



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

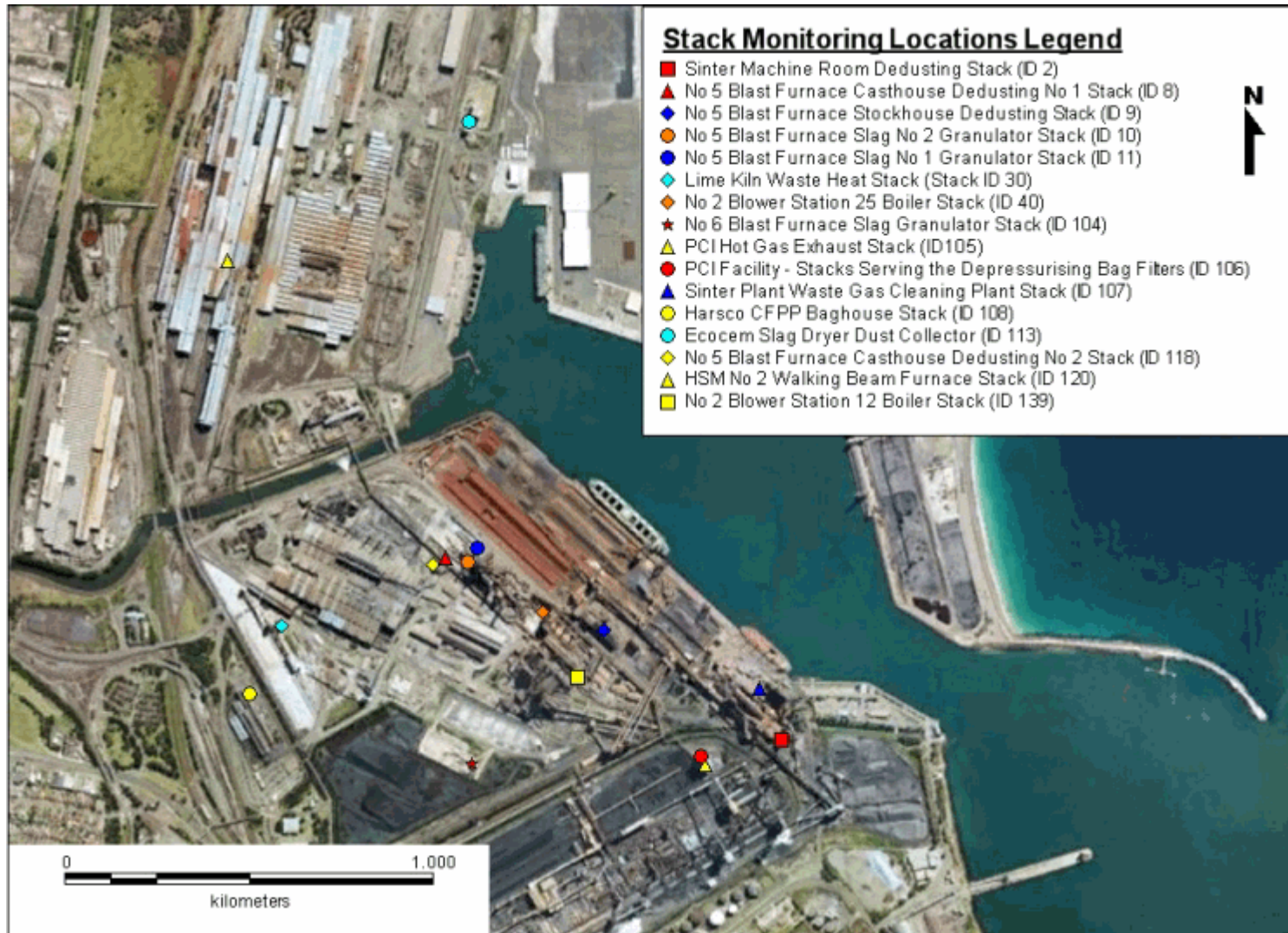
for

1 Mar 2016 to 31 Mar 2016

Monthly (March 2016) Report Published: 25, May, 2016

Stack Air Monitoring Requirements

EPL6092 Conditions M2.2/M2.3/M8.2/E1.4/O4.14/O4.15





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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	12.00	12.00	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	0.00067	0.00069		no
Cadmium	Milligrams per cubic metre	Quarterly in duplicate	2	0.00042	0.00047		no
Carbon Dioxide	Percent	Quarterly in duplicate	24	4.700	6.800		no
Dioxins & Furans (15.7% Oxygen correction)	Nanograms per cubic metre	Quarterly in duplicate	2	0.022000	0.022000	0.300000	no
Dry Gas Density	Kilograms per cubic metre	Quarterly in duplicate	36	1.31	1.34		no
Fine Particulates	Milligrams per cubic metre	Quarterly in duplicate	2	5.50	6.30		no
Hydrogen Chloride	Milligrams per cubic metre	Quarterly in duplicate	2	45.00	60.00		no
Hydrogen Fluoride	Milligrams per cubic metre	Quarterly in duplicate	2	1.7000	2.3000		no
Lead	Milligrams per cubic metre	Quarterly in duplicate	2	0.0190	0.0200		no
Manganese	Milligrams per cubic metre	Quarterly in duplicate	2	0.0028	0.0028		no
Moisture	Percent	Quarterly in duplicate	36	9.50	13.00		no
Molecular Weight of stack gases	grams per gram mole	Quarterly in duplicate	36	29.40	30.00		no
Nickel	Milligrams per cubic metre	Quarterly in duplicate	2	0.00058	0.00100		no
Nitrogen Oxides	Milligrams per cubic metre	Quarterly	24	252.00	348.00	2,000.00	no
Oxygen (O2)	Percent	Quarterly in duplicate	24	16.00	18.00		no
Solid Particles	Milligrams per cubic metre	Quarterly in duplicate	2	7.30	13.00	20.00	no
Sulfuric acid mist and sulphur trioxide (as SO3)	Milligrams per cubic metre	Quarterly in duplicate	2	3.70	4.00	100.00	no
Sulphur Dioxide - UV	Milligrams per cubic metre	Quarterly	24	190.00	437.00	1,000.00	no
Temperature	Degrees Celcius	Quarterly in duplicate	36	136.00	144.00		no
Velocity	Metres per second	Quarterly in duplicate	36	15.00	18.00		no
Volumetric flowrate	Cubic metres per second	Quarterly in duplicate	36	300.00	360.00		no

Comment:

Point 113:

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 (18% Oxygen correction)	Milligrams per cubic metre	Yearly	4	21.00	24.00	80.00	no

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	0.97	0.97	1.20	no
Moisture	Percent	Quarterly	8	5.40	6.20		no
Molecular Weight of stack gases	grams per gram mole	Quarterly	8	28.90	28.90		no
Temperature	Degrees Celcius	Quarterly	8	34.00	37.00		no
Velocity	Metres per second	Quarterly	8	2.00	2.40		no
Volumetric flowrate	Cubic metres per second	Quarterly	9	21.00	26.00		no

Comment:

Point 138:

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	Every 2 years	4	1.32	1.32		no
Moisture	Percent	Every 2 years	4	13.00	13.00		no
Molecular Weight of stack gases	grams per gram mole	Every 2 years	4	29.50	29.50		no
Nitrogen Oxides (3% Oxygen correction)	Milligrams per cubic metre	Every 2 years	4	53.00	55.00	200.00	no
Oxygen (O2)	Percent	Every 2 years	4	9.40	9.70		no
Temperature	Degrees Celcius	Every 2 years	4	130.00	130.00		no
Velocity	Metres per second	Every 2 years	4	4.50	4.50		no
Volumetric flowrate	Cubic metres per second	Every 2 years	4	7.40	7.40		no
Comment:							

Point O4.14:

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	1	4	no
Comment:				

Point O4.15:

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 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	0.31	4.7	4.5	9.2
Comment: Elevated results due to analyser calibration activities.							

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	0.45	3.1	2.8	25.4
Comment: Elevated result due to start up activities.							



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Ambient Air Monitoring Requirements

EPL6092 Condition M2.2

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	2.8	18.8	14.3	44.7
Benzene	Parts per billion	Every 6 days	5	0.0140	0.1146	0.1400	0.2300
Iron	Micrograms per cubic metre	Every 6 days	5	0.47	3.69	2.50	9.30
Lead	Micrograms per cubic metre	Every 6 days	5	<0.06	< 0.06	< 0.06	<0.06
Particulates - Deposited Matter	Grams per square metre per month	Monthly	1	2.30	2.30	2.30	2.30
Polycyclic aromatic hydrocarbons	Nanograms per cubic metre	24 hour period every 6 days.	5	0.60	3.52	1.70	7.90
Total suspended particles	Micrograms per cubic metre	Every 6 days	5	22.00	56.20	44.00	100.00
Zinc	Micrograms per cubic metre	Every 6 days	5	<0.11	<0.11	<0.11	0.16
Comment:							

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

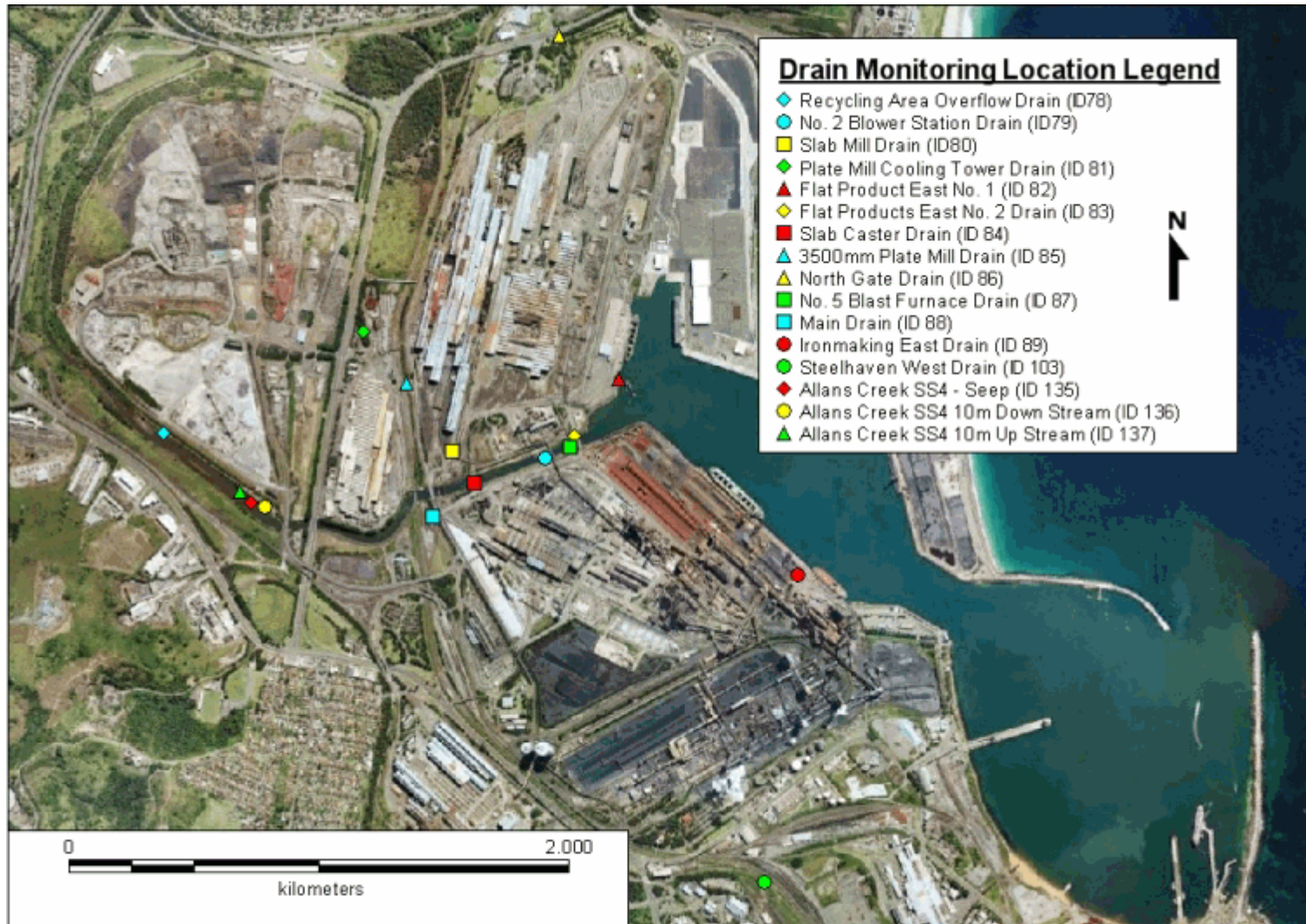
Pollutant	Units of Measure	Monitoring frequency required by licence	No. of times measured during month	Min. Value	Mean Value	Median Value	Max. Value
Fine Particulates	Micrograms per cubic metre	Continuous	Continuous	9.6	22.4	21.1	39.5
Benzene	Parts per billion	Every 6 days	5	0.0170	0.0562	0.0670	0.0800
Iron	Micrograms per cubic metre	Every 6 days	5	0.83	2.47	1.80	5.50
Lead	Micrograms per cubic metre	Every 6 days	5	<0.06	< 0.06	< 0.06	<0.06
Particulates - Deposited Matter	Grams per square metre per month	Monthly	1	1.80	1.80	1.80	1.80
Polycyclic aromatic hydrocarbons	Nanograms per cubic metre	24 hour period every 6 days.	5	0.61	1.07	1.00	1.80
Total suspended particles	Micrograms per cubic metre	Every 6 days	5	35.00	56.80	58.00	83.00
Zinc	Micrograms per cubic metre	Every 6 days	5	<0.11	0.14	0.13	0.26
Comment:							

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	0.37	1.39	1.10	2.90
Lead	Micrograms per cubic metre	Every 6 days	5	<0.06	<0.06	< 0.06	<0.06
Total suspended particles	Micrograms per cubic metre	Every 6 days	5	19.00	35.40	33.00	61.00
Zinc	Micrograms per cubic metre	Every 6 days	5	<0.11	< 0.11	< 0.11	0.22
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	<0.0600	5.0 (5.0)	no
Cyanide	Milligrams per litre	Every 8 days	4	<0.0200	<0.0200	0.30 (0.30)	no
Filtrable Iron	Milligrams per litre	Every 8 days	4	<0.0100	0.0330	0.3 (0.3)	no
Oil and Grease	Milligrams per litre	Every 8 days	4	<5.0000	<5.0000	20 (50)	no
pH		Every 8 days	4	7.90	8.20	6.5-9.0 (6.5-9.0)	no
Temperature	Degrees Celcius	Every 8 days	4	28.50	29.50	40 (40)	no
Total Iron	Milligrams per litre	Every 8 days	4	0.1290	0.5200	3 (50)	no
Total Suspended Solids	Milligrams per litre	Every 8 days	4	6.00	20.00	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	521,504.00	691,501.00		
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	2,181.00	4,513.00		
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	116.00	951.00		
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	239.00		
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	8.00	8.10	6.5-9.0	no
Temperature	Degrees Celcius	24/year. Min 15 days apart	2	24.50	26.50	35.00	no
Total Suspended Solids	Milligrams per litre	24/year. Min 15 days apart	2	9.60	9.60	50.00	no
Volume of Liquids Discharged	Kilolitres per day	Daily	Continuous	34,960.00	35,919.00		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	<0.0600	10.0 (10.0)	no
Cyanide	Milligrams per litre	Every 8 days	4	<0.0200	<0.0200	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	<0.50	<0.50	1.5 (1.5)	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	22.50	24.50	40 (40)	no
Total Iron	Milligrams per litre	Every 8 days	4	0.1830	0.3660	7 (100)	no
Total Suspended Solids	Milligrams per litre	Every 8 days	4	5.60	19.00	70 (500)	no
Volume of Liquids Discharged	Kilolitres per day	Daily	Continuous	2,225.00	2,528.00		
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 8 days	4	<0.0600	<0.0600	7.5 (7.5)	no
Ammonia	Tonnes per day	Every 8 days	4	0.0	0.0	1.200	no
Cyanide	Kilograms per day	Every 8 days	4	0.0	0.0	27.00	no
Cyanide	Milligrams per litre	Every 8 days	4	<0.0200	<0.0200	0.30 (0.30)	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	0.0	0.0	2.50	no
pH		Every 8 days	4	8.00	8.10	6.5-9.0 (6.5-9.0)	no
Phenol	Kilograms per day	Every 8 days	4	0.0	0.0	35.00	no
Phenol	Milligrams per litre	Every 8 days	4	<0.2000	<0.2000	0.45 (0.45)	no
Temperature	Degrees Celcius	Every 8 days	4	21.50	24.50	40 (40)	no
Total Suspended Solids	Milligrams per litre	Every 8 days	4	<3.00	8.80	100 (200)	no
Total Suspended Solids	Tonnes per day	Every 8 days	4	0.23	1.40	12.00	no
Total Zinc	Kilograms per day	Every 8 days	4	0.0	15.93	35.00	no
Total Zinc	Milligrams per litre	Every 8 days	4	<0.0500	0.1000	3 (3)	no
Volume of Liquids Discharged	Kilolitres per day	Daily	Continuous	150,810.00	159,821.00		
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 8 days	4	<0.0600	<0.0600	7.0 (7.0)	no
Copper	Milligrams per litre	Every 8 days	4	<0.010	<0.010	1.000	no
Cyanide	Milligrams per litre	Every 8 days	4	<0.0200	<0.0200	0.20 (0.20)	no
Filtrable Iron	Milligrams per litre	Every 8 days	4	0.0110	0.0220	0.5 (0.5)	no
Fluoride	Milligrams per litre	Every 8 days	4	3.60	5.90	50 (50)	no
pH		Every 8 days	4	8.00	8.30	6.5-9.0 (6.5-9.0)	no
Temperature	Degrees Celcius	Every 8 days	4	24.50	26.50	45 (45)	no
Total Iron	Milligrams per litre	Every 8 days	4	0.3970	1.1000	7 (20)	no
Total Suspended Solids	Milligrams per litre	Every 8 days	4	6.40	17.00	100 (200)	no
Total Zinc	Milligrams per litre	Every 8 days	4	0.0600	0.3100	3 (3)	no
Volume of Liquids Discharged	Kilolitres per day	Daily	Continuous	5,486.00	9,012.00		
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	<0.0600	<0.0600	<0.0600	<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	8.40	8.40	8.40	8.40
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	30.50	30.50	30.50	30.50
Comment:							