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 - quarterly intervals (once every three months using USEPA method 8)

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

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 560 mg/m3

date and results being received.

The data in the below table is updated at two weekly intervals.

The data in the below table is updated at two weekly intervals.

on each 24hr day from midnight to midnight.

LDP4: Wastewater discharge to council drain adjacent to Tank 7

Description: This is a wastewater discharge point which discharges treated wastwater 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 - Continuos 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

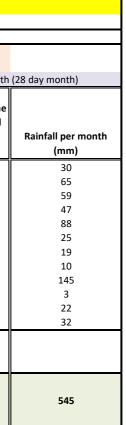
Volume: - This discharge point also requires monitoring of total volume discharged each day and has a maximum allowed discharge volume

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.

	LDP1:	SARP Stack	[LDP2: SME	S Stack					LDP	4: Wastewate	r Discharge adjac	ent to T7	
	SO2 max al SO3 max al		2800mg/m3 50mg/m3			SO2 max a	llowed	560mg/m3	pH Max allowed pH Min allowed		8.5 6.5		TSS Max Allo	ved (Dry Weather wed (Wet Weather Volume discharge	, er)	40mg/L 150mg/L 28000kL/mnt
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 Discharged per month (kL)
Oct-17	2107	0	576	46	Oct-17	26	1	5	Oct-17	8.3	6.8	7.8	34	7	14	1311
Nov-17	637	0	34		Nov-17	58	1	4	Nov-17	8.3	6.8	8.0	15	7	10	747
Dec-17	0	0	0		Dec-17	44	0	3	Dec-17	8.3	6.8	7.7	23	8	11	676
Jan-18	5	0	0		Jan-18	83	0	3	Jan-18	8.3	6.7	7.8	32	7	14	865
Feb-18	1406	0	29		Feb-18	169	0	8	Feb-18	8.3	6.8	7.9	35	7	12	774
Mar-18	2067	0	826		Mar-18	14	4	7	Mar-18	8.4	6.7	7.8	19	8	12	1623
Apr-18	1892	0	1034	27	Apr-18	101	2	7	Apr-18	8.3	6.6	7.6	39	8	14	1727
May-18	2237	0	945	10	May-18	15	3	8	May-18	8.4	6.7	7.4	35	8	16	1681
Jun-18	1801	0	1112		Jun-18	17	3	7	Jun-18	8.3	6.6	7.3	34	7	16	1978
Jul-18	1599	0	563		Jul-18	77	5	8	Jul-18	8.3	6.8	7.7	21	7	12	1267
Aug-18	1807	0	155		Aug-18	14	0	3	Aug-18	8.3	6.8	7.9	16	1	9	1328
Sep-18	1968	0	941		Sep-18	87	0	4	Sep-18	8.3	6.8	7.3	23	7	10	1469
ull Reporting /ear Results	2237	0	518	28		169	0	5		8.4	6.6	7.7	39	1	12	154

The data in the below table shows the maximum, minimum and average concentrations of sulphur dioxide measured



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. vescription: Inits is the large (sum) 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 - quarterly intervals (once every three months) Discharge limits for this point are maximum concentrations: Sulplur Discide that average maximum is 2800 mg/m3 Sulphur Trioxide maximum is 50 mg/m3 (minimum 1hr block average) he 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 receieved. The data in the below table is updated at two weekly intervals.

Current						
Month Data:	Oct-17	SO2 Lice	ensed Limit Max: 2800	mg/m3	SO3 Lice	nsed Limit Max: 50mg/m3
Day	Date	SO2 Maximum (mg/m3)	SO2 Minimum (mg/m3)	SO2 Average (mg/m3)	SO3 Result Required once per quarter (mg/m3)	Sampling Information
Sunday	1/10/2017	1557	0	1039		
Monday	2/10/2017	1869	365	1097		
Tuesday	3/10/2017	1535	0	715		
Wednesday	4/10/2017	0	0	0		
Thursday	5/10/2017	0	0	0		
Friday	6/10/2017	0	0	0		
Saturday	7/10/2017	0	0	0		
Sunday	8/10/2017	0	0	0		
Monday	9/10/2017	0	0	0		
Tuesday	10/10/2017	0	0	0		
Wednesday	11/10/2017	393	0	19		
Thursday	12/10/2017	1281	0	274		
Friday	13/10/2017	1447	422	1029		
Saturday	14/10/2017	1373	630	929		
Sunday	15/10/2017	1373	940	1212		
Monday	16/10/2017	1481	702	1143		
Tuesday	17/10/2017	1489	858	1160		
Wednesday	18/10/2017	1580	740	1209		
Thursday	19/10/2017	1952	0	717		
Friday	20/10/2017	109	0	8		
Saturday	21/10/2017	2107	203	939		
Sunday	22/10/2017	1123	573	812		
Monday	23/10/2017	1130	500	835		
Tuesday	24/10/2017	758	289	594		
Wednesday	25/10/2017	916	41	506		
						Stack Test 26 Oct 2017, Results Received 16 Nov 2017, Results
Thursday	26/10/2017	1051	348	711	46	Published 22 Nov 2017
Friday	27/10/2017	1240	212	706		
Saturday	28/10/2017	931	161	615		
Sunday	29/10/2017	1341	517	875		
Monday	30/10/2017	747	18	419		
Tuesday	31/10/2017	773	6	293		
Monthly Result	s	2107	0	576	46	

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) toring Frequency: Sulphur Dioxide - Continuous Monitoring, licensed in 1hr block averages.

harge limit for this point is maximum concentration: Sulphur Dioxide 1hr average maximum is 560 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.

	Licensed D	ischarge Point 2:	SIVIDS STACK	
Current Month Data:	Oct-17	SO2 Lice	nsed Limit max: 560n	ng/m3
Day	Date	SO2 Maximum (mg/m3)	SO2 Minimum (mg/m3)	SO2 Average (mg/m3)
Sunday	1/10/2017	4	1	2
Monday	2/10/2017		2	3
Tuesday	3/10/2017	7	4	4
Wednesday	4/10/2017	5	3	4
Thursday	5/10/2017		4	4
Friday	6/10/2017	6	3	5
Saturday	7/10/2017	-	5	5
Sunday	8/10/2017		6	6
Monday	9/10/2017	-	6	7
Tuesday	10/10/2017	7	5	6
Wednesday	11/10/2017	8	7	7
Thursday	12/10/2017	8	6	7
Friday	13/10/2017	-	6	7
Saturday	14/10/2017	8	4	6
Sunday	15/10/2017	8	5	6
Monday	16/10/2017	-	5	6
Tuesday	17/10/2017	7	5	6
Wednesday	18/10/2017	7	6	6
Thursday	19/10/2017	-	6	6
Friday	20/10/2017	26	2	5
Saturday	21/10/2017	4	2	3
Sunday	22/10/2017	4	2	3
Monday	23/10/2017	4	2	3
Tuesday	24/10/2017		3	4
Wednesday	25/10/2017	4	2	3
Thursday	26/10/2017	5	3	3
Friday	27/10/2017	4	2	3
Saturday	28/10/2017	5	3	3
Sunday	29/10/2017	5	3	4
Monday	30/10/2017	5	3	4
Tuesday	31/10/2017	3	2	2
Monthly Results		26	1	5

Description: This is a v			-				through the	e centre of the	site
This drain discharges i									
Pollutants Discharged		point is licensed	for discharge of treate	ed wastewater o	containing a maximur	n concentra	ition of Tota	al Suspended S	olids
as well as finite pH ran									
Units Of Measure: Tot	al Suspended S	olids are measure	ed in milligrams of soli	ds per litre of w	astewater discharged	d and pH is i	measured ir	n standard pH	units
Monitoring Frequency	: Total Suspend	led Solids - Conti	nuous during discharg	ge events					
Monitoring Frequency	/: pH: - Continue	ous during discha	rge events						
Discharge limits: pH -	The pH is measu	ured in a defined	range and the limits a	re 6.5 <ph<8.5.< th=""><th>The license applies to</th><th>AVERAGE</th><th><u>pH</u> recorded</th><th>d on each discl</th><th>harge event.</th></ph<8.5.<>	The license applies to	AVERAGE	<u>pH</u> recorded	d on each discl	harge event.
TSS	: The maximum	for TSS concentr	ation is 40mg/L in dry	weather and 15	60mg/L in wet weath	er (wet wea	ther is defir	ned as any 24h	r period
	in which more	than 10mm of ra	in falls). The license a	pplies to the <u>AV</u>	/ERAGE TSS over eac	h discharge	event		
Vol	ume: - This disc	harge point also i	requires monitoring o	f total volume d	ischarged each day a	nd has a ma	iximum allo	wed discharge	volume
	of 1000	kL/day							
The data in the table b	elow shows Ma	iximum, Minimun	n and average values	per day for TSS a	and pH as well as dai	y volume di	scharged a	nd total rainfal	l recorded.
This data is updated e	very two weeks								
			Licensed Discharge	Point 4: Wastev	vater discharge adjao	cent to T7			
Current Month Data:	Oct-17		рН		Total	Suspended	Solids (TSS)		
					TSS max: Dry weath				Wet Weather
icensed Limits		pH max 8.5	pH min 6.5		Wet weather: 150m	ig/L			>10mm/24hrs
								Total	
								Volume	
								discharged	
								per day (kL)	
							TSS	Limit	
						TSS min	Average	1000kL/day	Rainfall per day - 24hrs
Day	Date	pH Max	pH Min	pH Average	TSS Max (mg/L)	(mg/L)	(mg/L)	max	(mm)
Sunday	1/10/2017	8	8	8	16	14	15	68	0
Monday	2/10/2017	8.3	7.3	8.1	32	14	16	58	0
Fuesday	3/10/2017	8.3	7.4	8.1	33	31	32	53	0
Wednesday	4/10/2017	8.3	8.2	8.2	34	9	22	19	0
Thursday	5/10/2017	8.2	8.1	8.2	10	9	10	10	0
Friday	6/10/2017	8.3	8.0	8.2	12	12	12	20	0
Saturday	7/10/2017	8.3	7.9	8.2	14	12	13	79	0
Sunday	8/10/2017							0	0
Monday	9/10/2017	7.4	7.4	7.4	12	12	12	10	1
Tuesday	10/10/2017	7.9	7.9	7.9	12	12	12	5	0
Wednesday	11/10/2017	7.7	7.7	7.7	11	11	11	5	0
Thursday	12/10/2017	8.2	7.9	8.1	12	8	10	23	0
Friday	13/10/2017	8.3	7.5	7.9	10	7	9	30	5
Saturday	14/10/2017	8.2	6.8	7.2	10	9	10	45	0
Sunday	15/10/2017	8.3	6.8	7.2	9	8	8	32	0
Monday	16/10/2017	7.7	6.8	7.1	11	10	10	41	0
Tuesday	17/10/2017	7.8	7.6	7.7	12	10	11	37	0
Wednesday	18/10/2017	8.0	7.8	7.9	15	13	14	37	0
Thursday	19/10/2017	8.2	7.6	8.0	16	13	15	65	0
Friday	20/10/2017	8.3	7.3	7.8	15	11	14	125	12
Saturday	21/10/2017	8.2	7.4	7.9	13	10	12	65	0
Sunday	22/10/2017	8.2	7.6	7.8	13	12	13	57	3
Monday	23/10/2017	8.2	8.0	8.1	14	13	13	35	0
Tuesday	24/10/2017	8.3	8.1	8.2	14	10	13	65	0
Wednesday	25/10/2017	8.2	7.7	8.0	10	10	10	52	2
Thursday	26/10/2017	8.1	7.2	8.0	12	9	10	65	5
Friday	27/10/2017	7.6	7.2	7.4	21	13	19	41	1
Saturday	28/10/2017	7.6	7.3	7.5	19	18	19	38	0
Sunday	29/10/2017	8.1	7.8	8.0	19	18	19	49	0
Monday	30/10/2017	8.1	7.2	7.6	22	18	20	43	0
	21/10/2017	7.7	7.0	7.4	22	11	16	38	1
Tuesday	31/10/2017	7.17							

LDP4: Wastewater discharge to council drain adjacent to Tank 7

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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)

nitoring Frequency: Sulphur Dioxide - Continuous Monitoring, licensed in 1hr block averages.

Monitoring Frequency: Sulphur Trioxide - quarterly intervals (once every three months) Discharge limits for this point are maximum concentrations: Sulphur Dioxide 1hr average maximum is 2800 mg/m3

Subhur Trioxide maximum is for any point are maximum concentrations of pupping for an arcinger maximum is 500 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 receieved.

The data in the below table is updated at two weekly intervals.

Current Month Data:

Day Wednesday Thursday

Friday Saturday Sunday Monday Tuesday

Wednesday Thursday

Friday Saturday Sunday Monday Tuesday Wednesday

Thursday Friday Saturday Sunday Monday , Tuesday Wednesday Thursday

Friday Saturday Sunday Monday Tuesday Wednesda Thursday Monthly Results

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) Jnits Of Measure: Sulphur Dioxide is measured in mg/m3 (milligrams per cubic meter) toring Frequency: Sulphur Dioxide - Continuous Monitoring, licensed in 1hr block averages.

ischarge limit for this point is maximum concentration: Sulphur Dioxide 1hr average maximum is 560 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.

1		Licensed Discharge P	oint 1 - SARP Stack		
Nov-17	SO2 Lice	ensed Limit Max: 2800r	ng/m3	SO3 Licens	ed Limit Max: 50mg/m3
Date	SO2 Maximum (mg/m3)	SO2 Minimum (mg/m3)	SO2 Average (mg/m3)	SO3 Result Required once per quarter (mg/m3)	Sampling Information
1/11/2017	521	125	366	1	
2/11/2017	637	263	436		
3/11/2017	602	0	209		
4/11/2017	0	0	0		
5/11/2017	0	0	0		
6/11/2017	0	0	0		
7/11/2017	0	0	0		
8/11/2017	0	0	0		
9/11/2017	0	0	0		
10/11/2017	0	0	0		
11/11/2017	0	0	0		
12/11/2017	0	0	0		
13/11/2017	0	0	0		
14/11/2017	0	0	0		
15/11/2017	0	0	0		
16/11/2017	0	0	0		
17/11/2017	0	0	0		
18/11/2017	0	0	0		
19/11/2017	0	0	0		
20/11/2017	0	0	0		
21/11/2017	0	0	0		
22/11/2017	0	0	0		
23/11/2017	0	0	0		
24/11/2017	0	0	0		
25/11/2017	0	0	0		
26/11/2017	0	0	0		
27/11/2017	0	0	0		
28/11/2017	0	0	0		
29/11/2017	0	0	0		
30/11/2017	0	0	0		
s	637	0	34	1	

Current Month		Discharge Point 2:		
Data:	Nov-17	SO2 Lice	nsed Limit max: 560n	ng/m3
		SO2 Maximum	SO2 Minimum	SO2 Average
Day	Date	(mg/m3)	(mg/m3)	(mg/m3)
Wednesday	1/11/2017	2	1	2
Thursday	2/11/2017	4	1	2
Friday	3/11/2017	8	3	5
Saturday	4/11/2017	5	3	4
Sunday	5/11/2017	5	3	4
Monday	6/11/2017	7	4	5
Tuesday	7/11/2017	5	3	4
Wednesday	8/11/2017	5	3	4
Thursday	9/11/2017	5	3	4
Friday	10/11/2017	5	4	4
Saturday	11/11/2017	5	4	5
Sunday	12/11/2017	5	4	4
Monday	13/11/2017	6	4	4
Tuesday	14/11/2017	5	4	4
Wednesday	15/11/2017	6	4	5
Thursday	16/11/2017	6	4	5
Friday	17/11/2017	6	3	4
Saturday	18/11/2017	4	3	3
Sunday	19/11/2017	4	3	3
Monday	20/11/2017	4	3	3
Tuesday	21/11/2017	58	3	11
Wednesday	22/11/2017	4	3	3
Thursday	23/11/2017	7	3	4
Friday	24/11/2017	4	3	3
Saturday	25/11/2017	5	3	4
Sunday	26/11/2017	6	4	5
Monday	27/11/2017	6	3	4
Tuesday	28/11/2017	10	4	5
Wednesday	29/11/2017	5	4	5
Thursday	30/11/2017	5	3	4
				<u> </u>
Monthly Results		58	1	4

Description: This is a	actowator dias	hargo point which			uncil drain adjacent t		brough the	contro of the	ito
Description: This is a w			-				nrough the	centre of the s	site
This drain discharges in									
Pollutants Discharged:		point is licensed	for discharge of treate	d wastewater o	containing a maximun	n concentra	tion of Lota	i Suspended So	DIIds
as well as finite pH rang		P.1.	1. · · · · · · · · · · · · · · · · · · ·	1 Pa f					
Units Of Measure: Tota			0		astewater discharged	and pH is r	neasured in	standard pH L	inits
Monitoring Frequency:				e events					
Monitoring Frequency:	•		0		The lineare enalise to				
Discharge limits: pH - T			0				_		•
			ation is 40mg/L in dry v n falls). The license ap		-			ed as any 24nr	period
			equires monitoring of			•		und discharge	(aluma
Volu	of 1000	0 1	equires monitoring or	total volume u	schargen each uay an	10 11d5 d 111d7		veu uischarge	volume
The date is the table he		. ,						المقصد المعتقد	
The data in the table be			n and average values p	ber day for 155	and pH as well as dall	y volume di	scharged an	io total rainfall	recorded.
This data is updated even	ery two weeks								
		1	-	Point 4: Waster	vater discharge adjac				
Current Month Data:	Nov-17		рН			Suspended	Solids (TSS)		
					TSS max: Dry weath				Wet Weather
Licensed Limits		pH max 8.5	pH min 6.5		Wet weather: 150m	ng/L	1	Tatal	>10mm/24hrs
								Total	
								Volume	
								discharged per day (kL)	
							TSS	Limit	
						TSS min	Average	1000kL/day	Rainfall per day - 24hr
Dav	Date	pH Max	pH Min	pH Average	TEE Max (mg/l)	(mg/L)	-	max	(mm)
Day			-	-	TSS Max (mg/L)		(mg/L)		
Wednesday	1/11/2017	8	7	7	12	10	11	46	0
Thursday	2/11/2017	8.2	7.8	8.0	11	9	10	52	0
Friday	3/11/2017	8.3	8.1	8.2	10	9	10	33	0
Saturday	4/11/2017	8.1	7.2	7.9	13	9	11	40	5
Sunday	5/11/2017	8.3	8.2	8.3	10	9	10	35	0
Monday	6/11/2017	8.3	8.1	8.2	14	11	13	74	20
Tuesday	7/11/2017	8.3	8.1	8.2	15	11	13	20	0
Wednesday	8/11/2017	8.1	7.2	7.7	13	13	13	35	5
Thursday	9/11/2017	8.2	7.7	7.9	14	12	13	10	0
Friday	10/11/2017	8.2	8.2	8.2	12	11	12	10	0
Saturday	11/11/2017	8.2	7.7	7.9	11	10	11	24	0
Sunday	12/11/2017	7.9	7.7	7.8	11	10	11	10	0
Monday	13/11/2017	8.3	7.6	7.9	11	11	11	8	0
Tuesday	14/11/2017								0
Wednesday	15/11/2017	7.9	7.9	7.9	11	11	11	4	0
Thursday	16/11/2017	7.9	7.9	7.9	11	10	11	9	1
Friday	17/11/2017	8.2	7.3	7.8	13	11	12	22	5
Saturday	18/11/2017	8.1	7.2	7.7	13	11	12	94	26
Sunday	19/11/2017	8.1	7.3	7.7	11	10	11	15	1
Monday	20/11/2017	7.6	7.6	7.6	9	9	9	8	0
Tuesday	21/11/2017	7.7	7.6	7.7	11	9	10	13	0
Wednesday	22/11/2017	8.0	7.8	7.9	10	9	10	19	0
Thursday	23/11/2017	8.3	7.8	8.1	10	7	9	20	0
Friday	24/11/2017	8.3	8.1	8.2	8	7	7	15	0
Saturday	25/11/2017	8.3	8.0	8.1	7	7	7	33	0
Sunday	26/11/2017	8.1	8.1	8.1	8	7	7	15	0
Monday	27/11/2017	8.3	8.1	8.2	8	7	8	29	0
Tuesday	28/11/2017	8.2	7.3	8.1	10	8	9	22	2
Wednesday	29/11/2017	8.2	8.2	8.2	9	8	9	18	0
Thursday	30/11/2017	8.3	8.2	8.2	10	9	9	15	0
			1	1		1	1		

ite 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

ent 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) oring Frequency: Sulphur Dioxide - Continuous Monitoring, licensed in 1hr block averages. nitoring Frequency: Sulphur Trioxide - quarterly intervals (once every three months) charge 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) he 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 receieved. The data in the below table is updated at two weekly intervals

Licensed Discharge Point 1 - SARP Sta Dec-17 SO2 Licensed Limit Max: 2800mg/m3 SO3 Licensed Limit Max: 50mg/m3 Month Data: SO3 Result SO₂ Maximum SO₂ Minimum SO₂ Average equired once pe Day Date (mg/m3) (mg/m3) (mg/m3) rter (mg/m3) 1/12/20 day aturdav 2/12/201 inday 3/12/201 Monday 4/12/201 5/12/201 uesday /ednesdav 6/12/201 hursday 7/12/201 riday 8/12/2017 9/12/201 aturday inday 10/12/201 Monday 11/12/201 uesday 12/12/201 13/12/201 ednesday ursday 14/12/201 riday 15/12/201 Saturday 16/12/201 17/12/201 undav onday 18/12/201 Tuesdav 19/12/201 ednesday 20/12/201 hursday 21/12/201 riday 22/12/201 Saturday 23/12/201 unday 24/12/201 Monday 25/12/201 uesday 26/12/201 Vednesday 27/12/201 hursday 28/12/201 Friday Saturday 29/12/201 30/12/201 indav 31/12/20 Monthly Results 0 0 0

Description: This is the small white (22m) high stack adjacent to the white building on site lutants Discharged: This discharge point is licensed for discharge of Sulphur Dioxide (SO2) its Of Measure: Sulphur Dioxide is measured in mg/m3 (milligrams per cubic meter)

Frequency: Sulphur Dioxide - Continuous Monitoring, licensed in 1hr block averages.

harge limit for this point is maximum concentration: Sulphur Dioxide 1hr average maximum is 560 mg/m3

e data in the below table shows the maximum, minimum and average concentrations of sulphur dioxide measured n each 24hr day from midnight to midnight.

e data in the below table is updated at two weekly intervals.

	Licensed I	Discharge Point 2: SI	MBS Stack	
Current Month Data:	Dec-17	SO2 Licen	sed Limit max: 560mg	g/m3
Day	Date	SO2 Maximum (mg/m3)	SO2 Minimum (mg/m3)	SO2 Average (mg/m3)
Friday	1/12/2017	4	2	3
Saturday	2/12/2017	2	1	1
Sunday	3/12/2017		0	1
Monday	4/12/2017		0	1
Tuesday	5/12/2017	2	1	1
Wednesday	6/12/2017	2	1	1
Thursday	7/12/2017		1	2
Friday	8/12/2017	2	1	1
Saturday	9/12/2017	1	1	1
Sunday	10/12/2017	2	1	2
Monday	11/12/2017	32	2	7
Tuesday	12/12/2017	44	2	6
Wednesday	13/12/2017	4	2	3
Thursday	14/12/2017	4	2	3
Friday	15/12/2017	2	2	2
Saturday	16/12/2017	3	2	3
Sunday	17/12/2017	3	2	2
Monday	18/12/2017	3	2	2
Tuesday	19/12/2017	10	3	4
Wednesday	20/12/2017	4	2	3
Thursday	21/12/2017	3	2	2
Friday	22/12/2017	4	2	3
Saturday	23/12/2017	4	2	3
Sunday	24/12/2017	4	2	3
Monday	25/12/2017	2	1	1
Tuesday	26/12/2017	1	0	1
Wednesday	27/12/2017	18	1	3
Thursday	28/12/2017	3	2	3
Friday	29/12/2017	23	3	5
Saturday	30/12/2017	5	3	4
Sunday	31/12/2017	3	3	3
Monthly Results		44	0	3

Description: This is a wash This drain discharges into Pollutants Discharged: Th as well as finite pH range. Units Of Measure: Total S	the Port Ken	nbla Outer Harbou	r and also ca
Pollutants Discharged: Th as well as finite pH range.	is discharge		
as well as finite pH range.		point is licensed fo	
			r discharge o
Units Of Measure: Total S			
			•
Monitoring Frequency: To	•		•
Monitoring Frequency: pl	H: - Continuo	us during discharg	e events
Discharge limits: pH - The	pH is measu	red in a defined ra	nge and the
		for TSS concentrati	
		han 10mm of rain	
Volum		arge point also rec	quires monit
	of 1000k	1	
The data in the table belo		kimum, Minimum a	and average
This data is updated every	/ two weeks.		
		-	Licensed Dis
Current Month Data:	Dec-17		Licensed Dis
Current Month Data: Licensed Limits	Dec-17	pH max 8.5	

Current Month Data:	Dec-17								
current wonth Data:	Dec-17		рН	1		Suspended	Solius (135)		
					TSS max: Dry weath				Wet Weather
Licensed Limits		pH max 8.5	pH min 6.5		Wet weather: 150m	ng/L			>10mm/24hrs
								Total	
								Volume	
								discharged	
								per day (kL)	
							TSS	Limit	
						TSS min	Average	1000kL/day	Rainfall per day - 24h
Day	Date	pH Max	pH Min	pH Average	TSS Max (mg/L)	(mg/L)	(mg/L)	max	(mm)
Friday	1/12/2017	8	8	8	10	9	10	10	0
Saturday	2/12/2017	8.3	7.3	7.9	13	9	10	41	13
Sunday	3/12/2017	8.2	6.8	7.5	13	11	12	47	0
Monday	4/12/2017	7.8	7.3	7.5	16	15	15	28	8
Tuesday	5/12/2017	8.0	7.9	7.9	17	15	16	10	0
Wednesday	6/12/2017	8.2	8.1	8.2	15	9	12	10	0
Thursday	7/12/2017	8.2	8.2	8.2	10	10	10	5	0
Friday	8/12/2017	8.0	8.0	8.0	10	10	10	5	4
Saturday	9/12/2017	6.8	6.8	6.8	12	12	12	5	0
Sunday	10/12/2017								0
Monday	11/12/2017	8.0	7.5	7.8	9	8	8	42	0
Tuesday	12/12/2017								0
Wednesday	13/12/2017	8.1	7.4	7.7	10	8	9	23	0
Thursday	14/12/2017	7.8	7.7	7.7	10	9	10	9	0
Friday	15/12/2017	7.9	7.8	7.8	10	9	10	10	3
Saturday	16/12/2017	7.8	7.2	7.5	18	14	16	55	0
Sunday	17/12/2017	7.3	7.0	7.1	14	13	14	52	2
Monday	18/12/2017	7.5	7.5	7.5	13	13	13	10	0
Tuesday	19/12/2017	8.1	7.3	7.7	23	13	17	29	0
Wednesday	20/12/2017	8.0	6.9	7.6	14	14	14	10	1
Thursday	21/12/2017	8.2	7.1	7.8	16	11	13	24	0
Friday	22/12/2017	8.1	7.4	7.7	11	10	10	41	15
Saturday	23/12/2017	8.0	7.9	7.9	10	9	10	12	0
Sunday	24/12/2017	7.9	7.8	7.9	9	9	9	19	1
Monday	25/12/2017	7.6	6.8	7.2	10	9	10	23	0
Tuesday	26/12/2017	7.7	7.6	7.6	11	10	10	15	0
Wednesday	27/12/2017	7.8	7.7	7.8	11	8	10	15	0
Thursday	28/12/2017	7.9	7.7	7.8	9	8	9	18	0
Friday	29/12/2017	7.8	7.5	7.6	8	8	8	25	0
Saturday	30/12/2017	8.2	7.4	7.9	10	9	10	17	2
Sunday	31/12/2017	8.3	7.0	8.1	10	8	9	67	10

stewater discharge to

reated wastwater only into the council drain which runs through the centre of the site carries storm water run off from the local area. e of treated wastewater containing a maximum concentration of Total Suspended Solids

ms of solids per litre of wastewater discharged and pH is measured in standard pH units discharge events

limits are 6.5<pH<8.5. The license applies to AVERAGE pH recorded on each discharge event. g/L in dry weather and 150mg/L in wet weather (wet weather is defined as any 24hr period license applies to the AVERAGE TSS over each discharge event itoring of total volume discharged each day and has a maximum allowed discharge volume

values per day for TSS and pH as well as daily volume discharged and total rainfall recorded.

Site Name: IXOM Operations Pty Ltd 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)

nitoring Frequency: Sulphur Dioxide - Continuous Monitoring, licensed in 1hr block averages.

Monitoring Frequency: Sulphur Trioxide - quarterly intervals (once every three months) 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 receieved.

The data in the below table is updated at two weekly intervals.

Pollutants Discharged: This discharge point is licensed for discharge of Sulphur Dioxide (SO2) Jnits Of Measure: Sulphur Dioxide is measured in mg/m3 (milligrams per cubic meter) nitoring Frequency: Sulphur Dioxide - Continuous Monitoring, licensed in 1hr block averages. scharge limit for this point is maximum concentration: Sulphur Dioxide 1hr average maximum is 560 mg/m3

Description: This is the small white (22m) high stack adjacent to the white building on site

LDP2: SMBS (Sodium MetaBisulphite Plant) Stack

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.

Current						
Month Data:	Jan-18	SO2 Lice	ensed Limit Max: 2800	ng/m3	SO3 Licens	ed Limit Max: 50mg/m3
Day	Date	SO2 Maximum (mg/m3)	SO2 Minimum (mg/m3)	SO2 Average (mg/m3)	SO3 Result Required once per quarter (mg/m3)	Sampling Information
Monday	1/01/2018	0	0	0		
Tuesday	2/01/2018	0	0	0		
Wednesday	3/01/2018	0	0	0		
Thursday	4/01/2018	0	0	0		
Friday	5/01/2018	0	0	0		
Saturday	6/01/2018	0	0	0		
Sunday	7/01/2018	0	0	0		
Monday	8/01/2018	0	0	0		
Tuesday	9/01/2018	5	0	0		
Wednesday	10/01/2018	0	0	0		
Thursday	11/01/2018	0	0	0		
Friday	12/01/2018	0	0	0		
Saturday	13/01/2018	0	0	0		
Sunday	14/01/2018	0	0	0		
Monday	15/01/2018	0	0	0		
Tuesday	16/01/2018	0	0	0		
Wednesday	17/01/2018	0	0	0		
Thursday	18/01/2018	0	0	0		
Friday	19/01/2018	0	0	0		
Saturday	20/01/2018	0	0	0		
Sunday	21/01/2018	0	0	0		
Monday	22/01/2018	0	0	0		
Tuesday	23/01/2018	0	0	0		
Wednesday	24/01/2018	0	0	0		
Thursday	25/01/2018	0	0	0		
Friday	26/01/2018	0	0	0		
Saturday	27/01/2018	0	0	0		
Sunday	28/01/2018	0	0	0		
Monday	29/01/2018	0	0	0		
Tuesday	30/01/2018	0	0	0		
Wednesday	31/01/2018	0	0	0		
Monthly Result	s	5	0	0		

Current Month				
Data:	Jan-18	SO2 Lice	ensed Limit max: 560n	ng/m3
Day	Date	SO2 Maximum (mg/m3)	SO2 Minimum (mg/m3)	SO2 Average (mg/m3)
Monday	1/01/2018	4	2	3
Tuesday	2/01/2018	5	2	3
Wednesdav	3/01/2018	4	2	3
Thursday	4/01/2018	6	2	4
Friday	5/01/2018	4	3	4
Saturday	6/01/2018		3	4
Sunday	7/01/2018	6	3	4
Monday	8/01/2018	7	2	4
Tuesday	9/01/2018	25	3	5
Wednesday	10/01/2018	4	2	3
Thursday	11/01/2018	6	2	3
Friday	12/01/2018	5	4	5
Saturday	13/01/2018	5	2	4
Sunday	14/01/2018	2	1	1
Monday	15/01/2018	2	0	1
Tuesday	16/01/2018	3	0	1
Wednesday	17/01/2018	4	1	2
Thursday	18/01/2018	3	1	2
Friday	19/01/2018	5	2	3
Saturday	20/01/2018	4	2	3
Sunday	21/01/2018	4	3	3
Monday	22/01/2018	3	2	3
Tuesday	23/01/2018	4	2	3
Wednesday	24/01/2018	83	2	9
Thursday	25/01/2018	4	2	3
Friday	26/01/2018	4	3	4
Saturday	27/01/2018	4	3	4
Sunday	28/01/2018		3	7
Monday	29/01/2018	3	2	2
Tuesday	30/01/2018		1	2
Wednesday	31/01/2018	1	0	0
Monthly Results		83	0	3

as well as finite pH rang Units Of Measure: Tota		olide are measure	d in milligrams of coli	de nor litro of w	actowator discharges	land n⊎ ic n	a a a curad in	standard pH .	inite
			-		astewater discharged	i and pH is n	neasured in	standard pH u	inits
Monitoring Frequency				e events					
Monitoring Frequency		-	-						
Discharge limits: pH - T									
			tion is 40mg/L in dry					ed as any 24hr	period
			n falls). The license ap						
Volu			equires monitoring of	total volume di	scharged each day an	d has a max	imum allow	ved discharge v	volume
	of 1000k								
The data in the table be		ximum, Minimun	n and average values p	per day for TSS a	and pH as well as dail	y volume dis	charged an	id total rainfall	recorded.
This data is updated ev	ery two weeks.								
			Licensed Discharge	Point 4: Wastev	vater discharge adjac	ent to T7			
Current Month Data:	Jan-18		pН		Total	Suspended	Solids (TSS)		
					TSS max: Dry weath	er 40mg/L			Wet Weather
Licensed Limits		pH max 8.5	pH min 6.5		Wet weather: 150m	g/L			>10mm/24hrs
								Total	
								Volume	
								discharged	
								per day (kL)	
							TSS	Limit	
						TSS min	Average	1000kL/day	Rainfall per day - 24hrs
Day	Date	pH Max	pH Min	pH Average	TSS Max (mg/L)	(mg/L)	(mg/L)	max	(mm)
Monday	1/01/2018	8	8	8	9	8	8	19	0
Tuesday	2/01/2018	8.1	7.8	8.0	8	8	8	15	4
Wednesday	3/01/2018	8.1	7.4	7.7	9	8	9	25	0
Thursday	4/01/2018	7.4	7.2	7.3	11	9	10	14	0
Friday	5/01/2018	7.9	7.2	7.7	10	8	9	17	0
Saturday	6/01/2018	8.2	8.0	8.1	8	7	7	14	0
Sunday	7/01/2018	8.2	8.0	8.1	8	7	8	20	0
Monday	8/01/2018	8.3	7.1	7.8	9	7	8	43	8
Tuesday	9/01/2018	8.3	7.5	8.0	15	9	12	47	9
Wednesday	10/01/2018	8.3	7.9	8.2	14	13	14	18	0
Thursday	11/01/2018	8.3	7.9	8.2	15	13	14	30	0
Friday	12/01/2018	8.3	8.0	8.2	17	15	16	28	6
Saturday	13/01/2018	8.3	8.1	8.2	15	14	15	24	1
Sunday	14/01/2018	8.3	7.1	7.8	15	14	14	44	15
Monday	15/01/2018	8.2	7.5	7.8	14	14	14	15	0
Tuesday	16/01/2018	8.3	7.8	8.1	15	14	15	20	0
Wednesday	17/01/2018	8.1	8.1	8.1	15	15	15	10	0
Thursday	18/01/2018	8.3	7.8	8.1	16	15	16	19	0
Friday	19/01/2018	8.2	7.5	7.8	20	16	17	19	0
Saturday	20/01/2018	7.2	7.0	7.1	21	20	21	14	0
Sunday	21/01/2018	8.3	6.7	7.2	32	22	24	14	0
Monday	22/01/2018	7.1	7.1	7.1	32	31	32	14	0
Tuesday	23/01/2018	6.9	6.8	6.9	31	31	31	10	1
Wednesday	24/01/2018	8.1	7.0	7.6	32	8	20	18	0
Thursday	25/01/2018	7.9	6.8	7.1	13	8	10	81	0
Friday	26/01/2018	7.5	7.0	7.2	13	9	10	109	0
Saturday	27/01/2018	7.6	7.5	7.5	9	9	9	36	0
Sunday	28/01/2018	8.3	8.1	8.2	9	9	9	30	0
Monday	28/01/2018 29/01/2018	8.3	8.0	8.2	9	8	9	34 30	0
Tuesday	30/01/2018	8.3	7.6	8.1	12	° 9	9 10	41	0
Wednesday	30/01/2018 31/01/2018	8.3	8.0	8.1	12	9 11	10	41 25	3
			0.0	0.1	10	11	12	23	5

LDP4: Wastewater discharge to council drain adjacent to Tank 7 Description: This is a wastewater discharge point which discharges treated wastwater 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.

Site Name: IXOM Operations Pty Ltd 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

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 - Continuous Monitoring, Icensed in Life Bock averages. Monitoring Frequency: Sulphur Trioxide - quarterly intervals (once every three months) Discharge limits for this point are maximum concentrations: Sulphur Dioxide Life 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) nitoring Frequency: Sulphur Dioxide - Continuous Monitoring, licensed in 1hr block averages.

scharge limit for this point is maximum concentration: Sulphur Dioxide 1hr average maximum is 560 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.

			Licensed Discharge P	oint 1 - SARP Stack		
Current						
Month Data:	Feb-18	SO2 Lic	ensed Limit Max: 2800	mg/m3	SO3 Licens	ed Limit Max: 50mg/m3
Day	Date	SO2 Maximum (mg/m3)	SO2 Minimum (mg/m3)	SO2 Average (mg/m3)	SO3 Result Required once per quarter (mg/m3)	Sampling Information
Thursday	1/02/2018	0	0	0		
Friday	2/02/2018	0	0	0		
Saturday	3/02/2018	20	0	1		
Sunday	4/02/2018	0	0	0		
Monday	5/02/2018	0	0	0		
Tuesday	6/02/2018	0	0	0		
Wednesday	7/02/2018	0	0	0		
Thursday	8/02/2018	0	0	0		
Friday	9/02/2018	0	0	0		
Saturday	10/02/2018	0	0	0		
Sunday	11/02/2018	0	0	0		
Monday	12/02/2018	0	0	0		
Tuesday	13/02/2018	0	0	0		
Wednesday	14/02/2018	0	0	0		
Thursday	15/02/2018	0	0	0		
Friday	16/02/2018	0	0	0		
Saturday	17/02/2018	0	0	0		
Sunday	18/02/2018	0	0	0		
Monday	19/02/2018	0	0	0		
Tuesday	20/02/2018	0	0	0		
Wednesday	21/02/2018	0	0	0		
Thursday	22/02/2018	0	0	0		
Friday	23/02/2018	0	0	0		
Saturday	24/02/2018	1167	0	49		
Sunday	25/02/2018	663	0	116		
Monday	26/02/2018	0	0	0		
Tuesday	27/02/2018	0	0	0		
Wednesday	28/02/2018	1406	0	634		
Monthly Result	s	1406	0	29		

Current Month					
Data:	Feb-18	SO2 Lice	nsed Limit max: 560	ng/m3	
Day	Date	SO2 Maximum (mg/m3)	SO2 Minimum (mg/m3)	SO2 Average (mg/m3)	
Thursday	1/02/2018	1	0	0	
Friday	2/02/2018	7	0	4	
Saturday	3/02/2018	7	5	6	
Sunday	4/02/2018	7	5	6	
Monday	5/02/2018	7	5	7	
Tuesday	6/02/2018	8	6	7	
Wednesday	7/02/2018	8	6	7	
Thursday	8/02/2018	7	6	7	
Friday	9/02/2018	9	7	8	
Saturday	10/02/2018	8	7	8	
Sunday	11/02/2018		6	7	
Monday	12/02/2018		6	7	
Tuesday	13/02/2018		7	7	
Wednesday	14/02/2018		5	7	
Thursday	15/02/2018		5	19	
Friday	16/02/2018		5	11	
Saturday	17/02/2018		5	5	
Sunday	18/02/2018		6	7	
Monday	19/02/2018		5	6	
Tuesday	20/02/2018		4	5	
Wednesday	21/02/2018		4	5	
Thursday	22/02/2018		4	5	
Friday	23/02/2018		6	36	
Saturday	24/02/2018		6	7	
Sunday	25/02/2018		4	6	
Monday	26/02/2018		4	4	
Tuesday	27/02/2018	5 7	4	4	
Wednesday	28/02/2018	/	4	6	

bay Date pH Max pH Min pH Average TSS Max (mg/L) (mg/L) (mg/L) max (mm) hursday 1/02/2018 8 8 8 12 10 11 30 0 hursday 2/02/2018 8.3 8.2 8.3 11 10 11 544 7 aunday 4/02/2018 8.3 7.0 8.0 11 9 10 25 0 donday 5/02/2018 8.2 7.6 8.0 11 9 10 19 0 vesday 6/02/2018 8.1 7.4 7.7 12 10 11 25 0 hursday 8/02/2018 8.1 7.4 7.7 12 10 11 19 0 iaturday 1/02/2018 8.1 6.9 7.6 100 9 9 15 0 iunday 1/02/2018 8.1 6.9 3 0 0						ncil drain adjacent to					
Nature series in the provide of magnetic for discharge of treated wastewater containing a maximum concentration of Total Suspended Solids are measured in milingama of solids per lite of wastewater discharged and pi is measured in standard pi units donchraig frequency: PH - Continuous during discharge events: Kathoring frequency: PH - Continuous during discharge texts to be <u>CTRAGE TS</u> Store exa discharged as my 2thr period in which more than 10m of rain fails). The disa in the table below shows Maximum, Minimum and average values per day for TSS and pi as ealier volume discharged and total rainfall recorded. Fields is updated event wo weeks Kenned Dutate text text text text text text text	Description: This is a w	astewater discha	irge point which d	ischarges treated wa	stwater only inte	o the council drain w	hich runs th	rough the c	entre of the sit	e	
s well as finite pit-range. Inite Of Measure: Calibid Superied Solids - continuous during dicharge event: Montoring Frequency: Total Superied Solids - continuous during dicharge event: Micharge frequency: Total Superied Solids - Continuous during dicharge event: Micharge frequency: Total Superied Solids - Continuous during dicharge event: Micharge frequency: Total Superied Solids - Continuous during dicharge event: Micharge frequency: Total Superied Solids - Continuous during dicharge event: Micharge frequency: Total Superied Solids - Continuous during dicharge event: Micharge frequency: Total Superied Solids - Continuous during dicharge event we weather (wet weether (wet weether) is defined as any 2414 period in which more than 100m of rain falls). The license applies to <u>WERAGE 175</u> over each discharge event. Michael in the table below shows Machanum, Minimum and average values per day for TSS and pH as well as daily volume discharge diad total rainfall recorded. The data is tup dated every two weeks. Turent Month Data: Feb-18 <u>pH mark 5 pH min 6.5 West eventer</u> 150mp/L remet Month Data: Feb-18 <u>pH mark 5 pH min 6.5 West eventer</u> 150mp/L remet Month Data: Feb-18 <u>pH mark 5 pH min 6.5 West eventer</u> 150mp/L remet Month Data: Feb-18 <u>pH mark 5 pH min 6.5 West eventer</u> 150mp/L remet Month Data: Feb-18 <u>pH mark 5 pH min 6.5 West eventer</u> 150mp/L remet Month Data: Feb-18 <u>pH Mark pH Min pH Average 175 Shark (mp/L) (mp/L) mark 5 meanum remet Month Data: Feb-18 <u>pH mark 5 pH min 6.5 West eventer</u> 150mp/L remet Month Data: John 1 1 25 <u>0</u> Michaerge 1000kL/day Rainfall per day - 24hr michaerge 1000kL/day Rainfall per day - 24hr ficial y 10/07/018 8.3 7.7 8.1 14 9 11 25 <u>0</u> Anothy 50/07/018 8.3 7.7 8.1 14 9 10 125 <u>0</u> Monthay 50/07/018 8.3 7.7 8.1 19 9 9 15 <u>0</u> Michaerge 10/00kL/day Rainfall per day - 24hr ficial y 10/07/018 8.2 7.6 8.0 10 9 9 19 2.5 <u>0</u> Monthay 50/07/018 8.2 7.6 8.0 10 9 9 10 19 0 Michaerge 10/00kL/day Rainfall per day - 24hr ficial y 10/07/018 8.2 7.6 8.0 10 9 9 10 15 </u>	•										
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Monitoring Frequency: Total Supported Solida - Continuous during discharge events Monitoring Frequency: Pit- Continuous during discharge events Stanzare dimite inter set 5 - Scht-8.5. The license applies to the AVERAGE PI recorded on each discharge event. Tiss: The animum of TSS concentration is domp(it only weather and 150m(); the veather discharge event weather is defined any 24th period Weather and to main the set of to a vector of the vector of to a vector of the vector of the vector of the vector of to a vector of the	as well as finite pH ran	ge.									
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bits has ensured in a defined range and the limits are 5-5pt+8.3. The license applies to the <u>VERAGE H</u> record on each discharge event. This the maximum of the Sidon (in the line water and 150m)(in wetwather is defined as any 24th period in which more than 10mm of rain falls). The license applies to the <u>VERAGE ISS</u> over each discharge event. bits the maximum diverge point also requires monitoring of total volume discharge each discharge event. bits the maximum diverge values per day for TSS and pH as well as daily volume discharge and total rainfall recorded. bits the diverge values per day for TSS and pH as well as daily volume discharge and total rainfall recorded. bits the diverge values per day for TSS and pH as well as daily volume discharge due total rainfall recorded. bits the diverge values per day for TSS and pH as well as daily volume discharge due total rainfall recorded. wetter discharge adjacent to T terret Month Data: ref at the table discharge due total rainfall recorded. wetter Month Data: ref pH min 6.5 Vetter maximum allowed inscharge due total rainfall recorded. bate pH min 6.5 Vetter maximum allowed inscharge due total rainfall recorded. bate pH min 6.5 Vetter maximum allowed inscharge due total rainfall recorded. bate <td>Monitoring Frequency</td> <td>: Total Suspende</td> <td>d Solids - Continu</td> <td>ous during discharge</td> <td>events</td> <td></td> <td></td> <td></td> <td></td> <td></td>	Monitoring Frequency	: Total Suspende	d Solids - Continu	ous during discharge	events						
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hursday 22/02/2018 8.3 7.8 8.0 17 15 16 15 0 riday 23/02/2018 7.6 7.6 7.6 26 26 26 4 0 jaturday 24/02/2018 7.9 6.9 7.4 35 19 25 37 0 junday 25/02/2018 8.3 6.8 7.6 23 15 18 150 177 Monday 26/02/2018 8.3 7.0 7.8 16 14 15 44 42 'uesday 27/02/2018 8.3 8.2 8.3 14 13 14 20 4 Vednesday 28/02/2018 8.3 8.1 8.2 14 7 11 39 0	Wednesday	21/02/2018	8.3	8.1	8.2	16	12	14	30	1	
riday 23/02/2018 7.6 7.6 7.6 26 26 26 4 0 iaturday 24/02/2018 7.9 6.9 7.4 35 19 25 37 0 iunday 25/02/2018 8.3 6.8 7.6 23 15 18 150 17 /onday 26/02/2018 8.3 7.0 7.8 16 14 15 44 42 /uesday 27/02/2018 8.3 8.2 8.3 14 13 14 20 4 Wednesday 28/02/2018 8.3 8.1 8.2 14 7 11 39 0	Thursday										
iaturday 24/02/2018 7.9 6.9 7.4 35 19 25 37 0 junday 25/02/2018 8.3 6.8 7.6 23 15 18 150 17 wonday 26/02/2018 8.3 7.0 7.8 16 14 15 44 42 uesday 27/02/2018 8.3 8.2 8.3 14 13 14 20 4 Wednesday 28/02/2018 8.3 8.1 8.2 14 7 11 39 0	Friday		7.6		7.6	26	26	26	4		
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Anthly Results 8.3 6.8 7.9 35 7 12 774 98		20,02,2010	0.0	0.1	0.2				55	Ŭ	
Annthiv Results 8.3 6.8 7.9 35 7 12 774 98											
Annthly Results 8.3 6.8 7.9 35 7 12 774 88											

Site Name: IXOM Operations Pty Ltd Site Adme: 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)

nitoring Frequency: Sulphur Dioxide - Continuous Monitoring, licensed in 1hr block averages.

Monitoring Frequency: Suphar Trioxide - quarterly intervals (once every three months) Discharge limits for this point are maximum concentrations: Sulphur Dioxide 1hr average maximum is 2800 mg/m3

Sulphur Dixide maximum is 200 mis point are maximum concentrations. Sulphur Trioxide maximum is 200 mig/ms 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) nitoring Frequency: Sulphur Dioxide - Continuous Monitoring, licensed in 1hr block averages.

ischarge limit for this point is maximum concentration: Sulphur Dioxide 1hr average maximum is 560 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.

Current						
Month Data:	Mar-18	SO2 Lice	ensed Limit Max: 2800	mg/m3	SO3 Licens	ed Limit Max: 50mg/m3
Day	Date	SO2 Maximum (mg/m3)	SO2 Minimum (mg/m3)	SO2 Average (mg/m3)	SO3 Result Required once per quarter (mg/m3)	Sampling Information
Thursday	1/03/2018	1649	694	1253		
Friday	2/03/2018	636	0	35		
Saturday	3/03/2018	1444	394	963		
Sunday	4/03/2018	1698	507	1028		
Monday	5/03/2018	1888	0	1453		
Tuesday	6/03/2018	1660	0	944		
Wednesday	7/03/2018	1384	0	469		
Thursday	8/03/2018	297	0	13		
Friday	9/03/2018	1368	0	61		
Saturday	10/03/2018	1827	148	1170		
Sunday	11/03/2018	1616	1005	1282		
Monday	12/03/2018	1611	694	1197		
Tuesday	13/03/2018	1338	0	287		
Wednesday	14/03/2018	1576	0	631		
Thursday	15/03/2018	1911	0	921		
Friday	16/03/2018	224	0	27		
Saturday	17/03/2018	1884	213	974		
Sunday	18/03/2018	1500	0	601		
Monday	19/03/2018	1631	0	492		
Tuesday	20/03/2018	1698	0	429		
Wednesday	21/03/2018	1654	482	1187		
Thursday	22/03/2018	1642	1196	1453		
Friday	23/03/2018	1701	0	231		
Saturday	24/03/2018	1810	0	921		
Sunday	25/03/2018	1892	1022	1404		
Monday	26/03/2018	1338	952	1122		
Tuesday	27/03/2018	1370	1149	1237		
Wednesday	28/03/2018	1476	1023	1199		
Thursday	29/03/2018	2067	0	512		
Friday	30/03/2018	1387	392	1079		
Saturday	31/03/2018	1896	754	1022		
Monthly Result	s	2067	0	826		

Current Month Data:	Mar-18	SO2 Licensed Limit max: 560mg/m3					
Data.	14181-10	302 Lice	insed Linne max. Joon	g/m3			
		SO ₂ Maximum	SO ₂ Minimum	SO ₂ Average			
Day	Date	(mg/m3)	(mg/m3)	(mg/m3)			
Thursday	1/03/2018	6	5	6			
Friday	2/03/2018	11	5	6			
Saturday	3/03/2018	8	6	6			
Sunday	4/03/2018	7	5	6			
Monday	5/03/2018	6	5	6			
Tuesday	6/03/2018	7	4	5			
Wednesday	7/03/2018		5	6			
Thursday	8/03/2018		5	5			
Friday	9/03/2018		4	5			
Saturday	10/03/2018		4	5			
Sunday	11/03/2018		5	6			
Monday	12/03/2018		5	6			
Tuesday	13/03/2018	-	4	5			
Wednesday	14/03/2018	8	5	6			
Thursday	15/03/2018		6	7			
Friday	16/03/2018		6	7			
Saturday	17/03/2018	10	7	8			
Sunday	18/03/2018	11	7	8			
Monday	19/03/2018		7	8			
Tuesday	20/03/2018	9	5	7			
Wednesday	21/03/2018	14	6	7			
Thursday	22/03/2018		6	7			
Friday	23/03/2018	8	6	7			
Saturday	24/03/2018		6	8			
Sunday	25/03/2018	9	7	8			
Monday	26/03/2018		5	7			
Tuesday	27/03/2018		6	7			
Wednesday	28/03/2018	7	6	6			
Thursday	29/03/2018		6	7			
Friday	30/03/2018	8	6	7			
Saturday	31/03/2018	10	5	6			
Monthly Results		14	4	7			

			LDP4: Wastewater of	lischarge to cou	ncil drain adjacent to	Tank 7			
			discharges treated wa			hich runs th	rough the o	entre of the sit	e
This drain discharges	s into the Port Keml	bla Outer Harbou	r and also carries stor	m water run off	from the local area.				
Pollutants Discharge	ed: This discharge p	oint is licensed fo	or discharge of treated	wastewater co	ntaining a maximum	concentratio	on of Total S	Suspended Soli	ds
as well as finite pH ra	ange.								
Units Of Measure: T	otal Suspended Sol	ids are measured	in milligrams of solid	s per litre of was	tewater discharged a	and pH is me	easured in s	tandard pH un	its
Monitoring Frequen	cy: Total Suspende	d Solids - Contin	uous during discharge	events					
Monitoring Frequen	cy: pH: - Continuou	us during discharg	e events						
Discharge limits: pH	- The pH is measur	ed in a defined ra	nge and the limits are	e 6.5 <ph<8.5. td="" th<=""><td>e license applies to A</td><td>VERAGE pH</td><td>I recorded of</td><td>on each discha</td><td>rge event.</td></ph<8.5.>	e license applies to A	VERAGE pH	I recorded of	on each discha	rge event.
TS	S: The maximum fo	or TSS concentrati	ion is 40mg/L in dry w	eather and 150r	ng/L in wet weather	(wet weathe	er is defined	d as any 24hr p	eriod
	in which more th	an 10mm of rain	falls). The license app	lies to the <u>AVE</u>	AGE TSS over each d	ischarge ev	ent		
Vo			quires monitoring of t	otal volume disc	harged each day and	has a maxir	num allowe	ed discharge vo	lume
	of 1000kL	/day							
The data in the table	below shows Maxi	mum, Minimum	and average values pe	er day for TSS an	d pH as well as daily	volume disc	harged and	total rainfall r	ecorded.
This data is updated	every two weeks.								
			Licensed Discharge F	oint 4: Wastew	ater discharge adjace	ent to T7			
Current Month Data	a: Mar-18		pН		Total	Suspended	Solids (TSS)		
					TSS max: Dry weath	er 40mg/L			Wet Weather
Licensed Limits		pH max 8.5	pH min 6.5		Wet weather: 150m	g/L			>10mm/24hrs
								Total	
								Volume	
								discharged	
								per day (kL)	
							TSS	Limit	
						TSS min	Average	1000kL/day	Rainfall per day - 24hrs
Day	Date	pH Max	pH Min	pH Average	TSS Max (mg/L)	(mg/L)	(mg/L)	max	(mm)
Thursday	1/03/2018	8	7	8	11	10	11	63	0
Friday	2/03/2018	8.3	7.7	8.1	12	10	11	49	0
Saturday	3/03/2018	8.2	8.1	8.2	11	9	10	49	0
Sunday	4/03/2018	8.1	7.1	7.5	11	10	11	43	0
Monday	5/03/2018	7.4	7.0	7.3	11	10	10	43	0
Tuesday	6/03/2018	8.2	7.3	7.9	12	10	11	51	1
Wednesday	7/03/2018	8.1	7.2	7.7	14	13	14	34	1
Thursday	8/03/2018	8.2	8.0	8.0	14	12	13	24	0
Friday	9/03/2018	8.3	7.8	8.1	12	9	10	30	0
Saturday	10/03/2018	8.3	7.8	8.0	10	8	9	40	0
Sunday	11/03/2018	8.0	7.4	7.6	11	9	10	58	0
Monday	12/03/2018	8.3	7.5	8.0	13	11	12	59	0
Tuesday	13/03/2018	8.3	7.5	8.1	16	12	14	92	2
Wednesday	14/03/2018	8.3	8.1	8.2	11	9	10	37	3
Thursday	15/03/2018	8.1	6.8	7.5	13	9	11	34	0
Friday	16/03/2018	8.3	7.0	8.0	14	13	14	37	0
Saturday	17/03/2018	8.3	6.9	7.7	12	10	11	44	0
Sunday	18/03/2018	7.6	6.8	7.1	13	11	12	38	0
Monday	19/03/2018	8.1	7.1	7.7	16	13	14	78	0
Tuesday	20/03/2018	8.1	7.1	7.9	13	9	10	92	0
Wednesday	21/03/2018	8.2	6.8	7.7	16	9	12	68	5
Thursday	22/03/2018	8.4	6.7	7.2	18	12	15	63	9
Friday	23/03/2018	7.9	7.0	7.3	16	13	15	50	1
Saturday	24/03/2018	8.3	7.8	8.1	12	10	11	61	1
Sunday	25/03/2018	8.1	6.9	7.6	16	12	14	55	0
Monday	26/03/2018	8.3	6.9	7.3	16	11	14	51	2
Tuesday	27/03/2018	8.3	7.3	7.8	12	10	11	62	0
	28/03/2018	8.3	8.0	8.2	14	10	11	64	0
Wednesday	29/03/2018	8.3	8.1	8.2	11	10	10	44	0
			3.1	3.2				~	0
Wednesday Thursday Friday		82	7.5	81	10	9	9	52	0
	30/03/2018 31/03/2018	8.2 8.0	7.5 6.9	8.1 7.2	10 19	9 8	9 10	52 58	0

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. pllutants 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) itoring Frequency: Sulphur Dioxide - Continuous Monitoring, licensed in 1hr block averages. Monitoring Frequency: Sulphur Trioxide - quarterly intervals (once every three months) 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 receieved.

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 lutants Discharged: This discharge point is licensed for discharge of Sulphur Dioxide (SO2) Inits Of Measure: Sulphur Dioxide is measured in mg/m3 (milligrams per cubic meter) toring Frequency: Sulphur Dioxide - Continuous Monitoring, licensed in 1hr block averages.

scharge limit for this point is maximum concentration: Sulphur Dioxide 1hr average maximum is 560 mg/m3

he 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.

Licensed Discharge Point 1 - SARP Stack rent Month Data: Apr-18 SO2 Licensed Limit Max: 2800mg/m3 SO3 Licensed Limit Max: 50mg/m3 SO3 Result SO₂ Maximum SO₂ Minimum SO₂ Average quired once pe Dav Date (mg/m3) (mg/m3) (mg/m3) uarter (mg/m3) noling Information unday 1/04/201 1892 651 1310 2/04/2018 1728 936 1190 Monday . Tuesday 3/04/2018 1064 936 1007 27 Stack Test 3 April 2018, Wednesday 4/04/2018 1222 869 1075 Results Received 16 April, Thursday 5/04/2018 1393 871 1144 Results Published 20 April Friday 6/04/2018 1501 973 1112 Saturday 7/04/2018 1250 742 963 Sunday 8/04/2018 1346 927 1099 Monday 9/04/2018 1242 0 716 Tuesday 10/04/2018 1326 228 . Wednesda Thursday 11/04/2018 0 0 462 69 12/04/2018 0 Friday 13/04/2018 1609 741 0 Saturday 14/04/2018 1533 598 963 15/04/2018 526 Sunday 1358 855 Monday 16/04/2018 1578 1104 1325 Tuesdav 17/04/2018 1099 1271 1601 Vednesda 18/04/2018 1541 1115 1390 Thursday 19/04/2018 1704 770 1387 1588 1872 1714 Friday 20/04/2018 . Saturda 21/04/2018 1752 1385 1572 Sunday 22/04/2018 1647 1144 1443 Monday 23/04/2018 1329 739 1115 . Tuesday Wednesday 24/04/2018 1522 550 957 25/04/2018 1010 1467 Thursday 26/04/2018 1355 1119 1249 27/04/2018 Friday 1322 614 1110 Saturday 28/04/2018 1497 1232 1344 Sunday 29/04/2018 1462 616 1034 Monday 30/04/2018 1036 612 0 Monthly Resu 1892 1034 27 ٥

Current Month				
Data:	Apr-18	SO2 Lice	nsed Limit max: 560r	ng/m3
		SO ₂ Maximum	SO2 Minimum	SO2 Average
Day	Date	(mg/m3)	(mg/m3)	(mg/m3)
Sunday	1/04/2018	9	6	7
Monday	2/04/2018		5	6
Tuesday	3/04/2018		4	6
Wednesday	4/04/2018		4	6
Thursday	5/04/2018		6	8
Friday	6/04/2018		5	6
Saturday	7/04/2018		6	7
Sunday	8/04/2018		5	6
Monday	9/04/2018		5	6
Tuesday	10/04/2018		5	6
Wednesday	11/04/2018		4	6
Thursday	12/04/2018		5	16
Friday	13/04/2018		5	6
Saturday	14/04/2018		3	5
Sunday	15/04/2018		2	4
Monday	16/04/2018		4	5
Tuesday	17/04/2018		3	6
Wednesday	18/04/2018		3	5
Thursday	19/04/2018		4	5
Friday	20/04/2018		4	7
Saturday	21/04/2018		6	7
Sunday	22/04/2018		6	7
Monday	23/04/2018		6	7
Tuesday	24/04/2018		5	8
Wednesday	25/04/2018		8	8
Thursday	26/04/2018		6	7
Friday	27/04/2018		6	7
Saturday	28/04/2018		6	6
Sunday	29/04/2018		6	6
Monday	30/04/2018	8	6	7
Monthly Results		101	2	7

			LDP4: Wastewater d	lischarge to cou	ncil drain adjacent to	o Tank 7			
Description: This is a w	astewater discha	arge point which	discharges treated wa	stwater only int	o the council drain w	hich runs th	rough the c	entre of the si	te
This drain discharges in			-				-		
Pollutants Discharged:						concentrati	on of Total	Suspended Sol	ids
as well as finite pH rang	ze.		-		-				
Units Of Measure: Tota	al Suspended Sol	ids are measured	in milligrams of solids	per litre of wa	stewater discharged a	and pH is m	easured in s	standard pH ur	nits
Monitoring Frequency	Total Suspende	d Solids - Contin	uous during discharge	events					
Monitoring Frequency	: pH: - Continuou	is during discharg	e events						
Discharge limits: pH - T	he pH is measur	ed in a defined ra	nge and the limits are	6.5 <ph<8.5. td="" th<=""><td>ne license applies to A</td><td>VERAGE pH</td><td>recorded</td><td>on each discha</td><td>irge event.</td></ph<8.5.>	ne license applies to A	VERAGE pH	recorded	on each discha	irge event.
TSS:	The maximum fo	or TSS concentrati	on is 40mg/L in dry w	eather and 150	mg/L in wet weather	(wet weath	er is define	d as any 24hr p	eriod
i	n which more th	an 10mm of rain	falls). The license app	lies to the AVE	RAGE TSS over each d	lischarge ev	ent		
Volu	me: - This discha	rge point also red	quires monitoring of to	otal volume disc	harged each day and	has a maxii	mum allowe	ed discharge vo	olume
	of 1000kL	/day							
The data in the table be	low shows Maxi	mum, Minimum	and average values pe	r day for TSS an	d pH as well as daily	volume disc	harged and	l total rainfall r	ecorded.
This data is updated ev	ery two weeks.								
			Licensed Discharge P	oint 4: Wastew	ater discharge adjac	ent to T7			
Current Month Data:	Apr-18		pH			Suspended	Solids (TSS)		
				TSS max: Dry weath				Wet Weather	
Licensed Limits		pH max 8.5	pH min 6.5		Wet weather: 150m				>10mm/24hrs
								Total	
								Volume	
								discharged	
								per day (kL)	
							TSS	Limit	
						TSS min	Average	1000kL/day	Rainfall per day - 24h
Day	Date	pH Max	pH Min	pH Average	TSS Max (mg/L)	(mg/L)	(mg/L)	max	(mm)
Sunday	1/04/2018	7	7	7	22	14	18	74	0
Monday	2/04/2018	8.1	6.8	7.5	21	15	18	47	0
Tuesday	3/04/2018	7.7	6.9	7.3	20	18	19	47	2
Wednesday	4/04/2018	7.9	7.0	7.4	20	9	12	67	0
Thursday	5/04/2018	8.3	6.8	7.2	10	9	10	101	0
Friday	6/04/2018	8.0	6.6	7.1	10	8	9	54	0
Saturday	7/04/2018	8.1	6.6	7.3	10	8	9	72	0
Sunday	8/04/2018	7.8	6.9	7.0	10	10	10	62	0
Monday	9/04/2018	8.0	6.9	7.4	14	10	11	80	0
Tuesday	10/04/2018	8.3	7.4	8.0	13	9	10	37	0
Wednesday	11/04/2018	8.2	7.8	8.0	10	9	10	24	0
Thursday	12/04/2018	7.9	7.7	7.8	10	9	10	19	0
Friday	13/04/2018	8.2	7.1	8.0	9	8	9	34	0
Saturday	14/04/2018	8.3	7.3	7.9	10	9	9	53	2
Sunday	15/04/2018	8.2	7.8	8.0	10	10	11	41	0
Monday	16/04/2018	8.3	7.9	8.1	11	10	11	86	0
Tuesday	17/04/2018	8.2	7.2	7.7	12	10	11	51	0
Wednesday	18/04/2018	7.7	6.9	7.3	11	10	10	41	0
Thursday	19/04/2018	8.2	6.7	7.5	12	10	10	57	0
Friday	20/04/2018	8.2	6.9	7.8	20	10	14	63	0
Saturday	20/04/2018 21/04/2018	8.2	6.8	7.6	13	10	14	62	0
Sunday	22/04/2018	8.2	6.8	7.6	13	10	11	56	0
Monday	22/04/2018	7.8	6.8	7.4	12	10	11	63	0
Tuesday	23/04/2018	8.3	6.9	7.4	13	10	11	56	0
Wednesday	25/04/2018	8.3	8.2	8.3	14	10	12	49	0
Thursday	25/04/2018 26/04/2018	8.3	7.5	8.3 7.8	34	10	21	49 61	0
Friday	26/04/2018 27/04/2018	8.2 7.6	7.5	7.8	34 31	25	21 29	61	0
,		-	-		-	-	-		0
Saturday	28/04/2018 29/04/2018	8.0 8.3	6.8 6.9	7.3 7.4	29 27	26 25	28 26	56 89	0
Sunday						-			15
Monday	30/04/2018	8.3	7.7	8.2	39	10	25	62	15

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)

nitoring Frequency: Sulphur Dioxide - Continuous Monitoring, licensed in 1hr block averages. Monitoring Frequency: Sulphur Trioxide - quarterly intervals (once every three months)

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 receieved.

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 bllutants Discharged: This discharge point is licensed for discharge of Sulphur Dioxide (SO2) Jnits Of Measure: Sulphur Dioxide is measured in mg/m3 (milligrams per cubic meter) nitoring Frequency: Sulphur Dioxide - Continuous Monitoring, licensed in 1hr block averages.

scharge limit for this point is maximum concentration: Sulphur Dioxide 1hr average maximum is 560 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.

he data in the below table is updated at two weekly intervals.

Current						
Month Data:	May-18	SO2 Lice	ensed Limit Max: 2800	mg/m3	SO3 License	d Limit Max: 50mg/m3
Day	Date	SO2 Maximum (mg/m3)	SO2 Minimum (mg/m3)	SO2 Average (mg/m3)	SO3 Result Required once per quarter (mg/m3)	Sampling Information
Tuesday	1/05/2018	1	0	1		
Wednesday	2/05/2018	2	1	2		
Thursday	3/05/2018	3	2	3		
Friday	4/05/2018	1712	0	404		
Saturday	5/05/2018	1134	355	860		
Sunday	6/05/2018	1116	625	900		
Monday	7/05/2018	2237	659	1260		
Tuesday	8/05/2018	1627	844	1270		
Wednesday	9/05/2018	1622	1032	1298		
Thursday	10/05/2018	1438	715	1108		
Friday	11/05/2018	1592	765	1173		
Saturday	12/05/2018	1742	1036	1293		
Sunday	13/05/2018	1502	475	1031		
Monday	14/05/2018	1338	1120	1222		
Tuesday	15/05/2018	1288	1070	1187		
Wednesday	16/05/2018	1209	966	1069		
Thursday	17/05/2018	1551	960	1117		
						Stack Test 18 May 2018, Results
Friday	18/05/2018	1613	1210	1388	10	Received 12 June 2018, Results Publishe 26 June 2018
Saturday	19/05/2018	1544	1246	1393		
Sunday	20/05/2018	1606	781	1294		
Monday	21/05/2018	1348	976	1151		
Tuesday	22/05/2018	1424	724	995		
Wednesday	23/05/2018	1627	939	1209		
Thursday	24/05/2018	958	803	893		
Friday	25/05/2018	1050	768	890		
Saturday	26/05/2018	1698	700	1073		
Sunday	27/05/2018	1422	779	1196		
Monday	28/05/2018	1418	982	1232		
Tuesday	29/05/2018	1796	466	1006		
Wednesday	30/05/2018	1186	0	375		
Thursday	31/05/2018	1	0	1		
Monthly Result		2237	0	945	10	

Current Month								
Data:	May-18	SO2 Licensed Limit max: 560mg/m3						
		SO ₂ Maximum	SO ₂ Minimum	SO ₂ Average				
Day	Date	(mg/m3)	(mg/m3)	(mg/m3)				
Tuesday	1/05/2018	7	5	6				
Wednesday	2/05/2018		6	7				
Thursday	3/05/2018	9	6	7				
Friday	4/05/2018	9	5	7				
Saturday	5/05/2018	7	5	6				
Sunday	6/05/2018	7	5	6				
Monday	7/05/2018	9	6	7				
Tuesday	8/05/2018	8	6	7				
Wednesday	9/05/2018	9	7	8				
Thursday	10/05/2018	8	4	6				
Friday	11/05/2018	11	7	9				
Saturday	12/05/2018	13	9	10				
Sunday	13/05/2018	12	9	10				
Monday	14/05/2018	11	9	9				
Tuesday	15/05/2018	12	9	10				
Wednesday	16/05/2018	11	9	10				
Thursday	17/05/2018	13	9	10				
Friday	18/05/2018	12	9	11				
Saturdav	19/05/2018		9	10				
Sunday	20/05/2018		9	10				
Monday	21/05/2018		8	9				
Tuesday	22/05/2018		8	11				
Wednesday	23/05/2018		9	11				
Thursday	24/05/2018		10	12				
Friday	25/05/2018		5	8				
Saturdav	26/05/2018		4	5				
Sunday	27/05/2018	8	5	6				
Monday	28/05/2018	-	6	7				
Tuesday	29/05/2018	-	5	6				
Wednesday	30/05/2018	° 7	3	5				
Thursday	31/05/2018	6	4	5				
Monthly Results	51/05/2018	15	3	8				

LDP4: Wastewater discharge to council drain adjacent to Tank 7 Description: This is a wastewater discharge point which discharges treated wastwater only into the council drain which runs through the centre of the site his 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

onitoring Frequency: Total Suspended Solids - Continuous during discharge events onitoring Frequency: pH: - Continuous during discharge events

of 1000kL/day

This data is updated every two weeks.

Current Month Data:	May-18		рН		Total S	Suspended	Solids (TSS)		
					TSS max: Dry weath	er 40mg/L			Wet Weather
Licensed Limits		pH max 8.5	pH min 6.5		Wet weather: 150m		>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 - 24hi (mm)
Tuesday	1/05/2018	8	8	8	10	9	10	33	0
Wednesday	2/05/2018	8.2	7.6	7.9	12	9	11	34	0
Thursday	3/05/2018	8.3	7.7	8.0	12	10	11	34	0
Friday	4/05/2018	8.2	7.8	8.0	15	11	12	25	0
Saturday	5/05/2018	7.9	7.3	7.6	27	15	19	46	0
Sunday	6/05/2018	8.4	6.9	7.5	30	23	27	52	0
Monday	7/05/2018	8.2	7.7	8.0	34	26	30	56	0
Tuesday	8/05/2018	8.3	6.8	7.4	35	32	34	62	0
Wednesday	9/05/2018	8.4	6.8	7.5	31	13	22	72	0
Thursday	10/05/2018	8.3	6.9	7.5	12	9	10	64	0
Friday	11/05/2018	8.3	6.8	7.5	10	9	9	68	0
Saturday	12/05/2018	7.7	6.9	7.4	18	9	13	77	0
Sunday	13/05/2018	8.0	6.8	7.2	19	15	17	69	6
Monday	14/05/2018	8.3	7.8	8.1	16	15	15	68	1
Tuesday	15/05/2018	7.9	6.8	7.2	15	14	15	60	1
Wednesday	16/05/2018	7.8	6.8	7.1	16	8	12	59	0
Thursday	17/05/2018	8.3	6.7	7.4	9	8	8	51	0
Friday	18/05/2018	8.3	6.8	7.1	9	8	9	64	0
Saturday	19/05/2018	7.1	6.8	6.9	9	8	9	57	0
Sunday	20/05/2018	7.1	6.8	6.9	9	8	9	39	0
Monday	21/05/2018	7.9	6.8	7.1	9	9	9	73	0
Tuesday	22/05/2018	8.1	6.8	7.4	17	8	11	63	0
Wednesday	23/05/2018	8.2	7.2	7.6	19	16	17	55	0
Thursday	24/05/2018	7.7	6.9	7.4	18	17	18	57	0
Friday	25/05/2018	7.5	6.8	6.9	20	19	19	52	0
Saturday	26/05/2018	8.1	6.9	7.1	20	19	20	58	0
Sunday	27/05/2018	7.2	6.9	7.0	21	20	20	55	0
Monday	28/05/2018	7.2	6.8	6.9	23	21	22	56	0
Tuesday	29/05/2018	8.3	6.7	7.3	23	21	22	56	0
Wednesday	30/05/2018	8.2	7.1	7.8	24	8	16	46	1
Thursday	31/05/2018	8.1	7.7	7.9	12	11	11	19	1

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

Site Name: IXOM Operations Pty Ltd Site Adams: 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)

onitoring Frequency: Sulphur Dioxide - Continuous Monitoring, licensed in 1hr block averages.

Monitoring Frequency: Sulphur Trioxide - quarterly intervals (once every three months) 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) 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 receieved.

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) toring Frequency: Sulphur Dioxide - Continuous Monitoring, licensed in 1hr block averages.

Discharge limit for this point is maximum concentration: Sulphur Dioxide 1hr average maximum is 560 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.

Current								
Month Data:	Jun-18	SO2 Lice	ensed Limit Max: 2800	SO3 Licensed Limit Max: 50mg/m3				
Day	Date	SO2 Maximum (mg/m3)	SO2 Minimum (mg/m3)	SO2 Average (mg/m3)	SO3 Result Required once per quarter (mg/m3)	Sampling Information		
Friday	1/06/2018	29	0	2				
Saturday	2/06/2018	1451	0	410				
Sunday	3/06/2018	1211	0	543				
Monday	4/06/2018	1384	1095	1231				
Tuesday	5/06/2018	1751	1298	1486				
Wednesday	6/06/2018	1790	1239	1449				
Thursday	7/06/2018	1801	658	1189				
Friday	8/06/2018	1629	1263	1429				
Saturday	9/06/2018	1420	666	1068				
Sunday	10/06/2018	1501	1111	1258				
Monday	11/06/2018	1345	1146	1229				
Tuesday	12/06/2018	1482	1017	1198				
Wednesday	13/06/2018	1579	1147	1391				
Thursday	14/06/2018	1457	1099	1310				
Friday	15/06/2018	1157	848	1025				
Saturday	16/06/2018	1462	491	881				
Sunday	17/06/2018	1430	1074	1264				
Monday	18/06/2018	1391	1001	1253				
Tuesday	19/06/2018	1336	854	1059				
Wednesday	20/06/2018	1414	1144	1329				
Thursday	21/06/2018	1532	1135	1296				
Friday	22/06/2018	1575	1121	1335				
Saturday	23/06/2018	1529	1045	1278				
Sunday	24/06/2018	1502	1187	1287				
Monday	25/06/2018	1412	731	1038				
Tuesday	26/06/2018	1087	873	944				
Wednesday	27/06/2018	1146	903	1014				
Thursday	28/06/2018	1446	883	1145				
Friday	29/06/2018	1178	889	1042				
Saturday	30/06/2018	1108	807	978				
Monthly Result	re in the second se	1801	0	1112	1			

Current Month								
Data:	Jun-18	SO2 Licensed Limit max: 560mg/m3						
		SO2 Maximum	SO2 Minimum					
Dav	Date			SO ₂ Average				
Day		(mg/m3)	(mg/m3)	(mg/m3)				
Friday Saturday	1/06/2018 2/06/2018		3	5				
,		-	4					
Sunday Monday	3/06/2018 4/06/2018		4	5				
,			7	8				
Fuesday Wednesday	5/06/2018 6/06/2018		5	8 10				
rhursday	7/06/2018		4	8				
riday Friday	8/06/2018		4	8 10				
-riuay Saturdav	9/06/2018		6	9				
Sundav	10/06/2018		5	6				
Monday	11/06/2018	-	5	7				
vioriday Fuesdav	12/06/2018	-	5	7				
Vednesday	13/06/2018		5	8				
rhursday	13/06/2018		4	8 6				
Fridav	15/06/2018		4	9				
-riuay Saturdav	16/06/2018		4	5				
Saturday Sunday	17/06/2018	-	4	4				
Mondav	18/06/2018		4	4				
Tuesday	19/06/2018		4	5				
Wednesday	20/06/2018	-	6	7				
Thursday	21/06/2018		5	6				
riday	22/06/2018		6	8				
iaturday	23/06/2018		4	5				
Sunday	24/06/2018		5	6				
Monday	25/06/2018	,	4	4				
Tuesday	26/06/2018	-	4	7				
Wednesdav	27/06/2018		7	8				
Thursday	28/06/2018		6	8				
Friday	29/06/2018		8	11				
Saturday	30/06/2018	13	7	9				
aca. aay	30,00,2010	14	,					
Monthly Results		17	3	7				

			LDP4: Wastewater d	ischarge to cou	ncil drain adjacent to	Tank 7			
Description: This is a w	astewater dischar	rge point which di	ischarges treated was	twater only into	the council drain wh	ich runs thr	ough the ce	ntre of the site	3
This drain discharges ir	to the Port Kemb	la Outer Harbour	and also carries storn	n water run off	from the local area.				
Pollutants Discharged:	This discharge po	pint is licensed for	discharge of treated	wastewater cor	ntaining a maximum c	oncentratio	n of Total S	uspended Solio	ds
as well as finite pH ran			0		0			•	
Units Of Measure: Tot	5	ds are measured i	n milligrams of solids	per litre of was	tewater discharged a	nd pH is me	asured in st	andard pH uni	ts
Monitoring Frequency			-						-
Monitoring Frequency			• •	events					
Discharge limits: pH - 1		• •					recorded o	o ooch dischor	a avent
• •			•		ng/L in wet weather (•
					-			as any 24m pe	nou
					AGE TSS over each di	-			
Volu			uires monitoring of to	tai volume disci	harged each day and l	nas a maxim	num allowe	discharge vo	ume
	of 1000kL/	,							
The data in the table b		num, Minimum a	nd average values pe	r day for TSS and	d pH as well as daily v	olume disch	narged and	total rainfall re	corded.
This data is updated ev	ery two weeks.								
			-	oint 4: Wastew	ater discharge adjace				
Current Month Data:	Jun-18		рН			Suspended	Solids (TSS)		
					TSS max: Dry weath				Wet Weather
Licensed Limits		pH max 8.5	pH min 6.5		Wet weather: 150m	ig/L		-	>10mm/24hrs
								_	
								Total	
							TSS	Volume	
						TSS min	Average	discharged	Rainfall per day - 24hrs
Day	Date	pH Max	pH Min	pH Average	TSS Max (mg/L)	(mg/L)	(mg/L)	per day (kL)	(mm)
Friday	1/06/2018	8	8	8	12	11	11	29	0
Saturday	2/06/2018	8.2	7.7	8.1	14	11	12	35	0
Sunday	3/06/2018	8.3	7.0	7.5	16	14	15	32	0
Monday	4/06/2018	8.1	6.6	7.3	19	15	17	58	0
Tuesday	5/06/2018	8.3	6.7	7.2	20	16	17	68	0
Wednesday	6/06/2018	7.7	6.9	7.2	16	13	15	149	16
Thursday	7/06/2018	7.8	6.8	7.2	17	12	14	64	30
Friday	8/06/2018	7.9	6.8	7.3	21	20	21	45	0
,		7.9	6.8	7.0	21	20	21	45 58	0
Saturday	9/06/2018	-					-		-
Sunday	10/06/2018	7.3	6.9	7.0	34	25	31	44	3
Monday	11/06/2018	7.8	6.8	7.0	30	18	24	54	1
Tuesday	12/06/2018	7.9	6.8	7.3	18	17	17	57	0
Wednesday	13/06/2018	7.2	6.8	6.9	18	7	12	62	0
Thursday	14/06/2018	7.1	6.8	6.9	9	8	8	55	0
Friday	15/06/2018	7.1	6.8	6.9	8	8	8	59	0
Saturday	16/06/2018	8.0	6.8	7.1	8	8	8	57	0
Sunday	17/06/2018	8.3	8.0	8.1	8	8	8	62	0
Monday	18/06/2018	8.3	6.9	7.6	19	8	15	70	0
Tuesday	19/06/2018	8.3	6.8	7.5	17	13	14	108	12
Wednesday	20/06/2018	8.2	7.2	8.0	17	12	14	57	23
Thursday	21/06/2018	7.5	6.8	7.1	18	14	16	55	0
Friday	22/06/2018	7.1	6.8	6.9	19	17	17	60	0
Saturday	23/06/2018	7.1	6.8	6.9	24	19	20	54	0
Sunday	24/06/2018	7.1	6.8	6.9	28	22	20	60	0
Monday	25/06/2018	7.3	6.8	7.0	28	22	24	55	0
,		7.3 8.0			24	22	23		0
Tuesday	26/06/2018		6.8	7.1				64	-
Wednesday	27/06/2018	8.3	6.8	7.4	22	15	18	105	0
Thursday	28/06/2018	8.1	6.8	7.1	14	12	13	184	19
Friday	29/06/2018	7.5	6.8	7.0	14	13	14	55	41
Saturday	30/06/2018	7.9	7.6	7.7	14	14	14	62	0
				1	ļ		<u> </u>		
Monthly Results		8.3	6.6	7.3	34	7	16	1978	145

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.

ollutants 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)

oring Frequency: Sulphur Dioxide - Continuous Monitoring, licensed in 1hr block averages.

onitoring Frequency: Sulphur Trioxide - quarterly intervals (once every three months) scharge 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 receieved.

The data in the below table is updated at two weekly intervals.

			Licensed Discharge Po	int 1 - SARP Stack					
Current									
Month Data:	Jul-18	SO2 Lice	ensed Limit Max: 2800	ng/m3	SO3 Licensed Limit Max: 50mg/m3				
					SO3 Result				
		SO ₂ Maximum	SO ₂ Minimum	SO ₂ Average	Required once per				
Day	Date	(mg/m3)	(mg/m3)	(mg/m3)	quarter (mg/m3)	Sampling Information			
Sunday	1/07/2018	1184	951	1066					
Monday	2/07/2018	1168	675	919					
Tuesday	3/07/2018	1460	663	966					
Wednesday	4/07/2018	1532	692	1027					
Thursday	5/07/2018	1481	1119	1304					
Friday	6/07/2018	1500	1004	1192					
Saturday	7/07/2018	1376	920	1182					
Sunday	8/07/2018	1431	954	1189					
Monday	9/07/2018	1397	790	1120					
Tuesday	10/07/2018	1450	1033	1198					
Wednesday	11/07/2018	1482	871	1169					
Thursday	12/07/2018	1510	600	1147					
Friday	13/07/2018	1599	398	1010					
Saturday	14/07/2018	1155	748	939					
Sunday	15/07/2018	1487	1056	1224					
Monday	16/07/2018	1094	0	236					
Tuesday	17/07/2018	0	0	0					
Wednesday	18/07/2018	0	0	0					
Thursday	19/07/2018	0	0	0					
Friday	20/07/2018	0	0	0					
Saturday	21/07/2018	0	0	0					
Sunday	22/07/2018	0	0	0					
Monday	23/07/2018	0	0	0					
Tuesday	24/07/2018	0	0	0					
Wednesday	25/07/2018	0	0	0					
Thursday	26/07/2018	0	0	0					
Friday	27/07/2018	0	0	0					
Saturday	28/07/2018	0	0	0					
Sunday	29/07/2018	0	0	0					
Monday	30/07/2018	0	0	0					
Tuesday	31/07/2018								
Monthly Result	s	1599	0	563					

LDP2: SMBS (Sodium MetaBisulphite Plant) Stack Description: This is the small white (22m) high stack adjacent to the white building on site lutants Discharged: This discharge point is licensed for discharge of Sulphur Dioxide (SO2) nits Of Measure: Sulphur Dioxide is measured in mg/m3 (milligrams per cubic meter) itoring Frequency: Sulphur Dioxide - Continuous Monitoring, licensed in 1hr block averages.

charge limit for this point is maximum concentration: Sulphur Dioxide 1hr average maximum is 560 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.

Current Month				
Data:	Jul-18	SO2 Lice	nsed Limit max: 560n	ng/m3
Day	Date	SO2 Maximum (mg/m3)	SO2 Minimum (mg/m3)	SO2 Average (mg/m3)
Sundav	1/07/2018	1 0. 1	8	9
Monday	2/07/2018		6	6
Tuesdav	3/07/2018		5	6
Wednesday	4/07/2018	-	8	8
Thursday	5/07/2018		9	10
Friday	6/07/2018		6	9
Saturday	7/07/2018		6	7
Sunday	8/07/2018		5	6
Monday	9/07/2018		5	5
Tuesday	10/07/2018	-	5	5
Wednesday	11/07/2018	9	5	6
Thursday	12/07/2018	9	6	8
Friday	13/07/2018		5	6
Saturday	14/07/2018	16	9	13
Sunday	15/07/2018	11	7	9
Monday	16/07/2018	11	7	9
Tuesday	17/07/2018	9	6	7
Wednesday	18/07/2018	13	7	8
Thursday	19/07/2018	10	8	9
Friday	20/07/2018	9	5	7
Saturday	21/07/2018	10	6	7
Sunday	22/07/2018	77	5	21
Monday	23/07/2018	13	5	6
Tuesday	24/07/2018	9	5	6
Wednesday	25/07/2018		5	7
Thursday	26/07/2018	8	6	7
Friday	27/07/2018	18	5	7
Saturday	28/07/2018	13	7	9
Sunday	29/07/2018		6	8
Monday	30/07/2018	59	5	14
Tuesday	31/07/2018			
Monthly Results		77	5	8

Description: This is a wastewater discharge point which discharges treated wastwater 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.

nitoring 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

This data is updated every two weeks.

Current Month Data:	Jul-18		pН	рН					
					TSS max: Dry weath	er 40mg/L			Wet Weather
Licensed Limits		pH max 8.5	pH min 6.5		Wet weather: 150m				>10mm/24hrs
Day	Date	рН Мах	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 - 24hr (mm)
Sunday	1/07/2018	8	8	8	15	14	14	59	0
Monday	2/07/2018	8.2	7.8	8.1	16	15	16	55	0
Tuesday	3/07/2018	8.3	6.9	8.1	18	15	16	62	1
Wednesday	4/07/2018	8.3	8.2	8.3	17	16	17	68	0
Thursday	5/07/2018	8.3	7.5	7.9	18	16	17	57	0
Friday	6/07/2018								0
Saturday	7/07/2018	7.3	6.8	7.0	18	17	18	69	0
Sunday	8/07/2018	7.2	6.8	7.0	19	18	19	55	0
Monday	9/07/2018	8.3	6.8	7.1	21	19	20	70	0
Tuesday	10/07/2018	7.5	6.8	7.1	20	19	20	62	0
Wednesday	11/07/2018	8.2	6.8	7.2	20	7	11	64	0
Thursday	12/07/2018	8.2	6.8	7.2	8	8	8	61	0
Friday	13/07/2018	8.2	6.8	7.3	8	8	8	69	2
Saturday	14/07/2018	8.3	7.8	8.2	8	7	8	64	0
Sunday	15/07/2018	8.3	7.3	7.6	8	8	8	89	0
Monday	16/07/2018	7.5	7.3	7.4	8	8	8	41	0
Tuesday	17/07/2018	7.9	7.6	7.7	9	8	9	10	0
Wednesday	18/07/2018	7.6	7.1	7.4	10	10	10	14	0
Thursday	19/07/2018	7.7	6.9	7.3	11	11	11	12	0
Friday	20/07/2018	7.7	7.4	7.6	11	10	11	10	0
Saturday	21/07/2018	7.5	7.5	7.5	11	11	11	11	0
Sunday	22/07/2018	7.8	7.5	7.6	10	10	10	20	0
Monday	23/07/2018	8.2	8.0	8.1	10	10	10	19	0
Tuesday	24/07/2018	8.3	8.1	8.2	10	10	10	20	0
Wednesday	25/07/2018	8.3	8.3	8.3	10	9	9	28	0
Thursday	26/07/2018	8.3	8.2	8.3	10	9	9	19	0
Friday	27/07/2018	8.3	8.2	8.2	10	10	10	35	0
Saturday	28/07/2018	8.3	7.8	8.0	10	10	10	29	0
Sunday	29/07/2018	8.2	7.8	8.0	10	10	10	25	0
Monday	30/07/2018	8.3	8.0	8.1	10	10	10	34	0
Tuesday	31/07/2018	8.2	7.8	8.1	10	10	10	35	0
Monthly Results		8.3	6.8	7.7	21	7	12	1267	3

LDP4: Wastewater discharge to council drain adjacent to Tank 7

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

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.

llutants 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)

itoring Frequency: Sulphur Dioxide - Continuous Monitoring, licensed in 1hr block averages.

nitoring Frequency: Sulphur Trioxide - guarterly intervals (once every three months)

ischarge 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 receieved.

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 lutants 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) oring Frequency: Sulphur Dioxide - Continuous Monitoring, licensed in 1hr block averages.

ischarge limit for this point is maximum concentration: Sulphur Dioxide 1hr average maximum is 560 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.

Current						
Month Data:	Aug-18	SO2 Lice	ensed Limit Max: 2800	mg/m3	SO3 License	d Limit Max: 50mg/m3
Day	Date	SO2 Maximum (mg/m3)	SO2 Minimum (mg/m3)	SO2 Average (mg/m3)	SO3 Result Required once per quarter (mg/m3)	Sampling Information
Wednesday	1/08/2018	0	0	0		
Thursday	2/08/2018	0	0	0		
Friday	3/08/2018	0	0	0		
Saturday	4/08/2018	0	0	0		
Sunday	5/08/2018	0	0	0		
Monday	6/08/2018	0	0	0		
Tuesday	7/08/2018	0	0	0		
Wednesday	8/08/2018	0	0	0		
Thursday	9/08/2018	0	0	0		
Friday	10/08/2018	0	0	0		
Saturday	11/08/2018	0	0	0		
Sunday	12/08/2018	0	0	0		
Monday	13/08/2018	0	0	0		
Tuesday	14/08/2018	4	0	1		
Wednesday	15/08/2018	14	1	4		
Thursday	16/08/2018	3	0	1		
Friday	17/08/2018	3	1	2		
Saturday	18/08/2018	7	0	1		
Sunday	19/08/2018	2	0	0		
Monday	20/08/2018	2	0	1		
Tuesday	21/08/2018	2	0	1		
Wednesday	22/08/2018	0	0	0		
Thursday	23/08/2018	0	0	0		
Friday	24/08/2018	0	0	0		
Saturday	25/08/2018	1	0	0		
Sunday	26/08/2018	0	0	0		
Monday	27/08/2018	0	0	0		
Tuesday	28/08/2018	1371	0	760		
Wednesday	29/08/2018	1666	897	1307		
Thursday	30/08/2018	1515	1174	1327		
Friday	31/08/2018	1807	1170	1387		

Current Month								
Data:	Aug-18	SO2 Licensed Limit max: 560mg/m3						
	Ĭ			Ĩ				
		SO ₂ Maximum	SO ₂ Minimum	SO ₂ Average				
Day	Date	(mg/m3)	(mg/m3)	(mg/m3)				
Wednesday	1/08/2018		4	5				
Thursday	2/08/2018		7	8				
Friday	3/08/2018		3	5				
Saturday	4/08/2018		4	5				
Sunday	5/08/2018		3	4				
Monday	6/08/2018		2	5				
Tuesday	7/08/2018	4	1	2				
Wednesday	8/08/2018	4	1	2				
Thursday	9/08/2018	5	2	3				
Friday	10/08/2018	4	2	3				
Saturday	11/08/2018	4	0	1				
Sunday	12/08/2018	2	0	0				
Monday	13/08/2018	2	1	1				
Tuesday	14/08/2018	4	0	1				
Wednesday	15/08/2018	14	1	4				
Thursday	16/08/2018	3	0	1				
Friday	17/08/2018	3	1	2				
Saturday	18/08/2018	7	0	1				
Sunday	19/08/2018	2	0	0				
Monday	20/08/2018	2	0	1				
Tuesday	21/08/2018	2	0	1				
Wednesday	22/08/2018	1	0	1				
Thursday	23/08/2018	2	0	1				
Friday	24/08/2018	4	0	2				
Saturday	25/08/2018	5	3	4				
Sunday	26/08/2018	11	3	6				
Monday	27/08/2018	5	1	2				
Tuesday	28/08/2018		2	5				
Wednesday	29/08/2018	10	2	4				
Thursday	30/08/2018	9	3	6				
Friday	31/08/2018		3	6				
Monthly Results		14	0	3				

Description: This is a wastewater discharge point which discharges treated wastwater 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

nitoring Frequency: Total Suspended Solids - Continuous during discharge events Ionitoring Frequency: pH: - Continuous during discharge events

of 1000kL/day

This data is updated every two weeks.

Current Month Data:	Aug-18		pН		Total S	Suspended	Solids (TSS)		
					TSS max: Dry weath	er 40mg/L			Wet Weather
Licensed Limits		pH max 8.5	pH min 6.5		Wet weather: 150m	g/L	-		>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	1/08/2018	8	8	8	10	9	10	40	0
Thursday	2/08/2018	8.3	7.5	8.1	10	9	10	36	3
Friday	3/08/2018	8.3	8.0	8.2	10	9	9	41	0
Saturday	4/08/2018	8.2	7.6	7.9	10	9	10	49	0
Sunday	5/08/2018	8.3	8.2	8.2	10	10	10	29	0
Monday	6/08/2018	8.3	8.0	8.2	10	10	10	67	0
Tuesday	7/08/2018	8.3	8.1	8.2	10	10	10	30	2
Wednesday	8/08/2018	8.2	7.8	8.1	11	10	10	36	0
Thursday	9/08/2018	8.3	7.9	8.1	10	10	10	30	0
Friday	10/08/2018	8.3	7.9	8.1	10	9	10	48	0
Saturday	11/08/2018	8.3	7.8	8.1	9	9	9	30	0
Sunday	12/08/2018	8.2	8.0	8.1	10	9	10	40	0
Monday	13/08/2018	8.3	7.7	8.1	10	9	9	33	0
Tuesday	14/08/2018	8.1	7.8	7.9	9	9	9	30	0
Wednesday	15/08/2018	8.2	7.4	8.0	10	9	9	45	0
Thursday	16/08/2018	8.2	7.8	8.1	9	9	9	40	0
Friday	17/08/2018	8.2	8.0	8.1	9	9	9	45	0
Saturday	18/08/2018	8.0	7.7	7.8	9	9	9	39	0
Sunday	19/08/2018	8.1	7.8	7.9	9	1	6	45	1
Monday	20/08/2018	8.3	8.0	8.1	1	1	1	38	0
Tuesday	21/08/2018	7.9	7.3	7.8	2	1	2	45	0
Wednesday	22/08/2018	7.7	7.2	7.5	10	1	6	43	0
Thursday	23/08/2018	7.9	7.6	7.8	9	8	9	40	0
Friday	24/08/2018	8.0	7.1	7.5	12	8	10	69	1
Saturday	25/08/2018	8.3	7.1	7.9	16	9	11	54	7
Sunday	26/08/2018	8.2	7.2	7.8	11	9	10	50	2
Monday	27/08/2018	8.2	7.3	7.9	11	9	10	62	1
Tuesday	28/08/2018	8.3	8.1	8.2	9	9	9	33	5
Wednesday	29/08/2018	8.2	6.8	7.4	12	10	11	48	0
Thursday	30/08/2018	8.2	6.8	7.3	12	11	12	55	0
Friday	31/08/2018	8.0	6.8	7.1	12	12	12	39	0

LDP4: Wastewater discharge to council drain adjacent to Tank 7

Discharge limits: pH - The pH is measured of a defined range and the limits are 6.5<pH<8.5. The license applies to <u>AVERAGE pH</u> 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 <u>AVERAGE TSS</u> over each discharge event Volume: - This discharge point also requires monitoring of total volume discharged each day and has a maximum allowed discharge volume

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)

nitoring Frequency: Sulphur Dioxide - Continuous Monitoring, licensed in 1hr block averages. Monitoring Frequency: Sulphur Trioxide - quarterly intervals (once every three months)

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 receieved.

The data in the below table is updated at two weekly intervals.

LDP2: SMBS (Sodium MetaBisulphite Plant) Stack
escription: This is the small white (22m) high stack adjacent to the white building on site
ollutants Discharged: This discharge point is licensed for discharge of Sulphur Dioxide (SO2)
nits Of Measure: Sulphur Dioxide is measured in mg/m3 (milligrams per cubic meter)
Ionitoring Frequency: Sulphur Dioxide - Continuous Monitoring, licensed in 1hr block averages.

scharge limit for this point is maximum concentration: Sulphur Dioxide 1hr average maximum is 560 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.

urrent Month		ischarge Point 2:						
Data:	Sep-17	SO2 Licensed Limit max: 560mg/m3						
Day	Date	SO2 Maximum (mg/m3)	SO2 Minimum (mg/m3)	SO2 Average (mg/m3)				
Saturday	1/09/2018	21	2	5				
Sunday	2/09/2018	5	1	3				
Monday	3/09/2018	5	2	3				
Tuesday	4/09/2018	5	3	4				
Wednesday	5/09/2018	4	2	3				
Thursday	6/09/2018	8	4	6				
Friday	7/09/2018	26	2	7				
Saturday	8/09/2018	3	1	1				
Sunday	9/09/2018	23	0	3				
Monday	10/09/2018	13	1	3				
Tuesday	11/09/2018	4	2	2				
Wednesday	12/09/2018	30	1	4				
Thursday	13/09/2018	33	1	3				
Friday	14/09/2018	28	1	4				
Saturday	15/09/2018	28	0	3				
Sunday	16/09/2018	0	0	0				
Monday	17/09/2018	1	0	0				
Tuesday	18/09/2018	2	0	1				
Wednesday	19/09/2018	32	1	5				
Thursday	20/09/2018	1	0	1				
Friday	21/09/2018	3	0	1				
Saturday	22/09/2018	87	1	5				
Sunday	23/09/2018	47	0	5				
Monday	24/09/2018	3	1	2				
Tuesday	25/09/2018	2	0	1				
Wednesday	26/09/2018	9	0	6				
Thursday	27/09/2018	8	7	7				
Friday	28/09/2018	10	8	9				
Saturday	29/09/2018	9	6	7				
Sunday	30/09/2018	6	3	5				
Monthly Results		87	0	4				

LDP4: Wastewater discharge to council drain adjacent to Tank 7 Description: This is a wastewater discharge point which discharges treated wastwater 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 onitoring Frequency: pH: - Continuous during discharge events scharge 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 <u>AVERAGE TSS</u> 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

This data is updated every two weeks.

Current Month Data:	Sep-17		рН		Total	Suspended	Solids (TSS)		
					TSS max: Dry weath	er 40mg/L			Wet Weather
Licensed Limits		pH max 8.5	pH min 6.5		Wet weather: 150m	g/L			>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 - 24hr (mm)
Saturday	1/09/2018	8	7	7	15	12	14	75	1
Sunday	2/09/2018	8.3	7.4	8.0	14	13	14	58	0
Monday	3/09/2018	8.3	7.2	7.8	15	13	14	71	1
Tuesday	4/09/2018	8.0	6.8	7.3	17	14	15	74	6
Wednesday	5/09/2018	7.1	6.8	6.9	16	7	11	60	4
Thursday	6/09/2018	7.2	6.8	6.9	8	7	7	50	0
Friday	7/09/2018	7.4	6.8	7.0	10	7	8	87	0
Saturday	8/09/2018	7.1	6.8	7.0	10	8	8	68	17
Sunday	9/09/2018	8.0	6.8	7.0	8	8	8	49	2
Monday	10/09/2018	8.3	8.2	8.3	8	8	8	53	0
Tuesday	11/09/2018	8.3	7.5	8.0	9	8	8	54	0
Wednesday	12/09/2018	7.6	7.2	7.4	9	8	9	50	0
Thursday	13/09/2018	7.4	7.1	7.3	9	7	8	50	0
Friday	14/09/2018	7.5	7.1	7.4	11	7	8	75	0
Saturday	15/09/2018	7.4	7.0	7.2	10	10	10	18	0
Sunday	16/09/2018	7.2	7.0	7.1	10	10	10	25	0
Monday	17/09/2018	7.3	7.0	7.2	10	10	10	20	0
Tuesday	18/09/2018	7.1	7.1	7.1	10	10	10	15	0
Wednesday	19/09/2018	8.3	7.0	7.6	10	10	10	14	0
Thursday	20/09/2018	8.0	7.2	7.7	10	8	9	30	1
Friday	21/09/2018	8.3	8.1	8.2	9	8	9	20	0
Saturday	22/09/2018	8.1	6.8	7.3	9	7	8	49	0
Sunday	23/09/2018	7.8	6.9	7.2	8	7	8	45	0
Monday	24/09/2018	7.2	6.8	7.0	8	7	8	50	0
Tuesday	25/09/2018	7.8	7.0	7.3	20	8	17	49	0
Wednesday	26/09/2018	7.9	6.9	7.3	23	9	15	80	0
Thursday	27/09/2018	7.9	6.8	7.1	10	8	9	53	0
Friday	28/09/2018	7.7	6.8	7.1	10	8	9	40	0
Saturday	29/09/2018	7.9	6.9	7.1	10	9	9	43	0
Sunday	30/09/2018	8.1	6.8	7.1	10	9	9	43	0
Monthly Results									

Current						
Month Data:	Sep-17	SO2 Licensed Limit Max: 2800mg/m3			SO3 Licensed Limit Max: 50mg/m3	
		SO ₂ Maximum	SO ₂ Minimum	SO ₂ Average	SO3 Result Required once per	
Day	Date	(mg/m3)	(mg/m3)	(mg/m3)	quarter (mg/m3)	Sampling Informatio
Saturday	1/09/2018	1757	642	1095		
Sunday	2/09/2018	1728	541	1185		
Monday	3/09/2018	1533	1307	1388		
Tuesday	4/09/2018	1536	1109	1294		
Wednesday	5/09/2018	1341	1108	1262		
Thursday	6/09/2018	1391	950	1184		
Friday	7/09/2018	1704	1076	1453		
Saturday	8/09/2018	1530	1097	1358		
Sunday	9/09/2018	1674	684	1146		
Monday	10/09/2018	1734	1164	1349		
Tuesday	11/09/2018	1787	921	1241		
Wednesday	12/09/2018	1968	1368	1597		
Thursday	13/09/2018	1596	0	1101		
Friday	14/09/2018	0	0	0		
Saturday	15/09/2018	0	0	0		
Sunday	16/09/2018	0	0	0		
Monday	17/09/2018	0	0	0		
Tuesday	18/09/2018	0	0	0		
Wednesday	19/09/2018	0	0	0		
Thursday	20/09/2018	0	0	0		
Friday	21/09/2018	1378	0	468		
Saturday	22/09/2018	1306	622	948		
Sunday	23/09/2018	1571	560	1267		
Monday	24/09/2018	1583	862	1188		
Tuesday	25/09/2018	1382	1102	1270		
Wednesday	26/09/2018	1539	1076	1336		
, Thursday	27/09/2018	1932	925	1372		
Friday	28/09/2018	1890	1126	1572		
Saturday	29/09/2018	1453	874	1190		
Sunday	30/09/2018	1349	504	958		
Monthly Result						