



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

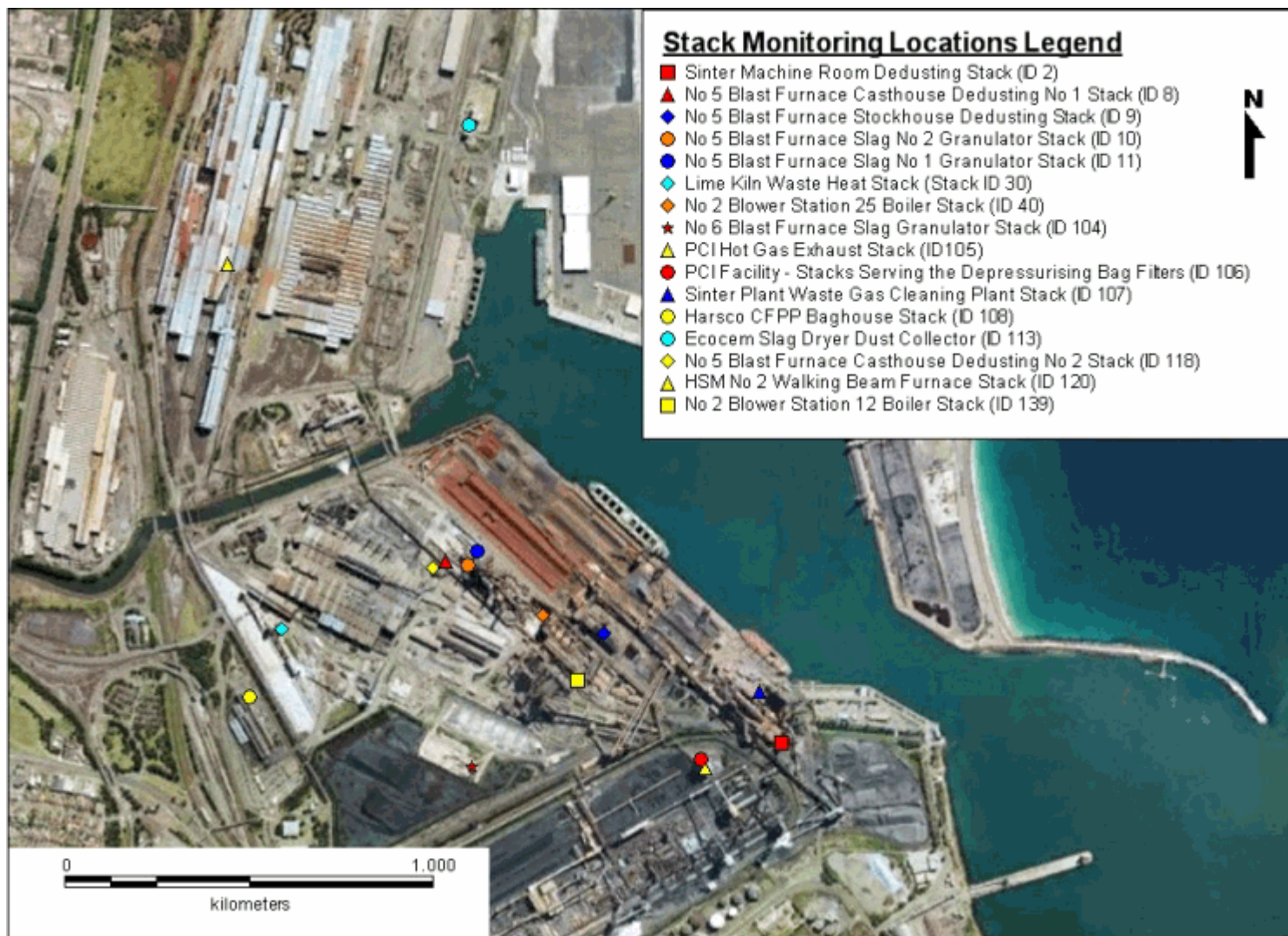
for

1 Jun 2016 to 30 Jun 2016

Monthly (June 2016) Report Published: 10, August, 2016

Stack Air Monitoring Requirements

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



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	<5.00	<5.00	200.00	no
Solid Particles (3% Oxygen correction)	Milligrams per cubic metre	Yearly	1	12.00	12.00	20.00	no
Comment:							

Point 106:

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	<1.00	<1.00	20.00	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) *
Dioxins & Furans (15.7% Oxygen correction)	Nanograms per cubic metre	Quarterly in duplicate	2	0.014000	0.015000	0.300000	no
Dry Gas Density	Kilograms per cubic metre	Quarterly in duplicate	4	1.33	1.33		no
Moisture	Percent	Quarterly in duplicate	4	10.00	10.00		no
Molecular Weight of stack gases	grams per gram mole	Quarterly in duplicate	4	29.90	29.90		no
Sulfuric acid mist and sulphur trioxide (as SO ₃)	Milligrams per cubic metre	Quarterly in duplicate	2	2.00	2.50	100.00	no
Temperature	Degrees Celcius	Quarterly in duplicate	4	135.00	138.00		no
Velocity	Metres per second	Quarterly in duplicate	4	14.00	18.00		no
Volumetric flowrate	Cubic metres per second	Quarterly in duplicate	4	280.00	360.00		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) *
Dry Gas Density	Kilograms per cubic metre	Yearly	2	1.34	1.34		no
Moisture	Percent	Yearly	2	9.60	9.60		no
Molecular Weight of stack gases	grams per gram mole	Yearly	2	30.00	30.00		no
Solid Particles (7% Oxygen corrected)	Milligrams per cubic metre	Yearly	1	39.00	39.00	30.00	yes*
Temperature	Degrees Celcius	Yearly	2	182.00	182.00		no
Velocity	Metres per second	Yearly	2	13.00	13.00		no
Volumetric flowrate	Cubic metres per second	Yearly	2	56.00	56.00		no

Comment:
 *An analysis of the filter was conducted and showed that 80% of the Total Particulate Matter collected on the filter were sulphates. This was attributed to a change in backend temperature leading to a temporary increase in thermal degradation of sulphur containing refractory particles.

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	2.4	2	8.6
Comment: Elevated results associated with 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	0.7	3.8	2.9	40.3
Comment: Elevated results associated with Plant start-up or Plant shutdown							



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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	4.7	10.5	9	26.2
Benzene	Parts per billion	Every 6 days	5	0.0280	0.0710	0.0540	0.1300
Iron	Micrograms per cubic metre	Every 6 days	5	0.26	1.02	0.76	2.90
Lead	Micrograms per cubic metre	Every 6 days	5	<0.05	0.03	0.03	<0.06
Particulates - Deposited Matter	Grams per square metre per month	Monthly	1	2.40	2.40	2.40	2.40
Polycyclic aromatic hydrocarbons	Nanograms per cubic metre	24 hour period every 6 days.	5	0.59	0.79	0.68	1.10
Total suspended particles	Micrograms per cubic metre	Every 6 days	5	11.00	16.00	14.00	23.00
Zinc	Micrograms per cubic metre	Every 6 days	5	<0.11	0.12	0.06	0.24
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	5.4	15.3	14.5	30.3
Benzene	Parts per billion	Every 6 days	5	0.0380	0.1178	0.1400	0.2000
Iron	Micrograms per cubic metre	Every 6 days	5	0.76	1.69	2.00	2.40
Lead	Micrograms per cubic metre	Every 6 days	5	<0.05	0.03	0.03	<0.06
Particulates - Deposited Matter	Grams per square metre per month	Monthly	1	1.10	1.10	1.10	1.10
Polycyclic aromatic hydrocarbons	Nanograms per cubic metre	24 hour period every 6 days.	5	0.75	1.93	1.30	3.90
Total suspended particles	Micrograms per cubic metre	Every 6 days	5	19.00	29.80	27.00	52.00
Zinc	Micrograms per cubic metre	Every 6 days	5	0.14	0.21	0.20	0.27
Comment:							

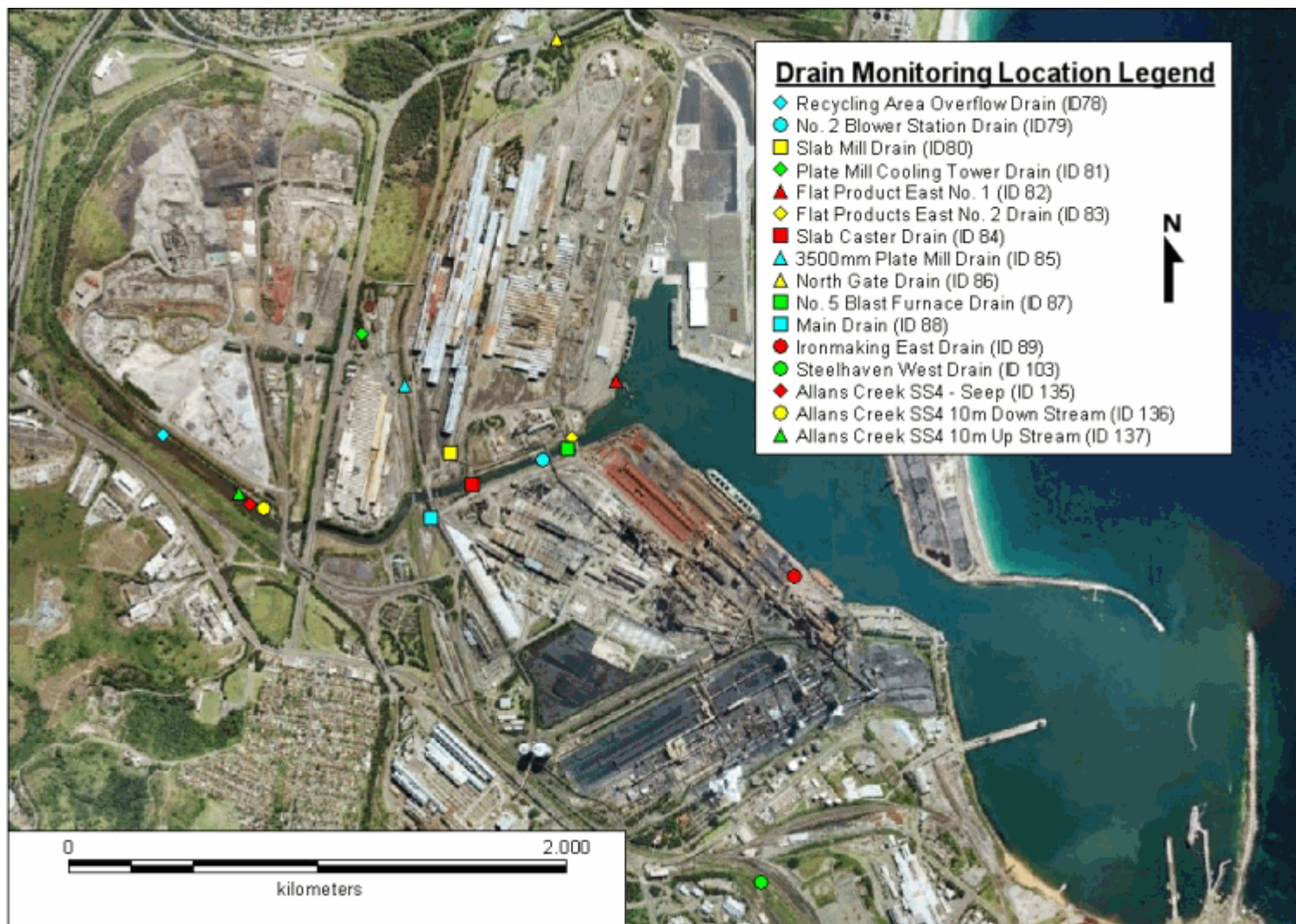


Point 153: Receiver 3 (located west of licensed site)

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	0.72	1.08	0.89	1.90
Lead	Micrograms per cubic metre	Every 6 days	5	<0.05	0.03	0.03	0.07
Total suspended particles	Micrograms per cubic metre	Every 6 days	5	13.00	20.80	21.00	32.00
Zinc	Micrograms per cubic metre	Every 6 days	5	<0.11	0.09	0.06	0.22
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
pH		Daily during any discharge which is not due to Wet Weather Conditions	1*	10.70	10.70	10.70	10.70
Total Suspended Solids	Milligrams per litre	Daily during any discharge which is not due to Wet Weather Conditions	1*	14.00	14.00	14.00	14.00
Volume of Liquids Discharged	Kilolitres per day	Daily	Continuous	0.00	290.17	0.00	4,337.00
Comment: * Wet weather conditions apply.							

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	<0.0100	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	8.30	6.5-9.0 (6.5-9.0)	no
Temperature	Degrees Celcius	Every 8 days	4	24.00	28.00	40 (40)	no
Total Iron	Milligrams per litre	Every 8 days	4	0.1600	0.6500	3 (50)	no
Total Suspended Solids	Milligrams per litre	Every 8 days	4	11.00	21.00	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	483,580.00	637,397.00		

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) *
Cyanide	Milligrams per litre	6/yr. Min 50 days apart.	1	<0.0200	<0.0200	0.10 (0.00)	no
pH		6/yr. Min 50 days apart.	1	8.40	8.40	6.5-9.0 (0.0-0.0)	no
Volume of Liquids Discharged	Kilolitres per day	Daily	Continuous*	2,720.00	26,204.00		

Comment:* Missed flow measurements on four days due to a sensor failure.

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	2	<0.0200	<0.0200	0.30 (0.00)	no
Volume of Liquids Discharged	Kilolitres per day	Daily	Continuous	209.00	14,313.00		
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	1	<0.0200	<0.0200	0.15 (0.00)	no
Volume of Liquids Discharged	Kilolitres per day	Daily	Continuous	0.00	3,861.00		
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	8.00	6.5-9.0	no
Temperature	Degrees Celcius	24/year. Min 15 days apart	2	19.00	22.00	35.00	no
Total Suspended Solids	Milligrams per litre	24/year. Min 15 days apart	2	12.00	21.00	50.00	no
Volume of Liquids Discharged	Kilolitres per day	Daily	Continuous	32,815.00	53,139.00		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	0.0200	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	8.00	6.5-11.0 (6.5-11.0)	no
Temperature	Degrees Celcius	Every 8 days	4	17.00	20.00	40 (40)	no
Total Iron	Milligrams per litre	Every 8 days	4	0.1400	0.2260	7 (100)	no
Total Suspended Solids	Milligrams per litre	Every 8 days	4	9.20	19.00	70 (500)	no
Volume of Liquids Discharged	Kilolitres per day	Daily	Continuous	1,980.00	3,216.00		
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	7.90	8.00	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	17.00	19.00	40 (40)	no
Total Suspended Solids	Milligrams per litre	Every 8 days	4	5.20	30.00	100 (200)	no
Total Suspended Solids	Tonnes per day	Every 8 days	4	0.77	4.49	12.00	no
Total Zinc	Kilograms per day	Every 8 days	4	0.0	0.0	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	87,470.00	578,157.00		
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	11	<0.0600	<0.0600	7.0 (7.0)	no
Copper	Milligrams per litre	Every 8 days	11	<0.010	0.010	1.000	no
Cyanide	Milligrams per litre	Every 8 days	11	<0.0200	<0.0200	0.20 (0.20)	no
Filtrable Iron	Milligrams per litre	Every 8 days	11	<0.0100	0.0300	0.5 (0.5)	no
Fluoride	Milligrams per litre	Every 8 days	11	2.60	4.40	50 (50)	no
pH		Every 8 days	11	7.90	8.20	6.5-9.0 (6.5-9.0)	no
Temperature	Degrees Celcius	Every 8 days	11	17.00	21.00	45 (45)	no
Total Iron	Milligrams per litre	Every 8 days	11	0.2100	0.7400	7 (20)	no
Total Suspended Solids	Milligrams per litre	Every 8 days	11	6.00	51.00	100 (200)	no
Total Zinc	Milligrams per litre	Every 8 days	11	<0.0500	<0.0500	3 (3)	no
Volume of Liquids Discharged	Kilolitres per day	Daily	Continuous	7,568.00	33,909.00		
Comment:							