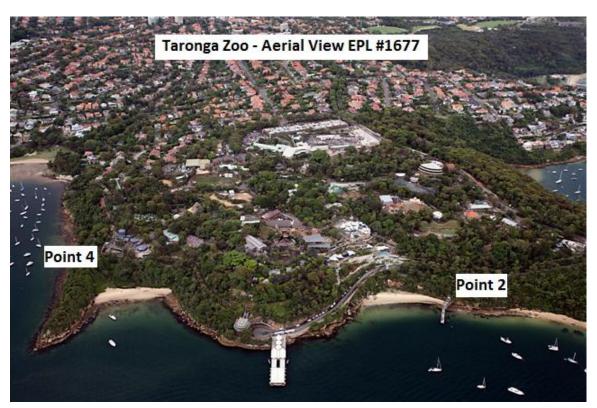
Taronga Zoo holds an Environment Protection Licence (EPL #: 1677) to discharge water into Sydney Harbour. This licence is issued under the Protection of the Environment Operations Act 1997 (POEO Act).

In accordance with section 66(6) of the Act, Taronga is required to publish pollution monitoring results. The intention of this requirement is to improve the general public's access to information about the environmental performance of licensed facilities.



EPL number	1677
Licensee	ZOOLOGICAL PARKS BOARD OF NSW (trading as Taronga Conservation Society Australia)
Site	Taronga Zoo
Premises address	Bradleys Head Road, Mosman, NSW 2088
Activity	Taronga Water Recycling Plant (EPL Monitoring Point 4) Great Southern Oceans Exhibit (EPL Monitoring Point 2)
Web link	Taronga EPL 1677 details on NSW EPA Public Register
	Note for Internet Explorer 10 users:
	Some functionality on this website is currently not compatible with Internet Explorer 10.
	If you find that functionality on this website is unresponsive, you can try running your browser in compatibility mode:
	Open Internet Explorer 10
	Press 'ALT' key on your keyboard to bring up the top menu. Then, go to Tools > Developer Tools.  This will bring up the IE developer tools menu.
	Select IE9 or IE8 from this menu.

Date sampled	20 March 2012				
Data obtained by Licensee	4 April 2012				
Results Published	4 July 2012				
Monitoring Point	Frequency	Pollutant	Measurement	Limit	Unit
2	Monthly	рН	8.1	-	-
	frequency	TSS	<3	50	mg/L
		BOD	<2	20	mg/L
4	Monthly	рН	7.8	6.5-8.5	-
	frequency	TSS	4	20	mg/L
		BOD	<2	15	mg/L

Date sampled	17 April 2012				
Data obtained by Licensee	2 May 2012				
Results Published	4 July 2012				
Monitoring Point	Frequency	Pollutant	Measurement	Limit	Unit
2	Monthly	рН	8.1	-	-
	frequency	TSS	4	50	mg/L
		BOD	<2	20	mg/L
4	Monthly	рН	7.7	6.5-8.5	-
	frequency	TSS	4	20	mg/L
		BOD	<2	15	mg/L

Date sampled	13 May 2012				
Data obtained by Licensee	30 May 2012				
Results Published	4 July 2012				
Monitoring Point	Frequency	Pollutant	Measurement	Limit	Unit
2	Monthly	рН	7.8	-	-
	frequency	TSS	<3	50	mg/L
		BOD	<4	20	mg/L
4	Monthly	рН	7.7	6.5-8.5	-
	frequency	TSS	8	20	mg/L
		BOD	<4	15	mg/L

Date sampled	7 June 2012				
Data obtained by Licensee	19 June 2012				
Results Published	4 July 2012				
Monitoring Point	Frequency	Pollutant	Measurement	Limit	Unit
2	Monthly	рН	7.9	-	-
	frequency	TSS	<2	50	mg/L
		BOD	<2	20	mg/L
4	Monthly	рН	7.7	6.5-8.5	-
	frequency	TSS	11	20	mg/L
		BOD	4	15	mg/L

Date sampled	25 July 2012						
Data obtained by Licensee	3 August 2012	3 August 2012					
Results Published	13 August 2012	13 August 2012					
Monitoring Point	Frequency	Pollutant	Measurement	Limit	Unit		
2	Monthly	рН	8	-	-		
	frequency	TSS	3	50	mg/L		
		BOD	4	20	mg/L		
4	Monthly	рН	7.5	6.5-8.5	-		
	frequency	TSS	12	20	mg/L		
		BOD	3	15	mg/L		

Date sampled	16 August 2012						
Data obtained by Licensee	28 August 2012	28 August 2012					
Results Published	27 September 2	27 September 2012					
Monitoring Point	Frequency	Pollutant	Measurement	Limit	Unit		
2	Monthly	рН	7.9	-	-		
	frequency	TSS	3	50	mg/L		
		BOD	<2	20	mg/L		
4	Monthly	рН	7.3	6.5-8.5	-		
	frequency	TSS	14	20	mg/L		
		BOD	4	15	mg/L		

Date sampled	6 September 2012					
Data obtained by Licensee	14 September 2	14 September 2012				
Results Published	27 September 2	27 September 2012				
Monitoring Point	Frequency	Pollutant	Measurement	Limit	Unit	
2	Monthly	рН	8.1	-	-	
	frequency	TSS	8	50	mg/L	
		BOD	<2	20	mg/L	
4	Monthly	рН	7.6	6.5-8.5	-	
	frequency	TSS	<3	20	mg/L	
		BOD	8	15	mg/L	

Date sampled	12 October 2012						
Data obtained by Licensee	19 October 201	19 October 2012					
Results Published	23 October 201	23 October 2012					
Monitoring Point	Frequency	Pollutant	Measurement	Limit	Unit		
2	Monthly	рН	7.9	-	-		
	frequency	TSS	4	50	mg/L		
		BOD	<2	20	mg/L		
4	Monthly	рН	7.6	6.5-8.5	-		
	frequency	TSS	8	20	mg/L		
		BOD	3	15	mg/L		

Date sampled	14 November2012					
Data obtained by Licensee	28 November 2	28 November 2012				
Results Published	4 December 20	4 December 2012				
Monitoring Point	Frequency	Pollutant	Measurement	Limit	Unit	
2	Monthly	рН	8	-	-	
	frequency	TSS	4	50	mg/L	
		BOD	<2	20	mg/L	
4	Monthly	рН	7.6	6.5-8.5	-	
	frequency	TSS	5	20	mg/L	
		BOD	<2	15	mg/L	

Date sampled	6 December 2012					
Data obtained by Licensee	18 December 20	18 December 2012				
Results Published	20 December 2	20 December 2012				
Monitoring Point	Frequency	Pollutant	Measurement	Limit	Unit	
2	Monthly	рН	8.1	-	-	
	frequency	TSS	4	50	mg/L	
		BOD	<2	20	mg/L	
4	Monthly	рН	7.8	6.5-8.5	-	
	frequency	TSS	6	20	mg/L	
		BOD	<2	15	mg/L	

Date sampled	11 January 2013						
Data obtained by Licensee	22 January 2013	22 January 2013					
Results Published	4 February 2013	4 February 2013					
Monitoring Point	Frequency	Pollutant	Measurement	Limit	Unit		
2	Monthly	рН	8.1	-	-		
	frequency	TSS	20	50	mg/L		
		BOD	<2	20	mg/L		
4	Monthly	рН	7.8	6.5-8.5	-		
	frequency	TSS	<3	20	mg/L		
		BOD	<2	15	mg/L		

Date sampled	7 February 2013						
Data obtained by Licensee	18 February 202	18 February 2013					
Results Published	20 February 203	20 February 2013					
Monitoring Point	Frequency	Pollutant	Measurement	Limit	Unit		
2	Monthly	рН	8	-	-		
	frequency	TSS	34	50	mg/L		
		BOD	4	20	mg/L		
4	Monthly	рН	7.4	6.5-8.5	-		
	frequency	TSS	4	20	mg/L		
		BOD	<2	15	mg/L		

Date sampled	31 March 2013				
Data obtained by Licensee	3 April 2013				
Results Published	17 May 2013				
Monitoring Point	Frequency	Pollutant	Measurement	Limit	Unit
2	Monthly	рН	7.8	-	-
	frequency	TSS	75	50	mg/L
		BOD	3	20	mg/L
4	Monthly	рН	7.6	6.5-8.5	-
	frequency	TSS	6	20	mg/L
		BOD	5	15	mg/L

Date sampled	24 April 2013				
Data obtained by Licensee	3 May 2013				
Results Published	17 May 2013				
Monitoring Point	Frequency	Pollutant	Measurement	Limit	Unit
2	Monthly	рН	7.9	-	-
	frequency	TSS	37	50	mg/L
		BOD	<2	20	mg/L
4	Monthly	рН	7.6	6.5-8.5	-
	frequency	TSS	6	20	mg/L
		BOD	5	15	mg/L

Date sampled	10 May 2013				
Data obtained by Licensee	16 May 2013				
Results Published	17 May 2013				
Monitoring Point	Frequency	Pollutant	Measurement	Limit	Unit
2	Monthly	рН	7.9	-	-
	frequency	TSS	42	50	mg/L
		BOD	<2	20	mg/L
4	Monthly	рН	7.9	6.5-8.5	-
	frequency	TSS	39* <b>LRE</b>	20	mg/L
		BOD	<2	15	mg/L

Date sampled	17 June				
Data obtained by Licensee	27 June 2013				
Results Published	9 July 2013				
Monitoring Point	Frequency	Pollutant	Measurement	Limit	Unit
2	Monthly	рН	7.9	-	-
	frequency	TSS	17	50	mg/L
		BOD	<2	20	mg/L
4	Monthly	рН	7.6	6.5-8.5	-
	frequency	TSS	4	20	mg/L
		BOD	<2	15	mg/L

Date sampled	26 July						
Data obtained by Licensee	16 August 2013	16 August 2013					
Results Published	2 Sept 2013						
Monitoring Point	Frequency	Pollutant	Measurement	Limit	Unit		
2	Monthly	рН	7.9	-	-		
	frequency	TSS	10	50	mg/L		
		BOD	<2	20	mg/L		
4	Monthly	рН	7.7	6.5-8.5	-		
	frequency	TSS	<2	20	mg/L		
		BOD	<2	15	mg/L		

Date sampled	21 Aug 2013				
Data obtained by Licensee	2 Sept 2013				
Results Published	9 Sept 2013				
Monitoring Point	Frequency	Pollutant	Measurement	Limit	Unit
2	Monthly	рН	7.9	-	-
	frequency	TSS	5	50	mg/L
		BOD	<2	20	mg/L
4	Monthly	рН	7.6	6.5-8.5	-
	frequency	TSS	5	20	mg/L
		BOD	3	15	mg/L

Date sampled	12 Sept 2013				
Data obtained by Licensee	23 Sept 2013				
Results Published					
Monitoring Point	Frequency	Pollutant	Measurement	Limit	Unit
2	Monthly	рН	8.1	-	-
	frequency	TSS	4	50	mg/L
		BOD	<2	20	mg/L
4	Monthly	рН	7.5	6.5-8.5	-
	frequency	TSS	5	20	mg/L
		BOD	11	15	mg/L

Date sampled	24 October 2013						
Data obtained by Licensee	1 November 20	1 November 2013					
Results Published							
Monitoring Point	Frequency	Pollutant	Measurement	Limit	Unit		
2	Monthly	pН	8.1	-	-		
	frequency	TSS	<2	50	mg/L		
		BOD	<2	20	mg/L		
4	Monthly	рН	7.7	6.5-8.5	-		
	frequency	TSS	<2	20	mg/L		
		BOD	<2	15	mg/L		

Date sampled	29 November 2013						
Data obtained by Licensee	9 December 20:	9 December 2013					
Results Published							
Monitoring Point	Frequency	Pollutant	Measurement	Limit	Unit		
2	Monthly	рН	8.1	-	-		
	frequency	TSS	<2	50	mg/L		
		BOD	3	20	mg/L		
4	Monthly	рН	7.8	6.5-8.5	-		
	frequency	TSS	<2	20	mg/L		
		BOD	<2	15	mg/L		

Date sampled	16 December 2013				
Data obtained	30 December 2	013			
by Licensee Results Published					
Monitoring Point	Frequency	Pollutant	Measurement	Limit	Unit
2	Monthly	рН	8	-	-
	frequency	TSS	<2	50	mg/L
		BOD	<2	20	mg/L
4	Monthly	рН	7.6	6.5-8.5	-
	frequency	TSS	<2	20	mg/L
		BOD	<2	15	mg/L

Date sampled	9 January 2014						
Data obtained by Licensee	17 January 2014	17 January 2014					
Results Published							
Monitoring	Frequency	Pollutant	Measurement	Limit	Unit		
Point							
2	Monthly	рН	7.6	-	-		
	frequency	TSS	3	50	mg/L		
		BOD	<2	20	mg/L		
4	Monthly	рН	8.1	6.5-8.5	-		
	frequency	TSS	4	20	mg/L		
		BOD	<2	15	mg/L		

Date sampled	7 February 2014						
Data obtained by Licensee	18 February 20	18 February 2014					
Results Published							
Monitoring Point	Frequency	Pollutant	Measurement	Limit	Unit		
2	Monthly	рН	8.1	-	-		
	frequency	TSS	4	50	mg/L		
		BOD	<2	20	mg/L		
4	Monthly	рН	7.5	6.5-8.5	-		
	frequency	TSS	<2	20	mg/L		
		BOD	<2	15	mg/L		

Date sampled	14 March 2014						
Data obtained by Licensee	21 March 2014	21 March 2014					
Results Published	23 March 2014	23 March 2014					
Monitoring Point	Frequency	Pollutant	Measurement	Limit	Unit		
2	Monthly	рН	8.1	-	-		
	frequency	TSS	<2	50	mg/L		
		BOD	<2	20	mg/L		
4	Monthly	рН	7.3	6.5-8.5	-		
	frequency	TSS	<2	20	mg/L		
		BOD	4	3	mg/L		

Date sampled	3 April							
Data obtained by Licensee	20 May	20 May						
Results Published	23 May							
Monitoring	Frequency	Pollutant	Measurement	Limit	Unit			
Point								
2	Monthly	рН	8	-	-			
	frequency	TSS	6	50	mg/L			
		BOD	<2	20	mg/L			
4	Monthly	рН	7.6	6.5-8.5	-			
	frequency	TSS	8	20	mg/L			
		BOD	<2	15	mg/L			

Date sampled	9 May 2014							
Data obtained by Licensee	21 May 2014	21 May 2014						
Results Published	23 May 2014							
Monitoring Point	Frequency	Pollutant	Measurement	Limit	Unit			
2	Monthly	рН	8	-	-			
	frequency	TSS	4	50	mg/L			
		BOD	<2	20	mg/L			
4	Monthly	рН	7.4	6.5-8.5	-			
	frequency	TSS	8	20	mg/L			
		BOD	<2	15	mg/L			

5 June 2014
17 June 2014
23 June 2014

Monitoring Point	Frequency	Pollutant	Measurement	Limit	Unit
2	Monthly	рН	8	-	-
	frequency	TSS	5	50	mg/L
		BOD	4	20	mg/L
4	Monthly	рН	7.6	6.5-8.5	-
	frequency	TSS	13	20	mg/L
		BOD	<2	15	mg/L

Date sampled	11 July 2014				
Data obtained by Licensee	20 July 2014				
Results Published	28 July 2014				
Monitoring Point	Frequency	Pollutant	Measurement	Limit	Unit
2	Monthly	рН	8	-	-
	frequency	TSS	4	50	mg/L
		BOD	<2	20	mg/L
4	Monthly	рН	7.5	6.5-8.5	-
	frequency	TSS	6	20	mg/L
		BOD	5	15	mg/L

Date sampled	7 August 2014							
Data obtained by Licensee	19 August 2014	19 August 2014						
Results Published	22 August 2014	22 August 2014						
Monitoring	Frequency	Pollutant	Measurement	Limit	Unit			
Point								
2	Monthly	pН	8.1	-	-			
	frequency	TSS	<2	50	mg/L			
		BOD	<2	20	mg/L			
4	Monthly	pН	7.4	6.5-8.5	-			
	frequency	TSS	6	20	mg/L			
		BOD	22	15	mg/L			

Date sampled	18 September 2014						
Data obtained by Licensee	26 September 2	26 September 2014					
Results Published	26 September 2	26 September 2014					
Monitoring Point	Frequency	Pollutant	Measurement	Limit	Unit		
2	Monthly	рН	8	-	-		
	frequency	TSS	<2	50	mg/L		
		BOD	<2	20	mg/L		
4	Monthly	рН	7.3	6.5-8.5	-		
	frequency	TSS	2	20	mg/L		
		BOD	<2	15	mg/L		

Date sampled	9 October 2014						
Data obtained by Licensee	22 October 201	22 October 2014					
Results Published	27 October 201	27 October 2014					
Monitoring Point	Frequency	Pollutant	Measurement	Limit	Unit		
2	Monthly	рН	8	-	-		
	frequency	TSS	<2	50	mg/L		
		BOD	<2	20	mg/L		
4	Monthly	рН	7.4	6.5-8.5	-		
	frequency	TSS	2	20	mg/L		
		BOD	<2	15	mg/L		

Date sampled	13 November 2014						
Data obtained by Licensee	25 November 2	25 November 2014					
Results Published	28 November 2	28 November 2014					
Monitoring Point	Frequency	Pollutant	Measurement	Limit	Unit		
2	Monthly	рН	8.1	-	-		
	frequency	TSS	4	50	mg/L		
		BOD	<2	20	mg/L		
4	Monthly	рН	7.6	6.5-8.5	-		
	frequency	TSS	<2	20	mg/L		
		BOD	4	15	mg/L		

Date sampled	5 <sup>th</sup> December 2014						
Data obtained by Licensee	16 <sup>th</sup> December	16 <sup>th</sup> December 2014					
Monitoring Point	Frequency	Pollutant	Measurement	Limit	Unit		
2	Monthly	рН	7.9	-	-		
	frequency	TSS	7	50	mg/L		
		BOD	<2	20	mg/L		
4	Monthly	рН	7.4	6.5-8.5	-		
	frequency	TSS	9	20	mg/L		
		BOD	5	15	mg/L		

Date sampled	22 January 2015						
Data obtained by Licensee	22 January 201	22 January 2015					
Monitoring	Frequency	Pollutant	Measurement	Limit	Unit		
Point							
2	Monthly	рН	7.9	-	-		
	frequency	TSS	11	50	mg/L		
		BOD	<2	20	mg/L		
4	Monthly	рН	7.3	6.5-8.5	-		
	frequency	TSS	<2	20	mg/L		
		BOD	3	15	mg/L		

Date sampled	12 March 2015	12 March 2015					
Data obtained by Licensee	20 March 2015	20 March 2015					
Monitoring Point	Frequency	Pollutant	Measurement	Limit	Unit		
2	Monthly	рН	8	-	-		
	frequency	TSS	10	50	mg/L		
		BOD	3	20	mg/L		
4	Monthly	рН	7.7	6.5-8.5	-		
	frequency	TSS	<2	20	mg/L		
		BOD	4	15	mg/L		

Date sampled	27 March 2015	27 March 2015					
Data obtained by Licensee	2 April 2015	2 April 2015					
Monitoring Point	Frequency	Pollutant	Measurement	Limit	Unit		
2	Monthly	рН	8	-	-		
	frequency	TSS	3	50	mg/L		
		BOD	2	20	mg/L		
4	Monthly	рН	7.6	6.5-8.5	-		
	frequency	TSS	8	20	mg/L		
		BOD	7	15	mg/L		

Date sampled	16 April 2015				
Data obtained by Licensee	24 April 2015				
Monitoring Point	Frequency	Pollutant	Measurement	Limit	Unit
2	Monthly	рН	7.9	-	-
	frequency	TSS	4	50	mg/L
		BOD	<2	20	mg/L
4	Monthly	рН	7.5	6.5-8.5	-
	frequency	TSS	3	20	mg/L
		BOD	<2	15	mg/L

Date sampled	15 May 2015					
Data obtained by Licensee	25 May 2015					
Monitoring Point	Frequency	Pollutant	Measurement	Limit	Unit	
2	Monthly	рН	8	-	-	
	frequency	TSS	8	50	mg/L	
		BOD	<2	20	mg/L	
4	Monthly	рН	7.8	6.5-8.5	-	
	frequency	TSS	3	20	mg/L	
		BOD	<2	15	mg/L	

Date sampled	15 May 2015				
Data obtained by Licensee	25 May 2015				
Monitoring Point	Frequency	Pollutant	Measurement	Limit	Unit
2	Monthly	рН	8	-	-
	frequency	TSS	8	50	mg/L
		BOD	<2	20	mg/L
4	Monthly	рН	7.8	6.5-8.5	-
	frequency	TSS	3	20	mg/L
		BOD	<2	15	mg/L

Date sampled	4 June 2015				
Data obtained by Licensee	11 June 2015				
Monitoring Point	Frequency	Pollutant	Measurement	Limit	Unit
2	Monthly	рН	8	-	-
	frequency	TSS	<5	50	mg/L
		BOD	<2	20	mg/L
4	Monthly	рН	7.6	6.5-8.5	-
	frequency	TSS	12	20	mg/L
		BOD	<2	15	mg/L

Date sampled	21 July 2015				
Data obtained by Licensee	28 July 2015				
Monitoring Point	Frequency	Pollutant	Measurement	Limit	Unit
2	Monthly	рН	8	-	-
	frequency	TSS	<5	50	mg/L
		BOD	<2	20	mg/L
4	Monthly	рН	7.3	6.5-8.5	-
	frequency	TSS	9	20	mg/L
		BOD	<2	15	mg/L
		*Enterococci	<2	40	CFU/100mL
*Note: EPA Licence variation includes new water quality indicator for Point 4					

Date sampled	6 August 2015						
Data obtained by Licensee	14 August 201	14 August 2015					
Monitoring Point	Frequency	Pollutant	Measurement	Limit	Unit		
2	Monthly	pН	8	-	-		
	frequency	TSS	<5	50	mg/L		
		BOD	<2	20	mg/L		
4	Monthly	рН	7.9	6.5-8.5	-		
	frequency	TSS	5	20	mg/L		
		BOD	<1	15	mg/L		
		*Enterococci	<1	40	CFU/100mL		
*Note: EPA Lice	*Note: EPA Licence variation includes new water quality indicator for Point 4						

Date sampled	7 September 2015						
Data obtained by Licensee	15 September	15 September 2015					
Monitoring Point	Frequency	Pollutant	Measurement	Limit	Unit		
2	Monthly	рН	7.8	-	-		
	frequency	TSS	<5	50	mg/L		
		BOD	<2	20	mg/L		
4	Monthly	рН	7.8	6.5-8.5	-		
	frequency	TSS	8	20	mg/L		
		BOD	<2	15	mg/L		
		*Enterococci	<1	40	CFU/100mL		
*Note: EPA Lice	*Note: EPA Licence variation includes new water quality indicator for Point 4						

Date sampled	16 October 2015					
Data obtained by Licensee	26 October 201	.5				
Monitoring Point	Frequency	Pollutant	Measurement	Limit	Unit	
2	Monthly	рН	8.08	-	-	
	frequency	TSS	<5	50	mg/L	
		BOD	<2	20	mg/L	
4	Monthly	рН	No sample	6.5-8.5	-	
	frequency	TSS	No sample	20	mg/L	
		BOD	No sample	15	mg/L	
		*Enterococci	No sample	40	CFU/100mL	
*Note: EPA Lice	*Note: EPA Licence variation includes new water quality indicator for Point 4					

Date sampled	13 November 2015						
Data obtained by Licensee	20 November 2	20 November 2015					
Monitoring Point	Frequency	Pollutant	Measurement	Limit	Unit		
2	Monthly	рН	7.89	-	-		
	frequency	TSS	<2	50	mg/L		
		BOD	<2	20	mg/L		
4	Monthly	рН	7.80	6.5-8.5	-		
	frequency	TSS	<5	20	mg/L		
		BOD	4	15	mg/L		
		*Enterococci	9	40	CFU/100mL		
*Note: EPA Licence variation includes new water quality indicator for Point 4							

Date sampled	11 December 2015
Data obtained	18 December 2015
by Licensee	

Monitoring	Frequency	Pollutant	Measurement	Limit	Unit
Point					
2	Monthly	рН	8.09	-	-
	frequency	TSS	<5	50	mg/L
		BOD	<2	20	mg/L
4	Monthly	рН	7.89	6.5-8.5	-
	frequency	TSS	19	20	mg/L
		BOD	<2	15	mg/L
		*Enterococci	23*	40	CFU/100mL

Note: EPA Licence variation includes new water quality indicator for Point 4 (Enterococci)

Date sampled	22 January 2016					
Data obtained by Licensee	1 February 2016					
Monitoring Point	Frequency	Pollutant	Measurement	Limit	Unit	
2	Monthly	рН	7.99	-	-	
	frequency	TSS	<5	50	mg/L	
		BOD	<2	20	mg/L	
4	Monthly	рН	7.86	6.5-8.5	-	
	frequency	TSS	<5	20	mg/L	
		BOD	4	15	mg/L	
		Enterococci	320	40	CFU/100mL	

Date sampled	19 February 2016				
Data obtained by Licensee	26 February 2016				
Monitoring Point	Frequency	Pollutant	Measurement	Limit	Unit
2	Monthly	рН	8.02	-	-
	frequency	TSS	<5	50	mg/L
		BOD	<2	20	mg/L
4	Monthly	рН	7.91	6.5-8.5	-
	frequency	TSS	6	20	mg/L
		BOD	<2	15	mg/L
		Enterococci	<1	40	CFU/100mL

Date sampled	29 March 2016						
Data obtained by Licensee	5 April 2016	5 April 2016					
Monitoring Point	Frequency	Pollutant	Measurement	Limit	Unit		
2	Monthly	рH	8.12	-	-		
	frequency	TSS	<5	50	mg/L		
		BOD	<2	20	mg/L		
4	Monthly	рН	7.92	6.5-8.5	-		
	frequency	TSS	<5	20	mg/L		

	BOD	<2	15	mg/L
	Enterococci	<1	40	CFU/100mL

Date sampled	18 April 2016				
Data obtained by Licensee	27 April 2016				
Monitoring	Frequency	Pollutant	Measurement	Limit	Unit
Point					
2	Monthly	рН	8.06	-	-
	frequency	TSS	<5	50	mg/L
		BOD	<2	20	mg/L
4	Monthly	рН	7.86	6.5-8.5	-
	frequency	TSS	13	20	mg/L
		BOD	<2	15	mg/L
		Enterococci	<1	40	CFU/100mL

Date sampled	16 May 2016				
Data obtained by Licensee	24 May 2016				
Monitoring Point	Frequency	Pollutant	Measurement	Limit	Unit
2	Monthly	pН	7.97	-	-
	frequency	TSS	28	50	mg/L
		BOD	<2	20	mg/L
4	Monthly	рН	7.67	6.5-8.5	-
	frequency	TSS	10	20	mg/L
		BOD	<2	15	mg/L
		Enterococci	<1	40	CFU/100mL

Date sampled	22 June 2016				
Data obtained by Licensee	27 June 2016				
Monitoring Point	Frequency	Pollutant	Measurement	Limit	Unit
2	Monthly	рН	7.23	-	-
	frequency	TSS	6	50	mg/L
		BOD	<2	20	mg/L
4	Monthly	рН	7.50	6.5-8.5	-
	frequency	TSS	6	20	mg/L
		BOD	<2	15	mg/L
		Enterococci	<1	40	CFU/100mL

Date sampled	18 July 2016				
Data obtained by Licensee	25 July 2016				
Monitoring Point	Frequency	Pollutant	Measurement	Limit	Unit
2	Monthly	рН	7.85	6.5-8.5	-
	frequency	TSS	<5	50	mg/L
		BOD	<2	20	mg/L
4	Monthly	рН	7.73	6.5-8.5	-
	frequency	TSS	8	20	mg/L
		BOD	<2	15	mg/L
		Enterococci	<1	40	CFU/100mL

Date sampled	15 August 2016				
Data obtained by Licensee	22 August 2016				
Monitoring Point	Frequency	Pollutant	Measurement	Limit	Unit
2	Monthly	рН	8.1	6.5-8.5	-
	frequency	TSS	9	50	mg/L
		BOD	<2	20	mg/L
4	Monthly	рН	7.68	6.5-8.5	-
	frequency	TSS	8	20	mg/L
		BOD	<2	15	mg/L
		Enterococci	<1	40	CFU/100mL

Date sampled	12 September 2016					
Data obtained by Licensee	20 September 2016					
Monitoring Point	Frequency	Pollutant	Measurement	Limit	Unit	
2	Monthly	рН	7.98	6.5-8.5	-	
	frequency	TSS	23	50	mg/L	
		BOD	<2	20	mg/L	
4	Monthly	рН	8.07	6.5-8.5	-	
	frequency	TSS	7	20	mg/L	
		BOD	<2	15	mg/L	
		Enterococci	<1	40	CFU/100mL	

Date sampled	28 October 201	28 October 2016					
Data obtained by Licensee	3 November 20	3 November 2016					
Monitoring Point	Frequency	Pollutant	Measurement	Limit	Unit		
2	Monthly	рН	8.10	6.5-8.5	-		
	frequency	TSS	<5	50	mg/L		
		BOD	<2	20	mg/L		
4	Monthly	рН	7.64	6.5-8.5	-		
	frequency	TSS	8	20	mg/L		
		BOD	<2	15	mg/L		
		Enterococci	<1	40	CFU/100mL		

Date sampled	15 December 2016						
Data obtained by Licensee	20 December 20	20 December 2016					
Monitoring	Frequency	Pollutant	Measurement	Limit	Unit		
Point							
2	Monthly	рН	8.06	6.5-8.5	-		
	frequency	TSS	<5	50	mg/L		
		BOD	<2	20	mg/L		
4	Monthly	рН	7.86	6.5-8.5	-		
	frequency	TSS	13	20	mg/L		
		BOD	<2	15	mg/L		
		Enterococci	<1	40	CFU/100mL		

Date sampled	19 January 2017	19 January 2017				
Data obtained	27 January 2017	7				
by Licensee						
Monitoring	Frequency	Pollutant	Measurement	Limit	Unit	
Point						
2	Monthly	рН	8.20	6.5-8.5	-	
	frequency	TSS	<5	50	mg/L	
		BOD	<2	20	mg/L	
4	Monthly	рН	7.64	6.5-8.5	-	
	frequency	TSS	<5	20	mg/L	
		BOD	<2	15	mg/L	
		Enterococci	<1	40	CFU/100mL	

Date sampled	13 February 2017					
Data obtained by Licensee	22 February 201	22 February 2017				
Monitoring	Frequency	Pollutant	Measurement	Limit	Unit	
Point 2	Monthly	рН	7.82	6.5-8.5	-	

	frequency	TSS	16	50	mg/L
		BOD	<2	20	mg/L
4	Monthly	рН	7.71	6.5-8.5	-
	frequency	TSS	<5	20	mg/L
	BOD	<2	15	mg/L	
		Enterococci	<1	40	CFU/100mL

Date sampled	14 March 2017				
Data obtained by Licensee	21 March 2017				
Monitoring Point	Frequency	Pollutant	Measurement	Limit	Unit
2	Monthly	рН	8.02	6.5-8.5	-
	frequency	TSS	<5	50	mg/L
		BOD	<2	20	mg/L
4	Monthly	рН	7.60	6.5-8.5	-
	frequency	TSS	<5	20	mg/L
		BOD	<2	15	mg/L
		Enterococci	<1	40	CFU/100mL

Date sampled	14 April 2017				
Data obtained by Licensee	21 April 2017				
Monitoring	Frequency	Pollutant	Measurement	Limit	Unit
Point					
2	Monthly	рН	8.25	6.5-8.5	-
	frequency	TSS	5	50	mg/L
		BOD	2	20	mg/L
4	Monthly	pН	7.88	6.5-8.5	-
	frequency	TSS	14	20	mg/L
		BOD	2	15	mg/L
		Enterococci	1	40	CFU/100mL

Date sampled	16 May 2017				
Data obtained by Licensee	23 May 2017				
Monitoring Point	Frequency	Pollutant	Measurement	Limit	Unit
2	Monthly	рН	8.2	6.5-8.5	-
	frequency	TSS	5	50	mg/L
		BOD	2	20	mg/L
4	Monthly	рН	7.54	6.5-8.5	-
	frequency	TSS	10	20	mg/L
		BOD	8	15	mg/L
		Enterococci	1	40	CFU/100mL

Date sampled	19 June 2017				
Data obtained by Licensee	26 June 2017				
Monitoring Point	Frequency	Pollutant	Measurement	Limit	Unit
2	Monthly	рН	8.1	6.5-8.5	-
	frequency	TSS	<5	50	mg/L
		BOD	<2	20	mg/L
4	Monthly	рН	7.9	6.5-8.5	-
	frequency	TSS	7	20	mg/L
		BOD	<2	15	mg/L
		Enterococci	<1	40	CFU/100mL

Date sampled	10 July 2017				
Data obtained by Licensee	17 July 2017				
Monitoring Point	Frequency	Pollutant	Measurement	Limit	Unit
2	Monthly	рН	8.08	6.5-8.5	-
	frequency	TSS	<5	50	mg/L
		BOD	2	20	mg/L
4	Monthly	рН	7.63	6.5-8.5	-
	frequency	TSS	15	20	mg/L
		BOD	4	15	mg/L
		Enterococci	1	40	CFU/100mL

Date sampled	18 August 2017						
Data obtained by Licensee	25 August 2017	25 August 2017					
Monitoring	Frequency	Pollutant	Measurement	Limit	Unit		
Point							
2	Monthly	рН	7.98	6.5-8.5	-		
	frequency	TSS	5	50	mg/L		
		BOD	2	20	mg/L		
4	Monthly	рН	7.73	6.5-8.5	-		
	frequency	TSS	5	20	mg/L		
		BOD	<5	15	mg/L		
		Enterococci	<1	40	CFU/100mL		

Date sampled	18 September 2	017				
Data obtained by Licensee	25 September 2	25 September 2017				
Monitoring Point	Frequency	Pollutant	Measurement	Limit	Unit	

2	Monthly	рН	7.95	6.5-8.5	-
	frequency	TSS	<5	50	mg/L
		BOD	2	20	mg/L
4	Monthly	рН	7.53	6.5-8.5	-
	frequency	TSS	14	20	mg/L
		BOD	<5	15	mg/L
		Enterococci	<1	40	CFU/100mL

Date sampled	20 October 2017							
Data obtained by Licensee	26 October 201	26 October 2017						
Monitoring Point	Frequency	Pollutant	Measurement	Limit	Unit			
2	Monthly	рН	7.78	6.5-8.5	-			
	frequency	TSS	16	50	mg/L			
		BOD	<2	20	mg/L			
4	Monthly	рН	7.76	6.5-8.5	-			
	frequency	TSS	9	20	mg/L			
		BOD	8	15	mg/L			
		Enterococci	<1	40	CFU/100mL			

Date sampled	27 November 2017							
Data obtained by Licensee	04 December 20	04 December 2017						
Monitoring	Frequency	Pollutant	Measurement	Limit	Unit			
Point								
2	Monthly	рН	8	6.5-8.5	-			
	frequency	TSS	<5	50	mg/L			
		BOD	<2	20	mg/L			
4	Monthly	рH	7.89	6.5-8.5	-			
	frequency	TSS	8	20	mg/L			
		BOD	5	15	mg/L			
		Enterococci	<1	40	CFU/100mL			

Date sampled	20 December 2017							
Data obtained by Licensee	03 January 201	03 January 2018						
Monitoring Point	Frequency	Pollutant	Measurement	Limit	Unit			
2	Monthly	рН	8.08	6.5-8.5	-			
	frequency	TSS	41	50	mg/L			
		BOD	2	20	mg/L			
4	Monthly	рН	7.99	6.5-8.5	-			
	frequency	TSS	8	20	mg/L			
		BOD	10	15	mg/L			
		Enterococci	<1	40	CFU/100mL			

Date sampled	11 January 2018							
Data obtained by Licensee	18 January 2018	18 January 2018						
Monitoring Point	Frequency	Pollutant	Measurement	Limit	Unit			
2	Monthly	рН	7.85	6.5-8.5	-			
	frequency	TSS	<5	50	mg/L			
		BOD	<2	20	mg/L			
4	Monthly	рН	7.72	6.5-8.5	-			
	frequency	TSS	<5	20	mg/L			
		BOD	5	15	mg/L			
		Enterococci	<1	40	CFU/100mL			

Date sampled	20 February 2018							
Data obtained by Licensee	26 February 2	26 February 2018						
Monitoring Point	Frequency	Pollutant	Measurement	Limit	Unit			
2	Monthly	рН	8.14	6.5-8.5	-			
	frequency	TSS	43	50	mg/L			
		BOD	<2	20	mg/L			
4	Monthly frequency	рН	7.76	6.5-8.5	-			
		TSS	15	20	mg/L			
		BOD	<2	15	mg/L			
		Enterococci	<1	40	CFU/100mL			

Date sampled	14 March 2018						
Data obtained by Licensee	21 March 2018						
Monitoring	Frequency	Pollutant	Measurement	Limit	Unit		
Point							
2	Monthly	pН	No water flow	6.5-8.5	-		
	frequency	TSS	during testing	50	mg/L		
		BOD	period	20	mg/L		
4	Monthly	рН	7.92	6.5-8.5	-		
	frequency	TSS	21	20	mg/L		
		BOD	<2	15	mg/L		
		Enterococci	<1	40	CFU/100mL		

Date sampled	17 April 2018				
Data obtained by Licensee	23 April 2018				
Monitoring Point	Frequency	Pollutant	Measurement	Limit	Unit
2	Monthly	рН	7.97	6.5-8.5	-
	frequency	TSS	18	50	mg/L

		BOD	<2	20	mg/L
4 Monthly frequency	Monthly	рН	7.93	6.5-8.5	-
	frequency	TSS	13	20	mg/L
		BOD	<2	15	mg/L
		Enterococci	<1	40	CFU/100mL

Date sampled	21 May 2018				
Data obtained by Licensee	28 May 2018				
Monitoring Point	Frequency	Pollutant	Measurement	Limit	Unit
2	Monthly	рН	8.04	6.5-8.5	-
	frequency	TSS	<5	50	mg/L
		BOD	<2	20	mg/L
4	Monthly	рН	7.85	6.5-8.5	-
	frequency	TSS	<5	20	mg/L
		BOD	<2	15	mg/L
		Enterococci	<1	40	CFU/100mL

Date sampled	27 June 2018 – Monitoring Point 4			10 July 2018 – Monitoring Point 2		
Data obtained by Licensee	04 July 2018 –	04 July 2018 – Monitoring Point 4 17 July 2018 – Monitoring Point 2				
Monitoring Point	Frequency	Pollutant	Measurement	Limit	Unit	
2	Monthly	рН	8.05	6.5-8.5	-	
	frequency	TSS	<5	50	mg/L	
		BOD	<2	20	mg/L	
4	Monthly	рН	7.75	6.5-8.5	-	
	frequency	TSS	<15	20	mg/L	
		BOD	563	15	mg/L	
		Enterococci	<1	40	CFU/100mL	
*Samples had to be taken on separate dates						

Date sampled	19 July 2018				
Data obtained by Licensee	25 July 2018				
Monitoring Point	Frequency	Pollutant	Measurement	Limit	Unit
2	Monthly	рН	8.04	6.5-8.5	-
	frequency	TSS	13	50	mg/L
		BOD	<2	20	mg/L
4	Monthly	рН	7.74	6.5-8.5	-
	frequency	TSS	<8	20	mg/L
		BOD	<12	15	mg/L
		Enterococci	<1	40	CFU/100mL

Date sampled	21 August 2018						
Data obtained by Licensee	27 August 2018	27 August 2018					
Monitoring Point	Frequency	Pollutant	Measurement	Limit	Unit		
2	Monthly	рН	7.85	6.5-8.5	-		
	frequency	TSS	7	50	mg/L		
		BOD	<2	20	mg/L		
4	Monthly	рН	7.54	6.5-8.5	-		
	frequency	TSS	11	20	mg/L		
		BOD	<2	15	mg/L		
		Enterococci	<1	40	CFU/100mL		

Date sampled	11 September 2018							
Data obtained by Licensee	18 September 2	18 September 2018						
Monitoring Point	Frequency	Pollutant	Measurement	Limit	Unit			
2	Monthly	pН	7.95	6.5-8.5	-			
	frequency	TSS	<5	50	mg/L			
		BOD	<2	20	mg/L			
4	Monthly	рН	7.44	6.5-8.5	-			
fre	frequency	TSS	5	20	mg/L			
		BOD	<2	15	mg/L			
		Enterococci	<1	40	CFU/100mL			

Date sampled	31 October 2018							
Data obtained by Licensee	07 November 2	07 November 2018						
Monitoring	Frequency	Pollutant	Measurement	Limit	Unit			
Point								
2	Monthly	рН	8.04	6.5-8.5	-			
	frequency	TSS	43	50	mg/L			
		BOD	<2	20	mg/L			
4	Monthly	рН	7.89	6.5-8.5	-			
	frequency	TSS	130	20	mg/L			
		BOD	4	15	mg/L			
		Enterococci	<1	40	CFU/100mL			

Date sampled	21 November 20	018			
Data obtained by Licensee	28 November 20	018			
Monitoring Point	Frequency	Pollutant	Measurement	Limit	Unit

2	Monthly	рН	8.15	6.5-8.5	-
	frequency	TSS	11	50	mg/L
		BOD	<2	20	mg/L
	Monthly	рН	7.84	6.5-8.5	-
	frequency	TSS	8	20	mg/L
		BOD	3	15	mg/L
		Enterococci	<1	40	CFU/100mL

Date sampled	05 December 20	05 December 2018					
Data obtained	12 December 20	018					
by Licensee							
Monitoring	Frequency	Pollutant	Measurement	Limit	Unit		
Point							
2	Monthly	рН	8.13	6.5-8.5	-		
	frequency	TSS	10	50	mg/L		
		BOD	<2	20	mg/L		
4	Monthly	рН	7.86	6.5-8.5	-		
	frequency	TSS	9	20	mg/L		
		BOD	<2	15	mg/L		
		Enterococci	<1	40	CFU/100mL		

Date sampled	23 January 2019							
Data obtained by Licensee	31 January 2019	31 January 2019						
Monitoring Point	Frequency	Pollutant	Measurement	Limit	Unit			
2	Monthly	рН	8.02	6.5-8.5	-			
	frequency	TSS	20	50	mg/L			
		BOD	2	20	mg/L			
4	Monthly	рН	8.05	6.5-8.5	-			
	frequency	TSS	11	20	mg/L			
		BOD	<2	15	mg/L			
		Enterococci	<1	40	CFU/100mL			

Date sampled	13 February 2019						
Data obtained by Licensee	04 March 2019	04 March 2019					
Monitoring Point	Frequency	Pollutant	Measurement	Limit	Unit		
2	Monthly	рН	7.94	6.5-8.5	-		
	frequency	TSS	23	50	mg/L		
		BOD	<2	20	mg/L		
4	Monthly	рН	7.84	6.5-8.5	-		
	frequency	TSS	8	20	mg/L		
		BOD	<2	15	mg/L		
		Enterococci	<1	40	CFU/100mL		

Date sampled	14 March 2019						
Data obtained by Licensee	21 March 2019	21 March 2019					
Monitoring Point	Frequency	Pollutant	Measurement	Limit	Unit		
2	Monthly	рН	8.08	6.5-8.5	-		
	frequency	TSS	<5	50	mg/L		
		BOD	<2	20	mg/L		
4	Monthly	рН	8.02	6.5-8.5	-		
	frequency	TSS	9	20	mg/L		
		BOD	<2	15	mg/L		
		Enterococci	<1	40	CFU/100mL		

Date sampled	14 April 2019						
Data obtained by Licensee	15 May 2019 -	15 May 2019 – results were sent to incorrect recipient					
Monitoring Point	Frequency	Pollutant	Measurement	Limit	Unit		
2	Monthly	рН	7.91	6.5-8.5	-		
	frequency	TSS	<5	50	mg/L		
		BOD	<2	20	mg/L		
4	Monthly	рН	7.91	6.5-8.5	-		
f	frequency	TSS	11	20	mg/L		
		BOD	<2	15	mg/L		
		Enterococci	3	40	CFU/100mL		

Date sampled	08 May 2019				
Data obtained by Licensee	15 May 2019				
Monitoring	Frequency	Pollutant	Measurement	Limit	Unit
Point					
2	Monthly	рН	7.85	6.5-8.5	-
	frequency	TSS	<5	50	mg/L
		BOD	<2	20	mg/L
4	Monthly	рН	No water flow	6.5-8.5	-
	frequency	TSS	during testing	20	mg/L
		BOD	period	15	mg/L
		Enterococci		40	CFU/100mL

Date sampled	19 June 2019				
Data obtained by Licensee	28 June 2019				
Monitoring Point	Frequency	Pollutant	Measurement	Limit	Unit
2	Monthly	рН	7.76	6.5-8.5	-
	frequency	TSS	<5	50	mg/L

		BOD	<2	20	mg/L
4	Monthly	рН	7.85	6.5-8.5	-
	frequency	TSS	20	20	mg/L
		BOD	13	15	mg/L
		Enterococci	130*	40	CFU/100mL

\*Outflow UV sterilisation system equipment (ballasts) ceased operating on 19th June 2019. The faulty ballasts compromised the UV treatment that sterilises the overflow from the buffer tank. In the days leading up to this, there was heavy rain (33mm on 18th June). As a result, on 19th June 2019 and early 20th June 2019 undisinfected overflow water was discharged from the licence premises to Little Sirius Cove. The 2 faulty ballasts on the UV system were unable to be replaced by internal electricians, on 19th June the Asset Operations Manager called and emailed the external equipment maintenance contractor requesting repair on the ballasts. The Licensee undertook measures on 20th June 2019 to prevent any further discharge of undisinfected water. The faulty ballast issue was rectified on 25th June 2019. For all days that the outflow UV system was down (other than the 19th and 20th) the water was circulated through the normal recycled Mentec disinfection system before it went back into the Zoo.

The EPA was notified of the incident in a timely manner, and the PIRMP was reviewed post-incident in line with statutory obligation.

Date sampled*	10 July 2019 – Monitoring Point 4 18 July 2019 – Monitoring Point				
Data obtained by Licensee*	18 July 2019 – Monitoring Point 4 25 July 2019 – Monitoring Poin				
Monitoring Point	Frequency	Pollutant	Measurement	Limit	Unit
2	Monthly	рН	7.99	6.5-8.5	-
	frequency	TSS	<5	50	mg/L
		BOD	<2	20	mg/L
4	Monthly	рН	8.03	6.5-8.5	-
	frequency	TSS	9	20	mg/L
		BOD	2	15	mg/L
		Enterococci	<1	40	CFU/100mL

\*Samples for outflow 2 were not taken on the  $10^{th}$  of July due to ALS timing issues. Samples were taken separately on the  $18^{th}$  of July

Date sampled*	09 August 2019 – Monitoring Point 4 Point 2			07 August 2019 –	Monitoring	
Data obtained by Licensee*	16 August 2019 Point 2	16 August 2019 – Monitoring Point 4 14 August 2019 – Monitoring Point 2				
Monitoring Point	Frequency	Pollutant	Measurement	Limit	Unit	
2	Monthly	рН	7.87	6.5-8.5	-	
	frequency	TSS	<5	50	mg/L	
		BOD	<2	20	mg/L	
4	Monthly	pН	7.20	6.5-8.5	-	
	frequency	TSS	14	20	mg/L	
		BOD	5	15	mg/L	
		Enterococci	<1	40	CFU/100mL	
*Samples for ou	ıtflow 4 were not	taken on the 07 <sup>th</sup>	of August due to	Taronga access is	ssues. Samples	

Date sampled		03 September 2019 – Monitoring Point 2 & 4							
Data obtained		19 September 2019 – Monitoring Point 2 & 4							
by Licensee		19 Septembe	1 2019 – MOHILOH	ing Point 2 & 4					
Monitoring	Frequency	Pollutant	Measurement	Limit	Unit				
Point									
2	Monthly	рН	7.62	6.5-8.5	-				
	frequency	TSS	<5	50	mg/L				
		BOD	<2	20	mg/L				
4	Monthly	рН	7.79	6.5-8.5	-				
	frequency	TSS	7	20	mg/L				
		BOD	2	15	mg/L				
		Enterococci	<1	40	CFU/100mL				

Date sampled	03 October 2019 – Monitoring Point 2 & 4							
Data obtained		11 October 2019 – Monitoring Point 2 & 4						
by Licensee		11 October	2019 – ΜΟΠΙΙΟΠΙΙ	g Pullit 2 & 4				
Monitoring	Frequency	Pollutant	Measurement	Limit	Unit			
Point								
2	Monthly	рН	7.5	6.5-8.5	-			
	frequency	TSS	<5	50	mg/L			
		BOD	<2	20	mg/L			
4	Monthly	рН	7.6	6.5-8.5	-			
	frequency	TSS	<5	20	mg/L			
		BOD	<2	15	mg/L			
		Enterococci	<1	40	CFU/100mL			

Date sampled		06 November 2019 – Monitoring Point 2 & 4						
Data obtained by Licensee		12 November 2019 – Monitoring Point 2 & 4						
Monitoring Point	Frequency	Pollutant	Measurement	Limit	Unit			
2	Monthly	рН	7.91	6.5-8.5	-			
	frequency	TSS	<5	50	mg/L			
		BOD	<2	20	mg/L			
4	Monthly	рН	8	6.5-8.5	-			
	frequency	TSS	<5	20	mg/L			
		BOD	3	15	mg/L			
		Enterococci	<1	40	CFU/100mL			

Date sampled		04 December 2019 – Monitoring Point 2 & 4						
Data obtained		15 January 2020 – Monitoring Point 2 & 4						
by Licensee		15 January		g Pullit 2 & 4				
Monitoring	Frequency	Pollutant	Measurement	Limit	Unit			
Point								
2	Monthly	рН	7.83	6.5-8.5	-			
	frequency	TSS	<5	50	mg/L			
		BOD	<2	20	mg/L			
4	Monthly	рН	7.79	6.5-8.5	-			
freque	frequency	TSS	<5	20	mg/L			
		BOD	<2	15	mg/L			
		Enterococci	<1	40	CFU/100mL			

Date sampled	09 January 2020 – Monitoring Point 2 & 4							
Data obtained	04 February 2020 – Monitoring Point 2 & 4							
by Licensee		04 rebruary	2020 – Wioriitorii	ig i ollit 2 & 4				
Monitoring	Frequency	Pollutant	Measurement	Limit	Unit			
Point								
2	Monthly	рН	7.86	6.5-8.5	-			
	frequency	TSS	<5	50	mg/L			
		BOD	<2	20	mg/L			
4	Monthly	рН	No water flow	6.5-8.5	-			
	frequency	TSS	during testing	20	mg/L			
		BOD	period	15	mg/L			
		Enterococci		40	CFU/100mL			

Date sampled		28 February 2020 – Monitoring Point 2 & 4						
Data obtained		10 March 2020 – Monitoring Point 2 & 4						
by Licensee		10 March 2	2020 – Monitoring	3 PUIIIL 2 & 4				
Monitoring	Frequency	Pollutant	Measurement	Limit	Unit			
Point								
2	Monthly	рН	8.02	6.5-8.5	-			
	frequency	TSS	<5	50	mg/L			
		BOD	<2	20	mg/L			
4	Monthly	рН	7.9	6.5-8.5	-			
	frequency	TSS	8	20	mg/L			
		BOD	2	15	mg/L			
		Enterococci	<1	40	CFU/100mL			

Date sampled	11 March 2020 – Monitoring Point 2 & 4						
Data obtained	18 March 2020 – Monitoring Point 2 & 4						
by Licensee		10 March 2	.020 — Monitoring	3 POINT 2 & 4			
Monitoring	Frequency	Pollutant	Measurement	Limit	Unit		
Point							
2	Monthly	рН	7.87	6.5-8.5	-		
	frequency	TSS	<5	50	mg/L		
		BOD	<2	20	mg/L		
4	Monthly	рН	7.9	6.5-8.5	-		
	frequency	TSS	21*	20	mg/L		
		BOD	3	15	mg/L		
		Enterococci	<1	40	CFU/100mL		

<sup>\*</sup> Sample taken at discharge and monitoring point 4 (water recycling plant) on 11th March 2020 measured 21 miligrams per litre of TSS. The TSS concentration limit stipulated in the licence is 20 mg per litre. When the exceedance was observed, the Water Systems Supervisor notified the Head of Assets (as per the PIRMP). Investigations found that there were no abnormalities in the process that could potentially lead to the elevated level. Because the limit was exceeded by only 5%, a possible explanation may be a sampling and/or laboratory error.

Date sampled		02 April 2020 – Monitoring Point 2 & 4						
Data obtained		09 April 2020 – Monitoring Point 2 & 4						
by Licensee		US April 20	DZO – MOHILOHING	FUIIIL Z & 4				
Monitoring	Frequency	Pollutant	Measurement	Limit	Unit			
Point								
2	Monthly	рН	7.8	6.5-8.5	-			
	frequency	TSS	<5	50	mg/L			
		BOD	<2	20	mg/L			
4	Monthly	рН	7.94	6.5-8.5	-			
	frequency	TSS	8	20	mg/L			
		BOD	<2	15	mg/L			
		Enterococci	<1	40	CFU/100mL			

Date sampled	07 May 2020 – Monitoring Point 2 & 4							
Data obtained by Licensee		14 May 2020 – Monitoring Point 2 & 4						
Monitoring Point	Frequency	Pollutant	Measurement	Limit	Unit			
2	Monthly	рН	7.81	6.5-8.5	-			
	frequency	TSS	<5	50	mg/L			
		BOD	<2	20	mg/L			
4	Monthly	рН	7.89	6.5-8.5	-			
	frequency	TSS	9	20	mg/L			
		BOD	2	15	mg/L			

E	Enterococci <	<1	40	CFU/100mL
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Date sampled	10 June 2020 -Point 2 & 4					
Data obtained by Licensee		17 June 2020 –Point 2 & 4				
EPL monitoring point	Frequency	Pollutant	Measurement	Limit	Unit	
2	Monthly	рН	7.79	6.5-8.5	-	
	frequency	TSS	<5	50	mg/L	
		BOD	2	20	mg/L	
4	Monthly	рН	7.82	6.5-8.5	-	
	frequency	TSS	18	20	mg/L	
		BOD	3	15	mg/L	
		Enterococci	<1	40	CFU/100mL	

Date sampled	2 July 2020 –Point 2 & 4						
Data obtained by Licensee		9 July 2020 –Point 2 & 4					
EPL monitoring point	Frequency	requency Pollutant Measurement Limit Unit					
2	Monthly	рН	7.71	6.5-8.5	-		
	frequency	TSS	<5	50	mg/L		
		BOD	<2	20	mg/L		
4	Monthly	рН	7.75	6.5-8.5	-		
	frequency	TSS	12	20	mg/L		
		BOD	<2	15	mg/L		
		Enterococci	<1	40	CFU/100mL		

Date sampled	12 August 2020 –Point 2 & 4						
Data obtained		21 August 2020 –Point 2 & 4					
by Licensee		21 A(	agust 2020 – Foilit	. 2 0. 4			
EPL	Required	Pollutant	Measurement	Limit	Unit		
monitoring	monitoring						
point	frequency						
2	Fortnightly	рН	7.78	6.5-8.5	-		
		TSS	<5	50	mg/L		
		BOD	<2	20	mg/L		
4	Monthly	рН	7.84	6.5-8.5	-		
		TSS	14	20	mg/L		
		BOD	<2	15	mg/L		
		Enterococci	<1	40	CFU/100mL		

Date sampled	27 August 2020 –Point 2					
Data obtained		2 Cambanahan 2020				
by Licensee		2 September 2020				
EPL	Required	Pollutant	Measurement	Limit	Unit	
monitoring	monitoring					
point	frequency					
2	Fortnightly	рН	7.93	6.5-8.5	-	
		TSS	<5	50	mg/L	
		BOD	<2	20	mg/L	

Date sampled		10 September 2020 –Point 2 & 4					
Data obtained by Licensee		17 September 2020–Point 2 & 4					
EPL monitoring point	Required monitoring frequency	Pollutant	Measurement	Limit	Unit		
2	Fortnightly	рН	7.81	6.5-8.5	-		
		TSS	10	50	mg/L		
		BOD	<2	20	mg/L		
4	Monthly	рН	7.78	6.5-8.5	-		
		TSS	15	20	mg/L		
		BOD	2	15	mg/L		
		Enterococci	<1	40	CFU/100mL		

Date sampled	24 September 2020 –Point 2						
Data obtained		30 September 2020 - Point 2					
by Licensee		30 36	ptember 2020 - F	OIIIt Z			
EPL	Required	Pollutant	Measurement	Limit	Unit		
monitoring	monitoring						
point	frequency						
2	Fortnightly	рН	7.65	6.5-8.5	-		
		TSS	16	50	mg/L		
		BOD	2	20	mg/L		

Date sampled	8 October 2020 –Point 2 & 4						
Data obtained		15 October 2020–Point 2 & 4					
by Licensee		13 00	tobel 2020–Politi	1204			
EPL	Required	Pollutant	Measurement	Limit	Unit		
monitoring	monitoring						
point	frequency						
2	Fortnightly	pН	7.95	6.5-8.5	-		
		TSS	<5	50	mg/L		
		BOD	<2	20	mg/L		
4	Monthly	рН	7.87	6.5-8.5	-		
		TSS	12	20	mg/L		
		BOD	<2	15	mg/L		
		Enterococci	<1	40	CFU/100mL		

Date sampled	22 October 2020 –Point 2					
Data obtained		20 <sup>th</sup>	October 2020 - Po	aint 2		
by Licensee		29 <sup>th</sup> October 2020- Point 2				
EPL	Required	Pollutant	Measurement	Limit	Unit	
monitoring	monitoring					
point	frequency					
2	Fortnightly	pН	7.54	6.5-8.5	-	
		TSS	<5	50	mg/L	
		BOD	<2	20	mg/L	

Date sampled	5 November 2020 –Point 2 & 4					
Data obtained by Licensee		12 November 2020–Point 2 & 4				
EPL monitoring point	Required monitoring frequency	Pollutant	Measurement	Limit	Unit	
2	Fortnightly	рН	7.98	6.5-8.5	-	
		TSS	9	50	mg/L	
		BOD	3	20	mg/L	
4	Monthly	рН	8.33	6.5-8.5	-	
		TSS	15	20	mg/L	
		BOD	16*	15	mg/L	
		Enterococci	~1	40	CFU/100mL	

<sup>\*</sup>Sample taken at discharge and monitoring point 4 (water recycling plant) on 5<sup>th</sup> November 2020 measured 16 mg/L of BOD. The BOD concentration limit stipulated in the licence is 15 mg/L. Investigations have found that there were no abnormalities in the process on the 5th November that could potentially lead to the elevated level. Because the limit was only exceeded by 1 mg/L, a likely explanation may be sampling/and or analysis error.

Date sampled	19 November 2020 –Point 2						
Data obtained		2C Navambar 2020, Daint 2					
by Licensee		26 November 2020- Point 2					
EPL	Required	Pollutant	Measurement	Limit	Unit		
monitoring	monitoring						
point	frequency						
2	Fortnightly	рН	6.98	6.5-8.5	-		
		TSS	13	50	mg/L		
		BOD	<2	20	mg/L		

Date sampled	3 December 2020 –Point 2 & 4						
Data obtained		10 December 2020–Point 2 & 4					
by Licensee		10 Dec	Leitiber 2020–Poli	11 2 0 4			
EPL monitoring point	Required monitoring frequency	Pollutant	Measurement	Limit	Unit		
2	Fortnightly	рН	7.83	6.5-8.5	-		
		TSS	28	50	mg/L		
		BOD	<2	20	mg/L		
4	Monthly	pН	7.87	6.5-8.5	-		
		TSS	8	20	mg/L		

	BOD	<2	15	mg/L
	Enterococci	<1	40	CFU/100mL

Date sampled	17 December 2020 –Point 2				
Data obtained	24 December 2020- Point 2				
by Licensee	24 December 2020- Point 2				
EPL	Required	Pollutant	Measurement	Limit	Unit
monitoring	monitoring				
point	frequency				
2	Fortnightly	рН	7.80	6.5-8.5	-
		TSS	12	50	mg/L
		BOD	<2	20	mg/L

Date sampled	7 <sup>th</sup> January 2021 –Point 2 & 4				
Data obtained by Licensee	13 <sup>th</sup> January 2021–Point 2 & 4				
EPL monitoring point	Required monitoring frequency	Pollutant	Measurement	Limit	Unit
2	Fortnightly	рН	7.94	6.5-8.5	-
		TSS	<5	50	mg/L
		BOD	<2	20	mg/L
4	Monthly	рН	7.62	6.5-8.5	-
		TSS	14	20	mg/L
		BOD	<2	15	mg/L
		Enterococci	<1	40	CFU/100mL

Date sampled	21 <sup>st</sup> January 2021 –Point 2				
Data obtained	20th January 2021 Daint 2				
by Licensee	28 <sup>th</sup> January 2021- Point 2				
EPL	Required	Pollutant	Measurement	Limit	Unit
monitoring	monitoring				
point	frequency				
2	Fortnightly	рН	7.89	6.5-8.5	-
		TSS	17	50	mg/L
		BOD	<2	20	mg/L

Date sampled	4 <sup>th</sup> Feb 2021 –Point 2 & 4					
Data obtained	11 <sup>th</sup> Feb 2021–Point 2 & 4					
by Licensee	11" Feb 2021–Point 2 & 4					
EPL	Required	Pollutant	Measurement	Limit	Unit	
monitoring	monitoring					
point	frequency					
2	Fortnightly	рН	7.68	6.5-8.5	-	
		TSS	6	50	mg/L	
		BOD	<2	20	mg/L	
4	Monthly	рН	6.87	6.5-8.5	-	
		TSS	7	20	mg/L	
		BOD	<2	15	mg/L	

Enterococci <1 40	CFU/100mL
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Date sampled	18 February 2021 –Point 2				
Data obtained		25.5	ebruary 2021- Po	int 2	
by Licensee		23 F	ebidary 2021- Po	1111, 2	
EPL	Required	Pollutant	Measurement	Limit	Unit
monitoring	monitoring				
point	frequency				
2	Fortnightly	рН	7.73	6.5-8.5	-
		TSS	<5	50	mg/L
		BOD	<2	20	mg/L

Date sampled	4 <sup>th</sup> March 2021 –Point 2 & 4						
Data obtained		16 <sup>th</sup> March 2021–Point 2 & 4					
by Licensee		10 1	/idicii 2021–Poiiit	. 2 0 4			
EPL	Required	Pollutant	Measurement	Limit	Unit		
monitoring	monitoring						
point	frequency						
2	Fortnightly	рН	7.74	6.5-8.5	-		
		TSS	<5	50	mg/L		
		BOD	<2	20	mg/L		
4	Monthly	рН	7.93	6.5-8.5	-		
		TSS	10	20	mg/L		
		BOD	3	15	mg/L		
		Enterococci	<1	40	CFU/100mL		

Date sampled	18 March 2021 –Point 2				
Data obtained		25	March 2021- Poir	nt 2	
by Licensee		23	IVIAICII 2021- POII	11, 2	
EPL	Required	Pollutant	Measurement	Limit	Unit
monitoring	monitoring				
point	frequency				
2	Fortnightly	рН	7.74	6.5-8.5	-
		TSS	8	50	mg/L
		BOD	2	20	mg/L

Date sampled	1 <sup>st</sup> April 2021 –Point 2 & 4					
Data obtained		9 <sup>th</sup> April 2021–Point 2 & 4				
by Licensee		9 F	Aprii 2021–Pollit 2	2 0 4		
EPL	Required	Pollutant	Measurement	Limit	Unit	
monitoring	monitoring					
point	frequency					
2	Fortnightly	рН	7.88	6.5-8.5	-	
		TSS	<5	50	mg/L	
		BOD	<2	20	mg/L	
4	Monthly	рН	7.92	6.5-8.5	-	
		TSS	<5	20	mg/L	
		BOD	2	15	mg/L	
		Enterococci	<1	40	CFU/100mL	

Date sampled	15 <sup>th</sup> April 2021 – Point 2				
Data obtained		221	<sup>nd</sup> April 2021- Poir	n+ 2	
by Licensee		22	April 2021- Poli	11, 2	
EPL	Required	Pollutant	Measurement	Limit	Unit
monitoring	monitoring				
point	frequency				
2	Fortnightly	рН	8.07	6.5-8.5	-
		TSS	<5	50	mg/L
		BOD	<2	20	mg/L

Date sampled	29 <sup>th</sup> Apr 2021 – Point 2 & 4				
Data obtained		<b>7</b> th <b>N</b>	Лау 2021– Point 2	2. 4	
by Licensee		/ · I	viay 2021— Politi 2	2 0 4	
EPL	Required	Pollutant	Measurement	Limit	Unit
monitoring	monitoring				
point	frequency				
2	Fortnightly	рН	7.84	6.5-8.5	-
		TSS	<5	50	mg/L
		BOD	<2	20	mg/L
4	Monthly	рН	7.59	6.5-8.5	-
		TSS	<5	20	mg/L
		BOD	11	15	mg/L
		Enterococci	<1	40	CFU/100mL

Date sampled	13 May 2021 –Point 2				
Data obtained		20	0 May 2021- Point	+ 7	
by Licensee		20	Jiviay 2021- Politi	ι 2	
EPL	Required	Pollutant	Measurement	Limit	Unit
monitoring	monitoring				
point	frequency				
2	Fortnightly	рН	7.73	6.5-8.5	-
		TSS	26	50	mg/L
		BOD	3	20	mg/L

Date sampled	26 May 2021 –Point 2				
Data obtained		7	! June 2021- Point	· 2	
by Licensee		2	Julie 2021- Politi	. 2	
EPL	Required	Pollutant	Measurement	Limit	Unit
monitoring	monitoring				
point	frequency				
2	Fortnightly	рН	7.98	6.5-8.5	-
		TSS	<5	50	mg/L
		BOD	5	20	mg/L

Date sampled	15 <sup>th</sup> June 2021 – Point 2 & 4					
Data obtained	22 <sup>nd</sup> June 2021– Point 2 & 4					
by Licensee		ZZ <sup></sup> June 2021– Point 2 & 4				
EPL	Required	Pollutant	Measurement	Limit	Unit	
monitoring	monitoring					
point	frequency					

2	Fortnightly	рН	7.78	6.5-8.5	-
		TSS	14	50	mg/L
		BOD	<2	20	mg/L
4	Monthly	рН	7.83	6.5-8.5	-
		TSS	13	20	mg/L
		BOD	<2	15	mg/L
		Enterococci	<1	40	CFU/100mL

Date sampled	29 <sup>th</sup> June 2021 - Point 2				
Data obtained		<b>7</b> t	h July 2021 - Point	÷ 7	
by Licensee		,	July 2021 - Politi	l Z	
EPL	Required	Pollutant	Measurement	Limit	Unit
monitoring	monitoring				
point	frequency				
2	Fortnightly	рН	7.58	6.5-8.5	-
		TSS	<5	50	mg/L
		BOD	<2	20	mg/L

Date sampled	13 <sup>th</sup> July 2021 – Point 2 & 4				
Data obtained	20 <sup>th</sup> July 2021– Point 2 & 4				
by Licensee		20	July 2021— Pollit A	2 0 4	
EPL	Required	Pollutant	Measurement	Limit	Unit
monitoring	monitoring				
point	frequency				
2	Fortnightly	рН	7.76	6.5-8.5	-
		TSS	<5	50	mg/L
		BOD	<2	20	mg/L
4	Monthly	рН	7.76	6.5-8.5	-
		TSS	10	20	mg/L
		BOD	<2	15	mg/L
		Enterococci	<1	40	CFU/100mL

Date sampled	27 <sup>th</sup> July 2021 - Point 2				
Data obtained		<b>ɔ</b> r	d Aug 2021 - Point	+ n	
by Licensee		3	Aug 2021 - Politi	1. 2	
EPL	Required	Pollutant	Measurement	Limit	Unit
monitoring	monitoring				
point	frequency				
2	Fortnightly	pН	7.89	6.5-8.5	-
		TSS	6	50	mg/L
		BOD	<2	20	mg/L

Date sampled	10 Aug 2021- Point 2						
Data obtained	17 Aug 2021 Point 2						
by Licensee		17 Aug 2021- Point 2					
EPL	Required	Pollutant	Measurement	Limit	Unit		
monitoring	monitoring						
point	frequency						
2	Fortnightly	рН	6.9	6.5-8.5	-		

	TSS	<5	50	mg/L
	BOD	<2	20	mg/L

Point 4 samples were cancelled because the WWTP was switched-off for cleaning. Samples will be conducted at WWTP in mid to late August.

Date sampled	24 <sup>th</sup> Aug 2021 – Point 2 & 4					
Data obtained	30 <sup>th</sup> August 2021– Point 2 & 4					
by Licensee		30 A	ugust 2021– Polii	1204		
EPL	Required	Pollutant	Measurement	Limit	Unit	
monitoring	monitoring					
point	frequency					
2	Fortnightly	рН	7.30	6.5-8.5	-	
		TSS	<5	50	mg/L	
		BOD	3	20	mg/L	
4	Monthly	рН	6.56	6.5-8.5	-	
		TSS	36*	20	mg/L	
		BOD	4	15	mg/L	
		Enterococci	<1	40	CFU/100mL	

<sup>\*</sup>The likely cause of TSS exceedance was heavy rain (30+mm) and water flow through the system increasing significantly. The clarifier had just been restarted from a major clean, and probably the increase of the flow induced wash out of some sludge remains.

Date sampled	7 <sup>th</sup> Sep 2021 – Point 2					
Data obtained by Licensee	14 <sup>th</sup> Sep 2021 - Point 2					
EPL monitoring point	Required monitoring frequency	Pollutant	Measurement	Limit	Unit	
2	Fortnightly	рН	7.95	6.5-8.5	-	
		TSS	20	50	mg/L	
		BOD	<2	20	mg/L	

Date sampled	21 <sup>st</sup> Sep 2021 – Point 2 & 4						
Data obtained	28 <sup>th</sup> Sep 2021– Point 2 & 4						
by Licensee		20	Sep 2021— Pollit	2 0 4			
EPL	Required	Pollutant	Measurement	Limit	Unit		
monitoring	monitoring						
point	frequency						
2	Fortnightly	рН	8.01	6.5-8.5	-		
		TSS	36	50	mg/L		
		BOD	<2	20	mg/L		
4	Monthly	pН	7.77	6.5-8.5	-		
		TSS	<5	20	mg/L		
		BOD	2	15	mg/L		
		Enterococci	<1	40	CFU/100mL		

Date sampled	5 <sup>th</sup> Oct 2021 – Point 2
Data obtained	11 <sup>th</sup> Sep 2021 - Point 2

by Licensee					
EPL monitoring point	Required monitoring frequency	Pollutant	Measurement	Limit	Unit
2	Fortnightly	рН	6.79	6.5-8.5	-
		TSS	<5	50	mg/L
		BOD	<2	20	mg/L

Date sampled	19 <sup>th</sup> Oct 2021 – Point 2 & 4						
Data obtained by Licensee		26 <sup>th</sup> Oct 2021– Point 2 & 4					
EPL monitoring point	Required monitoring frequency	nonitoring					
2	Fortnightly	рН	7.86	6.5-8.5	-		
		TSS	12	50	mg/L		
		BOD	2	20	mg/L		
4	Monthly	рН	7.64	6.5-8.5	-		
		TSS	8	20	mg/L		
		BOD	<2	15	mg/L		
		Enterococci	<1	40	CFU/100mL		

Date sampled	2 <sup>nd</sup> Nov 2021 – Point 2				
Data obtained by Licensee	10 <sup>th</sup> Nov 2021 - Point 2				
EPL monitoring point	Required monitoring frequency	Pollutant	Measurement	Limit	Unit
2	Fortnightly	pH	7.75	6.5-8.5	-
		TSS	<5	50	mg/L
		BOD	<2	20	mg/L

Date sampled	16 <sup>th</sup> Nov 2021 – Point 2 & 4							
Data obtained		23 <sup>rd</sup> Nov 2021– Point 2 & 4						
by Licensee		25	NOV 2021— POIIIL	2 0 4				
EPL	Required	Pollutant	Measurement	Limit	Unit			
monitoring	monitoring							
point	frequency							
2	Fortnightly	рН	8.01	6.5-8.5	-			
		TSS	8	50	mg/L			
		BOD	<2	20	mg/L			
4	Monthly	рН	7.95	6.5-8.5	-			
		TSS	12	20	mg/L			
		BOD *	32	15	mg/L			
		Enterococci	<1	40	CFU/100mL			

<sup>\*</sup>Sample showed elevated levels of Biochemical Oxygen Demand at point 4 (Water treatment plant). The reading was 32 mg/L and the Licence stipulates a limit of 15 mg/L. On that day, other parameters like TSS and enterococci were within the limits stipulated in our Licence. There weren't any signs of water quality deteriorating on the sampling day nor on the day before. We have investigated potential causes for the elevated BOD, and believe the likely cause is that stagnant

water in 'Styx yard tanks' had an unscheduled clean and drop, and this caused high BOD at the WWTP when this water was dropped. Therefore, is considered a 'once off' incident (it is worth noting that we have not had an exceedance of BOD for several years besides one sampling error). To prevent reoccurrence, we will drain these 'Styx yard tanks' more frequently to allow water to better exchange. Because BOD correlates with TSS, we are ensuring that TSS is in normal range, for example by checking UV intensity parameters at the discharge Point 4 UV system. In terms of our WWTP equipment, all systems are running as normal and no faults have been reported.

Date sampled	30th Nov 2021 – Point 2						
Data obtained		7th Dog 2021					
by Licensee		7 <sup>th</sup> Dec 2021 - Point 2					
EPL	Required	Pollutant	Measurement	Limit	Unit		
monitoring	monitoring						
point	frequency						
2	Fortnightly	рН	7.66	6.5-8.5	-		
		TSS	9	50	mg/L		
		BOD	2	20	mg/L		

Date sampled	14 <sup>th</sup> Dec 2021 – Point 2 & 4						
Data obtained	22 <sup>nd</sup> Dec 2021– Point 2 & 4						
by Licensee		22	DCC 2021 TOINC	2 0 4			
EPL	Required	Pollutant	Measurement	Limit	Unit		
monitoring	monitoring						
point	frequency						
2	Fortnightly	рН	8.17	6.5-8.5	-		
		TSS	19	50	mg/L		
		BOD	<2	20	mg/L		
4	Monthly	рН	7.96	6.5-8.5	-		
		TSS	13	20	mg/L		
		BOD	2	15	mg/L		
		Enterococci	<1	40	CFU/100mL		

Date sampled	21 <sup>st</sup> Dec 2021 – Point 2						
Data obtained		30 <sup>th</sup> Dec 2021 - Point 2					
by Licensee		30	Dec 2021 - Polit	11. 2			
EPL	Required	Pollutant	Measurement	Limit	Unit		
monitoring	monitoring						
point	frequency						
2	Fortnightly	рН	7.44	6.5-8.5	-		
		TSS	23	50	mg/L		
		BOD	<2	20	mg/L		

Date sampled	11 <sup>th</sup> Jan 2022 – Point 2 & 4						
Data obtained		10th Ion 2022 Reint 2.8.4					
by Licensee		18 <sup>th</sup> Jan 2022– Point 2 & 4					
EPL	Required	Pollutant	Measurement	Limit	Unit		
monitoring	monitoring						
point	frequency						
2	Fortnightly	рН	7.68	6.5-8.5	-		
		TSS	64*	50	mg/L		

		BOD	5	20	mg/L
4	Monthly	рН	8	6.5-8.5	-
		TSS	<5	20	mg/L
		BOD	<2	15	mg/L
		Enterococci	<1	40	CFU/100mL

\*Sample showed elevated levels of Total Suspended Solids. On that day, other parameters like pH and BOD were within the limits stipulated in our Licence. Enterococci levels at Point 2 were also low, at 12 CFU/100mL. We have investigated the potential cause of the elevated TSS and found that there was no process changes or functional issues that could cause exceedance in TSS on that day. Therefore, is considered a 'once off' incident or sampling error. In terms of our existing equipment, all systems are running as normal and no faults have been reported.

Date sampled	25th Jan 2022 – Point 2						
Data obtained		1 <sup>St</sup> Fob 2022					
by Licensee		1 <sup>st</sup> Feb 2022 - Point 2					
EPL	Required	Pollutant	Measurement	Limit	Unit		
monitoring	monitoring						
point	frequency						
2	Fortnightly	рН	7.89	6.5-8.5	-		
		TSS	10	50	mg/L		
		BOD	2	20	mg/L		

Date sampled	8 <sup>th</sup> Feb 2022 – Point 2 & 4							
Data obtained by Licensee		14 <sup>th</sup> Feb 2022– Point 2 & 4						
EPL monitoring point	Required monitoring frequency	onitoring						
2	Fortnightly	рН	7.55	6.5-8.5	-			
		TSS	12	50	mg/L			
		BOD	<2	20	mg/L			
4	Monthly	рН	7.49	6.5-8.5	-			
		TSS	8	20	mg/L			
		BOD	<2	15	mg/L			
		Enterococci	<1	40	CFU/100mL			

Date sampled	22 <sup>nd</sup> Feb 2022 – Point 2						
Data obtained by Licensee	28 <sup>th</sup> Feb 2022 - Point 2						
EPL monitoring point	Required monitoring frequency	Pollutant	Measurement	Limit	Unit		
2	Fortnightly	рН	8.25	6.5-8.5	-		
		TSS	10	50	mg/L		
		BOD	<2	20	mg/L		

Date sampled	8 <sup>th</sup> March 2022 – Point 2 & 4
Data obtained	15 <sup>th</sup> March 2022– Point 2 & 4

by Licensee					
EPL monitoring point	Required monitoring frequency	Pollutant	Measurement	Limit	Unit
2	Fortnightly	рН	8.25	6.5-8.5	-
		TSS	41	50	mg/L
		BOD	5	20	mg/L
4	Monthly	pН	8.29	6.5-8.5	-
		TSS	15	20	mg/L
		BOD	<2	15	mg/L
		Enterococci	~4	40	CFU/100mL

Date sampled	22 <sup>nd</sup> March 2022 – Point 2						
Data obtained		29 <sup>th</sup> March 2022 - Point 2					
by Licensee		23	IVIAICII 2022 - FO	IIIL Z			
EPL	Required	Pollutant	Measurement	Limit	Unit		
monitoring	monitoring						
point	frequency						
2	Fortnightly	рН	7.93	6.5-8.5	-		
		TSS	30	50	mg/L		
		BOD	<2	20	mg/L		

Date sampled	5 <sup>th</sup> April 2022 – Point 2 & 4						
Data obtained	12 <sup>th</sup> April 2022– Point 2 & 4						
by Licensee		12 /	April 2022– Politi	2 0 4			
EPL	Required	Pollutant	Measurement	Limit	Unit		
monitoring	monitoring						
point	frequency						
2	Fortnightly	рН	7.81	6.5-8.5	-		
		TSS	6	50	mg/L		
		BOD	<2	20	mg/L		
4	Monthly	рН	8.15	6.5-8.5	-		
		TSS	14	20	mg/L		
		BOD	<2	15	mg/L		
		Enterococci	<1	40	CFU/100mL		

Date sampled	19 <sup>th</sup> April 2022 – Point 2					
Data obtained	26 <sup>th</sup> April 2022 - Point 2					
by Licensee	26" April 2022 - Politt 2					
EPL	Required	Pollutant	Measurement	Limit	Unit	
monitoring	monitoring					
point	frequency					
2	Fortnightly	рН	8.43	6.5-8.5	-	
		TSS	20	50	mg/L	
		BOD	2	20	mg/L	

Date sampled	3 <sup>rd</sup> May 2022 – Point 2 & 4
Data obtained	10 <sup>th</sup> May 2022– Point 2 & 4
by Licensee	10 IVIAY 2022— POINT 2 & 4

EPL monitoring point	Required monitoring frequency	Pollutant	Measurement	Limit	Unit
2	Fortnightly	рН	7.67	6.5-8.5	-
		TSS	<5	50	mg/L
		BOD	<2	20	mg/L
4	Monthly	рН	7.89	6.5-8.5	-
		TSS	<5	20	mg/L
		BOD	2	15	mg/L
		Enterococci	<1	40	CFU/100mL

Date sampled	17 <sup>th</sup> May 2022 – Point 2					
Data obtained	26 <sup>th</sup> May 2022 Point 2					
by Licensee	26 <sup>th</sup> May 2022 - Point 2					
EPL	Required	Pollutant	Measurement	Limit	Unit	
monitoring	monitoring					
point	frequency					
2	Fortnightly	рH	7.97	6.5-8.5	-	
		TSS	13	50	mg/L	
		BOD	<2	20	mg/L	

Date sampled	31 <sup>st</sup> May 2022– Point 2 & 4					
Data obtained by Licensee	8 <sup>th</sup> June 2022– Point 2 & 4					
EPL monitoring point	Required monitoring frequency	Pollutant	Measurement	Limit	Unit	
2	Fortnightly	рН	7.49	6.5-8.5	-	
		TSS	12	50	mg/L	
		BOD	<2	20	mg/L	
4	Monthly	рН	8.0	6.5-8.5	-	
		TSS	6	20	mg/L	
		BOD	<2	15	mg/L	
		Enterococci	<1	40	CFU/100mL	

Date sampled	14 <sup>th</sup> June 2022 – Point 2					
Data obtained	21 <sup>st</sup> June 2022 - Point 2					
by Licensee	21 Julie 2022 - POIIIL 2					
EPL	Required	Pollutant	Measurement	Limit	Unit	
monitoring	monitoring					
point	frequency					
2	Fortnightly	рН	7.63	6.5-8.5	-	
		TSS	24	50	mg/L	
		BOD	<2	20	mg/L	

Date sampled   28 <sup>st</sup> June 2022– Point 2 & 4
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Data obtained by Licensee	5 <sup>th</sup> Jul 2022– Point 2 & 4						
EPL monitoring point	Required monitoring frequency	Pollutant	Measurement	Limit	Unit		
2	Fortnightly	рН	7.60	6.5-8.5	-		
		TSS	16	50	mg/L		
		BOD	2	20	mg/L		
4	Monthly	рН	7.58	6.5-8.5	-		
		TSS	6	20	mg/L		
		BOD	2	15	mg/L		
		Enterococci	<1	40	CFU/100mL		

Date sampled	12 <sup>th</sup> Jul 2022 – Point 2					
Data obtained	19 <sup>th</sup> Jul 2022 - Point 2					
by Licensee	19° Jul 2022 - POINT 2					
EPL	Required	Pollutant	Measurement	Limit	Unit	
monitoring	monitoring					
point	frequency					
2	Fortnightly	рН	8	6.5-8.5	-	
		TSS	30	50	mg/L	
		BOD	<2	20	mg/L	

Date sampled	26 <sup>th</sup> Jul 2022– Point 2 & 4							
Data obtained	2 <sup>nd</sup> Aug 2022– Point 2 & 4							
by Licensee								
EPL	Required	Pollutant	Measurement	Limit	Unit			
monitoring	monitoring							
point	frequency							
2	Fortnightly	рН	7.8	6.5-8.5	-			
		TSS	14	50	mg/L			
		BOD	<2	20	mg/L			
4	Monthly	рН	7.93	6.5-8.5	-			
		TSS	10	20	mg/L			
		BOD	3	15	mg/L			
		Enterococci	~1	40	CFU/100mL			

Date sampled	9 <sup>th</sup> Aug 2022 – Point 2					
Data obtained	16 <sup>th</sup> Aug 2022 Point 2					
by Licensee	16 <sup>th</sup> Aug 2022 - Point 2					
EPL	Required	Pollutant	Measurement	Limit	Unit	
monitoring	monitoring					
point	frequency					
2	Fortnightly	рН	7.85	6.5-8.5	-	
		TSS	35	50	mg/L	
		BOD	2	20	mg/L	

Date sampled	23 <sup>rd</sup> Aug 2022 – Point 2 & 4					
Data obtained by Licensee	30 <sup>th</sup> Aug 2022– Point 2 & 4					
EPL monitoring point	Required monitoring frequency	Pollutant	Measurement	Limit	Unit	
2	Fortnightly	рН	7.92	6.5-8.5	-	
		TSS	<5	50	mg/L	
		BOD	2	20	mg/L	
4	Monthly	рН	7.91	6.5-8.5	-	
		TSS	26*	20	mg/L	
		BOD	2	15	mg/L	
		Enterococci	<1	40	CFU/100mL	

\*Point 4 measured 26mg/L for Total Suspended Solids, whereas the limit stipulated on our Licence is 20mg/L. Cause of this slight exceedance was investigated and believed to be related to a blockage of the Rotork valve at the Water Treatment Plant. Just prior to the sampling event this blockage was detected, and the blocked valve was unblocked which restored normal flow to the downstream treatment system. During and after pipe unblockage there was increased velocities of water to the buffer tank and then to sampling Point 4. The tail of this 'first flash' was captured in the sampling event.

Date sampled	6 <sup>th</sup> Sep 2022 - Point 2					
Data obtained		13 <sup>th</sup> Sep 2022 - Point 2				
by Licensee		15 Sep 2022 - Point 2				
EPL	Required	Pollutant	Measurement	Limit	Unit	
monitoring	monitoring					
point	frequency					
2	Fortnightly	рН	7.98	6.5-8.5	-	
		TSS	14	50	mg/L	
		BOD	2	20	mg/L	

Date sampled	20 <sup>th</sup> Sep 2022 – Point 2 & 4					
Data obtained		28 <sup>th</sup> Sep 2022– Point 2 & 4				
by Licensee		20	Sep 2022- Point	2 0 4		
EPL	Required	Pollutant	Measurement	Limit	Unit	
monitoring	monitoring					
point	frequency					
2	Fortnightly	рН	7.95	6.5-8.5	-	
		TSS	<5	50	mg/L	
		BOD	<2	20	mg/L	
4	Monthly	рН	7.78	6.5-8.5	-	
		TSS	8	20	mg/L	
		BOD	<2	15	mg/L	
		Enterococci	<1	40	CFU/100mL	

Date sampled	4 <sup>th</sup> Oct 2022 - Point 2
Data obtained	11 <sup>th</sup> Oct 2022 - Point 2

by Licensee					
EPL monitoring point	Required monitoring frequency	Pollutant	Measurement	Limit	Unit
2	Fortnightly	рН	7.69	6.5-8.5	-
		TSS	10	50	mg/L
		BOD	2	20	mg/L

Date sampled	20 <sup>th</sup> October 2022 – Point 2 & 4				
Data obtained by Licensee		27 <sup>th</sup> (	October 2022– Poir	nt 2 & 4	
EPL monitoring point	Required monitoring frequency	Pollutant	Measurement	Limit	Unit
2	Fortnightly	pH TSS BOD	7.89 <5 <2	6.5-8.5 50 20	- mg/L mg/L
4	Monthly	pH TSS BOD Enterococci	7.85 14 <2 <1	6.5-8.5 20 15 40	- mg/L mg/L CFU/100mL

1 <sup>st</sup> November 2022 – Point 2 & 4				
8 <sup>th</sup> November 2022– Point 2 & 4				
lequired nonitoring requency	Pollutant	Measurement	Limit	Unit
ortnightly	рН	7.94	6.5-8.5	-
	TSS	<5	50	mg/L
	BOD	<2	20	mg/L
/lonthly	рН	7.85	6.5-8.5	-
	TSS	14	20	mg/L
	BOD	<2	15	mg/L
	Enterococci	<1	40	CFU/100mL
r	nonitoring equency ortnightly	equired Pollutant conitoring equency ortnightly PH TSS BOD Control PH TSS BOD TSS BOD	equired pollutant Measurement monitoring equency portnightly pH 7.94  TSS <5  BOD <2  Ionthly pH 7.85  TSS 14  BOD <2	equired nonitoring equency prtnightly

Date sampled	15th November 2022 – Point 2 & 4						
Data obtained by Licensee		22nd November 2022– Point 2 & 4					
EPL monitoring point	Required monitoring frequency	Pollutant	Measurement	Limit	Unit		
2	Fortnightly	pН	7.69	6.5-8.5	-		
		TSS	<5	50	mg/L		
		BOD	<2	20	mg/L		
4	Monthly	рН	8.01	6.5-8.5	-		
		TSS	13	20	mg/L		
		BOD	2	15	- mg/L mg/L -		
		Enterococci	<1	40	CFU/100mL		
		Enterococci	<1	40	CFU/100mL		

Date sampled	30th November 2022 – Point 2						
Data obtained by Licensee		7 <sup>th</sup> December 2022– Point 2					
EPL monitoring point	Required monitoring frequency	Pollutant	Measurement	Limit	Unit		
2	Fortnightly	рН	7.82	6.5-8.5	-		
	TSS	47	50	mg/L			
		BOD	22	20	mg/L		

Date sampled	13 <sup>th</sup> December 2022 – Point 2 & 4				
Data obtained by Licensee		20 <sup>th</sup> De	ecember 2022– Po	int 2 & 4	
EPL monitoring point	Required monitoring frequency	Pollutant	Measurement	Limit	Unit
2	Fortnightly	pH TSS BOD	8.00 5 <2	6.5-8.5 50 20	- mg/L mg/L
4	Monthly	pH TSS BOD Enterococci	7.9 20 3 <1	6.5-8.5 20 15 40	mg/L mg/L CFU/100mL

Date sampled	17 <sup>th</sup> January 2023 – Point 2 & 4				
Data obtained by Licensee		23 <sup>rd</sup> J	anuary 2023– Poir	nt 2 & 4	
EPL monitoring point	Required monitoring frequency	Pollutant	Measurement	Limit	Unit
2	Fortnightly	pH TSS BOD	7.93 <5 <2	6.5-8.5 50 20	- mg/L mg/L
4	Monthly	pH TSS BOD Enterococci	7.78 13 <2 <1	6.5-8.5 20 15 40	- mg/L mg/L CFU/100mL

Date sampled	31st January 2023 – Point 2				
Data obtained by Licensee		7 <sup>t</sup>	h February 2023– Po	oint 2	
EPL monitoring point	Required monitoring frequency	Pollutant	Measurement	Limit	Unit
2	Fortnightly	рН	8.01	6.5-8.5	-
		TSS	<5	50	mg/L
		BOD	<2	20	mg/L