



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

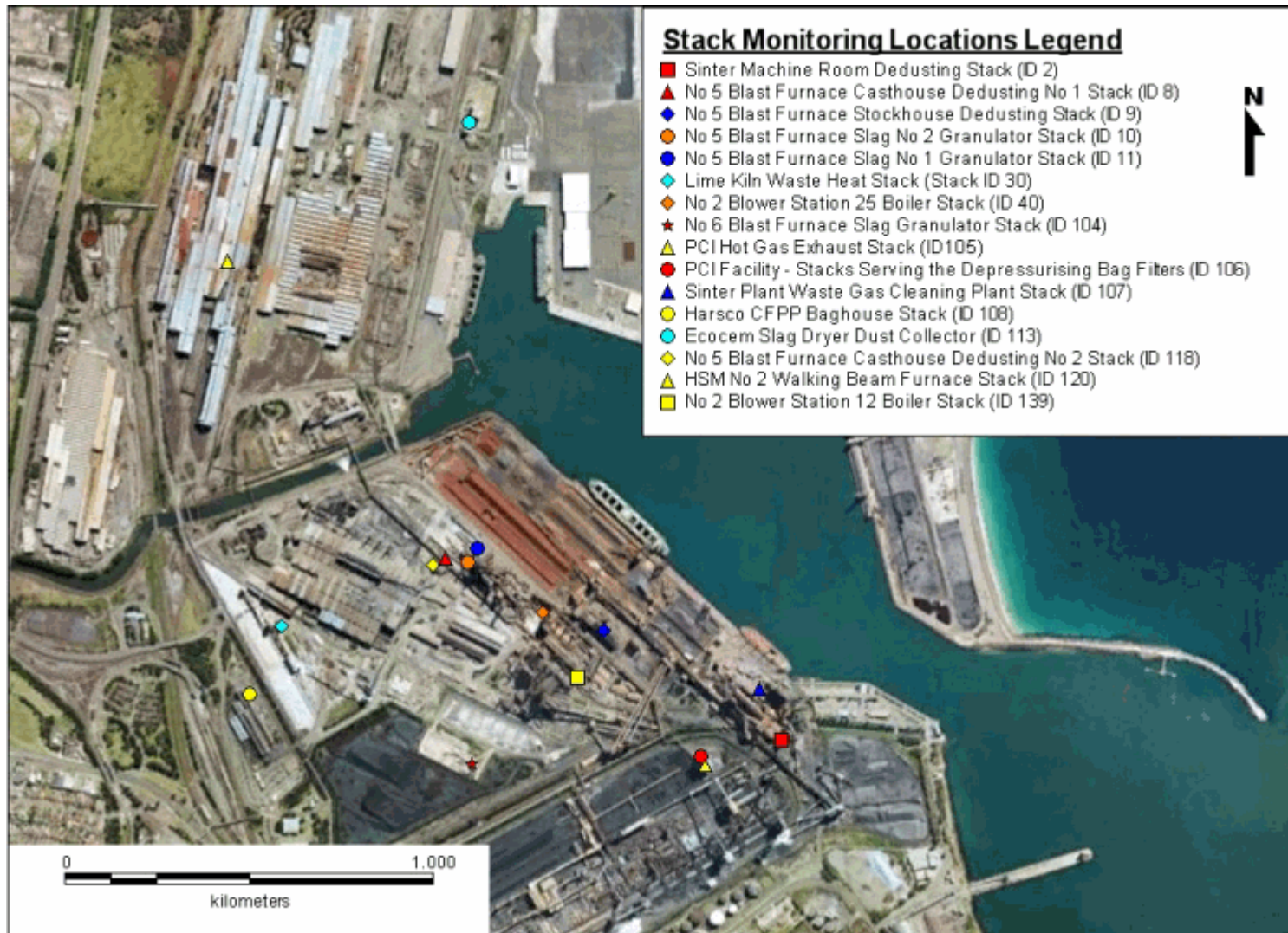
for

1 May 2017 to 31 May 2017

Monthly (May 2017) Report Published: 21, August, 2017

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	Quarterly	1	4.2	4.2	50.00	no
Comment:							

Point 40:

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) *
Carbon Dioxide	Percent	Yearly	4	21	22		no
Carbon Monoxide (7% Oxygen correction)	Milligrams per cubic metre	Yearly	4	<3	<3	400.00	no
Dry Gas Density	Kilograms per cubic metre	Yearly	1	1.41	1.41		no
Moisture	Percent	Yearly	1	9.7	9.7		no
Molecular Weight of stack gases	grams per gram mole	Yearly	1	31.6	31.6		no
Nitrogen Oxides (7% Oxygen correction)	Milligrams per cubic metre	Yearly	4	138	142	600.00	no
Oxygen (O2)	Percent	Yearly	4	4.1	4.2		no
Sulphur Dioxide (7% Oxygen correction)	Milligrams per cubic metre	Yearly	4	247	260	1,250.00	no
Temperature	Degrees Celcius	Yearly	1	162	162		no
Velocity	Metres per second	Yearly	1	8.7	8.7		no
Volumetric flowrate	Cubic metres per second	Yearly	1	52	52		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) *
Dry Gas Density	Kilograms per cubic metre	Quarterly in duplicate	2	1.33	1.33		no
Moisture	Percent	Quarterly in duplicate	2	11	11		no
Molecular Weight of stack gases	grams per gram mole	Quarterly in duplicate	2	29.7	29.7		no
Sulfuric acid mist and sulphur trioxide (as SO ₃)	Milligrams per cubic metre	Quarterly in duplicate	2	2.6	3	100.00	no
Temperature	Degrees Celcius	Quarterly in duplicate	2	138	138		no
Velocity	Metres per second	Quarterly in duplicate	2	18	18		no
Volumetric flowrate	Cubic metres per second	Quarterly in duplicate	2	360	360		no
Comment:							



Point 108:

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	Milligrams per cubic metre	Yearly	1	<0.00026	<0.00026	1.00000	no
Dry Gas Density	Kilograms per cubic metre	Yearly	1	1.29	1.29		no
Mercury	Milligrams per cubic metre	Yearly	1	<0.00026	<0.00026	1.000000	no
Moisture	Percent	Yearly	1	2.3	2.3		no
Solid Particles	Milligrams per cubic metre	Yearly	1	<1	<1	20.00	no
Temperature	Degrees Celcius	Yearly	1	30	30		no
Type 1 and Type 2 substances in aggregate	Milligrams per cubic metre	Yearly	1	0.0084	0.0084	5.0000	no
Velocity	Metres per second	Yearly	1	15	15		no
Volumetric flowrate	Cubic metres per second	Yearly	1	11	11		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) *
Carbon Dioxide	Percent	Yearly	3	4	4.4		no
Carbon Monoxide (7% Oxygen correction)	Milligrams per cubic metre	Yearly	3	<3	<3	400.00	no
Dry Gas Density	Kilograms per cubic metre	Yearly	9	1.31	1.33		no
Moisture	Percent	Yearly	9	11	11		no
Molecular Weight of stack gases	grams per gram mole	Yearly	9	29.2	29.7		no
Nitrogen Oxides (7% Oxygen correction)	Milligrams per cubic metre	Yearly	3	540	650	650.00	no
Oxygen (O2)	Percent	Yearly	3	12	13		no
Solid Particles (7% Oxygen corrected)	Milligrams per cubic metre	Yearly	1	18	18	30.00	no
Sulphur Dioxide (7% Oxygen correction)	Milligrams per cubic metre	Yearly	3	660	700	1,250.00	no
Temperature	Degrees Celcius	Yearly	9	193	193		no
Velocity	Metres per second	Yearly	9	10	10		no
Volumetric flowrate	Cubic metres per second	Yearly	9	39	39		no
Comment:							



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Point 18:

Pollutant	Units of Measure	Monitoring frequency required by licence	No. of times measured during month	Min. Value	Mean Value	Median Value	Max. Value
Hydrogen Sulphide	Milligrams per cubic metre	Quarterly	4	3.3	3.6	3.60	3.9
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	3.1	3.2	13*
Comment: * Elevated results associated with plant start-up and shut down.							

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	4.3	3.9	34*
Comment: * Elevated results associated with plant start-up and shut down.							



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Ambient Air Monitoring Requirements

EPL6092 Condition M2.2/M2.3/O4.14,O4.15 (Cont.)



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:				

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 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	4.6	12.4	12.4	25.3
Benzene	Parts per billion	Every 6 days	5	0.087	0.1434	0.1300	0.22
Iron	Micrograms per cubic metre	Every 6 days	5	0.4	0.996	0.56	2.8
Lead	Micrograms per cubic metre	Every 6 days	5	<0.054	<0.054	0.03	<0.055
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.	5	0.6	0.702	0.60	1.1
Total suspended particles	Micrograms per cubic metre	Every 6 days	5	17	24	22.00	32
Zinc	Micrograms per cubic metre	Every 6 days	5	<0.11	<0.11	0.06	0.22
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	8.3	17.4	15.7	37
Benzene	Parts per billion	Every 6 days	5	0.15	0.202	0.1900	0.28
Iron	Micrograms per cubic metre	Every 6 days	5	0.73	2.146	2.20	3.4
Lead	Micrograms per cubic metre	Every 6 days	5	<0.054	<0.054	0.03	<0.055
Particulates - Deposited Matter	Grams per square metre per month	Monthly	1	0.92	0.92	0.92	0.92
Polycyclic aromatic hydrocarbons	Nanograms per cubic metre	24 hour period every 6 days.	5	1	1.26	1.20	1.5
Total suspended particles	Micrograms per cubic metre	Every 6 days	5	18	32.4	35.00	45
Zinc	Micrograms per cubic metre	Every 6 days	5	<0.11	0.137	0.14	0.2
Comment:							



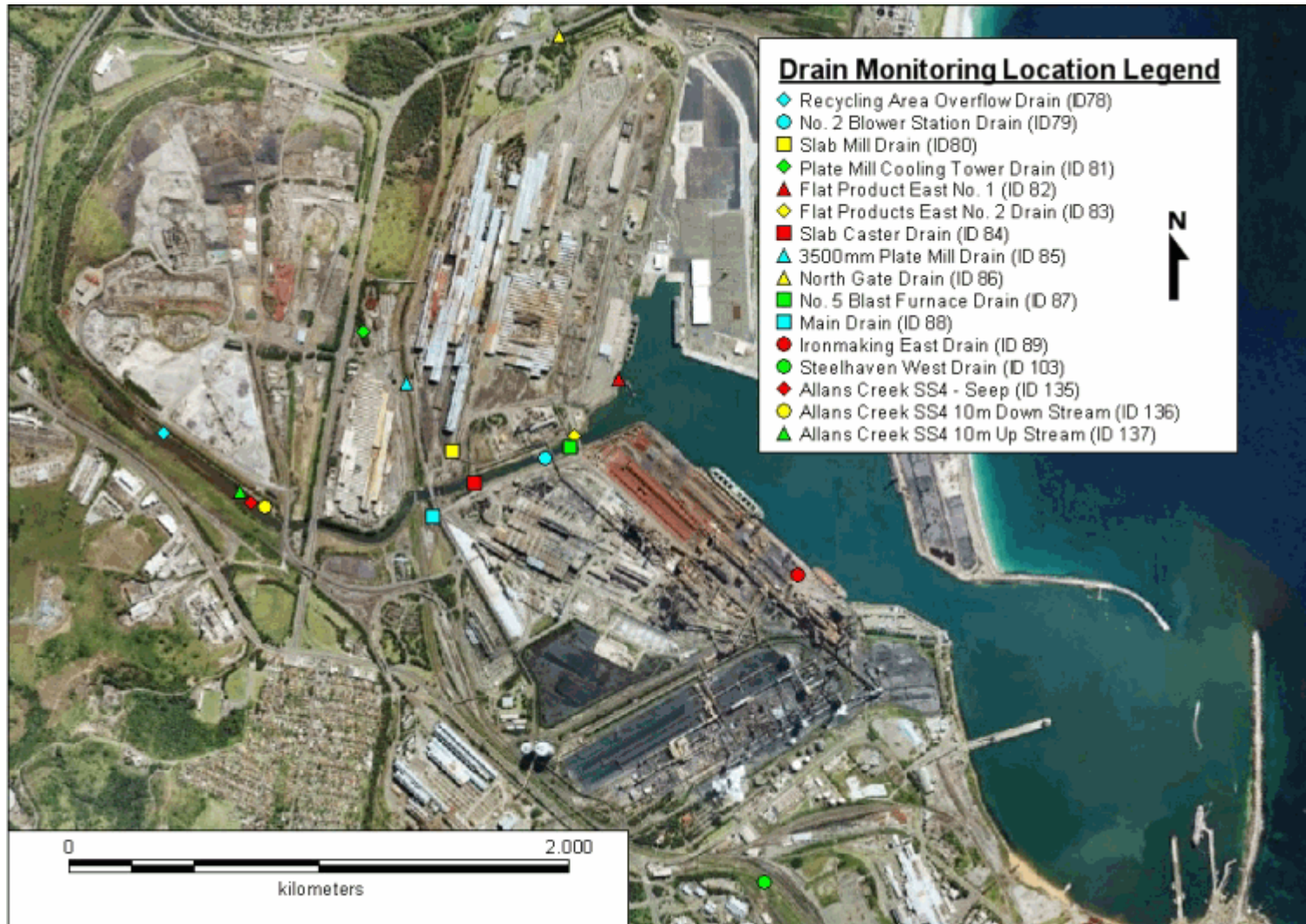
Point 153: Receiver 3 (located west of licensed site)

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	0.47	1.394	1.70	2.2
Lead	Micrograms per cubic metre	Every 6 days	5	<0.054	<0.054	0.03	<0.055
Total suspended particles	Micrograms per cubic metre	Every 6 days	5	17	27.6	19.00	46
Zinc	Micrograms per cubic metre	Every 6 days	5	<0.11	<0.11	0.06	<0.11

Comment:

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
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	0	0.00	0
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	4	<0.06	<0.06	5.0 (5.0)	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	0.038	0.3 (0.3)	no
Oil and Grease	Milligrams per litre	Every 8 days	4	<5	<5	20 (50)	no
pH		Every 8 days	4	7.9	8.1	6.5-9.0 (6.5-9.0)	no
Temperature	Degrees Celcius	Every 8 days	4	24	26	40 (40)	no
Total Iron	Milligrams per litre	Every 8 days	4	0.15	0.39	3 (50)	no
Total Suspended Solids	Milligrams per litre	Every 8 days	4	5	20	50 (500)	no
Total Zinc	Milligrams per litre	Every 8 days	4	<0.05	<0.05	3 (3)	no
Volume of Liquids Discharged	Kilolitres per day	Daily	Continuous	508364	704478		
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	<0.02	<0.02	0.20 (0.00)	no
pH		6/yr. Min 50 days apart.	1	8	8	6.5-9.0 (0.0-0.0)	no
Volume of Liquids Discharged	Kilolitres per day	Daily	Continuous	380	4505		
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	<0.02	<0.02	0.30 (0.00)	no
Volume of Liquids Discharged	Kilolitres per day	Daily	Continuous	14	619		
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	138		
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	<5	20.0000	no
pH		24/year. Min 15 days apart	2	8	8.3	6.5-9.0	no
Temperature	Degrees Celcius	24/year. Min 15 days apart	2	20.5	21.5	35.00	no
Total Suspended Solids	Milligrams per litre	24/year. Min 15 days apart	2	14	16	50.00	no
Volume of Liquids Discharged	Kilolitres per day	Daily	Continuous	32630	34808		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	0.01	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
pH		Every 8 days	4	7.9	8.4	6.5-11.0 (6.5-11.0)	no
Temperature	Degrees Celcius	Every 8 days	4	18.8	21	40 (40)	no
Total Iron	Milligrams per litre	Every 8 days	4	0.18	0.53	7 (100)	no
Total Suspended Solids	Milligrams per litre	Every 8 days	4	8	24	70 (500)	no
Volume of Liquids Discharged	Kilolitres per day	Daily	Continuous	2021	2216		
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	<0.06	<0.06	7.5 (7.5)	no
Cyanide	Milligrams per litre	Every 8 days	4	<0.02	<0.02	0.30 (0.30)	no
Oil and Grease	Milligrams per litre	Every 8 days	4	<5	<5	20 (50)	no
pH		Every 8 days	4	7.9	8.4	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	4	17.5	20	40 (40)	no
Total Suspended Solids	Milligrams per litre	Every 8 days	4	5	16	100 (200)	no
Total Zinc	Milligrams per litre	Every 8 days	4	<0.05	<0.05	3 (3)	no
Volume of Liquids Discharged	Kilolitres per day	Daily	Continuous	31767.6	31767.6		
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	Daily during any discharge	0			7.0 (7.0)	no
Copper	Milligrams per litre	Daily during any discharge	0			1.000	no
Cyanide	Milligrams per litre	Daily during any discharge	0			0.20 (0.20)	no
Filtrable Iron	Milligrams per litre	Daily during any discharge	0			0.5 (0.5)	no
Fluoride	Milligrams per litre	Daily during any discharge	0			50 (50)	no
pH		Daily during any discharge	0			6.5-9.0 (6.5-9.0)	no
Temperature	Degrees Celcius	Daily during any discharge	0			45 (45)	no
Total Iron	Milligrams per litre	Daily during any discharge	0			7 (20)	no
Total Suspended Solids	Milligrams per litre	Daily during any discharge	0			100 (200)	no
Total Zinc	Milligrams per litre	Daily during any discharge	0			3 (3)	no
Volume of Liquids Discharged	Kilolitres per day	Daily	Continuous	0	0		
Comment:							