



## Eraring Power Station - EPA Licence 1429

Rocky Point Rd, Dora Creek NSW 2264

### Environmental Monitoring Data September 2018



## Unit 1 Boiler Continuous Emission Monitoring Summary

EPA Identification no. 11 - Air emissions monitoring, Boiler 1 stack discharge to air

	NOX			Particulates			SOX		
	ppm (7% O <sub>2</sub> )			mg/m <sup>3</sup>			ppm (7% O <sub>2</sub> )		
	Daily Ave	Max Hourly	Min Hourly	Daily Ave	Max Hourly	Min Hourly	Daily Ave	Max Hourly	Min Hourly
1 September	150	175	118	18.5	21.3	15.7	264	327	179
2 September	168	181	154	15.9	18.4	15.7	314	329	296
3 September	164	176	140	16.2	20.3	15.7	302	311	288
4 September	173	191	145	19.1	29.2	14.9	280	303	255
5 September	165	183	146	16.8	20.9	15.2	288	300	264
6 September	167	189	145	17.0	23.2	13.8	269	298	235
7 September	168	186	129	17.0	22.3	15.6	270	295	238
8 September	176	192	145	16.7	20.4	16.2	303	330	277
9 September	176	191	152	19.3	22.6	16.2	328	349	297
10 September	168	187	107	17.1	20.5	16.3	284	335	157
11 September	158	181	132	18.3	26.7	16.0	271	304	260
12 September	173	195	154	16.4	21.1	14.9	255	305	241
13 September	159	199	130	16.7	20.3	15.5	248	285	210
14 September	153	196	126	17.0	20.2	15.5	256	273	233
15 September	146	198	117	19.5	23.7	15.5	260	293	227
16 September	156	190	119	18.6	21.3	15.5	262	282	233
17 September	171	190	134	17.1	24.1	3.0	252	266	215
18 September	169	197	133	16.8	22.3	15.3	217	246	168
19 September	156	184	112	15.8	20.1	14.8	237	273	209
20 September	160	176	141	16.4	20.2	14.9	220	232	203
21 September	173	191	121	15.7	22.2	2.7	272	286	237
22 September	171	190	119	3.7	6.3	2.1	285	306	266
23 September	177	191	117	3.0	3.5	2.9	300	312	274
24 September	188	202	118	3.4	4.0	2.9	304	317	271
25 September	195	206	183	4.2	6.0	2.9	276	310	130
26 September	186	209	158	3.1	4.5	2.5	268	276	256
27 September	191	204	155	3.9	9.5	2.6	268	273	255
28 September	179	207	149	3.8	6.2	2.3	253	261	243
29 September	195	230	157	2.3	2.3	2.3	243	249	237
30 September	203	244	151	3.3	5.0	2.3	246	273	223

## Unit 2 Boiler Continuous Emission Monitoring Summary

EPA Identification no. 12 - Air emissions monitoring, Boiler 2 stack discharge to air

Unit out of Service 5-30 September 2018

	NOX			Particulates			SOX		
	ppm (7% O <sub>2</sub> )			mg/m <sup>3</sup>			ppm (7% O <sub>2</sub> )		
	Daily Ave	Max Hourly	Min Hourly	Daily Ave	Max Hourly	Min Hourly	Daily Ave	Max Hourly	Min Hourly
1 September	141	163	110	6.8	9.9	4.0	266	279	247
2 September	133	153	120	7.2	10.9	6.6	249	262	240
3 September	133	157	120	8.1	14.1	6.6	247	261	225
4 September	126	140	108	8.5	14.5	4.6	203	230	182
5 September	-	-	-	-	-	-	-	-	-
6 September	-	-	-	-	-	-	-	-	-
7 September	-	-	-	-	-	-	-	-	-
8 September	-	-	-	-	-	-	-	-	-
9 September	-	-	-	-	-	-	-	-	-
10 September	-	-	-	-	-	-	-	-	-
11 September	-	-	-	-	-	-	-	-	-
12 September	-	-	-	-	-	-	-	-	-
13 September	-	-	-	-	-	-	-	-	-
14 September	-	-	-	-	-	-	-	-	-
15 September	-	-	-	-	-	-	-	-	-
16 September	-	-	-	-	-	-	-	-	-
17 September	-	-	-	-	-	-	-	-	-
18 September	-	-	-	-	-	-	-	-	-
19 September	-	-	-	-	-	-	-	-	-
20 September	-	-	-	-	-	-	-	-	-
21 September	-	-	-	-	-	-	-	-	-
22 September	-	-	-	-	-	-	-	-	-
23 September	-	-	-	-	-	-	-	-	-
24 September	-	-	-	-	-	-	-	-	-
25 September	-	-	-	-	-	-	-	-	-
26 September	-	-	-	-	-	-	-	-	-
27 September	-	-	-	-	-	-	-	-	-
28 September	-	-	-	-	-	-	-	-	-
29 September	-	-	-	-	-	-	-	-	-
30 September	-	-	-	-	-	-	-	-	-

## Unit 3 Boiler Continuous Emission Monitoring Summary

EPA Identification no. 13 - Air emissions monitoring, Boiler 3 stack discharge to air

	NOX			Particulates			SOX		
	ppm (7% O <sub>2</sub> )			mg/m <sup>3</sup>			ppm (7% O <sub>2</sub> )		
	Daily Ave	Max Hourly	Min Hourly	Daily Ave	Max Hourly	Min Hourly	Daily Ave	Max Hourly	Min Hourly
1 September	181	215	126	8.3	10.2	7.1	282	297	253
2 September	171	204	131	8.9	10.5	8.1	256	277	235
3 September	172	194	133	13.0	19.8	8.5	247	258	233
4 September	159	188	114	23.5	41.0	6.9	244	292	211
5 September	158	173	131	7.2	10.0	5.7	232	251	219
6 September	161	177	138	7.3	11.9	5.7	225	259	201
7 September	163	182	118	7.1	10.3	5.6	217	239	196
8 September	185	206	138	6.2	8.2	5.2	221	255	198
9 September	156	205	111	6.6	9.6	5.4	236	277	202
10 September	186	221	137	6.5	8.4	6.2	260	275	228
11 September	150	212	112	6.8	9.3	5.2	259	273	245
12 September	168	181	138	6.5	8.9	5.2	273	308	240
13 September	169	195	113	6.1	8.0	5.4	254	274	237
14 September	149	185	118	6.1	7.2	5.0	246	267	218
15 September	127	153	104	6.3	12.5	4.4	249	265	238
16 September	140	168	111	5.3	6.5	3.9	238	246	210
17 September	152	173	106	7.1	10.1	6.4	226	250	209
18 September	155	182	116	6.7	8.6	6.0	208	239	144
19 September	115	137	108	6.0	7.6	4.5	237	252	219
20 September	137	169	115	6.1	6.6	5.6	203	237	156
21 September	135	148	112	7.6	12.6	5.9	203	229	158
22 September	155	180	109	7.6	10.0	6.4	233	257	198
23 September	154	175	112	7.5	10.6	6.4	241	257	212
24 September	166	186	122	7.6	9.5	6.0	230	246	205
25 September	161	177	103	7.8	12.7	6.3	236	256	206
26 September	157	175	121	7.5	8.9	6.2	226	242	209
27 September	155	178	107	8.0	13.8	6.1	225	248	201
28 September	145	157	116	7.8	10.5	6.9	230	246	205
29 September	147	181	107	6.9	9.4	5.0	207	222	193
30 September	157	183	117	7.9	10.1	5.9	204	233	178

## Unit 4 Boiler Continuous Emission Monitoring Summary

*EPA Identification no. 14 - Air emissions monitoring, Boiler 4 stack discharge to air.*

	NOX			Particulates			SOX		
	ppm (7% O <sub>2</sub> )			mg/m <sup>3</sup>			ppm (7% O <sub>2</sub> )		
	Daily Ave	Max Hourly	Min Hourly	Daily Ave	Max Hourly	Min Hourly	Daily Ave	Max Hourly	Min Hourly
1 September	180	196	157	5.2	7.4	3.3	273	281	259
2 September	175	187	148	3.7	6.4	3.3	254	277	214
3 September	185	198	154	4.7	6.1	3.8	262	271	244
4 September	180	204	157	7.0	12.4	4.0	215	235	193
5 September	184	198	152	5.8	8.2	4.1	235	249	226
6 September	171	199	147	10.9	16.5	7.2	232	240	221
7 September	168	182	150	11.4	14.0	9.3	233	242	218
8 September	179	206	149	11.1	17.5	8.5	238	260	223
9 September	183	199	165	10.4	12.6	3.5	257	272	236
10 September	199	213	174	3.7	4.6	3.1	266	284	253
11 September	186	207	163	6.5	9.9	4.8	266	273	261
12 September	178	200	165	5.6	7.9	3.7	267	277	262
13 September	176	190	155	5.6	7.9	3.7	266	280	249
14 September	169	188	147	6.2	8.9	3.7	262	278	249
15 September	160	180	145	6.3	8.1	4.0	266	277	253
16 September	172	198	141	5.3	6.7	3.5	263	277	208
17 September	187	207	155	4.3	8.5	3.4	257	265	230
18 September	196	218	172	4.4	7.3	3.2	228	258	201
19 September	170	192	155	3.7	5.6	2.8	238	258	159
20 September	177	221	139	3.2	4.2	2.6	219	241	199
21 September	189	211	172	4.2	6.9	2.7	242	249	224
22 September	187	218	163	4.4	9.6	2.7	259	277	244
23 September	194	214	175	6.0	12.8	3.0	272	289	250
24 September	194	242	135	9.4	16.5	3.6	240	284	184
25 September	192	208	177	14.7	22.2	10.4	264	284	252
26 September	176	193	154	16.3	23.1	11.8	251	260	245
27 September	168	182	155	5.1	10.9	3.3	252	255	245
28 September	150	162	132	4.2	6.5	2.4	237	243	230
29 September	155	191	129	4.4	6.7	2.4	218	233	167
30 September	168	183	156	4.4	6.2	2.4	222	237	206



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## Unit 1 Boiler Emission Test Results

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*EPA Identification no. 11 - Air emissions monitoring, Boiler 1 stack discharge to air*

<u>Name</u>	<u>Reading</u>	<u>Units</u>	<u>Licence Limit</u>	<u>Date</u>
Cadmium	0.019	mg/m <sup>3</sup>	0.2	15/08/2017
Carbon Dioxide (Wet)	12.6	%	-	15/08/2017
Carbon Monoxide	14	ppm	-	15/08/2017
Chlorine	0.083	mg/m3	200	15/08/2017
Copper	0.0014	mg/m3	-	15/08/2017
Dry Gas Density	1.35	kg/m3	-	15/08/2017
Fluoride As HF - Total	8.7	mg/m3	50	15/08/2017
Hazardous Substances (Metals) - Total	0.030	mg/m3	1	15/08/2017
Hydrogen Chloride	2.6	mg/m3	100	15/08/2017
Mercury	<0.000096	mg/m3	0.2	15/08/2017
Moisture	5.3	%	-	15/08/2017
Particulates - Total	1.9	mg/m3	50	15/08/2017
Stack Gas Molecular Weight	30.3	kg/k-mole	-	15/08/2017
Temperature	107	degC	-	15/08/2017
Velocity	15	m/sec	-	15/08/2017
Volatile Organic Compounds (VOC) - Total	<0.08	ppm	-	15/08/2017
Volumetric Flow Rate (Dry At STP)	343	m3/sec	-	15/08/2017

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## Unit 2 Boiler Emission Test Results

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*EPA Identification no. 12 - Air emissions monitoring, Boiler 2 stack discharge to air*

<u>Name</u>	<u>Reading</u>	<u>Units</u>	<u>Licence Limit</u>	<u>Date</u>
Cadmium	<0.0002	mg/m <sup>3</sup>	0.2	27-28/02/2018
Carbon Dioxide (Wet)	12.9	%	-	27-28/02/2018
Carbon Monoxide	14	ppm	-	27-28/02/2018
Chlorine	0.033	mg/m <sup>3</sup>	200	27-28/02/2018
Copper	0.0009	mg/m <sup>3</sup>	-	27-28/02/2018
Dry Gas Density	1.4	kg/m <sup>3</sup>	-	27-28/02/2018
Fluoride As HF - Total	10.4	mg/m <sup>3</sup>	50	27-28/02/2018
Hazardous Substances (Metals) - Total	≤0.0097	mg/m <sup>3</sup>	1	27-28/02/2018
Hydrogen Chloride	9.6	mg/m <sup>3</sup>	100	27-28/02/2018
Mercury	0.00051	mg/m <sup>3</sup>	0.2	27-28/02/2018
Moisture	7.2	%	-	27-28/02/2018
Particulates - Total	3.4	mg/m <sup>3</sup>	50	27-28/02/2018
Stack Gas Molecular Weight	30.5	Kg/k-mole	-	27-28/02/2018
Temperature	122	degC	-	27-28/02/2018
Velocity	14	m/sec	-	27-28/02/2018
Volatile Organic Compounds (VOC) - Total	<0.06	ppm	-	27-28/02/2018
Volumetric Flow Rate (Dry At STP)	336	m <sup>3</sup> /sec	-	27-28/02/2018

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### Unit 3 Boiler Emission Test Results

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*EPA Identification no. 13 - Air emissions monitoring, Boiler 3 stack discharge to air*

<u>Name</u>	<u>Reading</u>	<u>Units</u>	<u>Licence Limit</u>	<u>Date</u>
Cadmium	<0.0002	mg/m <sup>3</sup>	0.2	29-30/05/2018
Carbon Dioxide (Wet)	13.2	%	-	29-30/05/2018
Carbon Monoxide	5.4	ppm	-	29-30/05/2018
Chlorine	<0.014	mg/m <sup>3</sup>	200	29-30/05/2018
Copper	<0.00046	mg/m <sup>3</sup>	-	29-30/05/2018
Dry Gas Density	1.36	kg/m <sup>3</sup>	-	29-30/05/2018
Fluoride As HF - Total	9.5	mg/m <sup>3</sup>	50	29-30/05/2018
Hazardous Substances (Metals) - Total	<0.011	mg/m <sup>3</sup>	1	29-30/05/2018
Hydrogen Chloride	11.5	mg/m <sup>3</sup>	100	29-30/05/2018
Mercury	<0.00033	mg/m <sup>3</sup>	0.2	29-30/05/2018
Moisture	7.2	%	-	29-30/05/2018
Particulates - Total	5.3	mg/m <sup>3</sup>	50	29-30/05/2018
Stack Gas Molecular Weight	30.5	kg/k-mole	-	29-30/05/2018
Temperature	117	degC	-	29-30/05/2018
Velocity	15.0	m/sec	-	29-30/05/2018
Volatile Organic Compounds (VOC) - Total	<0.006	ppm	-	29-30/05/2018
Volumetric Flow Rate (Dry At STP)	361	m <sup>3</sup> /sec	-	29-30/05/2018



## Unit 4 Boiler Emission Test Results

EPA Identification no. 14 - Air emissions monitoring, Boiler 4 stack discharge to air

<u>Name</u>	<u>Reading</u>	<u>Units</u>	<u>Licence Limit</u>	<u>Date</u>
Cadmium	0.0028	mg/m <sup>3</sup>	0.2	24-25/10/2017
Carbon Dioxide (Wet)	12.3	%	-	24-25/10/2017
Carbon Monoxide	10	ppm	-	24-25/10/2017
Chlorine	0.051	mg/m <sup>3</sup>	200	24-25/10/2017
Copper	0.00055	mg/m <sup>3</sup>	-	24-25/10/2017
Dry Gas Density	1.36	kg/m <sup>3</sup>	-	24-25/10/2017
Fluoride As HF - Total	5.8	mg/m <sup>3</sup>	50	24-25/10/2017
Hazardous Substances (Metals) - Total	0.0075	mg/m <sup>3</sup>	1	24-25/10/2017
Hydrogen Chloride	1.8	mg/m <sup>3</sup>	100	24-25/10/2017
Mercury	0.000091	mg/m <sup>3</sup>	0.2	24-25/10/2017
Moisture	5.1	%	-	24-25/10/2017
Particulates - Total	1.2	mg/m <sup>3</sup>	50	24-25/10/2017
Stack Gas Molecular Weight	30.4	kg/k-mole	-	24-25/10/2017
Temperature	121	degC	-	24-25/10/2017
Velocity	15.5	m/sec	-	24-25/10/2017
Volatile Organic Compounds (VOC) - Total	<0.07	ppm	-	24-25/10/2017
Volumetric Flow Rate (Dry At STP)	376	m <sup>3</sup> /sec	-	25-25/10/2017

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## Eraring Depositional Dust Gauges

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*EPA Identification no. 18, 25, 26 & 27 - Depositional dust monitoring within 1km  
of the coal handling operations*

	Deposited Matter		
	g/m <sup>2</sup> /month		
	Ash	Combustible	Insolubles
<b>E2</b>	1.5	0.4	1.9
<b>E4</b>	0.8	0.4	1.2
<b>E6</b>	0.8	1.4	2.2
<b>U6</b>	0.6	0.2	0.8

## Water Quality - Lake Monitoring LM10

*EPA Identification no. 4 - The waters of Lake Macquarie located midway between cooling water inlet and Hungary Point*

	Temp	pH	Salinity	Dissolved Oxygen		Secchi
	degC		ppt	%	mg/L	m
<b>Depth/Air</b>	18.48					
<b>010cm</b>	17.70	8.54	36.4	90.8	6.72	2.50
<b>050cm</b>	17.60	8.54	36.4	87.3	6.45	
<b>100cm</b>	17.58	8.57	36.4	86.3	6.35	
<b>150cm</b>	17.56	8.61	36.5	84.9	6.31	
<b>200cm</b>	17.56	8.62	36.5	84.7	6.29	
<b>Bottom</b>	17.59	8.63	36.5	74.3	5.48	

## Water Quality - Lake Monitoring LM12

*EPA Identification no. 6 - The waters of Lake Macquarie located at the Eraring/Vales Point mixing zone off Fishery Point*

	Temp	pH	Salinity	Dissolved Oxygen		Secchi
	degC		ppt	%	mg/L	m
<b>Depth/Air</b>	16.35					
<b>010cm</b>	16.73	8.50	36.7	80.0	6.03	3.25
<b>050cm</b>	16.72	8.51	36.7	78.2	5.86	
<b>100cm</b>	16.75	8.52	36.7	78.3	5.84	
<b>150cm</b>	16.65	8.58	36.8	80.3	6.09	
<b>200cm</b>	16.72	8.60	36.8	81.6	6.20	
<b>250cm</b>	16.65	8.60	36.8	81.3	6.14	
<b>300cm</b>	16.50	8.61	36.8	83.9	6.33	
<b>350cm</b>	16.65	8.62	36.8	84.6	6.38	
<b>400cm</b>	16.56	8.61	37.0	81.9	6.11	
<b>450cm</b>	16.13	8.60	37.0	82.0	6.21	
<b>500cm</b>	16.10	8.60	37.2	79.6	6.00	
<b>550cm</b>	16.05	8.60	37.2	79.5	6.07	
<b>600cm</b>	16.10	8.61	37.2	82.4	6.29	
<b>Bottom</b>	15.97	8.60	37.2	75.6	5.71	

## Water Quality - Lake Monitoring LM4

*EPA Identification no. 7 - The northern waters of Lake Macquarie east off Lake Macquarie Yacht Club*

	Temp	pH	Salinity	Dissolved Oxygen		Secchi
	degC		ppt	%	mg/L	m
<b>Depth/Air</b>	15.10					
<b>010cm</b>	15.15	8.38	36.4	80.0	6.29	4.75
<b>050cm</b>	15.23	8.41	36.3	75.5	5.78	
<b>100cm</b>	15.22	8.42	36.2	80.7	6.15	
<b>150cm</b>	15.26	8.44	36.2	76.3	5.88	
<b>200cm</b>	15.26	8.47	36.2	74.3	5.72	
<b>250cm</b>	15.25	8.47	36.2	78.9	6.06	
<b>300cm</b>	15.16	8.50	36.3	77.9	6.09	
<b>350cm</b>	15.15	8.48	36.3	75.3	5.90	
<b>400cm</b>	15.08	8.49	36.4	75.4	5.68	
<b>450cm</b>	15.22	8.52	36.7	73.4	5.60	
<b>500cm</b>	15.21	8.53	36.8	74.5	5.56	
<b>550cm</b>	15.15	8.52	36.9	56.9	5.82	
<b>600cm</b>	15.16	8.54	36.8	56.1	5.66	
<b>650cm</b>	15.16	8.54	36.8	56.1	5.74	
<b>700cm</b>	15.13	8.52	36.8	56.1	5.79	
<b>750cm</b>	15.13	8.53	36.8	56.1	5.71	
<b>Bottom</b>	15.06	8.53	36.8	72.8	5.62	

## Water Quality - Lake Monitoring LM7

*EPA Identification no. 5 - The waters of Lake Macquarie located off old Wangi power station inlet point in Myuna Bay*

	Temp	pH	Salinity	Dissolved Oxygen		Secchi
	degC		ppt	%	mg/L	m
<b>Depth/Air</b>	17.37					
<b>010cm</b>	19.53	8.42	36.8	95.8	6.81	3.25
<b>050cm</b>	19.67	8.42	36.7	91.4	6.43	
<b>100cm</b>	19.70	8.43	36.7	91.3	6.53	
<b>150cm</b>	19.68	8.49	36.7	88.6	6.28	
<b>200cm</b>	19.61	8.52	36.6	87.5	6.10	
<b>250cm</b>	19.42	8.54	36.8	85.4	6.23	
<b>300cm</b>	16.83	8.58	36.7	82.2	5.90	
<b>350cm</b>	16.73	8.59	36.8	74.7	5.64	
<b>400cm</b>	16.57	8.58	36.9	74.6	5.49	
<b>450cm</b>	16.54	8.57	36.9	73.1	5.14	
<b>500cm</b>	16.51	8.57	36.9	70.2	5.27	
<b>550cm</b>	16.49	8.58	37.0	64.9	5.16	
<b>Bottom</b>	16.52	8.57	36.9	55.7	4.08	



## Eraring Ash Dam Effluent Quality Monitoring

*EPA Identification no. 10 - Discharge point below siphon pond weir at Ash Dam*

<u>Name</u>		<u>Units</u>	<u>Licence Limit</u>	<u>Date</u>
Cadmium	0.07	ug/L	-	06/09/2018
Copper	4.0	ug/L	-	06/09/2018
Iron	35	ug/L	-	06/09/2018
Lead	<0.1	ug/L	-	06/09/2018
Manganese	29.4	ug/L	-	06/09/2018
Nitrite and Nitrate as N	6520	ug/L	-	06/09/2018
Phosphorus Reactive as P - Total	588	ug/L	-	06/09/2018
Phosphorus as P - Total	626	ug/L	-	06/09/2018
Selenium	14.3	ug/L	-	06/09/2018
Suspended Solids (SS)	5	mg/L	-	06/09/2018
Zinc	4	ug/L	-	06/09/2018
pH	8.20		-	06/09/2018

## Eraring Cooling Water Inlet Canal

*EPA Identification no. 8 - Inlet canal of the cooling water intake from Lake Macquarie*

<u>Name</u>		<u>Units</u>	<u>Licence Limit</u>	<u>Date</u>
Copper	2.3	ug/L	-	06/09/2018
Iron	92	ug/L	-	06/09/2018
Selenium	<1	ug/L	-	06/09/2018
Temperature – Average	18.5	deg C	-	September 2018
Temperature – Minimum	15.5	deg C	-	September 2018
Temperature - Maximum	20.9	deg C	-	September 2018

## Eraring Cooling Water Outlet Canal

*EPA Identification no. 1 - Cooling water outlet canal to Myuna Bay*

<u>Name</u>	<u>Reading</u>	<u>Units</u>	<u>Licence Limit</u>	<u>Date</u>
Copper	4	ug/L	5	20/09/2018
Iron	98	ug/L	300	06/09/2018
Selenium	<1	ug/L	2	06/09/2018
Temperature – Average	27.3	deg C	37.5	September 2018
Temperature – Minimum	21.4	deg C	37.5	September 2018
Temperature - Maximum	30.7	deg C	37.5	September 2018
Maximum Daily Discharge from Ash Dam	40.08	ML	150	September 2018
Monthly Discharge from Ash Dam	364.5.	ML	-	September 2018

## Emergency Discharge – Toe Drain Pond

*EPA Identification no. 17 - Emergency discharge to toe drain collection pond*

<u>Name</u>	<u>Reading</u>	<u>Units</u>	<u>Licence Limit</u>	<u>Date</u>
Nitrite and Nitrate as N	2	ug/L	-	06/09/2018
Phosphorus as P – Total	59	ug/L	-	06/09/2018
pH	7.40		-	06/09/2018

## Groundwater Monitoring

### Groundwater Well – MW01

EPA Identification no. 21 – Groundwater Monitoring Well 01

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Name	Reading	Units	Date
Arsenic	0.3	ug/L	8/06/2018
Cadmium	<0.05	ug/L	8/06/2018
Calcium	2000	ug/L	8/06/2018
Chromium	<0.2	ug/L	8/06/2018
Copper	1.6	ug/L	8/06/2018
Electrical Conductivity	0.379	mS/cm	8/06/2018
Iron	270	ug/L	8/06/2018
Lead	0.2	ug/L	8/06/2018
Magnesium	4000	ug/L	8/06/2018
Manganese	102	ug/L	8/06/2018
Nickel	4.3	ug/L	8/06/2018
pH	5.67	pH	8/06/2018
Potassium	4000	ug/L	8/06/2018
Selenium	<0.2	ug/L	8/06/2018
Standing Water Level	10.17	metres	8/06/2018
Zinc	35	ug/L	8/06/2018

### Groundwater Well – MW02

EPA Identification no. 22 – Groundwater Monitoring Well 02

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Name	Reading	Units	Date
Arsenic	7.2	ug/L	8/06/2018
Cadmium	<0.05	ug/L	8/06/2018
Calcium	327000	ug/L	8/06/2018
Chromium	0.8	ug/L	8/06/2018
Copper	<0.5	ug/L	8/06/2018
Electrical Conductivity	15.800	mS/cm	8/06/2018
Iron	5140	ug/L	8/06/2018
Lead	<0.1	ug/L	8/06/2018
Magnesium	216000	ug/L	8/06/2018
Manganese	1090	ug/L	8/06/2018
Nickel	1.9	ug/L	8/06/2018
pH	6.46	pH	8/06/2018
Potassium	109000	ug/L	8/06/2018
Selenium	0.2	ug/L	8/06/2018
Standing Water Level	4.24	metres	8/06/2018
Zinc	13	ug/L	8/06/2018

## Groundwater Well – MW06

EPA Identification no. 23 – Groundwater Monitoring Well 06

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Name	Reading	Units	Date
Arsenic	6.4	ug/L	8/06/2018
Cadmium	<0.05	ug/L	8/06/2018
Calcium	451000	ug/L	8/06/2018
Chromium	0.7	ug/L	8/06/2018
Copper	<0.5	ug/L	8/06/2018
Electrical Conductivity	21.300	mS/cm	8/06/2018
Iron	11900	ug/L	8/06/2018
Lead	<0.1	ug/L	8/06/2018
Magnesium	270000	ug/L	8/06/2018
Manganese	390	ug/L	8/06/2018
Nickel	0.8	ug/L	8/06/2018
pH	6.58	pH	8/06/2018
Potassium	124000	ug/L	8/06/2018
Selenium	0.4	ug/L	8/06/2018
Standing Water Level	1.645	metres	8/06/2018
Zinc	2	ug/L	8/06/2018

EPA Identification no. 24 – Groundwater Monitoring Well D26

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Groundwater well was dry during sampling in June 2018

Name	Reading	Units	Date
Arsenic		ug/L	8/06/2018
Cadmium		ug/L	8/06/2018
Calcium		ug/L	8/06/2018
Chromium		ug/L	8/06/2018
Copper		ug/L	8/06/2018
Electrical Conductivity		mS/cm	8/06/2018
Iron		ug/L	8/06/2018
Lead		ug/L	8/06/2018
Magnesium		ug/L	8/06/2018
Manganese		ug/L	8/06/2018
Nickel		ug/L	8/06/2018
pH		pH	8/06/2018
Potassium		ug/L	8/06/2018
Selenium		ug/L	8/06/2018
Standing Water Level		metres	8/06/2018
Zinc		ug/L	8/06/2018