



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

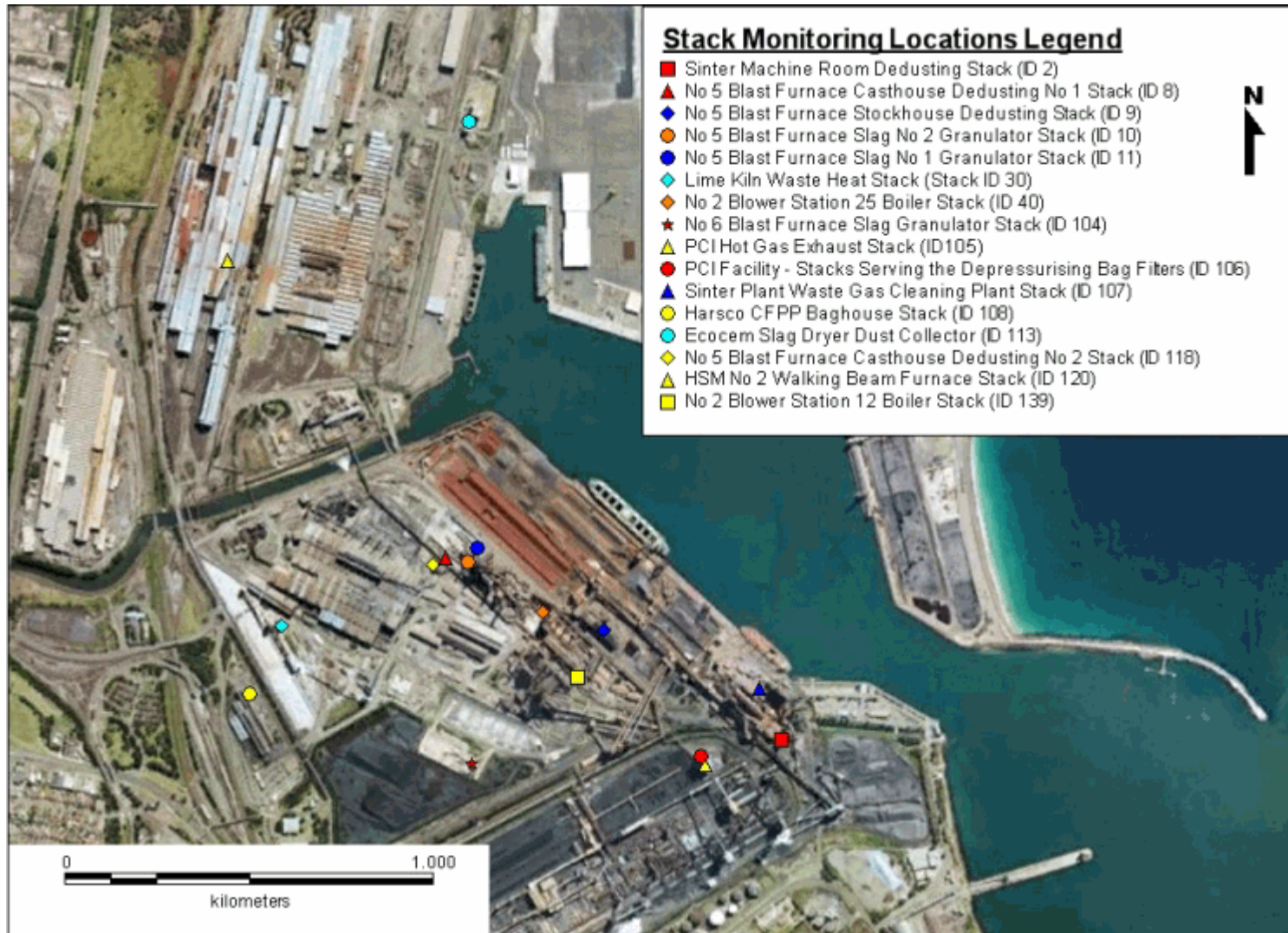
for

1 Dec 2016 to 31 Dec 2016

Monthly (December 2016) Report Published: 22, February, 2017

Stack Air Monitoring Requirements

EPL6092 Conditions L2.4/M2.2/M2.3/M8.2/E1.4





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) *
Cadmium (7% Oxygen correction)	Milligrams per cubic metre	Yearly	1	0.00023	0.00023	0.10000	no
Carbon Dioxide	Percent	Yearly	4	23	23		no
Carbon Monoxide (7% Oxygen correction)	Milligrams per cubic metre	Yearly	4	<3	67	400.00	no
Dry Gas Density	Kilograms per cubic metre	Yearly	9	1.41	1.42		no
Mercury (7% Oxygen correction)	Milligrams per cubic metre	Yearly	1	0.0005	0.0005	0.10000	no
Moisture	Percent	Yearly	9	10	11		no
Molecular Weight of stack gases	grams per gram mole	Yearly	9	31.6	31.9		no
Nitrogen Oxides (7% Oxygen correction)	Milligrams per cubic metre	Yearly	4	60	61	600.00	no
Oxygen (O2)	Percent	Yearly	4	3.2	3.3		no
Solid Particles (7% Oxygen corrected)	Milligrams per cubic metre	Yearly	1	9.3	9.3	30.00	no
Sulphur Dioxide (7% Oxygen correction)	Milligrams per cubic metre	Yearly	4	111	115	1,250.00	no
Temperature	Degrees Celcius	Yearly	9	160	166		no
Type 1 and 2 substances in aggregate (7% Oxygen correction)	Milligrams per cubic metre	Yearly	1	0.031	0.031	1.0000	no
Velocity	Metres per second	Yearly	9	10	11		no
Volumetric flowrate	Cubic metres per second	Yearly	9	61	65		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	<0.00043	<0.00043	0.10000	no
Carbon Dioxide	Percent	Yearly	4	4.3	4.6		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	13	1.29	1.31		no
Mercury (7% Oxygen correction)	Milligrams per cubic metre	Yearly	1	0.002	0.002	0.10000	no
Moisture	Percent	Yearly	13	8.9	13		no
Molecular Weight of stack gases	grams per gram mole	Yearly	13	29	29.3		no
Nitrogen Oxides (7% Oxygen correction)	Milligrams per cubic metre	Yearly	4	521	609	650.00	no
Oxygen (O2)	Percent	Yearly	4	12	13		no
Sulphur Dioxide (7% Oxygen correction)	Milligrams per cubic metre	Yearly	4	633	683	1,250.00	no
Temperature	Degrees Celcius	Yearly	13	250	278		no
Type 1 and 2 substances in aggregate (7% Oxygen correction)	Milligrams per cubic metre	Yearly	1	0.073	0.073	1.0000	no
Velocity	Metres per second	Yearly	13	18	25		no
Volumetric flowrate	Cubic metres per second	Yearly	13	61	83		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	2.6	2.3	15.7
Comment: Elevated result associated with fan trip.							

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	1	4.7	4.3	43.4
Comment: Elevated results associated with plant start-up and shutdown.							



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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	9.2	32.1	31.7	58.5
Benzene	Parts per billion	Every 6 days	5	0.015	0.0548	0.0220	0.19
Iron	Micrograms per cubic metre	Every 6 days	5	0.66	1.2	1.30	1.9
Lead	Micrograms per cubic metre	Every 6 days	5	<0.055	<0.055	0.03	< 0.057
Particulates - Deposited Matter	Grams per square metre per month	Monthly	1	0.2	0.2	0.20	0.2
Polycyclic aromatic hydrocarbons	Nanograms per cubic metre	24 hour period every 6 days.	5	0.62	1.422	0.67	2.7
Total suspended particles	Micrograms per cubic metre	Every 6 days	5	35	55.2	52.00	80
Zinc	Micrograms per cubic metre	Every 6 days	5	<0.11	<0.11	0.06	<0.11
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	14.3	30.5	27.8	49.1
Benzene	Parts per billion	Every 6 days	5	<0.01	0.0418	0.0220	0.14
Iron	Micrograms per cubic metre	Every 6 days	5	1	1.94	1.60	4
Lead	Micrograms per cubic metre	Every 6 days	5	<0.055	<0.055	0.03	< 0.057
Particulates - Deposited Matter	Grams per square metre per month	Monthly	1	0.42	0.42	0.42	0.42
Polycyclic aromatic hydrocarbons	Nanograms per cubic metre	24 hour period every 6 days.	5	0.62	1.228	0.91	2.3
Total suspended particles	Micrograms per cubic metre	Every 6 days	5	40	64.8	70.00	78
Zinc	Micrograms per cubic metre	Every 6 days	5	<0.11	0.13	0.12	0.22
Comment:							

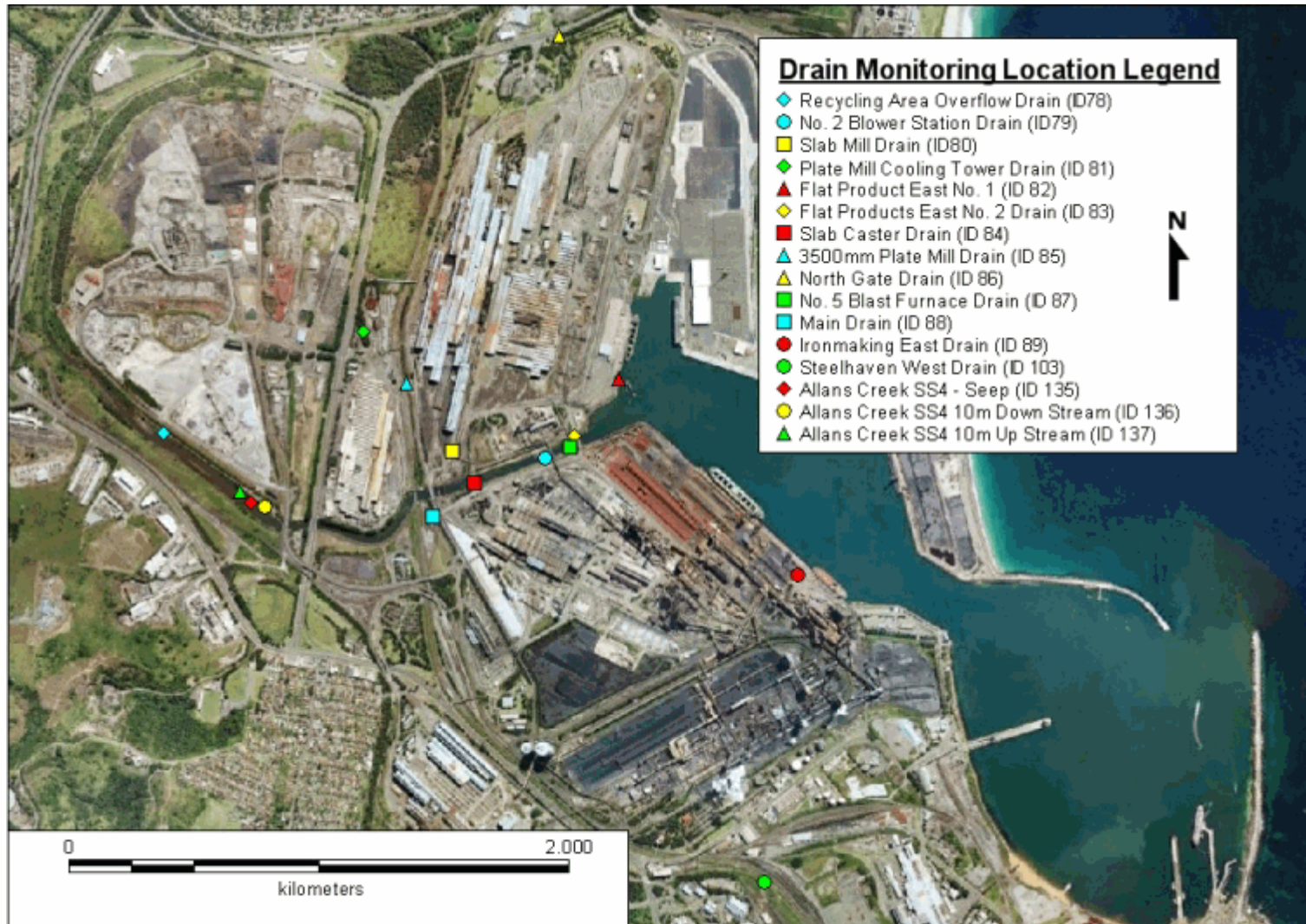


Point 153: Receiver 3 (located west of licensed site)

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	0.53	1.282	1.00	2.2
Lead	Micrograms per cubic metre	Every 6 days	5	<0.055	<0.055	0.03	< 0.057
Total suspended particles	Micrograms per cubic metre	Every 6 days	5	28	55.6	56.00	77
Zinc	Micrograms per cubic metre	Every 6 days	5	<0.11	<0.11	0.06	0.15
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
Volume of Liquids Discharged	Kilolitres per day	Daily	Continuous	0	0	0.00	0
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	<0.06	<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	0.162	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	8	8	6.5-9.0 (6.5-9.0)	no
Temperature	Degrees Celcius	Every 8 days	4	26	28	40 (40)	no
Total Iron	Milligrams per litre	Every 8 days	4	0.1	0.462	3 (50)	no
Total Suspended Solids	Milligrams per litre	Every 8 days	4	14	17	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	635316	694842		
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	487	2588		
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	1235		
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	384		
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	<5	20.0000	no
pH		24/year. Min 15 days apart	2	8	8.2	6.5-9.0	no
Temperature	Degrees Celcius	24/year. Min 15 days apart	2	24	25	35.00	no
Total Suspended Solids	Milligrams per litre	24/year. Min 15 days apart	2	<3	18	50.00	no
Volume of Liquids Discharged	Kilolitres per day	Daily	Continuous	28059	33788		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	6.5-11.0 (6.5-11.0)	no
Temperature	Degrees Celcius	Every 8 days	4	21	27	40 (40)	no
Total Iron	Milligrams per litre	Every 8 days	4	0.09	0.449	7 (100)	no
Total Suspended Solids	Milligrams per litre	Every 8 days	4	3.2	15	70 (500)	no
Volume of Liquids Discharged	Kilolitres per day	Daily	Continuous	1812	1985		
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
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	27.00	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
Oil and Grease	Tonnes per day	Every 8 days	4	0.0	0.0	2.50	no
pH		Every 8 days	4	7.9	8.1	6.5-9.0 (6.5-9.0)	no
Phenol	Kilograms per day	Every 8 days	4	0	0.0	35.00	no
Phenol	Milligrams per litre	Every 8 days	4	<0.2	<0.2	0.45 (0.45)	no
Temperature	Degrees Celcius	Every 8 days	4	21	24	40 (40)	no
Total Suspended Solids	Milligrams per litre	Every 8 days	4	<3	19	100 (200)	no
Total Suspended Solids	Tonnes per day	Every 8 days	4	0.24	1.62	12.00	no
Total Zinc	Kilograms per day	Every 8 days	4	0.0	5.1	35.00	no
Total Zinc	Milligrams per litre	Every 8 days	4	<0.05	0.06	3 (3)	no
Volume of Liquids Discharged	Kilolitres per day	Daily	Continuous	84043	90769		
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	1	1.6	1.6	7.0 (7.0)	no
Copper	Milligrams per litre	Daily during any discharge	1	0.03	0.03	1.000	no
Cyanide	Milligrams per litre	Daily during any discharge	1	0.022	0.022	0.20 (0.20)	no
Filtrable Iron	Milligrams per litre	Daily during any discharge	1	<0.01	<0.01	0.5 (0.5)	no
Fluoride	Milligrams per litre	Daily during any discharge	1	6	6	50 (50)	no
pH		Daily during any discharge	1	8.2	8.2	6.5-9.0 (6.5-9.0)	no
Temperature	Degrees Celcius	Daily during any discharge	1	25	25	45 (45)	no
Total Iron	Milligrams per litre	Daily during any discharge	1	4.8	4.8	7 (20)	no
Total Suspended Solids	Milligrams per litre	Daily during any discharge	1	19	19	100 (200)	no
Total Zinc	Milligrams per litre	Daily during any discharge	1	0.2	0.2	3 (3)	no
Volume of Liquids Discharged	Kilolitres per day	Daily	Continuous	0	2127		
Comment:							