



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 2013 to 31 May 2013**

## Stack Air Monitoring Requirements

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





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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	7.80	7.80	50.00	no
<b>Comment:</b>							

**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	0.00094	0.00096		no
Cadmium	Milligrams per cubic metre	Quarterly in duplicate	2	0.00058	0.00076		no
Carbon Dioxide	Percent	Quarterly in duplicate	24	4.600	6.500		no
Dioxins & Furans (15.7% Oxygen correction)	Nanograms per cubic metre	Quarterly in duplicate	2	0.0047	0.0110	0.3000	no
Dry Gas Density	Kilograms per cubic metre	Quarterly in duplicate	36	1.31	1.32		no
Fine Particulates	Milligrams per cubic metre	Quarterly in duplicate	2	3.00	3.30		no
Hydrogen Chloride	Milligrams per cubic metre	Quarterly in duplicate	2	18.00	22.00		no
Hydrogen Fluoride	Milligrams per cubic metre	Quarterly in duplicate	2	3.3000	3.8000		no
Lead	Milligrams per cubic metre	Quarterly in duplicate	2	0.0210	0.0270		no
Manganese	Milligrams per cubic metre	Quarterly in duplicate	2	0.0021	0.0025		no
Moisture	Percent	Quarterly in duplicate	36	11.00	13.00		no
Molecular Weight of stack gases	grams per gram mole	Quarterly in duplicate	36	29.30	29.70		no
Nickel	Milligrams per cubic metre	Quarterly in duplicate	2	0.00050	0.00096		no
Nitrogen Oxides	Milligrams per cubic metre	Quarterly	24	268.00	474.00	2,000.00	no
Oxygen (O2)	Percent	Quarterly in duplicate	24	16.00	17.00		no
Solid Particles	Milligrams per cubic metre	Quarterly in duplicate	2	3.90	5.40	20.00	no
Sulfuric acid mist and sulphur trioxide (as SO3)	Milligrams per cubic metre	Quarterly in duplicate	2	3.60	3.80	100.00	no
Sulphur Dioxide - UV	Milligrams per cubic metre	Quarterly	24	23.00	245.00	1,000.00	no
Temperature	Degrees Celcius	Quarterly in duplicate	36	142.00	143.00		no
Velocity	Metres per second	Quarterly in duplicate	36	16.00	18.00		no
Volumetric flowrate	Cubic metres per second	Quarterly in duplicate	36	310.00	350.00		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	0.63	0.63	1.20	no
Moisture	Percent	Quarterly	8	3.80	9.00		no
Molecular Weight of stack gases	grams per gram mole	Quarterly	8	28.90	28.90		no
Temperature	Degrees Celcius	Quarterly	8	28.00	44.00		no
Velocity	Metres per second	Quarterly	8	1.90	2.40		no
Volumetric flowrate	Cubic metres per second	Quarterly	9	21.00	24.00		no

**Comment:**



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## **Ambient Air Monitoring Requirements**

EPL6092 Condition M2.2/M2.3/O4.13/O4.14 (Cont.)

**Point 140: Residential Receiver 1 (South of Licenced site)**

Pollutant	Units of Measure	Monitoring frequency required by licence	No. of times measured during month	Min. Value	Mean Value	Median Value	Max. Value
Ash	Grams per square metre per month	Monthly	1	0.30	0.30	0.30	0.30
Benzene	Parts per billion	Every 6 days	5	0.0170	0.0756	0.0690	0.1500
Insoluble Solid	Grams per square metre per month	Monthly	1	0.90	0.90	0.90	0.90
Iron	Micrograms per cubic metre	Every 6 days	5	0.07	1.51	0.49	3.70
Polycyclic aromatic hydrocarbons	Nanograms per cubic metre	24 hour period every 6 days	5	0.67	4.17	0.69	18.00
Polycyclic aromatic hydrocarbons	Nanograms per cubic metre	A weekly sample when the wind is blowing wind direction 0-60 degrees.	1	59.00	59.00	59.00	59.00
Total suspended particles	Micrograms per cubic metre	Every 6 days	5	8.00	26.00	22.00	46.00
Zinc	Micrograms per cubic metre	Every 6 days	5	<0.12	0.06	0.06	<0.12
<b>Comment:</b>							

**Point 141: Residential Receiver 2 (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
Benzene	Parts per billion	Every 6 days	5	0.0270	0.0670	0.0580	0.1000
Iron	Micrograms per cubic metre	Every 6 days	5	0.09	1.56	0.88	3.30
Polycyclic aromatic hydrocarbons	Nanograms per cubic metre	24 hour period every 6 days.	5	0.68	3.16	0.69	13.00
Total suspended particles	Micrograms per cubic metre	Every 6 days	5	9.00	28.80	30.00	46.00
Zinc	Micrograms per cubic metre	Every 6 days	5	<0.12	0.06	0.06	<0.13
<b>Comment:</b>							

**Point 142: Residential Receiver 3 (located South 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	0.07	1.96	0.29	7.20
Total suspended particles	Micrograms per cubic metre	Every 6 days	5	7.80	20.56	16.00	37.00
Zinc	Micrograms per cubic metre	Every 6 days	5	<0.12	0.11	0.06	0.32
<b>Comment:</b>							



**Point 143: Residential Receiver 4 (located North East 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
Ash	Grams per square metre per month	Monthly	1	0.00	0.00	0.00	0.00
Insoluble Solid	Grams per square metre per month	Monthly	1	0.30	0.30	0.30	0.30
Iron	Micrograms per cubic metre	Every 6 days	5	0.52	1.05	1.10	1.60
Total suspended particles	Micrograms per cubic metre	Every 6 days	5	14.00	34.20	32.00	62.00
Zinc	Micrograms per cubic metre	Every 6 days	5	<0.12	0.08	0.06	0.16
<b>Comment:</b>							

**Point 144: Residential Receiver 5 (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
Ash	Grams per square metre per month	Monthly	1	0.30	0.30	0.30	0.30
Insoluble Solid	Grams per square metre per month	Monthly	1	0.90	0.90	0.90	0.90
<b>Comment:</b>							

**Point 145: Residential Receiver 6 (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
Ash	Grams per square metre per month	Monthly	1	0.70	0.70	0.70	0.70
Insoluble Solid	Grams per square metre per month	Monthly	1	1.40	1.40	1.40	1.40
<b>Comment:</b>							

**Point 146: Residential Receiver 7 (located North 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
Ash	Grams per square metre per month	Monthly	1	0.00	0.00	0.00	0.00
Insoluble Solid	Grams per square metre per month	Monthly	1	0.30	0.30	0.30	0.30
<b>Comment:</b>							

**Point 147: Residential Receiver 8 (located South East 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
Ash	Grams per square metre per month	Monthly	1	3.40	3.40	3.40	3.40
Insoluble Solid	Grams per square metre per month	Monthly	1	8.70	8.70	8.70	8.70
<b>Comment:</b>							

**Point 148: Residential Receiver 9 (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
Ash	Grams per square metre per month	Monthly	1	0.40	0.40	0.40	0.40
Insoluble Solid	Grams per square metre per month	Monthly	1	1.10	1.10	1.10	1.10
<b>Comment:</b>							

**Point 149: Residential Receiver 10 (located South 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
Ash	Grams per square metre per month	Monthly	1	0.10	0.10	0.10	0.10
Insoluble Solid	Grams per square metre per month	Monthly	1	0.50	0.50	0.50	0.50
<b>Comment:</b>							

**Point 150: Residential Receiver 11 (located South East 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
Polycyclic aromatic hydrocarbons	Nanograms per cubic metre	weekly sample when the wind is blowing wind direction 225-315 degrees	4	0.76	7.27	2.65	23.00
<b>Comment:</b>							



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**O4.12:**

**Meter 1**

Pollutant	Units of Measure	Monitoring frequency required by licence	No. of times measured during month	Min. Value	Mean Value	Median Value	Max. Value
Opacity	%	Daily	Continuous	1	9.8	4	94
<b>Comment:</b>							

**Meter 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	%	Daily	Continuous	1	43.4	46	91
<b>Comment:</b>							

**O4.13**

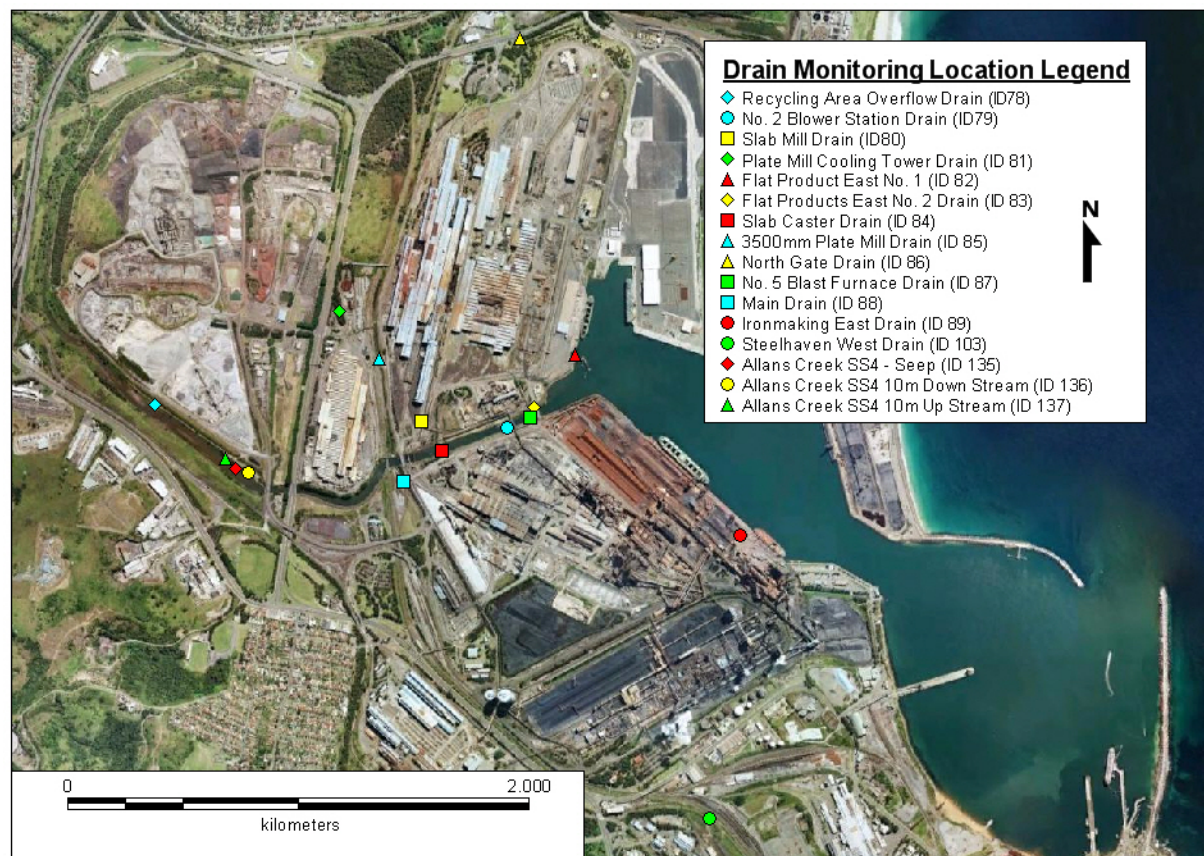
Pollutant	Monitoring frequency required by licence	No of significant emissions measured during month	100 Percentile Limit	Exceedance (yes/no) *
Emission - KISH Tipping DER 5	Monthly	0	4	no
<b>Comment:</b>				

**O4.14**

Pollutant	Monitoring frequency required by licence	No of significant emissions measured during month	100 Percentile Limit	Exceedance (yes/no) *
Emission - Torpedo Ladle DER>3	Monthly	0	4	no
<b>Comment:</b>				

## 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
pH		Overflow	1	5.70	5.70	5.70	5.70
Total Suspended Solids	Milligrams per litre	Overflow	1	34.00	34.00	34.00	34.00
Volume of Liquids Discharged	Kilolitres per day	Daily	Continuous	0.00	10.77	0.00	244.00
<b>Comment:</b>							

**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	0.2800	0.5000	5.0 (5.0)	no
BOD	Milligrams per litre	Every 8 days	3	<2.00	<2.00	20 (20)	no
Cadmium	Milligrams per litre	Every 8 days	3	<0.005	<0.005	0.06 (0.06)	no
Cyanide	Milligrams per litre	Every 4 days	7	<0.0050	0.0090	0.30 (0.30)	no
Filtrable Iron	Milligrams per litre	Every 8 days	3	<0.0100	<0.0100	0.3 (0.3)	no
Lead	Milligrams per litre	Every 8 days	3	<0.020	<0.020	0.1 (0.1)	no
Oil and Grease	Milligrams per litre	Every 8 days	3	<5.0000	<5.0000	20 (50)	no
pH		Every 8 days	3	8.10	8.10	6.5-9.0 (6.5-9.0)	no
Temperature	Degrees Celcius	Every 8 days	3	27.00	28.00	40 (40)	no
Total Iron	Milligrams per litre	Every 8 days	3	0.1280	0.1850	3 (50)	no
Total Suspended Solids	Milligrams per litre	Every 8 days	3	3.60	18.00	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*	436,272.00	593,797.00		
<b>Comment:*</b> Volume of Liquids discharged not logged for 18 hours (18/5/13) due to instrument program fault							



**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	155.00	1,549.00		
<b>Comment:</b>							

**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	0.0170	0.0170	0.30 (0.30)	no
Volume of Liquids Discharged	Kilolitres per day	Daily	Continuous	0.00	3,489.00		
<b>Comment:</b>							

**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	<0.0050	<0.0050	0.15 (0.15)	no
Volume of Liquids Discharged	Kilolitres per day	Daily	Continuous	0.00	1,119.00		
<b>Comment:</b>							





**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	8.10	8.10	6.5-9.0	no
Temperature	Degrees Celcius	24/year. Min 15 days apart	2	20.00	23.00	35.00	no
Total Suspended Solids	Milligrams per litre	24/year. Min 15 days apart	2	7.60	20.00	50.00	no
Volume of Liquids Discharged	Kilolitres per day	Daily	Continuous	26,569.00	33,806.00		no
<b>Comment:</b>							

**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	0.1100	0.3900	10.0 (10.0)	no
Cadmium	Milligrams per litre	Every 8 days	3	<0.005	<0.005	0.15 (0.15)	no
Chromium (Total)	Milligrams per litre	Every 8 days	3	<0.010	<0.010	0.6 (0.6)	no
Cyanide	Milligrams per litre	Every 8 days	3	<0.0050	0.0070	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	<0.10	<0.10	1.5 (1.5)	no
Oil and Grease	Milligrams per litre	Every 8 days	3	<5.0000	<5.0000	20 (20)	no
pH		Every 8 days	3	8.10	8.10	6.5-11.0 (6.5-11.0)	no
Temperature	Degrees Celcius	Every 8 days	3	20.00	21.00	40 (40)	no
Total Iron	Milligrams per litre	Every 8 days	3	0.0940	0.1660	7 (100)	no
Total Suspended Solids	Milligrams per litre	Every 8 days	3	2.80	3.60	70 (500)	no
Volume of Liquids Discharged	Kilolitres per day	Daily	Continuous	1,194.00	1,665.00		
<b>Comment:</b>							

**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 4 days	7	<0.0600	0.1700	7.5 (7.5)	no
Ammonia	Tonnes per day	Every 4 days	7	0.004	0.021	1.200	no
Cadmium	Milligrams per litre	Every 8 days	3	<0.005	<0.005	0.06 (0.06)	no
Cyanide	Kilograms per day	Every 4 days	7	0.31	0.62	27.00	no
Cyanide	Milligrams per litre	Every 4 days	7	<0.0050	0.0050	0.30 (0.30)	no
Lead	Milligrams per litre	Every 8 days	3	<0.020	<0.020	0.1 (0.1)	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	0.31	0.34	2.50	no
pH		Every 8 days	3	8.10	8.20	6.5-9.0 (6.5-9.0)	no
Phenol	Kilograms per day	Every 8 days	3	0.31	0.34	35.00	no
Phenol	Milligrams per litre	Every 8 days	3	<0.0050	<0.0050	0.45 (0.45)	no
Temperature	Degrees Celcius	Every 8 days	3	27.00	29.00	40 (40)	no
Total Suspended Solids	Milligrams per litre	Every 4 days	7	2.40	15.00	100 (200)	no
Total Suspended Solids	Tonnes per day	Every 4 days	7	0.30	1.85	12.00	no
Total Zinc	Kilograms per day	Every 8 days	3	3.09	3.40	35.00	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	123,567.00	145,242.00		
<b>Comment:</b>							

**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 4 days	7	<0.0600	0.5600	7.0 (7.0)	no
Arsenic	Micrograms per litre	Every 8 days	3	<10.00	<10.00	50.00	no
Cadmium	Milligrams per litre	Every 8 days	3	<0.005	<0.005	0.05 (0.05)	no
Chromium (Total)	Milligrams per litre	Every 8 days	3	<0.010	<0.010	0.350	no
Copper	Milligrams per litre	Every 8 days	3	<0.010	0.010	1.000	no
Cyanide	Milligrams per litre	Every 4 days	7	<0.0050	0.0100	0.20 (0.20)	no
Filtrable Iron	Milligrams per litre	Every 8 days	3	<0.0100	0.0200	0.5 (0.5)	no
Fluoride	Milligrams per litre	Every 8 days	3	1.40	2.00	50 (50)	no
Lead	Milligrams per litre	Every 8 days	3	<0.020	<0.020	0.2 (0.2)	no
Mercury	Micrograms per litre	Every 8 days	3	<0.10	<0.10	3.0 (3.0)	no
Oil and Grease	Milligrams per litre	Every 8 days	3	<5.0000	<5.0000	20 (20)	no
pH		Every 8 days	3	8.00	8.30	6.5-9.0 (6.5-9.0)	no
Selenium	Micrograms per litre	Every 8 days	3	<10.00	<10.00	20.00	no
Temperature	Degrees Celcius	Every 8 days	3	19.00	22.00	45 (45)	no
Total Iron	Milligrams per litre	Every 8 days	3	0.4340	1.4000	7 (20)	no
Total Suspended Solids	Milligrams per litre	Every 4 days	7	4.00	16.00	100 (200)	no
Total Zinc	Milligrams per litre	Every 8 days	3	0.0600	0.1700	3 (3)	no
Volume of Liquids Discharged	Kilolitres per day	Daily	Continuous	10,971.00	14,470.00		

**Comment:**