



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

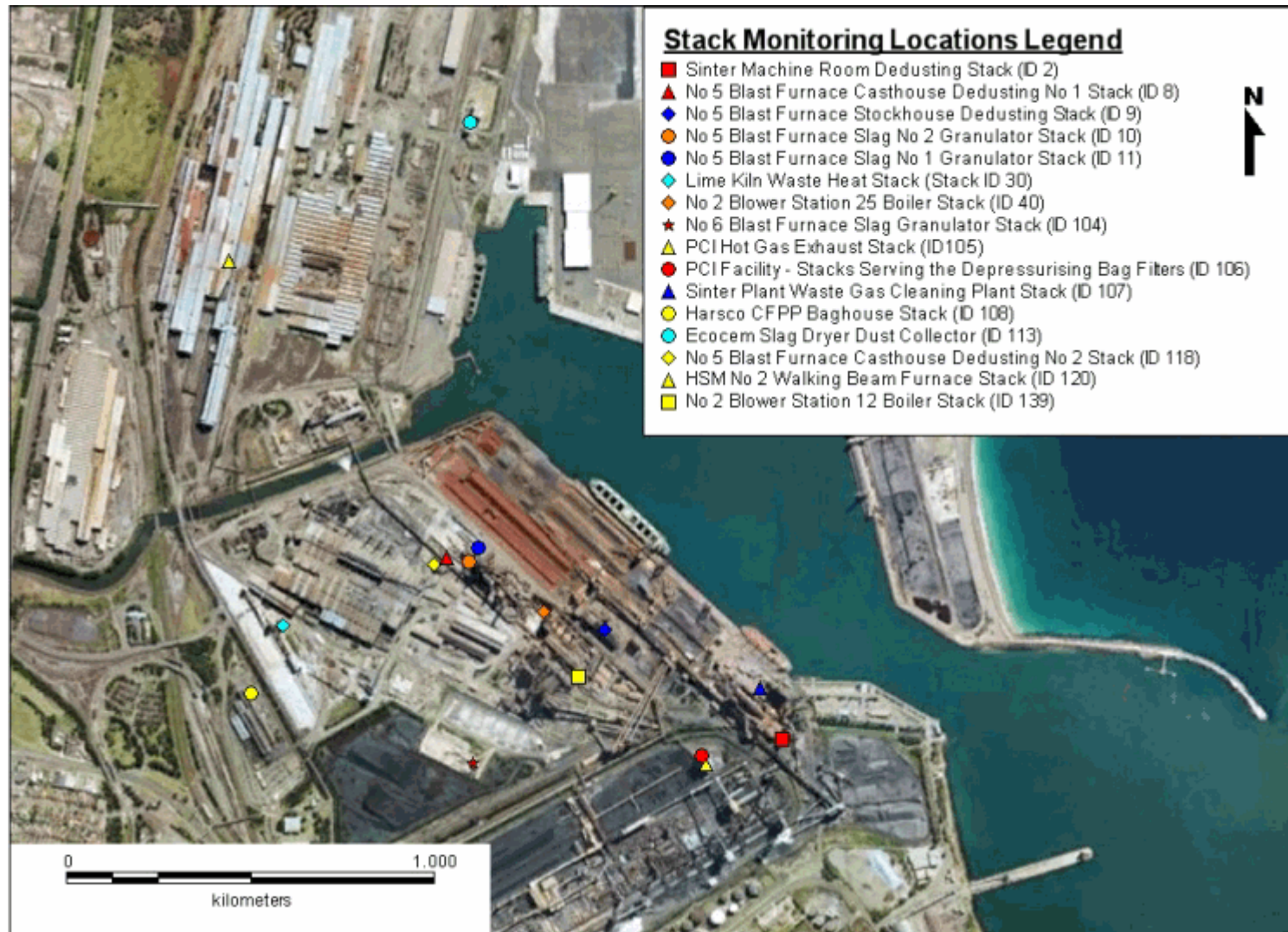
for

1 May 2016 to 31 May 2016

Monthly (May 2016) Report Published: 26, July, 2016

Stack Air Monitoring Requirements

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



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	0.00020	0.00036		no
Cadmium	Milligrams per cubic metre	Quarterly in duplicate	2	0.00036	0.00058		no
Carbon Dioxide	Percent	Quarterly in duplicate	24	1.200	6.700		no
Dry Gas Density	Kilograms per cubic metre	Quarterly in duplicate	34	1.32	1.33		no
Fine Particulates	Milligrams per cubic metre	Quarterly in duplicate	2	4.00	4.30		no
Hydrogen Chloride	Milligrams per cubic metre	Quarterly in duplicate	2	34.00	41.00		no
Hydrogen Fluoride	Milligrams per cubic metre	Quarterly in duplicate	2	1.1000	1.4000		no
Lead	Milligrams per cubic metre	Quarterly in duplicate	2	0.0190	0.0420		no
Manganese	Milligrams per cubic metre	Quarterly in duplicate	2	0.0071	0.0390		no
Moisture	Percent	Quarterly in duplicate	34	9.40	13.00		no
Molecular Weight of stack gases	grams per gram mole	Quarterly in duplicate	34	29.70	29.70		no
Nickel	Milligrams per cubic metre	Quarterly in duplicate	2	0.00075	0.00097		no
Nitrogen Oxides	Milligrams per cubic metre	Quarterly	24	32.00	363.00	2,000.00	no
Oxygen (O2)	Percent	Quarterly in duplicate	24	15.00	20.00		no
Solid Particles	Milligrams per cubic metre	Quarterly in duplicate	2	5.00	6.40	20.00	no
Sulfuric acid mist and sulphur trioxide (as SO3)	Milligrams per cubic metre	Quarterly in duplicate	2	42.00	45.00	100.00	no
Sulphur Dioxide - UV	Milligrams per cubic metre	Quarterly	24	69.00	90.00	1,000.00	no
Temperature	Degrees Celcius	Quarterly in duplicate	34	136.00	142.00		no
Velocity	Metres per second	Quarterly in duplicate	34	14.00	18.00		no
Volumetric flowrate	Cubic metres per second	Quarterly in duplicate	34	280.00	350.00		no

Comment:

Point 120:

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) *
Cadmium (7% Oxygen correction)	Milligrams per cubic metre	Yearly	1	<0.00034	<0.00034	0.10000	no
Carbon Dioxide	Percent	Yearly	4	3.200	3.800		no
Carbon Monoxide (7% Oxygen correction)	Milligrams per cubic metre	Yearly	3	<3.00	<3.00	400.00	no
Dry Gas Density	Kilograms per cubic metre	Yearly	9	1.33	1.34		no
Mercury (7% Oxygen correction)	Milligrams per cubic metre	Yearly	1	<0.00034	<0.00034	0.10000	no
Moisture	Percent	Yearly	9	9.80	10.00		no
Molecular Weight of stack gases	grams per gram mole	Yearly	9	29.70	30.00		no
Nitrogen Oxides (7% Oxygen correction)	Milligrams per cubic metre	Yearly	4	527.00	604.00	650.00	no
Oxygen (O2)	Percent	Yearly	4	13.00	14.00		no
Sulphur Dioxide (7% Oxygen correction)	Milligrams per cubic metre	Yearly	3	668.00	708.00	1,250.00	no
Temperature	Degrees Celcius	Yearly	9	183.00	246.00		no
Type 1 and 2 substances in aggregate (7% Oxygen correction)	Milligrams per cubic metre	Yearly	1	0.0600	0.0600	1.0000	no
Velocity	Metres per second	Yearly	9	15.00	23.00		no
Volumetric flowrate	Cubic metres per second	Yearly	9	62.00	81.00		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	0	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	2.7	2	12.4
Comment: Elevated results associated with Plant start-up, Plant shutdown or analyser calibration checks.							

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	0.2	3.4	3.2	29.1
Comment: Elevated results associated with Plant start-up.							



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Ambient Air Monitoring Requirements

EPL6092 Condition M2.2 (Cont.)

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	5.5	16.9	14.9	46.1
Benzene	Parts per billion	Every 6 days	6	0.0390	0.1078	0.0725	0.3100
Iron	Micrograms per cubic metre	Every 6 days	6	0.18	1.00	0.61	2.40
Lead	Micrograms per cubic metre	Every 6 days	6	<0.05	0.03	0.03	<0.06
Particulates - Deposited Matter	Grams per square metre per month	Monthly	1	1.20	1.20	1.20	1.20
Polycyclic aromatic hydrocarbons	Nanograms per cubic metre	24 hour period every 6 days.	6	0.59	1.89	0.68	7.10
Total suspended particles	Micrograms per cubic metre	Every 6 days	6	12.00	31.83	28.00	76.00
Zinc	Micrograms per cubic metre	Every 6 days	6	<0.11	0.07	0.06	0.14
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	7.9	27	25	61.1
Benzene	Parts per billion	Every 6 days	6	0.0570	0.1562	0.1350	0.3300
Iron	Micrograms per cubic metre	Every 6 days	6	0.70	2.07	2.35	2.90
Lead	Micrograms per cubic metre	Every 6 days	6	<0.05	0.03	0.03	<0.06
Particulates - Deposited Matter	Grams per square metre per month	Monthly	1	0.80	0.80	0.80	0.80
Polycyclic aromatic hydrocarbons	Nanograms per cubic metre	24 hour period every 6 days.	6	0.92	1.95	1.95	3.00
Total suspended particles	Micrograms per cubic metre	Every 6 days	6	25.00	54.00	52.50	85.00
Zinc	Micrograms per cubic metre	Every 6 days	6	<0.11	0.18	0.20	0.28
Comment:							

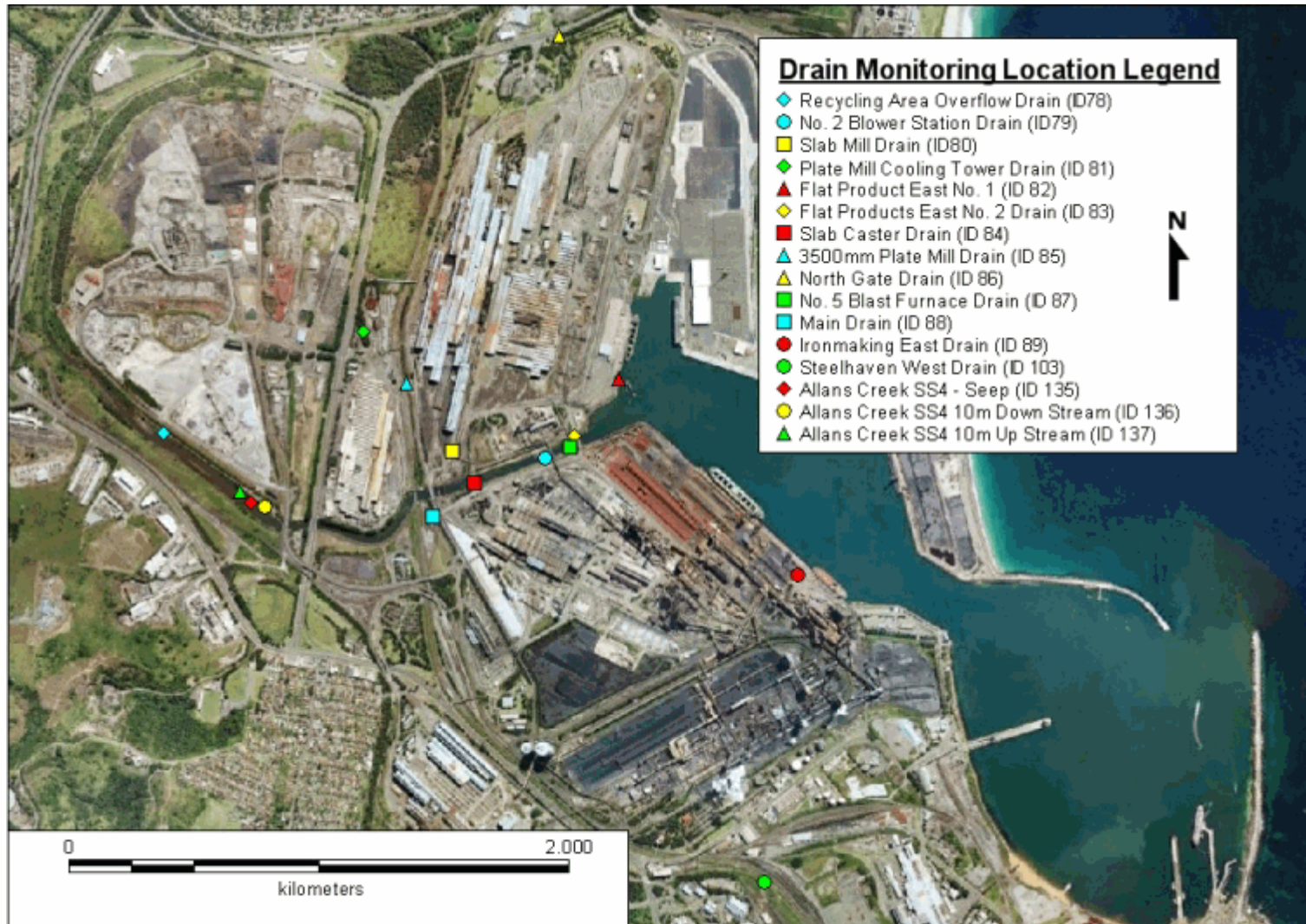


Point 153: Receiver 3 (located west of licensed site)

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	6	0.40	1.72	1.70	3.70
Lead	Micrograms per cubic metre	Every 6 days	6	<0.05	0.03	0.03	<0.06
Total suspended particles	Micrograms per cubic metre	Every 6 days	6	13.00	41.50	40.50	62.00
Zinc	Micrograms per cubic metre	Every 6 days	6	<0.11	0.50	0.34	1.20
Comment:							

Water and/or Land Monitoring Requirements

EPL6092 Condition 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
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	0.00	15.42	0.00	478.00
Comment: *No flow at time of sampling.							

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	3	<0.0600	<0.0600	5.0 (5.0)	no
Cyanide	Milligrams per litre	Every 8 days	3	<0.0200	<0.0200	0.30 (0.30)	no
Filtrable Iron	Milligrams per litre	Every 8 days	3	<0.0100	0.0900	0.3 (0.3)	no
Oil and Grease	Milligrams per litre	Every 8 days	3	<5.0000	<5.0000	20 (50)	no
pH		Every 8 days	3	8.00	8.10	6.5-9.0 (6.5-9.0)	no
Temperature	Degrees Celcius	Every 8 days	3	27.00	27.50	40 (40)	no
Total Iron	Milligrams per litre	Every 8 days	3	0.1400	0.4500	3 (50)	no
Total Suspended Solids	Milligrams per litre	Every 8 days	3	4.80	16.00	50 (500)	no
Total Zinc	Milligrams per litre	Every 8 days	3	<0.0500	<0.0500	3 (3)	no
Volume of Liquids Discharged	Kilolitres per day	Daily	Continuous	518,680.00	671,832.00		
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	2,745.00	6,842.00		
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) *
Cyanide	Milligrams per litre	Quarterly grab sample. Min 80 days apart	1	<0.0200	<0.0200	0.30 (0.00)	no
Volume of Liquids Discharged	Kilolitres per day	Daily	Continuous	80.00	2,325.00		
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) *
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	0.00	723.00		
Comment: *No flow at time of sampling.							

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	8.00	6.5-9.0	no
Temperature	Degrees Celcius	24/year. Min 15 days apart	2	21.00	22.50	35.00	no
Total Suspended Solids	Milligrams per litre	24/year. Min 15 days apart	2	18.00	21.00	50.00	no
Volume of Liquids Discharged	Kilolitres per day	Daily	Continuous	34,552.00	35,659.00		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	3	<0.0600	<0.0600	10.0 (10.0)	no
Cyanide	Milligrams per litre	Every 8 days	3	<0.0200	<0.0200	0.30 (0.30)	no
Filtrable Iron	Milligrams per litre	Every 8 days	3	<0.0100	<0.0100	1.5 (1.5)	no
Lead	Milligrams per litre	Every 8 days	3	<0.020	<0.020	0.5 (0.5)	no
Mercury	Micrograms per litre	Every 8 days	3	<0.50	<0.50	1.5 (1.5)	no
pH		Every 8 days	3	8.00	8.10	6.5-11.0 (6.5-11.0)	no
Temperature	Degrees Celcius	Every 8 days	3	21.00	21.50	40 (40)	no
Total Iron	Milligrams per litre	Every 8 days	3	0.1360	0.2700	7 (100)	no
Total Suspended Solids	Milligrams per litre	Every 8 days	3	3.20	16.00	70 (500)	no
Volume of Liquids Discharged	Kilolitres per day	Daily	Continuous	2,116.00	2,517.00		
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	3	<0.0600	<0.0600	7.5 (7.5)	no
Ammonia	Tonnes per day	Every 8 days	3	0.0	0.0	1.200	no
Cyanide	Kilograms per day	Every 8 days	3	0.0	0.0	27.00	no
Cyanide	Milligrams per litre	Every 8 days	3	<0.0200	<0.0200	0.30 (0.30)	no
Oil and Grease	Milligrams per litre	Every 8 days	3	<5.0000	<5.0000	20 (50)	no
Oil and Grease	Tonnes per day	Every 8 days	3	0.0	0.0	2.50	no
pH		Every 8 days	3	8.00	8.10	6.5-9.0 (6.5-9.0)	no
Phenol	Kilograms per day	Every 8 days	3	0.0	0.0	35.00	no
Phenol	Milligrams per litre	Every 8 days	3	<0.2000	<0.2000	0.45 (0.45)	no
Temperature	Degrees Celcius	Every 8 days	3	19.00	21.50	40 (40)	no
Total Suspended Solids	Milligrams per litre	Every 8 days	3	3.20	5.20	100 (200)	no
Total Suspended Solids	Tonnes per day	Every 8 days	3	0.48	0.80	12.00	no
Total Zinc	Kilograms per day	Every 8 days	3	0.0	29.29	35.00	no
Total Zinc	Milligrams per litre	Every 8 days	3	<0.0500	0.2000	3 (3)	no
Volume of Liquids Discharged	Kilolitres per day	Daily	Continuous	145,926.00	163,163.00		
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	9	<0.0600	<0.0600	7.0 (7.0)	no
Copper	Milligrams per litre	Every 8 days	9	<0.010	<0.010	1.000	no
Cyanide	Milligrams per litre	Every 8 days	9	<0.020	<0.0200	0.20 (0.20)	no
Filtrable Iron	Milligrams per litre	Every 8 days	9	<0.0100	0.0280	0.5 (0.5)	no
Fluoride	Milligrams per litre	Every 8 days	9	3.30	5.50	50 (50)	no
pH		Every 8 days	9	8.00	8.40	6.5-9.0 (6.5-9.0)	no
Temperature	Degrees Celcius	Every 8 days	9	21.00	25.00	45 (45)	no
Total Iron	Milligrams per litre	Every 8 days	9	0.2400	1.2000	7 (20)	no
Total Suspended Solids	Milligrams per litre	Every 8 days	9	3.20	29.00	100 (200)	no
Total Zinc	Milligrams per litre	Every 8 days	9	<0.0500	0.0900	3 (3)	no
Volume of Liquids Discharged	Kilolitres per day	Daily	Continuous	7,853.00	10,706.00		
Comment:							