



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

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

[Link to Environment Protection Licence EPL6092](#)

LICENCE MONITORING DATA
MONTHLY SUMMARY REPORT

for

1 Nov 2012 to 30 Nov 2012

Stack Air Monitoring Requirements

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





Point 8:

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	24.00	24.00	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	0.00051	0.00051		no
Cadmium	Milligrams per cubic metre	Quarterly in duplicate	2	0.00029	0.00034		no
Carbon Dioxide	Percent	Quarterly in duplicate	24	4.600	5.600		no
Dioxins & Furans (15.7% Oxygen correction)	Nanograms per cubic metre	Quarterly in duplicate	2	0.0069	0.0075	0.3000	no
Dry Gas Density	Kilograms per cubic metre	Quarterly in duplicate	36	1.32	1.32		no
Fine Particulates	Milligrams per cubic metre	Quarterly in duplicate	2	2.10	2.30		no
Hydrogen Chloride	Milligrams per cubic metre	Quarterly in duplicate	2	22.00	28.00		no
Hydrogen Fluoride	Milligrams per cubic metre	Quarterly in duplicate	2	2.0000	3.3000		no
Lead	Milligrams per cubic metre	Quarterly in duplicate	2	0.0130	0.0150		no
Manganese	Milligrams per cubic metre	Quarterly in duplicate	2	0.0032	0.0045		no
Moisture	Percent	Quarterly in duplicate	36	8.00	11.00		no
Molecular Weight of stack gases	grams per gram mole	Quarterly in duplicate	36	29.00	29.60		no
Nickel	Milligrams per cubic metre	Quarterly in duplicate	2	0.00026	0.00034		no
Nitrogen Oxides	Milligrams per cubic metre	Quarterly	24	242.00	288.00	2,000.00	no
Oxygen (O2)	Percent	Quarterly in duplicate	24	16.00	17.00		no
Solid Particles	Milligrams per cubic metre	Quarterly in duplicate	2	9.10	9.40	20.00	no
Sulfuric acid mist and sulphur trioxide (as SO3)	Milligrams per cubic metre	Quarterly in duplicate	2	1.20	1.40	100.00	no
Sulphur Dioxide - UV	Milligrams per cubic metre	Quarterly	24	12.00	69.00	1,000.00	no
Temperature	Degrees Celcius	Quarterly in duplicate	36	143.00	146.00		no
Velocity	Metres per second	Quarterly in duplicate	36	16.00	18.00		no
Volumetric flowrate	Cubic metres per second	Quarterly in duplicate	36	310.00	350.00		no



Comment:

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	2	4.60	6.70	50.00	no

Comment:



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PO Box 1854
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Ambient Air Monitoring Requirements

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

Point 140: Residential Receiver 1 (South of Licenced site)

Pollutant	Units of Measure	Monitoring frequency required by licence	No. of times measured during month	Min. Value	Mean Value	Median Value	Max. Value
Ash	Grams per square metre per month	Monthly	1	1.50	1.50	1.50	1.50
Benzene	Parts per billion	Every 6 days	5	0.1600	0.3100	0.3700	0.4400
Insoluble Solid	Grams per square metre per month	Monthly	1	2.40	2.40	2.40	2.40
Iron	Micrograms per cubic metre	Every 6 days	5	3.10	6.10	5.50	10.00
Polycyclic aromatic hydrocarbons	Nanograms per cubic metre	24 hour period every 6 days	5	2.70	8.22	5.90	19.00
Polycyclic aromatic hydrocarbons	Nanograms per cubic metre	A weekly sample when the wind is blowing wind direction 0-60 degrees.	1	26.00	26.00	26.00	26.00
Total suspended particles	Micrograms per cubic metre	Every 6 days	4*	63.00	105.75	110.00	140.00
Zinc	Micrograms per cubic metre	Every 6 days	5	<0.13	0.08	0.07	0.15

Comment: * One sample compromised due to analytical error

Point 141: Residential Receiver 2 (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	0.1400	0.2240	0.2100	0.3700
Iron	Micrograms per cubic metre	Every 6 days	5	4.70	8.36	7.50	14.00
Polycyclic aromatic hydrocarbons	Nanograms per cubic metre	24 hour period every 6 days.	5	1.50	3.94	3.50	6.40
Total suspended particles	Micrograms per cubic metre	Every 6 days	4*	68.00	117.00	130.00	140.00
Zinc	Micrograms per cubic metre	Every 6 days	5	<0.13	0.07	0.07	<0.13
Comment: * One sample compromised due to analytical error							

Point 142: Residential Receiver 3 (located South 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	8.50	10.66	9.10	17.00
Total suspended particles	Micrograms per cubic metre	Every 6 days	4*	75.00	123.75	135.00	150.00
Zinc	Micrograms per cubic metre	Every 6 days	5	0.13	0.33	0.32	0.61
Comment: * One sample compromised due to analytical error							

Point 143: Residential Receiver 4 (located North East 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
Ash	Grams per square metre per month	Monthly	1	1.30	1.30	1.30	1.30
Insoluble Solid	Grams per square metre per month	Monthly	1	2.20	2.20	2.20	2.20
Iron	Micrograms per cubic metre	Every 6 days	5	0.46	1.02	0.86	2.40
Total suspended particles	Micrograms per cubic metre	Every 6 days	4*	48.00	71.00	68.00	100.00
Zinc	Micrograms per cubic metre	Every 6 days	5	<0.12	0.06	0.07	<0.13
Comment: * One sample compromised due to analytical error							

Point 144: Residential Receiver 5 (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
Ash	Grams per square metre per month	Monthly	1	2.00	2.00	2.00	2.00
Insoluble Solid	Grams per square metre per month	Monthly	1	3.50	3.50	3.50	3.50
Comment:							

Point 145: Residential Receiver 6 (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
Ash	Grams per square metre per month	Monthly	1	2.00	2.00	2.00	2.00
Insoluble Solid	Grams per square metre per month	Monthly	1	3.20	3.20	3.20	3.20
Comment:							

Point 146: Residential Receiver 7 (located North 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
Ash	Grams per square metre per month	Monthly	1	1.30	1.30	1.30	1.30
Insoluble Solid	Grams per square metre per month	Monthly	1	1.80	1.80	1.80	1.80
Comment:							

Point 147: Residential Receiver 8 (located South East 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
Ash	Grams per square metre per month	Monthly	1	3.90	3.90	3.90	3.90
Insoluble Solid	Grams per square metre per month	Monthly	1	10.50	10.50	10.50	10.50
Comment:							

Point 148: Residential Receiver 9 (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
Ash	Grams per square metre per month	Monthly	1	1.30	1.30	1.30	1.30
Insoluble Solid	Grams per square metre per month	Monthly	1	2.20	2.20	2.20	2.20
Comment:							

Point 149: Residential Receiver 10 (located South 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
Ash	Grams per square metre per month	Monthly	1	1.00	1.00	1.00	1.00
Insoluble Solid	Grams per square metre per month	Monthly	1	1.50	1.50	1.50	1.50
Comment:							

Point 150: Residential Receiver 11 (located South East 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
Polycyclic aromatic hydrocarbons	Nanograms per cubic metre	weekly sample when the wind is blowing wind direction 225-315 degrees	0*				
Comment: * No samples collected, insufficient wind from prescribed direction.							



O4.12:

Meter 1

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	1	1	20.3	21	83.6
Comment:							

Meter 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	1	1	29.5	26.6	88.1
Comment:							

O4.13:

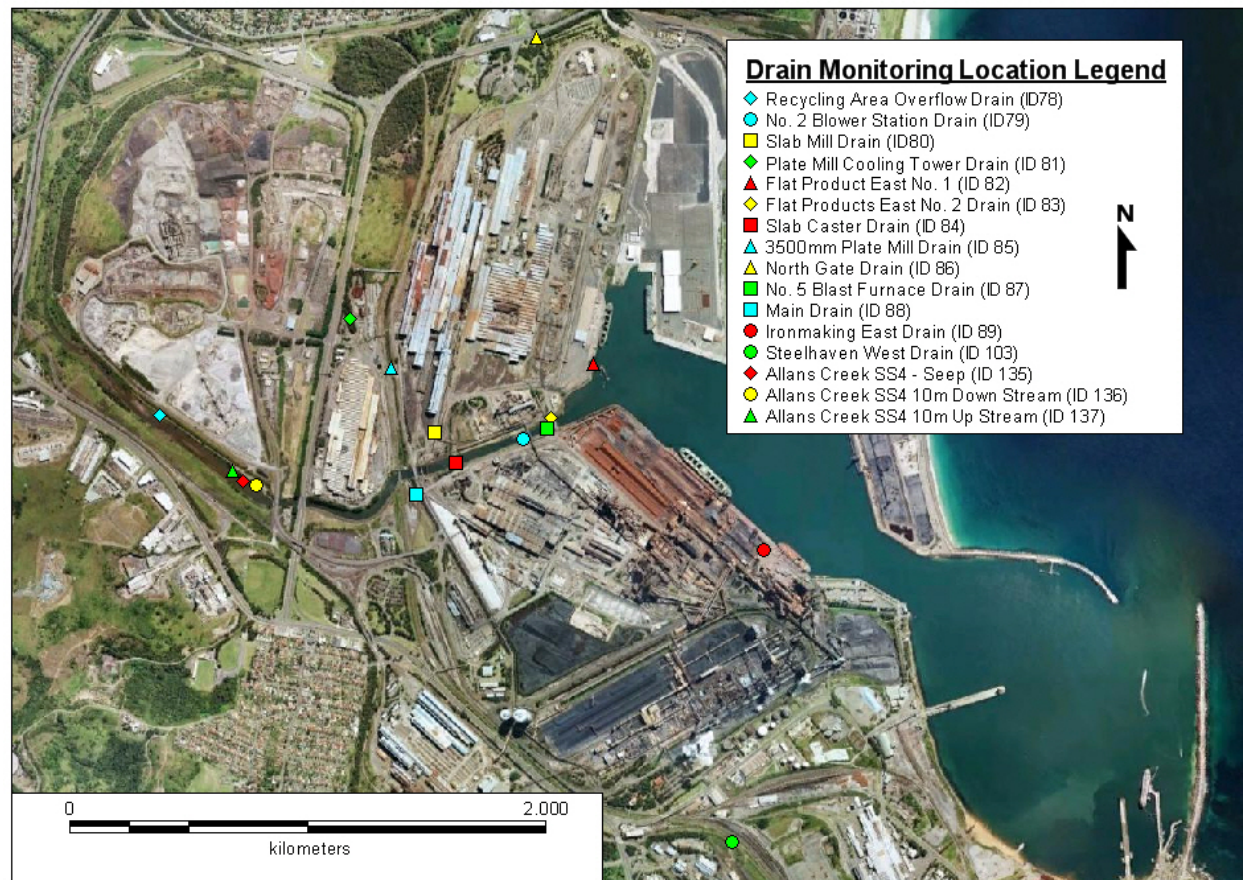
Pollutant	Monitoring frequency required by licence	No. of significant emissions measured during month	100 percentile limit	Exceedance (yes/no) *
Significant emissions of dust from the tipping of kish at the BOS	Monthly	0	4	no
Comment:				

O4.14:

Pollutant	Monitoring frequency required by licence	No. of significant emissions measured during month	100 percentile limit	Exceedance (yes/no) *
Significant emissions of dust from the hot metal pouring from the torpedo ladle into the refractory lined launder box	Monthly	0	4	no
Comment:				

Water and/or Land Monitoring Requirements

EPL6092 Condition M2.4/M2.5/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
Volume of Liquids Discharged	Kilolitres per day	Daily	Continuous	0.00	0.00	0.00	0.00
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	<0.0600	0.1700	5.0 (5.0)	no
BOD	Milligrams per litre	Every 8 days	4	<2.00	<2.00	20 (20)	no
Cadmium	Milligrams per litre	Every 8 days	4	<0.005	<0.005	0.06 (0.06)	no
Cyanide	Milligrams per litre	Every 4 days	8	<0.0050	0.0160	0.30 (0.30)	no
Filtrable Iron	Milligrams per litre	Every 8 days	4	<0.0100	<0.0100	0.3 (0.3)	no
Lead	Milligrams per litre	Every 8 days	4	<0.020	<0.020	0.1 (0.1)	no
Oil and Grease	Milligrams per litre	Every 8 days	4	<5.0000	<5.0000	20 (50)	no
pH		Every 8 days	4	8.10	8.20	6.5-9.0 (6.5-9.0)	no
Temperature	Degrees Celcius	Every 8 days	4	26.00	28.00	40 (40)	no
Total Iron	Milligrams per litre	Every 8 days	4	0.0710	0.2500	3 (50)	no
Total Suspended Solids	Milligrams per litre	Every 8 days	4	2.00	16.00	50 (500)	no
Total Zinc	Milligrams per litre	Every 8 days	4	<0.0500	<0.0500	3 (3)	no
Volume of Liquids Discharged	Kilolitres per day	Daily	Continuous	446,861.00	630,519.00		
Comment:							

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) *
Volume of Liquids Discharged	Kilolitres per day	Daily	Continuous	161.00	1,656.00		
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) *
Volume of Liquids Discharged	Kilolitres per day	Daily	Continuous	0.00	502.00		
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) *
Volume of Liquids Discharged	Kilolitres per day	Daily	Continuous	0.00	245.00		
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	<5.0000	<5.0000	20.0000	no
pH		24/year. Min 15 days apart	2	8.10	8.10	6.5-9.0	no
Temperature	Degrees Celcius	24/year. Min 15 days apart	2	22.00	22.00	35.00	no
Total Suspended Solids	Milligrams per litre	24/year. Min 15 days apart	2	2.80	3.20	50.00	no
Volume of Liquids Discharged	Kilolitres per day	Daily	Continuous	29,269.00	33,535.00		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	<0.0600	2.8800	10.0 (10.0)	no
Cadmium	Milligrams per litre	Every 8 days	4	<0.005	<0.005	0.15 (0.15)	no
Chromium (Total)	Milligrams per litre	Every 8 days	4	<0.010	<0.010	0.6 (0.6)	no
Cyanide	Milligrams per litre	Every 8 days	4	<0.0050	0.0070	0.30 (0.30)	no
Filtrable Iron	Milligrams per litre	Every 8 days	4	<0.0100	<0.0100	1.5 (1.5)	no
Lead	Milligrams per litre	Every 8 days	4	<0.020	<0.020	0.5 (0.5)	no
Mercury	Micrograms per litre	Every 8 days	4	<0.10	<0.10	1.5 (1.5)	no
Oil and Grease	Milligrams per litre	Every 8 days	4	<5.0000	<5.0000	20 (20)	no
pH		Every 8 days	4	8.00	8.10	6.5-11.0 (6.5-11.0)	no
Temperature	Degrees Celcius	Every 8 days	4	20.00	21.00	40 (40)	no
Total Iron	Milligrams per litre	Every 8 days	4	0.1500	0.3600	7 (100)	no
Total Suspended Solids	Milligrams per litre	Every 8 days	4	2.80	18.00	70 (500)	no
Volume of Liquids Discharged	Kilolitres per day	Daily	Continuous	943.00	1,467.00		
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 4 days	8	<0.0600	<0.0600	7.5 (7.5)	no
Ammonia	Tonnes per day	Every 4 days	8	0.004	0.004	1.200	no
Cadmium	Milligrams per litre	Every 8 days	4	<0.005	<0.005	0.06 (0.06)	no
Cyanide	Kilograms per day	Every 4 days	8	0.31	0.87	27.00	no
Cyanide	Milligrams per litre	Every 4 days	8	<0.0050	0.0070	0.30 (0.30)	no
Lead	Milligrams per litre	Every 8 days	4	<0.020	<0.020	0.1 (0.1)	no
Oil and Grease	Milligrams per litre	Every 8 days	4	<5.0000	<5.0000	20 (50)	no
Oil and Grease	Tonnes per day	Every 8 days	4	0.31	0.31	2.50	no
pH		Every 8 days	4	8.10	8.20	6.5-9.0 (6.5-9.0)	no
Phenol	Kilograms per day	Every 8 days	4	0.31	1.73	35.00	no
Phenol	Milligrams per litre	Every 8 days	4	<0.0050	0.0140	0.45 (0.45)	no
Temperature	Degrees Celcius	Every 8 days	4	29.00	31.00	40 (40)	no
Total Suspended Solids	Milligrams per litre	Every 4 days	8	3.20	13.00	100 (200)	no
Total Suspended Solids	Tonnes per day	Every 4 days	8	0.40	1.61	12.00	no
Total Zinc	Kilograms per day	Every 8 days	4	3.08	3.09	35.00	no
Total Zinc	Milligrams per litre	Every 8 days	4	<0.0500	<0.0500	3 (3)	no
Volume of Liquids Discharged	Kilolitres per day	Daily	Continuous	122,805.00	129,068.00		
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	Every 4 days	8	0.2800	1.4000	7.0 (7.0)	no
Arsenic	Micrograms per litre	Every 8 days	4	<10.00	<10.00	50.00	no
Cadmium	Milligrams per litre	Every 8 days	4	<0.005	<0.005	0.05 (0.05)	no
Chromium (Total)	Milligrams per litre	Every 8 days	4	<0.010	<0.010	0.350	no
Copper	Milligrams per litre	Every 8 days	4	<0.01	<0.01	1.00	no
Cyanide	Milligrams per litre	Every 4 days	8	<0.0050	0.0070	0.20 (0.20)	no
Filtrable Iron	Milligrams per litre	Every 8 days	4	0.0130	0.0290	0.5 (0.5)	no
Fluoride	Milligrams per litre	Every 8 days	4	<1.00	1.00	50 (50)	no
Lead	Milligrams per litre	Every 8 days	4	<0.020	<0.020	0.2 (0.2)	no
Mercury	Micrograms per litre	Every 8 days	4	<0.10	<0.10	3.0 (3.0)	no
Oil and Grease	Milligrams per litre	Every 8 days	4	<5.0000	<5.0000	20 (20)	no
pH		Every 8 days	4	8.00	8.20	6.5-9.0 (6.5-9.0)	no
Selenium	Micrograms per litre	Every 8 days	4	<10.00	<10.00	20.00	no
Temperature	Degrees Celcius	Every 8 days	4	21.00	23.00	45 (45)	no
Total Iron	Milligrams per litre	Every 8 days	4	0.0650	0.2900	7 (20)	no
Total Suspended Solids	Milligrams per litre	Every 4 days	8	<2.00	14.00	100 (200)	no
Total Zinc	Milligrams per litre	Every 8 days	4	<0.0500	<0.0500	3 (3)	no
Volume of Liquids Discharged	Kilolitres per day	Daily	Continuous	1,790.00	4,592.00		
Comment:							

Point 135:

Pollutant	Units of Measure	Monitoring frequency required by licence	No. of times measured during month	Min. Value	Mean Value	Median Value	Max. Value
Ammonia	Milligrams per litre	1 sample in Licence. Q1. 1 sample in Q3. 1 sample following a rainfall event of more than 10mm in a 24 hour period.	1	1.3700	1.3700	1.3700	1.3700
pH		1 sample in Licence. Q1. 1 sample in Q3. 1 sample following a rainfall event of more than 10mm in a 24 hour period.	1	8.80	8.80	8.80	8.80
Temperature	Degrees Celcius	1 sample in Licence. Q1. 1 sample in Q3. 1 sample following a rainfall event of more than 10mm in a 24 hour period.	1	20.00	20.00	20.00	20.00
Comment:							

Point 136:

Pollutant	Units of Measure	Monitoring frequency required by licence	No. of times measured during month	Min. Value	Mean Value	Median Value	Max. Value
Ammonia	Milligrams per litre	1 sample in Licence. Q1. 1 sample in Q3. 1 sample following a rainfall event of more than 10mm in a 24 hour period.	1	<0.0600	0.0300	0.0300	<0.0600
pH		1 sample in Licence. Q1. 1 sample in Q3. 1 sample following a rainfall event of more than 10mm in a 24 hour period.	1	8.10	8.10	8.10	8.10
Temperature	Degrees Celcius	1 sample in Licence. Q1. 1 sample in Q3. 1 sample following a rainfall event of more than 10mm in a 24 hour period.	1	20.00	20.00	20.00	20.00
Comment:							

Point 137:

Pollutant	Units of Measure	Monitoring frequency required by licence	No. of times measured during month	Min. Value	Mean Value	Median Value	Max. Value
Ammonia	Milligrams per litre	1 sample in Licence. Q1. 1 sample in Q3. 1 sample following a rainfall event of more than 10mm in a 24 hour period.	1	<0.0600	0.0300	0.0300	<0.0600
pH		1 sample in Licence. Q1. 1 sample in Q3. 1 sample following a rainfall event of more than 10mm in a 24 hour period.	1	8.30	8.30	8.30	8.30
Temperature	Degrees Celcius	1 sample in Licence. Q1. 1 sample in Q3. 1 sample following a rainfall event of more than 10mm in a 24 hour period.	1	21.00	21.00	21.00	21.00
Comment:							