

Environmental Monitoring Data:- EPA License Number 549

Site Name: IXOM Operations Pty Ltd

Site Address: Gate 1, Foreshore Road, Port Kembla, NSW, 2505

The site has three Licensed Discharge Points as detailed in the monitoring data tables below: **LDP1, LDP2 and LDP 4**

LDP1: SARP (Spent Acid Regeneration Plant) Stack

Description: This is the large (80m) high concrete stack.
Pollutants Discharged: This discharge point is licensed for discharge of Sulphur Dioxide (SO2) and Sulphur Trioxide (SO3)
Units Of Measure: Both Sulphur Dioxide and Sulphur Trioxide are measured in mg/m3 (milligrams per cubic meter)
Monitoring Frequency: Sulphur Dioxide - Continuous Monitoring, licensed in 1hr block averages.
Monitoring Frequency: Sulphur Trioxide - Testing conducted three times per licence period
Discharge limits for this point are maximum concentrations: **Sulphur Dioxide** 1hr average maximum is 2800 mg/m3
Sulphur Trioxide maximum is 50 mg/m3 (minimum 1hr block average)
 The data in the below table shows the maximum, minimum and average concentrations of **sulphur dioxide** measured on each 24hr day from midnight to midnight. For **Sulphur Trioxide** the data presented is the result of the actual stack test and is reported against the actual day the test was conducted. There is a delay of several weeks between the test date and results being received.
 The data in the below table is updated at two weekly intervals.

LDP2: SMBS (Sodium MetaBisulphite Plant) Stack

Description: This is the small white (22m) high stack adjacent to the white building on site
Pollutants Discharged: This discharge point is licensed for discharge of Sulphur Dioxide (SO2)
Units Of Measure: Sulphur Dioxide is measured in mg/m3 (milligrams per cubic meter)
Monitoring Frequency: Sulphur Dioxide - Continuous Monitoring, licensed in 1hr block averages.
 Discharge limit for this point is maximum concentration: Sulphur Dioxide 1hr average maximum is 559 mg/m3
 The data in the below table shows the maximum, minimum and average concentrations of **sulphur dioxide** measured on each 24hr day from midnight to midnight.
 The data in the below table is updated at two weekly intervals.

LDP4: Wastewater discharge to council drain adjacent to Tank 7

Description: This is a wastewater discharge point which discharges treated wastewater only into the council drain which runs through the centre of the site
 This drain discharges into the Port Kembla Outer Harbour and also carries storm water run off from the local area.
Pollutants Discharged: This discharge point is licensed for discharge of treated wastewater containing a maximum concentration of Total Suspended Solids as well as finite pH range.
Units Of Measure: Total Suspended Solids are measured in milligrams of solids per litre of wastewater discharged and pH is measured in standard pH units
Monitoring Frequency: Total Suspended Solids - Continuous during discharge events
Monitoring Frequency: pH - Continuous during discharge events
Discharge limits: pH - The pH is measured in a defined range and the limits are 6.5<pH<8.5. The license applies to **AVERAGE pH** recorded on **each discharge event**.
TSS: The maximum for TSS concentration is 40mg/L in dry weather and 150mg/L in wet weather (wet weather is defined as any 24hr period in which more than 10mm of rain falls). **The license applies to the AVERAGE TSS over each discharge event**
Volume: - This discharge point also requires monitoring of total volume discharged each day and has a maximum allowed discharge volume of <1000kL/day
 The data in the table below shows Maximum, Minimum and average values per day for TSS and pH as well as daily volume discharged and total rainfall recorded.
 This data is updated every two weeks.

Yearly Environmental Monitoring Data Summary (EPA reporting period 1 October 2018 to 30 September 2019)

LDP1: SARP Stack				LDP2: SMBS Stack				LDP4: Wastewater Discharge adjacent to T7									
SO2 max allowed		2800mg/m3		SO2 max allowed		559mg/m3		pH Max allowed	8.5	TSS Max allowed (Dry Weather)		40mg/L					
SO3 max allowed		50mg/m3						pH Min allowed	6.5	TSS Max Allowed (Wet Weather)		150mg/L					
								Max Monthly Volume discharged allowed:							28-31000 kL/mnth (1000kL/day)		
Month	SO2 Max (mg/m3)	SO2 Min (mg/m3)	SO2 Average (mg/m3)	SO3 result (mg/m3)	SO2 Max (mg/m3)	SO2 Min (mg/m3)	SO2 Average (mg/m3)		pH Max	pH Min	pH Average	TSS Max (mg/L)	TSS Min (mg/L)	TSS Average (mg/L)	Total Volume (kL)	Rainfall per month (mm)	
Oct-18	2051	0	1027		Oct-18	65	2	8	Oct-18	8.4	6.6	7.2	36	7	15	1592	105
Nov-18	2031	0	905	5.7	Nov-18	111	2	13	Nov-18	8.3	6.8	7.2	31	4	15	2086	120
Dec-18	2075	0	252		Dec-18	28	0	4	Dec-18	8.3	6.7	7.9	32	7	16	892	87
Jan-19	0	0	0		Jan-19	111	0	4	Jan-19	8.3	6.8	8.0	37	8	15	835	92
Feb-19	2087	0	272	51	Feb-19	102	0	4	Feb-19	8.3	6.8	7.8	28	7	15	845	46
Mar-19	2153	0	1075		Mar-19	10	0	4	Mar-19	8.3	6.7	7.4	29	7	18	2126	215
Apr-19	2167	0	831		Apr-19	31	2	5	Apr-19	8.3	6.6	7.8	33	6	16	1275	68
May-19	2032	0	1076		May-19	14	2	5	May-19	8.3	6.8	7.5	36	4	12	1333	9
Jun-19	1132	0	15		Jun-19	315	0	6	Jun-19	8.3	6.8	7.8	38	4	14	730	127
Jul-19	1684	0	78		Jul-19	84	0	4	Jul-19	8.3	6.8	7.8	38	0	11	415	10
Aug-19	2020	0	1102	16	Aug-19	21	2	6	Aug-19	8.3	6.8	7.9	39	7	19	2127	67
Sep-19	1873	0	846		Sep-19	135	1	5	Sep-19	8.3	6.8	7.8	38	9	19	1852	106
Full Reporting Year Results	2167	0	623	24		315	0	6		8.4	6.6	7.7	39	0	15	16107	1052

Environmental Monitoring Data:- EPA License Number 549

October 2018

Site Name: IXOM Operations Pty Ltd

Site Address: Gate 1, Foreshore Road, Port Kembla, NSW, 2505

The site has three Licensed Discharge Points as detailed in the monitoring data tables below: LDP1, LDP2 and LDP 4

Licensed Discharge Point 1 - SARP Stack

Limits:		SO2 Max: 2800mg/m3			SO3 Max: 50mg/m3	
Day	Date	SO2 Maximum (mg/m3)	SO2 Minimum (mg/m3)	SO2 Average (mg/m3)	SO3 Result (mg/m3)	Sampling Information (sampling for SO ₃ conducted three times per year)
Monday	1/10/2018	1782	694	1312		
Tuesday	2/10/2018	1908	1150	1581		
Wednesday	3/10/2018	1933	1279	1542		
Thursday	4/10/2018	2051	853	1241		
Friday	5/10/2018	1851	1177	1288		
Saturday	6/10/2018	1564	1074	1257		
Sunday	7/10/2018	1535	1048	1321		
Monday	8/10/2018	1815	1412	1640		
Tuesday	9/10/2018	2029	1364	1671		
Wednesday	10/10/2018	1812	1152	1339		
Thursday	11/10/2018	1372	1156	1281		
Friday	12/10/2018	1291	708	993		
Saturday	13/10/2018	1296	506	946		
Sunday	14/10/2018	1287	939	1086		
Monday	15/10/2018	1601	695	1103		
Tuesday	16/10/2018	1408	1055	1280		
Wednesday	17/10/2018	1798	1093	1461		
Thursday	18/10/2018	1749	1276	1498		
Friday	19/10/2018	1745	915	1351		
Saturday	20/10/2018	1517	644	1217		
Sunday	21/10/2018	1460	549	1144		
Monday	22/10/2018	1405	0	641		
Tuesday	23/10/2018	0	0	0		
Wednesday	24/10/2018	0	0	0		
Thursday	25/10/2018	0	0	0		
Friday	26/10/2018	1359	0	320		
Saturday	27/10/2018	1749	457	1205		
Sunday	28/10/2018	449	0	30		
Monday	29/10/2018	51	0	3		
Tuesday	30/10/2018	1512	0	931		
Wednesday	31/10/2018	1368	1058	1158		
Monthly Results		2051	0	1027		

Licensed Discharge Point 2: SMBS Stack

Limits:		SO2 Max: 560mg/m3		
Day	Date	SO2 Maximum (mg/m3)	SO2 Minimum (mg/m3)	SO2 Average (mg/m3)
Monday	1/10/2018	6	6	6
Tuesday	2/10/2018	6	5	6
Wednesday	3/10/2018	5	4	5
Thursday	4/10/2018	5	2	3
Friday	5/10/2018	10	3	7
Saturday	6/10/2018	10	8	9
Sunday	7/10/2018	9	8	9
Monday	8/10/2018	10	8	8
Tuesday	9/10/2018	9	8	9
Wednesday	10/10/2018	8	6	7
Thursday	11/10/2018	65	6	9
Friday	12/10/2018	7	5	6
Saturday	13/10/2018	8	5	6
Sunday	14/10/2018	7	6	7
Monday	15/10/2018	9	5	6
Tuesday	16/10/2018	8	6	7
Wednesday	17/10/2018	10	6	8
Thursday	18/10/2018	11	9	9
Friday	19/10/2018	10	9	10
Saturday	20/10/2018	9	7	8
Sunday	21/10/2018	8	7	8
Monday	22/10/2018	8	7	8
Tuesday	23/10/2018	9	8	8
Wednesday	24/10/2018	9	7	8
Thursday	25/10/2018	55	7	22
Friday	26/10/2018	15	7	9
Saturday	27/10/2018	9	7	8
Sunday	28/10/2018	13	6	8
Monday	29/10/2018	7	6	6
Tuesday	30/10/2018	7	6	6
Wednesday	31/10/2018	7	6	6
Monthly Results		65	2	8

Licensed Discharge Point 4: Wastewater discharge adjacent to T7

Limits:		pH Max 8.5	pH Min 6.5		TSS Max: Dry weather 40mg/L	1000kl per day Max	Wet Weather >10mm/24hrs		
Day	Date	pH Max	pH Min	pH Average	TSS Max (mg/L)	TSS min (mg/L)	TSS Average (mg/L)	Total Volume discharged per day (kl)	Rainfall per day - 24hrs (mm)
Monday	1/10/2018	8.3	7.9	8.2	10	8	9	39.8	0
Tuesday	2/10/2018	7.9	6.9	7.2	10	9	9	39.8	0
Wednesday	3/10/2018	7.3	6.9	7.1	9	8	9	29.9	0
Thursday	4/10/2018	7.7	6.8	7.1	11	8	9	136.7	2
Friday	5/10/2018	8.2	6.8	7.0	11	7	9	88.4	52
Saturday	6/10/2018	7.7	6.9	7.2	14	7	12	34.5	4
Sunday	7/10/2018	7.8	6.7	7.0	16	13	14	70.6	0
Monday	8/10/2018	7.3	6.8	7.0	15	13	14	60.8	22
Tuesday	9/10/2018	7.2	6.9	7.1	16	15	15	30.0	4
Wednesday	10/10/2018	7.2	6.8	7.0	36	16	24	38.7	0
Thursday	11/10/2018	7.2	6.8	7.0	29	17	22	43.7	1
Friday	12/10/2018	7.0	6.8	6.9	30	21	25	43.2	1
Saturday	13/10/2018	6.9	6.8	6.9	32	26	28	52.9	1
Sunday	14/10/2018	7.5	6.8	7.0	31	23	27	68.8	1
Monday	15/10/2018	7.3	6.8	7.0	24	14	17	83.5	3
Tuesday	16/10/2018	7.5	6.9	7.3	16	14	15	56.0	5
Wednesday	17/10/2018	7.7	6.8	7.1	23	9	15	54.8	1
Thursday	18/10/2018	8.0	6.8	6.9	9	7	8	80.5	5
Friday	19/10/2018	6.9	6.8	6.8	8	7	8	40.4	1
Saturday	20/10/2018	6.9	6.8	6.8	8	8	8	38.7	0
Sunday	21/10/2018	6.9	6.8	6.8	9	8	8	33.2	2
Monday	22/10/2018	7.0	6.8	6.8	12	9	11	22.3	0
Tuesday	23/10/2018	8.1	6.6	6.9	15	9	13	21.7	0
Wednesday	24/10/2018	8.3	6.9	7.4	9	7	8	21.0	0
Thursday	25/10/2018	8.4	6.6	7.2	28	9	16	41.5	0
Friday	26/10/2018	8.3	7.1	7.7	22	19	20	48.4	0
Saturday	27/10/2018	8.2	7.6	8.0	30	19	25	61.9	0
Sunday	28/10/2018	8.0	6.7	7.3	29	23	27	35.8	0
Monday	29/10/2018	8.2	6.7	7.8	23	20	21	50.2	0
Tuesday	30/10/2018	8.2	6.9	7.5	21	18	19	55.3	0
Wednesday	31/10/2018	7.1	6.8	6.9	21	8	12	69.0	0
Monthly Results		8.4	6.6	7.2	36	7	15	1592	105

Environmental Monitoring Data:- EPA License Number 549 November 2018
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SO3 sample details:
13/11 - Sample for SO3 taken.
28/11 - Report for SO3 result received by Ixom
4/12 - SO3 result for 13/11 published

Licensed Discharge Point 1 - SARP Stack						
Limits:		SO2 Max: 2800mg/m3			SO3 Max: 50mg/m3	
Day	Date	SO2 Maximum (mg/m3)	SO2 Minimum (mg/m3)	SO2 Average (mg/m3)	SO3 Result (mg/m3)	Sampling Information (sampling for SO ₃ conducted three times per year)
Thursday	1/11/2018	1611	945	1270		
Friday	2/11/2018	1818	988	1366		
Saturday	3/11/2018	1529	705	1184		
Sunday	4/11/2018	1560	753	993		
Monday	5/11/2018	1378	911	1095		
Tuesday	6/11/2018	1464	702	1056		
Wednesday	7/11/2018	1122	800	1002		
Thursday	8/11/2018	1303	826	1051		
Friday	9/11/2018	1503	937	1188		
Saturday	10/11/2018	1376	911	1172		
Sunday	11/11/2018	1420	918	1156		
Monday	12/11/2018	1431	749	1009		
Tuesday	13/11/2018	1511	805	1082	5.7	see above
Wednesday	14/11/2018	1450	1249	1344		
Thursday	15/11/2018	1576	921	1077		
Friday	16/11/2018	1298	1012	1108		
Saturday	17/11/2018	1265	957	1089		
Sunday	18/11/2018	1169	871	971		
Monday	19/11/2018	1082	0	304		
Tuesday	20/11/2018	0	0	0		
Wednesday	21/11/2018	0	0	0		
Thursday	22/11/2018	0	0	0		
Friday	23/11/2018	277	0	13		
Saturday	24/11/2018	1905	406	1402		
Sunday	25/11/2018	1680	1144	1454		
Monday	26/11/2018	1527	959	1188		
Tuesday	27/11/2018	1819	0	592		
Wednesday	28/11/2018	2031	0	549		
Thursday	29/11/2018	1329	0	826		
Friday	30/11/2018	1215	384	604		
Monthly Results		2031	0	905	5.7	

Licensed Discharge Point 2: SMBS Stack				
Limits:		SO2 Max: 560mg/m3		
Day	Date	SO2 Maximum (mg/m3)	SO2 Minimum (mg/m3)	SO2 Average (mg/m3)
Thursday	1/11/2018	6	6	6
Friday	2/11/2018	71	5	16
Saturday	3/11/2018	86	7	24
Sunday	4/11/2018	9	7	8
Monday	5/11/2018	11	8	9
Tuesday	6/11/2018	15	9	10
Wednesday	7/11/2018	11	7	9
Thursday	8/11/2018	8	7	7
Friday	9/11/2018	11	7	9
Saturday	10/11/2018	11	9	9
Sunday	11/11/2018	10	9	10
Monday	12/11/2018	10	9	9
Tuesday	13/11/2018	9	8	9
Wednesday	14/11/2018	10	8	9
Thursday	15/11/2018	10	8	9
Friday	16/11/2018	9	7	8
Saturday	17/11/2018	9	7	8
Sunday	18/11/2018	10	8	8
Monday	19/11/2018	17	8	9
Tuesday	20/11/2018	10	9	9
Wednesday	21/11/2018	10	9	9
Thursday	22/11/2018	11	8	9
Friday	23/11/2018	25	8	11
Saturday	24/11/2018	11	9	9
Sunday	25/11/2018	71	9	23
Monday	26/11/2018	14	9	10
Tuesday	27/11/2018	17	11	13
Wednesday	28/11/2018	73	5	27
Thursday	29/11/2018	70	3	43
Friday	30/11/2018	111	2	46
Monthly Results		111	2	13

Licensed Discharge Point 4: Wastewater discharge adjacent to T7										
Limits:		pH Max 8.5	pH Min 6.5		TSS Max: Dry weather 40mg/L	1000kl per day Max	Wet Weather >10mm/24hrs			
Day	Date	pH Max	pH Min	pH Average	TSS Max (mg/L)	TSS min (mg/L)	TSS Average (mg/L)	Total Volume discharged per day (kl)	Rainfall per day - 24hrs (mm)	
Thursday	1/11/2018	7.1	6.8	6.9	8	7	8	70.0	0	
Friday	2/11/2018	7.2	6.8	6.9	8	4	7	69.9	0	
Saturday	3/11/2018	7.2	6.8	6.9	9	6	7	62.7	3	
Sunday	4/11/2018	7.8	6.8	7.0	19	8	17	75.1	0	
Monday	5/11/2018	8.0	6.8	7.1	18	15	16	73.1	0	
Tuesday	6/11/2018	7.6	6.8	7.1	17	13	15	73.9	0	
Wednesday	7/11/2018	7.5	6.8	7.0	17	14	15	112.4	0	
Thursday	8/11/2018	8.0	6.9	7.6	16	13	15	118.5	20	
Friday	9/11/2018	8.0	6.9	7.4	17	16	17	94.6	5	
Saturday	10/11/2018	7.1	6.8	6.9	18	16	16	84.5	0	
Sunday	11/11/2018	7.0	6.8	6.9	17	16	16	74.8	0	
Monday	12/11/2018	7.0	6.8	6.9	16	16	16	72.4	0	
Tuesday	13/11/2018	7.1	6.8	6.9	17	16	17	73.7	0	
Wednesday	14/11/2018	7.0	6.8	6.9	17	16	17	77.4	0	
Thursday	15/11/2018	7.1	6.8	6.9	21	15	17	94.1	1	
Friday	16/11/2018	6.9	6.8	6.9	19	15	17	82.2	10	
Saturday	17/11/2018	7.1	6.8	6.9	19	17	18	74.1	1	
Sunday	18/11/2018	7.1	6.8	6.9	18	16	17	73.3	2	
Monday	19/11/2018	7.3	6.8	7.0	17	17	17	67.9	0	
Tuesday	20/11/2018	7.7	7.2	7.5	17	13	15	24.3	0	
Wednesday	21/11/2018	7.8	7.1	7.6	12	7	10	18.5	0	
Thursday	22/11/2018	7.9	7.4	7.5	8	7	8	31.2	0	
Friday	23/11/2018	7.8	7.6	7.7	8	7	8	34.3	0	
Saturday	24/11/2018	8.2	7.4	7.9	7	5	6	35.0	0	
Sunday	25/11/2018	8.1	7.3	7.8	20	6	9	58.4	0	
Monday	26/11/2018	7.4	6.9	7.1	28	22	26	51.1	7	
Tuesday	27/11/2018	7.6	6.8	7.0	31	27	29	38.1	0	
Wednesday	28/11/2018	7.7	7.0	7.3	22	13	16	177.2	4	
Thursday	29/11/2018	7.9	6.8	7.1	22	14	16	44.7	67	
Friday	30/11/2018	8.3	7.6	8.1	30	21	26	49.2	0	
Monthly Results		8.3	6.8	7.2	31	4	15	2086	120	

Environmental Monitoring Data:- EPA License Number 549

December 2018

Site Name: IXOM Operations Pty Ltd

Site Address: Gate 1, Foreshore Road, Port Kembla, NSW, 2505

The site has three Licensed Discharge Points as detailed in the monitoring data tables below: LDP1, LDP2 and LDP 4

Licensed Discharge Point 1 - SARP Stack

Limits:		SO2 Max: 2800mg/m3			SO3 Max: 50mg/m3	
Day	Date	SO2 Maximum (mg/m3)	SO2 Minimum (mg/m3)	SO2 Average (mg/m3)	SO3 Result (mg/m3)	Sampling Information (sampling for SO ₃ conducted three times per year)
Saturday	1/12/2018	1218	0	714		
Sunday	2/12/2018	1837	0	658		
Monday	3/12/2018	1507	1131	1297		
Tuesday	4/12/2018	1652	1281	1473		
Wednesday	5/12/2018	1502	1310	1390		
Thursday	6/12/2018	1674	0	914		
Friday	7/12/2018	884	0	37		
Saturday	8/12/2018	2075	0	866		
Sunday	9/12/2018	1790	0	467		
Monday	10/12/2018	0	0	0		
Tuesday	11/12/2018	0	0	0		
Wednesday	12/12/2018	0	0	0		
Thursday	13/12/2018	0	0	0		
Friday	14/12/2018	0	0	0		
Saturday	15/12/2018	0	0	0		
Sunday	16/12/2018	0	0	0		
Monday	17/12/2018	0	0	0		
Tuesday	18/12/2018	0	0	0		
Wednesday	19/12/2018	0	0	0		
Thursday	20/12/2018	0	0	0		
Friday	21/12/2018	0	0	0		
Saturday	22/12/2018	0	0	0		
Sunday	23/12/2018	0	0	0		
Monday	24/12/2018	0	0	0		
Tuesday	25/12/2018	0	0	0		
Wednesday	26/12/2018	0	0	0		
Thursday	27/12/2018	0	0	0		
Friday	28/12/2018	0	0	0		
Saturday	29/12/2018	0	0	0		
Sunday	30/12/2018	0	0	0		
Monday	31/12/2018	0	0	0		
Monthly Results		2075	0	252		

Licensed Discharge Point 2: SMBS Stack

Limits:		SO2 Max: 560mg/m3		
Day	Date	SO2 Maximum (mg/m3)	SO2 Minimum (mg/m3)	SO2 Average (mg/m3)
Saturday	1/12/2018	9	1	3
Sunday	2/12/2018	2	0	1
Monday	3/12/2018	2	0	1
Tuesday	4/12/2018	1	0	1
Wednesday	5/12/2018	5	0	2
Thursday	6/12/2018	8	5	6
Friday	7/12/2018	7	5	6
Saturday	8/12/2018	10	5	6
Sunday	9/12/2018	7	5	6
Monday	10/12/2018	8	4	5
Tuesday	11/12/2018	5	4	5
Wednesday	12/12/2018	6	4	5
Thursday	13/12/2018	6	4	5
Friday	14/12/2018	28	3	6
Saturday	15/12/2018	8	3	4
Sunday	16/12/2018	4	3	4
Monday	17/12/2018	5	3	4
Tuesday	18/12/2018	5	3	4
Wednesday	19/12/2018	5	3	4
Thursday	20/12/2018	6	4	5
Friday	21/12/2018	5	2	3
Saturday	22/12/2018	2	1	1
Sunday	23/12/2018	3	0	1
Monday	24/12/2018	15	1	3
Tuesday	25/12/2018	3	1	2
Wednesday	26/12/2018	4	1	2
Thursday	27/12/2018	6	2	3
Friday	28/12/2018	7	2	3
Saturday	29/12/2018	5	3	4
Sunday	30/12/2018	6	3	4
Monday	31/12/2018	5	3	4
Monthly Results		28	0	4

Licensed Discharge Point 4: Wastewater discharge adjacent to T7

Limits:		pH Max 8.5	pH Min 6.5		TSS Max: Dry weather 40mg/L	1000kl per day Max	Wet Weather >10mm/24hrs		
Day	Date	pH Max	pH Min	pH Average	TSS Max (mg/L)	TSS min (mg/L)	TSS Average (mg/L)	Total Volume discharged per day (kl)	Rainfall per day - 24hrs (mm)
Saturday	1/12/2018	8.3	8.1	8.2	32	20	27	48.6	0
Sunday	2/12/2018	8.2	8.1	8.1	20	16	17	27.2	0
Monday	3/12/2018	8.0	7.6	7.8	19	15	17	38.9	0
Tuesday	4/12/2018	7.8	7.1	7.5	29	21	26	40.2	0
Wednesday	5/12/2018	7.4	7.0	7.2	23	10	14	34.4	1
Thursday	6/12/2018	7.4	6.8	7.0	24	9	12	39.2	0
Friday	7/12/2018	7.8	7.1	7.4	25	20	23	23.6	0
Saturday	8/12/2018	8.2	7.1	7.8	20	15	17	43.7	0
Sunday	9/12/2018	8.2	7.5	7.9	20	19	20	34.2	0
Monday	10/12/2018	8.1	7.7	7.9	19	16	17	19.0	0
Tuesday	11/12/2018	8.3	7.6	8.0	17	16	17	15.0	0
Wednesday	12/12/2018	8.3	8.3	8.3	16	8	13	14.9	0
Thursday	13/12/2018	8.3	6.9	7.9	16	7	14	41.7	0
Friday	14/12/2018	8.3	7.4	7.7	15	12	13	133.1	13
Saturday	15/12/2018	8.2	7.4	8.0	15	13	14	56.7	54
Sunday	16/12/2018	8.3	7.9	8.1	21	15	18	11.8	5
Monday	17/12/2018	8.2	8.0	8.1	21	16	19	17.9	1
Tuesday	18/12/2018	8.3	8.1	8.2	15	15	15	19.9	0
Wednesday	19/12/2018	8.3	8.1	8.2	15	15	15	13.5	0
Thursday	20/12/2018	8.0	7.2	7.7	15	15	15	19.5	3
Friday	21/12/2018	8.1	8.0	8.1	15	15	15	13.2	7
Saturday	22/12/2018	8.0	7.4	7.8	15	15	15	28.0	0
Sunday	23/12/2018	7.8	6.7	7.2	15	15	15	7.1	3
Monday	24/12/2018	7.7	7.4	7.5	15	15	15	14.9	0
Tuesday	25/12/2018	7.4	7.2	7.3	15	15	15	20.3	0
Wednesday	26/12/2018	8.2	7.9	8.1	15	15	15	15.1	0
Thursday	27/12/2018	8.3	8.1	8.2	8	7	8	29.9	0
Friday	28/12/2018	8.3	8.2	8.3	11	8	10	22.9	0
Saturday	29/12/2018	8.3	8.2	8.3	11	10	11	8.8	0
Sunday	30/12/2018	8.3	8.3	8.3	11	10	10	14.4	0
Monday	31/12/2018	8.3	7.2	7.8	17	9	14	24.2	0
Monthly Results		8.3	6.7	7.9	32	7	16	892	87

Environmental Monitoring Data:- EPA License Number 549

January 2019

Site Name: IXOM Operations Pty Ltd

Site Address: Gate 1, Foreshore Road, Port Kembla, NSW, 2505

The site has three Licensed Discharge Points as detailed in the monitoring data tables below: LDP1, LDP2 and LDP 4

Licensed Discharge Point 1 - SARP Stack

Limits:		SO2 Max: 2800mg/m3			SO3 Max: 50mg/m3	
Day	Date	SO2 Maximum (mg/m3)	SO2 Minimum (mg/m3)	SO2 Average (mg/m3)	SO3 Result (mg/m3)	Sampling Information (sampling for SO ₃ conducted three times per year)
Tuesday	1/01/2019	0	0	0		
Wednesday	2/01/2019	0	0	0		
Thursday	3/01/2019	0	0	0		
Friday	4/01/2019	0	0	0		
Saturday	5/01/2019	0	0	0		
Sunday	6/01/2019	0	0	0		
Monday	7/01/2019	0	0	0		
Tuesday	8/01/2019	0	0	0		
Wednesday	9/01/2019	0	0	0		
Thursday	10/01/2019	0	0	0		
Friday	11/01/2019	0	0	0		
Saturday	12/01/2019	0	0	0		
Sunday	13/01/2019	0	0	0		
Monday	14/01/2019	0	0	0		
Tuesday	15/01/2019	0	0	0		
Wednesday	16/01/2019	0	0	0		
Thursday	17/01/2019	0	0	0		
Friday	18/01/2019	0	0	0		
Saturday	19/01/2019	0	0	0		
Sunday	20/01/2019	0	0	0		
Monday	21/01/2019	0	0	0		
Tuesday	22/01/2019	0	0	0		
Wednesday	23/01/2019	0	0	0		
Thursday	24/01/2019	0	0	0		
Friday	25/01/2019	0	0	0		
Saturday	26/01/2019	0	0	0		
Sunday	27/01/2019	0	0	0		
Monday	28/01/2019	0	0	0		
Tuesday	29/01/2019	0	0	0		
Wednesday	30/01/2019	0	0	0		
Thursday	31/01/2019	0	0	0		
Monthly Results		0	0	0		

Licensed Discharge Point 2: SMBS Stack

Limits:		SO2 Max: 560mg/m3		
Day	Date	SO2 Maximum (mg/m3)	SO2 Minimum (mg/m3)	SO2 Average (mg/m3)
Tuesday	1/01/2019	3	2	3
Wednesday	2/01/2019	4	2	3
Thursday	3/01/2019	3	3	3
Friday	4/01/2019	4	2	3
Saturday	5/01/2019	4	0	2
Sunday	6/01/2019	1	0	0
Monday	7/01/2019	1	1	1
Tuesday	8/01/2019	2	1	1
Wednesday	9/01/2019	24	2	6
Thursday	10/01/2019	5	0	1
Friday	11/01/2019	6	0	3
Saturday	12/01/2019	6	3	4
Sunday	13/01/2019	5	3	4
Monday	14/01/2019	28	3	6
Tuesday	15/01/2019	7	4	5
Wednesday	16/01/2019	7	5	5
Thursday	17/01/2019	5	4	5
Friday	18/01/2019	5	3	4
Saturday	19/01/2019	3	2	3
Sunday	20/01/2019	4	2	2
Monday	21/01/2019	4	3	3
Tuesday	22/01/2019	4	3	3
Wednesday	23/01/2019	5	2	4
Thursday	24/01/2019	4	3	4
Friday	25/01/2019	5	3	4
Saturday	26/01/2019	5	3	4
Sunday	27/01/2019	4	3	3
Monday	28/01/2019	4	3	4
Tuesday	29/01/2019	111	2	23
Wednesday	30/01/2019	6	4	5
Thursday	31/01/2019	4	1	3
Monthly Results		111	0	4

Licensed Discharge Point 4: Wastewater discharge adjacent to T7

Limits:		pH Max 8.5	pH Min 6.5		TSS Max: Dry weather 40mg/L	1000kl per day Max	Wet Weather >10mm/24hrs		
Day	Date	pH Max	pH Min	pH Average	TSS Max (mg/L)	TSS min (mg/L)	TSS Average (mg/L)	Total Volume discharged per day (kl)	Rainfall per day - 24hrs (mm)
Tuesday	1/01/2019	8.3	8.2	8.3	18	17	18	10.0	11
Wednesday	2/01/2019	8.3	8.3	8.3	17	15	16	14.0	0
Thursday	3/01/2019	8.3	8.3	8.3	19	19	19	14.9	0
Friday	4/01/2019	8.3	8.2	8.3	21	21	21	9.0	0
Saturday	5/01/2019	8.3	6.9	7.8	18	11	14	38.9	0
Sunday	6/01/2019	8.3	7.7	8.0	10	9	10	23.5	20
Monday	7/01/2019	8.3	8.2	8.3	8	8	8	15.0	0
Tuesday	8/01/2019	8.1	7.0	7.4	13	8	10	63.6	0
Wednesday	9/01/2019	8.2	7.0	7.2	14	11	12	51.8	34
Thursday	10/01/2019	8.1	6.9	7.4	22	14	17	46.6	0
Friday	11/01/2019	8.0	7.0	7.3	37	15	26	25.9	7
Saturday	12/01/2019	7.1	6.8	7.0	37	19	28	23.7	12
Sunday	13/01/2019	8.1	7.1	7.8	18	14	16	36.0	0
Monday	14/01/2019	8.1	8.0	8.0	14	12	13	34.6	0
Tuesday	15/01/2019	8.3	8.1	8.3	24	15	20	38.8	0
Wednesday	16/01/2019	8.3	8.3	8.3	24	21	22	24.7	0
Thursday	17/01/2019	8.3	8.2	8.3	25	20	22	24.1	0
Friday	18/01/2019	8.2	8.2	8.2	19	15	17	23.4	0
Saturday	19/01/2019	8.3	8.2	8.2	20	17	19	26.9	0
Sunday	20/01/2019	8.3	8.2	8.2	16	15	16	15.0	0
Monday	21/01/2019	8.3	8.2	8.2	14	14	14	18.7	0
Tuesday	22/01/2019	8.3	8.0	8.2	14	13	13	25.0	0
Wednesday	23/01/2019	8.3	7.8	8.1	15	14	14	26.0	0
Thursday	24/01/2019	8.3	8.2	8.3	15	14	15	24.8	0
Friday	25/01/2019	8.3	8.1	8.2	14	12	13	50.1	0
Saturday	26/01/2019	8.2	7.9	8.1	13	11	12	19.2	0
Sunday	27/01/2019	8.1	8.1	8.1	11	11	11	15.1	0
Monday	28/01/2019	8.3	8.1	8.2	12	11	11	27.5	8
Tuesday	29/01/2019	7.9	7.0	7.5	12	11	11	20.3	0
Wednesday	30/01/2019	8.0	7.3	7.7	11	11	11	23.5	0
Thursday	31/01/2019	8.2	7.7	7.9	12	11	11	24.0	0
Monthly Results		8.3	6.8	8.0	37	8	15	835	92

Environmental Monitoring Data:- EPA License Number 549
February 2019
Site Name: IXOM Operations Pty Ltd
Site Address: Gate 1, Foreshore Road, Port Kembla, NSW, 2505
The site has three Licensed Discharge Points as detailed in the monitoring data tables below: **LDP1, LDP2 and LDP 4**

SO3 sample details:
26/2 - Sample for SO3 taken.
7/3 - Results received
19/3 - Result for 26/2 sampling published

Licensed Discharge Point 1 - SARP Stack						
Limits:		SO2 Max: 2800mg/m3			SO3 Max: 50mg/m3	
Day	Date	SO2 Maximum (mg/m3)	SO2 Minimum (mg/m3)	SO2 Average (mg/m3)	SO3 Result (mg/m3)	Sampling Information (sampling for SO ₃ conducted three times per year)
Friday	1/02/2019	0	0	0		
Saturday	2/02/2019	0	0	0		
Sunday	3/02/2019	0	0	0		
Monday	4/02/2019	0	0	0		
Tuesday	5/02/2019	0	0	0		
Wednesday	6/02/2019	0	0	0		
Thursday	7/02/2019	0	0	0		
Friday	8/02/2019	0	0	0		
Saturday	9/02/2019	0	0	0		
Sunday	10/02/2019	0	0	0		
Monday	11/02/2019	0	0	0		
Tuesday	12/02/2019	0	0	0		
Wednesday	13/02/2019	0	0	0		
Thursday	14/02/2019	0	0	0		
Friday	15/02/2019	0	0	0		
Saturday	16/02/2019	0	0	0		
Sunday	17/02/2019	1430	0	156		
Monday	18/02/2019	1715	0	229		
Tuesday	19/02/2019	0	0	0		
Wednesday	20/02/2019	0	0	0		
Thursday	21/02/2019	1683	0	509		
Friday	22/02/2019	1423	530	1032		
Saturday	23/02/2019	1582	490	881		
Sunday	24/02/2019	1673	894	1207		
Monday	25/02/2019	1676	1286	1492		
Tuesday	26/02/2019	1459	638	1132	51	see above
Wednesday	27/02/2019	1687	0	584		
Thursday	28/02/2019	2087	0	383		
Monthly Results		2087	0	272	51	

Licensed Discharge Point 2: SMBS Stack				
Limits:		SO2 Max: 560mg/m3		
Day	Date	SO2 Maximum (mg/m3)	SO2 Minimum (mg/m3)	SO2 Average (mg/m3)
Friday	1/02/2019	38	1	5
Saturday	2/02/2019	53	5	13
Sunday	3/02/2019	6	5	5
Monday	4/02/2019	102	5	12
Tuesday	5/02/2019	7	6	6
Wednesday	6/02/2019	8	6	7
Thursday	7/02/2019	7	5	6
Friday	8/02/2019	30	1	5
Saturday	9/02/2019	1	0	0
Sunday	10/02/2019	0	0	0
Monday	11/02/2019	6	0	2
Tuesday	12/02/2019	2	0	1
Wednesday	13/02/2019	2	0	1
Thursday	14/02/2019	1	0	0
Friday	15/02/2019	3	0	1
Saturday	16/02/2019	16	1	2
Sunday	17/02/2019	4	0	2
Monday	18/02/2019	5	2	3
Tuesday	19/02/2019	2	0	1
Wednesday	20/02/2019	1	0	0
Thursday	21/02/2019	3	0	1
Friday	22/02/2019	3	1	2
Saturday	23/02/2019	5	1	2
Sunday	24/02/2019	5	2	3
Monday	25/02/2019	4	2	3
Tuesday	26/02/2019	5	2	3
Wednesday	27/02/2019	9	4	6
Thursday	28/02/2019	7	5	5
Monthly Results		102	0	4

Licensed Discharge Point 4: Wastewater discharge adjacent to T7									
Limits:		pH Max 8.5	pH Min 6.5		TSS Max: Dry weather 40mg/L	1000kl per day Max	Wet Weather >10mm/24hrs		
Day	Date	pH Max	pH Min	pH Average	TSS Max (mg/L)	TSS min (mg/L)	TSS Average (mg/L)	Total Volume discharged per day (kL)	Rainfall per day - 24hrs (mm)
Friday	1/02/2019	8.2	7.5	8.0	12	11	12	23.7	0
Saturday	2/02/2019	7.8	7.0	7.5	18	12	15	34.1	0
Sunday	3/02/2019	8.2	7.7	8.0	18	15	16	27.8	0
Monday	4/02/2019	8.1	7.0	7.5	24	15	18	44.0	0
Tuesday	5/02/2019	8.2	7.8	8.1	26	19	23	25.0	0
Wednesday	6/02/2019	8.1	7.7	7.9	17	8	11	15.2	1
Thursday	7/02/2019	7.9	7.0	7.6	10	8	9	37.1	5
Friday	8/02/2019	8.0	6.9	7.6	13	9	11	94.4	0
Saturday	9/02/2019	8.2	7.6	8.0	13	10	11	23.9	29
Sunday	10/02/2019	8.2	7.9	8.2	14	12	13	29.5	0
Monday	11/02/2019	8.3	7.6	7.9	17	13	15	37.7	0
Tuesday	12/02/2019	8.3	8.2	8.2	20	14	17	12.3	0
Wednesday	13/02/2019	7.8	7.8	7.8	11	11	11	4.9	0
Thursday	14/02/2019	8.3	7.7	8.0	10	9	10	8.8	0
Friday	15/02/2019	8.1	7.7	7.9	8	7	8	10.0	0
Saturday	16/02/2019	7.8	7.8	7.8	7	7	7	5.0	0
Sunday	17/02/2019	8.3	8.1	8.2	9	8	8	15.0	0
Monday	18/02/2019	8.3	8.2	8.2	10	9	10	19.8	0
Tuesday	19/02/2019	8.3	7.0	7.7	10	9	10	8.5	0
Wednesday	20/02/2019	8.3	7.8	8.0	19	11	15	13.5	0
Thursday	21/02/2019	8.3	7.5	7.9	18	18	18	15.2	1
Friday	22/02/2019	7.8	6.8	7.0	22	16	20	76.2	5
Saturday	23/02/2019	7.5	6.9	7.2	27	25	26	44.5	2
Sunday	24/02/2019	7.8	7.0	7.3	26	22	24	55.1	3
Monday	25/02/2019	7.1	6.8	6.9	28	18	23	58.8	0
Tuesday	26/02/2019	7.3	6.8	7.1	19	16	18	45.2	0
Wednesday	27/02/2019	8.2	6.8	7.3	22	16	18	35.2	0
Thursday	28/02/2019	8.3	8.1	8.2	16	15	16	24.9	0
Monthly Results		8.3	6.8	7.8	28	7	15	845	46

Environmental Monitoring Data:- EPA License Number 549

March 2019

Site Name: IXOM Operations Pty Ltd

Site Address: Gate 1, Foreshore Road, Port Kembla, NSW, 2505

The site has three Licensed Discharge Points as detailed in the monitoring data tables below: LDP1, LDP2 and LDP 4

Licensed Discharge Point 1 - SARP Stack

Limits:		SO2 Max: 2800mg/m3			SO3 Max: 50mg/m3	
Day	Date	SO2 Maximum (mg/m3)	SO2 Minimum (mg/m3)	SO2 Average (mg/m3)	SO3 Result (mg/m3)	Sampling Information (sampling for SO ₃ conducted three times per year)
Friday	1/03/2019	1574	1022	1176		
Saturday	2/03/2019	1725	1061	1293		
Sunday	3/03/2019	2050	765	1332		
Monday	4/03/2019	1802	809	1245		
Tuesday	5/03/2019	1794	1139	1456		
Wednesday	6/03/2019	1913	892	1404		
Thursday	7/03/2019	1416	819	1118		
Friday	8/03/2019	1544	670	975		
Saturday	9/03/2019	1642	859	1119		
Sunday	10/03/2019	1690	1109	1387		
Monday	11/03/2019	1878	0	759		
Tuesday	12/03/2019	1504	0	738		
Wednesday	13/03/2019	2150	0	502		
Thursday	14/03/2019	2153	0	1071		
Friday	15/03/2019	1730	572	1181		
Saturday	16/03/2019	1851	1182	1541		
Sunday	17/03/2019	1878	1378	1615		
Monday	18/03/2019	1670	0	360		
Tuesday	19/03/2019	1777	0	800		
Wednesday	20/03/2019	1808	1071	1503		
Thursday	21/03/2019	1786	1235	1592		
Friday	22/03/2019	1800	1009	1402		
Saturday	23/03/2019	1611	1153	1405		
Sunday	24/03/2019	1976	821	1407		
Monday	25/03/2019	1959	1086	1407		
Tuesday	26/03/2019	1642	0	747		
Wednesday	27/03/2019	1777	445	1395		
Thursday	28/03/2019	1771	0	727		
Friday	29/03/2019	0	0	0		
Saturday	30/03/2019	120	0	6		
Sunday	31/03/2019	2084	0	658		
Monthly Results		2153	0	1075		

Licensed Discharge Point 2: SMBS Stack

Limits:		SO2 Max: 560mg/m3		
Day	Date	SO2 Maximum (mg/m3)	SO2 Minimum (mg/m3)	SO2 Average (mg/m3)
Friday	1/03/2019	7	2	4
Saturday	2/03/2019	4	2	2
Sunday	3/03/2019	4	2	3
Monday	4/03/2019	3	2	2
Tuesday	5/03/2019	5	2	3
Wednesday	6/03/2019	6	1	4
Thursday	7/03/2019	2	0	1
Friday	8/03/2019	3	1	2
Saturday	9/03/2019	4	1	3
Sunday	10/03/2019	5	3	4
Monday	11/03/2019	7	3	4
Tuesday	12/03/2019	6	3	4
Wednesday	13/03/2019	5	2	3
Thursday	14/03/2019	5	3	3
Friday	15/03/2019	6	3	4
Saturday	16/03/2019	7	4	5
Sunday	17/03/2019	7	4	5
Monday	18/03/2019	8	4	5
Tuesday	19/03/2019	7	4	5
Wednesday	20/03/2019	8	5	7
Thursday	21/03/2019	6	5	5
Friday	22/03/2019	7	5	6
Saturday	23/03/2019	7	5	5
Sunday	24/03/2019	7	5	6
Monday	25/03/2019	6	4	5
Tuesday	26/03/2019	6	4	5
Wednesday	27/03/2019	6	4	5
Thursday	28/03/2019	9	4	6
Friday	29/03/2019	6	5	5
Saturday	30/03/2019	6	2	4
Sunday	31/03/2019	10	2	4
Monthly Results		10	0	4

Licensed Discharge Point 4: Wastewater discharge adjacent to T7

Limits:		pH Max 8.5	pH Min 6.5		TSS Max: Dry weather 40mg/L	1000kl per day Max	Wet Weather >10mm/24hrs		
Day	Date	pH Max	pH Min	pH Average	TSS Max (mg/L)	TSS min (mg/L)	TSS Average (mg/L)	Total Volume discharged per day (kL)	Rainfall per day - 24hrs (mm)
Friday	1/03/2019	8.2	7.5	8.0	18	14	15	54.2	0
Saturday	2/03/2019	8.3	7.3	7.6	20	16	18	52.6	0
Sunday	3/03/2019	7.4	6.9	7.2	18	15	17	58.4	1
Monday	4/03/2019	7.8	6.8	7.1	18	15	17	50.1	0
Tuesday	5/03/2019	8.0	6.8	7.3	18	17	18	63.7	0
Wednesday	6/03/2019	7.4	6.8	7.0	18	7	12	69.7	6
Thursday	7/03/2019	7.1	6.8	6.9	16	15	15	53.2	7
Friday	8/03/2019	7.1	6.8	6.9	21	17	19	50.3	0
Saturday	9/03/2019	8.0	7.0	7.6	29	22	26	57.8	0
Sunday	10/03/2019	8.1	7.9	8.0	23	21	22	55.3	0
Monday	11/03/2019	7.9	7.5	7.7	25	20	22	38.2	0
Tuesday	12/03/2019	7.6	6.8	7.2	29	25	28	39.3	0
Wednesday	13/03/2019	8.2	6.8	7.3	25	14	18	55.0	3
Thursday	14/03/2019	8.2	7.2	7.7	15	11	13	137.3	9
Friday	15/03/2019	8.3	6.8	7.5	16	11	14	95.4	49
Saturday	16/03/2019	7.9	6.8	7.4	19	12	14	112.3	6
Sunday	17/03/2019	7.7	6.8	7.1	26	10	20	131.5	17
Monday	18/03/2019	7.4	6.8	7.1	28	11	23	111.0	19
Tuesday	19/03/2019	8.1	7.0	7.3	25	12	21	129.6	58
Wednesday	20/03/2019	8.3	7.7	8.0	26	14	17	47.7	9
Thursday	21/03/2019	7.6	6.8	7.0	15	13	14	106.7	0
Friday	22/03/2019	7.4	6.8	6.9	20	16	18	49.2	16
Saturday	23/03/2019	8.0	6.8	7.3	21	20	21	48.8	0
Sunday	24/03/2019	8.3	6.8	7.2	23	21	22	43.8	0
Monday	25/03/2019	8.2	7.8	8.1	20	17	18	49.6	0
Tuesday	26/03/2019	8.0	7.7	7.8	23	17	18	39.8	0
Wednesday	27/03/2019	8.2	6.9	7.3	26	17	21	39.8	0
Thursday	28/03/2019	8.3	6.8	7.2	28	15	20	64.4	0
Friday	29/03/2019	7.8	7.1	7.4	21	13	15	100.0	1
Saturday	30/03/2019	7.7	6.9	7.4	14	13	13	85.5	0
Sunday	31/03/2019	7.8	6.7	7.3	17	14	15	36.0	14
Monthly Results		8.3	6.7	7.4	29	7	18	2126	215

Environmental Monitoring Data:- EPA License Number 549

April 2019

Site Name: IXOM Operations Pty Ltd

Site Address: Gate 1, Foreshore Road, Port Kembla, NSW, 2505

The site has three Licensed Discharge Points as detailed in the monitoring data tables below: LDP1, LDP2 and LDP 4

Licensed Discharge Point 1 - SARP Stack

Limits:		SO2 Max: 2800mg/m3			SO3 Max: 50mg/m3	
Day	Date	SO2 Maximum (mg/m3)	SO2 Minimum (mg/m3)	SO2 Average (mg/m3)	SO3 Result (mg/m3)	Sampling Information (sampling for SO ₃ conducted three times per year)
Monday	1/04/2019	0	0	0		
Tuesday	2/04/2019	0	0	0		
Wednesday	3/04/2019	45	0	4		
Thursday	4/04/2019	1715	0	152		
Friday	5/04/2019	1842	0	371		
Saturday	6/04/2019	1990	0	205		
Sunday	7/04/2019	1813	946	1451		
Monday	8/04/2019	2167	0	1127		
Tuesday	9/04/2019	1889	775	1209		
Wednesday	10/04/2019	1584	1184	1365		
Thursday	11/04/2019	1690	1165	1383		
Friday	12/04/2019	1581	1161	1378		
Saturday	13/04/2019	1840	0	844		
Sunday	14/04/2019	0	0	0		
Monday	15/04/2019	3	0	1		
Tuesday	16/04/2019	0	0	0		
Wednesday	17/04/2019	0	0	0		
Thursday	18/04/2019	20	0	1		
Friday	19/04/2019	1834	0	787		
Saturday	20/04/2019	1329	806	967		
Sunday	21/04/2019	1676	870	1378		
Monday	22/04/2019	1747	1308	1544		
Tuesday	23/04/2019	1865	1140	1531		
Wednesday	24/04/2019	2068	1248	1559		
Thursday	25/04/2019	1933	1143	1494		
Friday	26/04/2019	1444	1033	1224		
Saturday	27/04/2019	1206	867	1025		
Sunday	28/04/2019	1749	888	1277		
Monday	29/04/2019	1491	1133	1309		
Tuesday	30/04/2019	1621	1026	1327		
Monthly Results		2167	0	831		

Licensed Discharge Point 2: SMBS Stack

Limits:		SO2 Max: 560mg/m3		
Day	Date	SO2 Maximum (mg/m3)	SO2 Minimum (mg/m3)	SO2 Average (mg/m3)
Monday	1/04/2019	5	3	4
Tuesday	2/04/2019	6	4	5
Wednesday	3/04/2019	15	4	6
Thursday	4/04/2019	6	4	5
Friday	5/04/2019	12	5	6
Saturday	6/04/2019	21	4	6
Sunday	7/04/2019	6	5	5
Monday	8/04/2019	12	5	7
Tuesday	9/04/2019	6	4	5
Wednesday	10/04/2019	5	3	4
Thursday	11/04/2019	7	5	6
Friday	12/04/2019	6	3	4
Saturday	13/04/2019	12	2	4
Sunday	14/04/2019	5	3	4
Monday	15/04/2019	31	2	7
Tuesday	16/04/2019	5	2	4
Wednesday	17/04/2019	15	2	5
Thursday	18/04/2019	6	3	4
Friday	19/04/2019	9	3	5
Saturday	20/04/2019	7	3	5
Sunday	21/04/2019	4	3	4
Monday	22/04/2019	6	3	3
Tuesday	23/04/2019	5	4	4
Wednesday	24/04/2019	6	3	4
Thursday	25/04/2019	5	3	4
Friday	26/04/2019	9	2	5
Saturday	27/04/2019	4	2	3
Sunday	28/04/2019	5	2	3
Monday	29/04/2019	6	4	5
Tuesday	30/04/2019	8	5	6
Monthly Results		31	2	5

Licensed Discharge Point 4: Wastewater discharge adjacent to T7

Limits:		pH Max 8.5	pH Min 6.5		TSS Max: Dry weather 40mg/L	1000kl per day Max	Wet Weather >10mm/24hrs		
Day	Date	pH Max	pH Min	pH Average	TSS Max (mg/L)	TSS min (mg/L)	TSS Average (mg/L)	Total Volume discharged per day (kL)	Rainfall per day - 24hrs (mm)
Monday	1/04/2019	8.0	6.7	7.5	21	17	19	27.6	0
Tuesday	2/04/2019	8.2	7.8	8.0	20	18	19	14.8	0
Wednesday	3/04/2019	8.0	7.6	7.8	17	15	16	35.3	0
Thursday	4/04/2019	7.8	6.9	7.3	19	11	14	144.8	45
Friday	5/04/2019	8.3	7.7	8.1	17	12	15	33.5	0
Saturday	6/04/2019	8.3	8.2	8.2	22	17	19	24.1	0
Sunday	7/04/2019	8.3	8.1	8.2	24	19	21	24.6	0
Monday	8/04/2019	8.3	8.0	8.1	31	25	28	24.3	0
Tuesday	9/04/2019	8.3	8.0	8.1	29	28	29	37.9	0
Wednesday	10/04/2019	8.1	7.4	7.8	30	8	14	39.4	0
Thursday	11/04/2019	8.2	6.8	7.2	21	8	12	39.6	0
Friday	12/04/2019	8.3	6.8	7.3	25	19	22	40.5	0
Saturday	13/04/2019	8.3	6.8	7.6	29	19	23	54.4	0
Sunday	14/04/2019	8.3	8.3	8.3	32	22	27	43.3	0
Monday	15/04/2019	8.3	8.2	8.3	21	15	18	29.8	0
Tuesday	16/04/2019	8.3	8.0	8.2	14	13	14	25.0	0
Wednesday	17/04/2019	8.3	8.0	8.1	15	14	15	25.1	0
Thursday	18/04/2019	8.3	8.0	8.1	18	13	15	15.5	0
Friday	19/04/2019	8.3	7.8	8.2	17	13	16	31.4	0
Saturday	20/04/2019	8.3	8.1	8.2	17	12	15	39.6	0
Sunday	21/04/2019	8.3	8.2	8.3	16	15	15	42.1	0
Monday	22/04/2019	8.3	8.2	8.2	24	17	19	44.8	0
Tuesday	23/04/2019	8.3	7.0	7.6	33	14	22	103.8	0
Wednesday	24/04/2019	7.8	7.4	7.6	27	6	13	57.4	22
Thursday	25/04/2019	7.7	7.2	7.5	6	6	6	39.9	0
Friday	26/04/2019	7.6	7.4	7.5	7	6	6	49.8	0
Saturday	27/04/2019	7.4	6.9	7.2	6	6	6	44.0	0
Sunday	28/04/2019	7.2	6.8	7.0	6	6	6	53.2	1
Monday	29/04/2019	7.5	6.8	7.0	9	6	7	34.4	0
Tuesday	30/04/2019	7.5	6.6	7.0	8	6	7	54.6	0
Monthly Results		8.3	6.6	7.8	33	6	16	1275	68

Environmental Monitoring Data:- EPA License Number 549

May 2019

Site Name: IXOM Operations Pty Ltd

Site Address: Gate 1, Foreshore Road, Port Kembla, NSW, 2505

The site has three Licensed Discharge Points as detailed in the monitoring data tables below: LDP1, LDP2 and LDP 4

Licensed Discharge Point 1 - SARP Stack

Limits:		SO2 Max: 2800mg/m3			SO3 Max: 50mg/m3	
Day	Date	SO2 Maximum (mg/m3)	SO2 Minimum (mg/m3)	SO2 Average (mg/m3)	SO3 Result (mg/m3)	Sampling Information (sampling for SO ₃ conducted three times per year)
Wednesday	1/05/2019	1714	1167	1460		
Thursday	2/05/2019	1521	1058	1277		
Friday	3/05/2019	1637	718	1268		
Saturday	4/05/2019	1725	932	1231		
Sunday	5/05/2019	1479	0	795		
Monday	6/05/2019	1797	986	1303		
Tuesday	7/05/2019	1779	0	1131		
Wednesday	8/05/2019	0	0	0		
Thursday	9/05/2019	1928	0	275		
Friday	10/05/2019	1812	67	1178		
Saturday	11/05/2019	1237	0	479		
Sunday	12/05/2019	0	0	0		
Monday	13/05/2019	7	0	1		
Tuesday	14/05/2019	1443	0	492		
Wednesday	15/05/2019	1871	946	1313		
Thursday	16/05/2019	1698	837	1096		
Friday	17/05/2019	1721	966	1312		
Saturday	18/05/2019	2024	1328	1569		
Sunday	19/05/2019	1464	899	1164		
Monday	20/05/2019	1775	1076	1322		
Tuesday	21/05/2019	1760	1040	1340		
Wednesday	22/05/2019	1593	1102	1291		
Thursday	23/05/2019	2032	1060	1410		
Friday	24/05/2019	1664	1294	1453		
Saturday	25/05/2019	1770	1194	1438		
Sunday	26/05/2019	1672	1100	1351		
Monday	27/05/2019	1488	968	1230		
Tuesday	28/05/2019	1786	956	1383		
Wednesday	29/05/2019	1643	919	1180		
Thursday	30/05/2019	1893	947	1283		
Friday	31/05/2019	1929	691	1317		
Monthly Results		2032	0	1076		

Licensed Discharge Point 2: SMBS Stack

Limits:		SO2 Max: 560mg/m3		
Day	Date	SO2 Maximum (mg/m3)	SO2 Minimum (mg/m3)	SO2 Average (mg/m3)
Wednesday	1/05/2019	8	5	6
Thursday	2/05/2019	7	5	6
Friday	3/05/2019	6	4	5
Saturday	4/05/2019	6	3	5
Sunday	5/05/2019	8	3	4
Monday	6/05/2019	7	3	5
Tuesday	7/05/2019	5	2	3
Wednesday	8/05/2019	6	4	4
Thursday	9/05/2019	7	2	3
Friday	10/05/2019	6	2	4
Saturday	11/05/2019	7	3	4
Sunday	12/05/2019	6	3	5
Monday	13/05/2019	5	4	5
Tuesday	14/05/2019	7	2	4
Wednesday	15/05/2019	7	4	5
Thursday	16/05/2019	6	3	4
Friday	17/05/2019	9	3	5
Saturday	18/05/2019	9	4	7
Sunday	19/05/2019	8	4	5
Monday	20/05/2019	7	4	5
Tuesday	21/05/2019	9	5	7
Wednesday	22/05/2019	7	4	6
Thursday	23/05/2019	8	5	7
Friday	24/05/2019	8	4	6
Saturday	25/05/2019	5	3	4
Sunday	26/05/2019	5	3	4
Monday	27/05/2019	5	3	4
Tuesday	28/05/2019	5	3	4
Wednesday	29/05/2019	7	4	5
Thursday	30/05/2019	7	4	5
Friday	31/05/2019	14	6	9
Monthly Results		14	2	5

Licensed Discharge Point 4: Wastewater discharge adjacent to T7

Limits:		pH Max 8.5	pH Min 6.5		TSS Max: Dry weather 40mg/L	1000kl per day Max	Wet Weather >10mm/24hrs		
Day	Date	pH Max	pH Min	pH Average	TSS Max (mg/L)	TSS min (mg/L)	TSS Average (mg/L)	Total Volume discharged per day (kl)	Rainfall per day - 24hrs (mm)
Wednesday	1/05/2019	7.3	6.9	7.1	9	7	8	41.4	0
Thursday	2/05/2019	7.4	7.1	7.3	20	9	16	38.1	0
Friday	3/05/2019	7.4	7.0	7.3	29	19	26	52.8	0
Saturday	4/05/2019	8.3	7.3	8.1	25	17	21	45.2	2
Sunday	5/05/2019	8.3	7.6	8.1	23	16	18	42.8	0
Monday	6/05/2019	8.3	7.6	8.1	26	18	23	53.9	7
Tuesday	7/05/2019	8.2	7.0	7.4	27	21	23	51.7	0
Wednesday	8/05/2019	8.2	7.7	8.0	31	5	17	18.3	0
Thursday	9/05/2019	8.2	8.0	8.1	6	6	6	28.4	0
Friday	10/05/2019	8.2	7.8	8.0	7	4	5	39.9	0
Saturday	11/05/2019	8.2	7.2	8.0	6	5	5	34.6	0
Sunday	12/05/2019	8.0	7.3	7.6	10	8	9	19.6	0
Monday	13/05/2019	8.2	7.7	8.0	10	8	9	24.7	0
Tuesday	14/05/2019	8.2	7.7	7.9	8	6	7	24.9	0
Wednesday	15/05/2019	7.7	6.9	7.3	7	5	6	53.8	0
Thursday	16/05/2019	8.2	6.9	7.4	9	6	7	57.4	0
Friday	17/05/2019	8.3	7.5	8.1	14	7	10	59.7	0
Saturday	18/05/2019	8.2	7.7	7.8	8	6	7	52.6	0
Sunday	19/05/2019	7.5	7.0	7.2	8	6	6	59.9	0
Monday	20/05/2019	7.5	6.9	7.1	7	6	7	54.9	0
Tuesday	21/05/2019	7.0	6.8	6.9	7	6	7	41.5	0
Wednesday	22/05/2019	7.1	6.8	6.9	22	6	17	53.7	0
Thursday	23/05/2019	7.0	6.8	6.9	6	6	6	45.3	0
Friday	24/05/2019	6.9	6.8	6.8	6	6	6	29.4	0
Saturday	25/05/2019	6.9	6.8	6.8	10	7	9	24.3	0
Sunday	26/05/2019	7.0	6.8	6.8	12	10	11	40.1	0
Monday	27/05/2019	7.0	6.8	6.9	16	11	14	34.6	0
Tuesday	28/05/2019	7.5	6.9	7.0	22	17	19	53.3	0
Wednesday	29/05/2019	8.2	7.0	7.5	36	19	23	48.6	0
Thursday	30/05/2019	8.2	7.4	8.0	22	14	18	45.0	0
Friday	31/05/2019	7.2	6.8	7.0	27	14	20	62.5	0
Monthly Results		8.3	6.8	7.5	36	4	12	1333	9

Environmental Monitoring Data:- EPA License Number 549 **June 2019**
 Site Name: IXOM Operations Pty Ltd
 Site Address: Gate 1, Foreshore Road, Port Kembla, NSW, 2505
 The site has three Licensed Discharge Points as detailed in the monitoring data tables below: LDP1, LDP2 and LDP 4

Days with zero discharge: 18th, 19th and 21st

Licensed Discharge Point 1 - SARP Stack						
Limits:		SO2 Max: 2800mg/m3			SO3 Max: 50mg/m3	
Day	Date	SO2 Maximum (mg/m3)	SO2 Minimum (mg/m3)	SO2 Average (mg/m3)	SO3 Result (mg/m3)	Sampling Information (sampling for SO ₃ conducted three times per year)
Saturday	1/06/2019	1132	0	456		
Sunday	2/06/2019	0	0	0		
Monday	3/06/2019	0	0	0		
Tuesday	4/06/2019	0	0	0		
Wednesday	5/06/2019	0	0	0		
Thursday	6/06/2019	0	0	0		
Friday	7/06/2019	0	0	0		
Saturday	8/06/2019	0	0	0		
Sunday	9/06/2019	0	0	0		
Monday	10/06/2019	0	0	0		
Tuesday	11/06/2019	0	0	0		
Wednesday	12/06/2019	0	0	0		
Thursday	13/06/2019	0	0	0		
Friday	14/06/2019	0	0	0		
Saturday	15/06/2019	0	0	0		
Sunday	16/06/2019	0	0	0		
Monday	17/06/2019	0	0	0		
Tuesday	18/06/2019	0	0	0		
Wednesday	19/06/2019	0	0	0		
Thursday	20/06/2019	0	0	0		
Friday	21/06/2019	0	0	0		
Saturday	22/06/2019	0	0	0		
Sunday	23/06/2019	0	0	0		
Monday	24/06/2019	0	0	0		
Tuesday	25/06/2019	0	0	0		
Wednesday	26/06/2019	0	0	0		
Thursday	27/06/2019	0	0	0		
Friday	28/06/2019	0	0	0		
Saturday	29/06/2019	0	0	0		
Sunday	30/06/2019	0	0	0		
Monthly Results		1132	0	15		

Licensed Discharge Point 2: SMBS Stack				
Limits:		SO2 Max: 560mg/m3		
Day	Date	SO2 Maximum (mg/m3)	SO2 Minimum (mg/m3)	SO2 Average (mg/m3)
Saturday	1/06/2019	9	6	7
Sunday	2/06/2019	9	6	7
Monday	3/06/2019	9	6	7
Tuesday	4/06/2019	10	7	8
Wednesday	5/06/2019	10	6	8
Thursday	6/06/2019	10	7	8
Friday	7/06/2019	52	7	13
Saturday	8/06/2019	15	6	8
Sunday	9/06/2019	10	6	7
Monday	10/06/2019	10	7	8
Tuesday	11/06/2019	9	6	7
Wednesday	12/06/2019	10	7	9
Thursday	13/06/2019	11	6	8
Friday	14/06/2019	11	6	8
Saturday	15/06/2019	9	6	7
Sunday	16/06/2019	7	5	6
Monday	17/06/2019	7	6	6
Tuesday	18/06/2019	8	6	6
Wednesday	19/06/2019	315	0	18
Thursday	20/06/2019	1	0	0
Friday	21/06/2019	2	0	1
Saturday	22/06/2019	0	0	0
Sunday	23/06/2019	0	0	0
Monday	24/06/2019	0	0	0
Tuesday	25/06/2019	2	0	0
Wednesday	26/06/2019	7	1	3
Thursday	27/06/2019	4	0	1
Friday	28/06/2019	8	2	4
Saturday	29/06/2019	2	0	1
Sunday	30/06/2019	3	0	1
Monthly Results		315	0	6

Licensed Discharge Point 4: Wastewater discharge adjacent to T7									
Limits:		pH Max 8.5	pH Min 6.5		TSS Max: Dry weather 40mg/L	1000kl per day Max	Wet Weather >10mm/24hrs		
Day	Date	pH Max	pH Min	pH Average	TSS Max (mg/L)	TSS min (mg/L)	TSS Average (mg/L)	Total Volume discharged per day (kl)	Rainfall per day - 24hrs (mm)
Saturday	1/06/2019	8.2	6.8	7.3	23	19	21	37.4	0
Sunday	2/06/2019	8.3	8.1	8.2	24	22	23	24.9	0
Monday	3/06/2019	8.2	8.1	8.1	24	23	23	19.9	0
Tuesday	4/06/2019	8.2	6.9	7.5	24	18	20	136.2	0
Wednesday	5/06/2019	8.1	7.1	7.6	21	15	18	91.1	52
Thursday	6/06/2019	7.9	7.2	7.5	15	15	15	15.0	25
Friday	7/06/2019	7.4	6.8	7.2	15	8	12	18.8	0
Saturday	8/06/2019	8.1	6.9	7.4	38	17	29	36.2	0
Sunday	9/06/2019	8.2	8.0	8.1	33	26	29	18.5	0
Monday	10/06/2019	8.2	8.2	8.2	36	33	35	14.3	0
Tuesday	11/06/2019	8.2	8.1	8.2	26	23	25	9.9	0
Wednesday	12/06/2019	8.1	8.1	8.1	21	10	16	9.4	0
Thursday	13/06/2019	8.3	8.1	8.2	10	9	10	30.0	0
Friday	14/06/2019	8.3	8.1	8.2	9	6	8	29.7	0
Saturday	15/06/2019	8.2	7.3	7.8	6	6	6	9.1	0
Sunday	16/06/2019	7.8	7.1	7.4	8	6	7	127.1	8
Monday	17/06/2019	7.6	7.6	7.6	9	9	9	4.2	29
Tuesday	18/06/2019								0
Wednesday	19/06/2019								0
Thursday	20/06/2019	7.9	7.9	7.9	5	5	5	8.5	0
Friday	21/06/2019								0
Saturday	22/06/2019	7.8	7.8	7.8	4	4	4	5.0	0
Sunday	23/06/2019	7.6	7.6	7.6	6	6	6	5.0	0
Monday	24/06/2019	8.2	7.4	7.8	7	5	6	37.9	9
Tuesday	25/06/2019	8.2	7.5	7.9	7	5	6	15.0	3
Wednesday	26/06/2019	7.7	7.7	7.7	4	4	4	5.0	0
Thursday	27/06/2019	8.3	7.3	7.8	7	4	5	18.6	1
Friday	28/06/2019	0.0	0.0	0.0	0	0	0		0
Saturday	29/06/2019	7.8	7.8	7.8	8	8	8	3.2	0
Sunday	30/06/2019	0.0	0.0	0.0	0	0	0		0
Monthly Results		8.3	6.8	7.8	38	4	14	730	127

Environmental Monitoring Data:- EPA License Number 549 July 2019
 Site Name: IXOM Operations Pty Ltd
 Site Address: Gate 1, Foreshore Road, Port Kembla, NSW, 2505
 The site has three Licensed Discharge Points as detailed in the monitoring data tables below: LDP1, LDP2 and LDP 4

Days with zero discharge: 8th

Licensed Discharge Point 1 - SARP Stack						
Limits:		SO2 Max: 2800mg/m3			SO3 Max: 50mg/m3	
Day	Date	SO2 Maximum (mg/m3)	SO2 Minimum (mg/m3)	SO2 Average (mg/m3)	SO3 Result (mg/m3)	Sampling Information (sampling for SO ₃ conducted three times per year)
Monday	1/07/2019	0	0	0		
Tuesday	2/07/2019	0	0	0		
Wednesday	3/07/2019	0	0	0		
Thursday	4/07/2019	0	0	0		
Friday	5/07/2019	0	0	0		
Saturday	6/07/2019	0	0	0		
Sunday	7/07/2019	0	0	0		
Monday	8/07/2019	0	0	0		
Tuesday	9/07/2019	0	0	0		
Wednesday	10/07/2019	0	0	0		
Thursday	11/07/2019	0	0	0		
Friday	12/07/2019	0	0	0		
Saturday	13/07/2019	0	0	0		
Sunday	14/07/2019	0	0	0		
Monday	15/07/2019	0	0	0		
Tuesday	16/07/2019	0	0	0		
Wednesday	17/07/2019	0	0	0		
Thursday	18/07/2019	0	0	0		
Friday	19/07/2019	0	0	0		
Saturday	20/07/2019	0	0	0		
Sunday	21/07/2019	0	0	0		
Monday	22/07/2019	0	0	0		
Tuesday	23/07/2019	0	0	0		
Wednesday	24/07/2019	0	0	0		
Thursday	25/07/2019	0	0	0		
Friday	26/07/2019	0	0	0		
Saturday	27/07/2019	0	0	0		
Sunday	28/07/2019	11	0	1		
Monday	29/07/2019	1569	0	220		
Tuesday	30/07/2019	1684	313	1024		
Wednesday	31/07/2019	1335	1002	1164		
Monthly Results		1684	0	78		

Licensed Discharge Point 2: SMBS Stack				
Limits:		SO2 Max: 560mg/m3		
Day	Date	SO2 Maximum (mg/m3)	SO2 Minimum (mg/m3)	SO2 Average (mg/m3)
Monday	1/07/2019	4	0	1
Tuesday	2/07/2019	3	0	1
Wednesday	3/07/2019	7	1	3
Thursday	4/07/2019	3	1	1
Friday	5/07/2019	1	0	0
Saturday	6/07/2019	6	0	1
Sunday	7/07/2019	7	1	3
Monday	8/07/2019	4	0	2
Tuesday	9/07/2019	84	0	17
Wednesday	10/07/2019	9	0	3
Thursday	11/07/2019	11	4	6
Friday	12/07/2019	7	3	4
Saturday	13/07/2019	7	2	4
Sunday	14/07/2019	6	2	3
Monday	15/07/2019	3	2	2
Tuesday	16/07/2019	7	2	4
Wednesday	17/07/2019	9	4	6
Thursday	18/07/2019	5	3	4
Friday	19/07/2019	6	3	4
Saturday	20/07/2019	5	3	4
Sunday	21/07/2019	5	3	4
Monday	22/07/2019	5	4	4
Tuesday	23/07/2019	6	4	5
Wednesday	24/07/2019	9	2	5
Thursday	25/07/2019	11	2	3
Friday	26/07/2019	11	2	5
Saturday	27/07/2019	6	2	3
Sunday	28/07/2019	70	1	12
Monday	29/07/2019	2	0	1
Tuesday	30/07/2019	9	2	4
Wednesday	31/07/2019	10	2	4
Monthly Results		84	0	4

Licensed Discharge Point 4: Wastewater discharge adjacent to T7									
Limits:		pH Max 8.5	pH Min 6.5		TSS Max: Dry weather 40mg/L	1000kl per day Max	Wet Weather >10mm/24hrs		
Day	Date	pH Max	pH Min	pH Average	TSS Max (mg/L)	TSS min (mg/L)	TSS Average (mg/L)	Total Volume discharged per day (kl)	Rainfall per day - 24hrs (mm)
Monday	1/07/2019	8.0	8.0	8.0	8	8	8	4.8	0
Tuesday	2/07/2019	7.7	7.7	7.7	8	8	8	5.0	0
Wednesday	3/07/2019	8.3	7.6	8.0	9	9	9	4.9	0
Thursday	4/07/2019	8.0	6.8	7.1	38	8	27	36.7	0
Friday	5/07/2019	7.6	6.8	7.0	36	20	28	21.6	8
Saturday	6/07/2019	7.2	7.0	7.1	23	21	22	6.9	1
Sunday	7/07/2019	8.1	7.0	7.5	31	17	24	10.0	0
Monday	8/07/2019								0
Tuesday	9/07/2019	7.3	7.3	7.3	26	26	26	1.4	1
Wednesday	10/07/2019	7.4	7.1	7.2	22	17	20	8.5	0
Thursday	11/07/2019	7.4	7.2	7.2	16	11	13	18.6	0
Friday	12/07/2019	7.8	7.2	7.5	1	1	1	19.7	0
Saturday	13/07/2019	8.2	7.9	8.0	1	1	1	14.8	0
Sunday	14/07/2019	8.2	8.2	8.2	0	0	0	9.8	0
Monday	15/07/2019	8.3	8.2	8.2	0	0	0	9.8	0
Tuesday	16/07/2019	8.3	8.1	8.2	0	0	0	24.6	0
Wednesday	17/07/2019	8.3	8.2	8.2	8	7	7	9.8	0
Thursday	18/07/2019	8.3	8.3	8.3	7	7	7	4.9	0
Friday	19/07/2019	8.2	8.2	8.2	7	7	7	4.1	0
Saturday	20/07/2019	8.2	8.2	8.2	7	6	7	13.8	0
Sunday	21/07/2019	8.2	8.2	8.2	7	7	7	4.9	0
Monday	22/07/2019	8.3	7.7	8.1	8	8	8	13.6	0
Tuesday	23/07/2019	8.0	8.0	8.0	8	8	8	5.0	0
Wednesday	24/07/2019	8.2	7.9	8.1	10	9	9	15.0	0
Thursday	25/07/2019	7.3	7.0	7.1	26	16	22	12.5	0
Friday	26/07/2019	8.2	7.1	7.8	20	15	17	13.9	0
Saturday	27/07/2019	8.1	8.0	8.1	13	11	12	9.9	0
Sunday	28/07/2019	8.3	8.1	8.2	11	10	10	13.3	0
Monday	29/07/2019	8.2	8.2	8.2	11	10	10	14.4	0
Tuesday	30/07/2019	8.3	7.6	8.1	9	8	9	38.8	0
Wednesday	31/07/2019	8.2	7.0	7.7	9	8	8	43.8	0
Monthly Results		8.3	6.8	7.8	38	0	11	415	10

Environmental Monitoring Data:- EPA License Number 549 August 2019
Site Name: IXOM Operations Pty Ltd
Site Address: Gate 1, Foreshore Road, Port Kembla, NSW, 2505
The site has three Licensed Discharge Points as detailed in the monitoring data tables below: **LDP1, LDP2 and LDP 4**

SO3 sample details:
14/8 - Sample for SO3 taken.
23/8 - results received and under review.
Results not reported as results known to be incorrect - repeat test organised

SO3 sample details:
17/9 - Re-test planned, cancelled due to a storm
26/9 - Re-test planned, cancelled due to plant outage
3/10 - Re-test completed. Results received 15/10. Results published 22/10.

Licensed Discharge Point 1 - SARP Stack						
Limits:		SO2 Max: 2800mg/m3			SO3 Max: 50mg/m3	
Day	Date	SO2 Maximum (mg/m3)	SO2 Minimum (mg/m3)	SO2 Average (mg/m3)	SO3 Result (mg/m3)	Sampling Information (sampling for SO ₃ conducted three times per year)
Thursday	1/08/2019	1257	857	1047		
Friday	2/08/2019	1234	848	1034		
Saturday	3/08/2019	1549	992	1165		
Sunday	4/08/2019	1451	999	1235		
Monday	5/08/2019	1492	906	1112		
Tuesday	6/08/2019	1173	841	1010		
Wednesday	7/08/2019	1147	488	836		
Thursday	8/08/2019	1317	1041	1159		
Friday	9/08/2019	1832	840	1122		
Saturday	10/08/2019	1524	735	1219		
Sunday	11/08/2019	1885	0	701		
Monday	12/08/2019	1501	871	1213		
Tuesday	13/08/2019	1606	642	1088		
Wednesday	14/08/2019	1382	975	1156	16	see notes above
Thursday	15/08/2019	1399	885	1161		
Friday	16/08/2019	1516	495	989		
Saturday	17/08/2019	1523	1165	1334		
Sunday	18/08/2019	1553	955	1292		
Monday	19/08/2019	1375	916	1081		
Tuesday	20/08/2019	1605	831	1111		
Wednesday	21/08/2019	1197	1013	1139		
Thursday	22/08/2019	1279	888	1061		
Friday	23/08/2019	1083	873	961		
Saturday	24/08/2019	1754	1078	1277		
Sunday	25/08/2019	1177	0	780		
Monday	26/08/2019	1443	305	1075		
Tuesday	27/08/2019	1443	939	1110		
Wednesday	28/08/2019	1488	884	1084		
Thursday	29/08/2019	1351	873	1033		
Friday	30/08/2019	2020	1145	1440		
Saturday	31/08/2019	1561	774	1146		
Monthly Results		2020	0	1102	16	

Licensed Discharge Point 2: SMBS Stack				
Limits:		SO2 Max: 560mg/m3		
Day	Date	SO2 Maximum (mg/m3)	SO2 Minimum (mg/m3)	SO2 Average (mg/m3)
Thursday	1/08/2019	10	4	6
Friday	2/08/2019	8	3	5
Saturday	3/08/2019	5	3	4
Sunday	4/08/2019	6	4	4
Monday	5/08/2019	6	4	5
Tuesday	6/08/2019	9	3	6
Wednesday	7/08/2019	8	4	6
Thursday	8/08/2019	10	5	7
Friday	9/08/2019	21	6	11
Saturday	10/08/2019	7	4	5
Sunday	11/08/2019	12	3	6
Monday	12/08/2019	13	5	8
Tuesday	13/08/2019	13	4	7
Wednesday	14/08/2019	15	4	7
Thursday	15/08/2019	11	4	5
Friday	16/08/2019	19	5	9
Saturday	17/08/2019	13	4	6
Sunday	18/08/2019	10	6	7
Monday	19/08/2019	9	3	4
Tuesday	20/08/2019	12	5	8
Wednesday	21/08/2019	6	4	5
Thursday	22/08/2019	12	4	6
Friday	23/08/2019	5	3	4
Saturday	24/08/2019	10	2	5
Sunday	25/08/2019	8	3	5
Monday	26/08/2019	6	3	3
Tuesday	27/08/2019	8	3	5
Wednesday	28/08/2019	7	3	5
Thursday	29/08/2019	7	2	4
Friday	30/08/2019	12	3	4
Saturday	31/08/2019	11	4	6
Monthly Results		21	2	6

Licensed Discharge Point 4: Wastewater discharge adjacent to T7									
Limits:		pH Max 8.5	pH Min 6.5		TSS Max: Dry weather 40mg/L	1000kl per day Max	Wet Weather >10mm/24hrs		
Day	Date	pH Max	pH Min	pH Average	TSS Max (mg/L)	TSS min (mg/L)	TSS Average (mg/L)	Total Volume discharged per day (kl)	Rainfall per day - 24hrs (mm)
Thursday	1/08/2019	8.1	7.0	7.3	10	9	9	34.6	0
Friday	2/08/2019	8.3	8.2	8.3	9	9	9	44.1	0
Saturday	3/08/2019	8.3	8.3	8.3	12	8	10	46.2	0
Sunday	4/08/2019	8.3	7.9	8.2	13	7	8	52.1	0
Monday	5/08/2019	7.8	7.6	7.7	8	7	8	55.1	0
Tuesday	6/08/2019	7.8	7.5	7.6	8	8	8	50.2	0
Wednesday	7/08/2019	8.3	6.8	8.0	32	8	19	51.0	0
Thursday	8/08/2019	8.3	7.7	8.2	37	17	27	58.7	0
Friday	9/08/2019	8.3	7.8	8.1	18	16	17	68.8	0
Saturday	10/08/2019	8.3	7.7	8.1	17	14	15	80.2	0
Sunday	11/08/2019	8.2	7.6	7.8	15	13	14	59.7	0
Monday	12/08/2019	8.3	6.9	7.9	34	12	22	68.7	0
Tuesday	13/08/2019	8.3	7.7	8.2	39	27	30	83.8	1
Wednesday	14/08/2019	8.3	7.2	8.0	35	19	27	73.0	0
Thursday	15/08/2019	8.1	7.0	7.5	24	21	22	69.8	0
Friday	16/08/2019	8.3	6.8	7.8	23	20	21	69.8	0
Saturday	17/08/2019	8.3	8.3	8.3	38	23	29	69.8	0
Sunday	18/08/2019	8.3	7.9	8.1	37	21	26	84.0	0
Monday	19/08/2019	8.1	7.8	8.0	27	19	22	74.7	0
Tuesday	20/08/2019	8.3	7.4	7.8	20	18	19	79.4	0
Wednesday	21/08/2019	8.3	8.1	8.2	21	18	20	65.8	0
Thursday	22/08/2019	8.3	7.7	8.1	29	21	24	64.3	0
Friday	23/08/2019	8.3	8.2	8.3	22	20	20	54.2	0
Saturday	24/08/2019	8.3	8.2	8.2	24	20	21	59.2	0
Sunday	25/08/2019	8.2	7.5	7.9	25	23	24	59.5	0
Monday	26/08/2019	7.9	6.9	7.4	27	21	24	88.1	0
Tuesday	27/08/2019	7.4	7.0	7.2	25	22	23	74.3	7
Wednesday	28/08/2019	7.2	7.0	7.1	25	11	18	58.3	0
Thursday	29/08/2019	8.2	7.0	7.6	21	19	21	154.6	0
Friday	30/08/2019	7.8	7.1	7.4	23	19	21	122.4	59
Saturday	31/08/2019	8.3	7.1	7.7	24	24	24	52.1	0
Monthly Results		8.3	6.8	7.9	39	7	19	2127	67

Environmental Monitoring Data:- EPA License Number 549
September 2019
 Site Name: IXOM Operations Pty Ltd
 Site Address: Gate 1, Foreshore Road, Port Kembla, NSW, 2505
 The site has three Licensed Discharge Points as detailed in the monitoring data tables below: LDP1, LDP2 and LDP 4

SO3 sample details:

Licensed Discharge Point 1 - SARP Stack						
Limits:		SO2 Max: 2800mg/m3			SO3 Max: 50mg/m3	
Day	Date	SO2 Maximum (mg/m3)	SO2 Minimum (mg/m3)	SO2 Average (mg/m3)	SO3 Result (mg/m3)	Sampling Information (sampling for SO3 conducted three times per year)
Sunday	1/09/2019	1567	936	1289		
Monday	2/09/2019	1331	898	1061		
Tuesday	3/09/2019	1475	1072	1189		
Wednesday	4/09/2019	1373	914	1174		
Thursday	5/09/2019	1137	823	967		
Friday	6/09/2019	1129	816	973		
Saturday	7/09/2019	1008	755	885		
Sunday	8/09/2019	1364	875	1080		
Monday	9/09/2019	1583	1061	1249		
Tuesday	10/09/2019	1408	1033	1166		
Wednesday	11/09/2019	1626	970	1323		
Thursday	12/09/2019	1746	650	1138		
Friday	13/09/2019	1310	899	1065		
Saturday	14/09/2019	1136	846	984		
Sunday	15/09/2019	1138	938	1044		
Monday	16/09/2019	1203	791	1036		
Tuesday	17/09/2019	1425	873	1166		
Wednesday	18/09/2019	1809	797	1374		
Thursday	19/09/2019	1669	0	621		
Friday	20/09/2019	1317	0	69		
Saturday	21/09/2019	1326	0	433		
Sunday	22/09/2019	0	0	0		
Monday	23/09/2019	7	0	0		
Tuesday	24/09/2019	0	0	0		
Wednesday	25/09/2019	0	0	0		
Thursday	26/09/2019	33	0	2		
Friday	27/09/2019	1535	0	323		
Saturday	28/09/2019	1671	385	1064		
Sunday	29/09/2019	1873	1017	1353		
Monday	30/09/2019	1592	1061	1347		
Monthly Results		1873	0	846		

Licensed Discharge Point 2: SMBS Stack				
Limits:		SO2 Max: 560mg/m3		
Day	Date	SO2 Maximum (mg/m3)	SO2 Minimum (mg/m3)	SO2 Average (mg/m3)
Sunday	1/09/2019	10	4	5
Monday	2/09/2019	16	6	9
Tuesday	3/09/2019	6	3	5
Wednesday	4/09/2019	10	3	6
Thursday	5/09/2019	10	6	8
Friday	6/09/2019	6	2	5
Saturday	7/09/2019	8	3	5
Sunday	8/09/2019	3	2	3
Monday	9/09/2019	8	2	3
Tuesday	10/09/2019	7	3	5
Wednesday	11/09/2019	12	2	5
Thursday	12/09/2019	10	5	8
Friday	13/09/2019	16	5	8
Saturday	14/09/2019	15	9	13
Sunday	15/09/2019	15	5	8
Monday	16/09/2019	6	2	4
Tuesday	17/09/2019	6	3	4
Wednesday	18/09/2019	5	2	3
Thursday	19/09/2019	5	3	4
Friday	20/09/2019	3	3	3
Saturday	21/09/2019	8	2	3
Sunday	22/09/2019	5	3	4
Monday	23/09/2019	123	1	7
Tuesday	24/09/2019	3	1	2
Wednesday	25/09/2019	4	1	2
Thursday	26/09/2019	19	2	6
Friday	27/09/2019	135	2	9
Saturday	28/09/2019	4	3	4
Sunday	29/09/2019	6	3	4
Monday	30/09/2019	5	4	4
Monthly Results		135	1	5

Licensed Discharge Point 4: Wastewater discharge adjacent to T7										
Limits:		pH Max 8.5	pH Min 6.5		TSS Max: Dry weather 40mg/L	1000kl per day Max	Wet Weather >10mm/24hrs			
Day	Date	pH Max	pH Min	pH Average	TSS Max (mg/L)	TSS min (mg/L)	TSS Average (mg/L)	Total Volume discharged per day (kl)	Rainfall per day - 24hrs (mm)	
Sunday	1/09/2019	8.3	8.2	8.2	27	21	23	59.8	0	
Monday	2/09/2019	8.3	7.8	8.0	37	17	32	74.6	0	
Tuesday	3/09/2019	8.3	8.3	8.3	29	12	17	59.5	0	
Wednesday	4/09/2019	8.3	7.7	8.1	12	11	11	59.6	0	
Thursday	5/09/2019	8.0	7.1	7.5	12	11	12	69.7	0	
Friday	6/09/2019	8.3	7.4	7.8	12	11	12	59.7	0	
Saturday	7/09/2019	8.3	8.1	8.2	12	10	11	64.4	0	
Sunday	8/09/2019	8.0	7.1	7.4	11	10	10	69.8	0	
Monday	9/09/2019	7.4	6.9	7.1	30	12	17	73.7	0	
Tuesday	10/09/2019	7.2	6.9	7.0	34	21	32	64.4	0	
Wednesday	11/09/2019	7.5	7.1	7.3	35	11	20	60.1	0	
Thursday	12/09/2019	8.3	7.4	8.1	25	22	23	71.3	0	
Friday	13/09/2019	8.3	7.9	8.1	22	21	22	64.8	0	
Saturday	14/09/2019	8.2	6.9	7.2	32	21	22	59.9	0	
Sunday	15/09/2019	7.6	6.8	6.9	26	21	23	64.7	0	
Monday	16/09/2019	7.5	6.8	7.0	24	21	22	64.7	0	
Tuesday	17/09/2019	7.6	6.8	7.0	22	18	20	174.8	1	
Wednesday	18/09/2019	8.3	6.9	7.6	19	17	18	162.6	42	
Thursday	19/09/2019	8.2	7.5	8.1	27	17	20	90.8	15	
Friday	20/09/2019	8.3	8.1	8.2	37	24	28	51.3	0	
Saturday	21/09/2019	8.3	8.2	8.3	37	23	28	27.7	0	
Sunday	22/09/2019	8.3	8.0	8.2	38	22	29	30.7	0	
Monday	23/09/2019	8.3	8.3	8.3	11	11	11	6.6	1	
Tuesday	24/09/2019	8.3	8.1	8.2	12	11	12	19.9	47	
Wednesday	25/09/2019	8.1	7.9	8.0	12	11	12	19.9	0	
Thursday	26/09/2019	8.2	7.8	8.0	11	11	11	23.6	0	
Friday	27/09/2019	8.2	8.0	8.1	9	9	9	20.0	0	
Saturday	28/09/2019	8.3	7.7	8.1	11	9	10	49.8	0	
Sunday	29/09/2019	8.1	7.6	7.8	27	11	18	74.3	0	
Monday	30/09/2019	7.8	7.4	7.6	29	22	25	59.4	0	
Monthly Results		8.3	6.8	7.8	38	9	19	1852	106	