/yr. Min 50 days apart.	1	7.6	7.6	6.5-9.0 (0.0-0.0)	no
Volume of Liquids Discharged	Kilolitres per day	Daily	Continuous	603	5866		
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 10 sample. Min 80 days apart	1	0.014	0.014	0.15 (0.00)	no
Volume of Liquids Discharged	Kilolitres per day	Daily	Continuous	0	2903		
Comment:							

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. Min 80 days apart	0			0.15 (0.00)	no
Volume of Liquids Discharged	Kilolitres per day	Daily	Continuous	0	611		
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	no
рН		24/year. Min 15 days apart	2	8.1	8.2	6.5-9.0	no
Temperature	Degrees Celcius	24/year. Min 15 days apart	2	23	25	35	no
Total Suspended Solids	Milligrams per litre	24/year. Min 15 days apart	2	9	18	50	no
Volume of Liquids Discharged	Kilolitres per day	Daily	Continuous	33638	37386		no

Comment:

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	<0.06	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	0.02	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	8.1	8.2	6.5-11.0 (6.5-11.0)	no
Temperature	Degrees Celcius	Every 8 days	4	22	25	40 (40)	no
Total Iron	Milligrams per litre	Every 8 days	4	0.13	0.21	7 (100)	no
Total Suspended Solids	Milligrams per litre	Every 8 days	4	12	15	70 (500)	no
Volume of Liquids Discharged	Kilolitres per day	Daily	Continuous	1720	2481		

Comment:



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	8.1	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	22	24	40 (40)	no
Total Suspended Solids	Milligrams per litre	Every 8 days	2	7	12	100 (200)	no
Total Zinc	Milligrams per litre	Every 8 days	2	<0.05	0.09	3 (3)	no
Volume of Liquids Discharged	Kilolitres per day	Daily	Continuous	26527	49957		

Comment:

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	Special frequency 11	0			7.0 (7.0)	no
Copper	Milligrams per litre	Special frequency 11	0			1.000	no
Cyanide	Milligrams per litre	Special frequency 11	0			0.20 (0.20)	no
Filtrable Iron	Milligrams per litre	Special frequency 11	0			0.5 (0.5)	no
Fluoride	Milligrams per litre	Special frequency 11	0			50 (50)	no
рН		Special frequency 11	0			6.5-9.0 (6.5-9.0)	no
Temperature	Degrees Celcius	Special frequency 11	0			45 (45)	no
Total Iron	Milligrams per litre	Special frequency 11	0			7 (20)	no
Total Suspended Solids	Milligrams per litre	Special frequency 11	0			100 (200)	no
Total Zinc	Milligrams per litre	Special frequency 11	0			3 (3)	no
Volume of Liquids Discharged	Kilolitres per day	Daily	Continuous	0	0		

Comment: