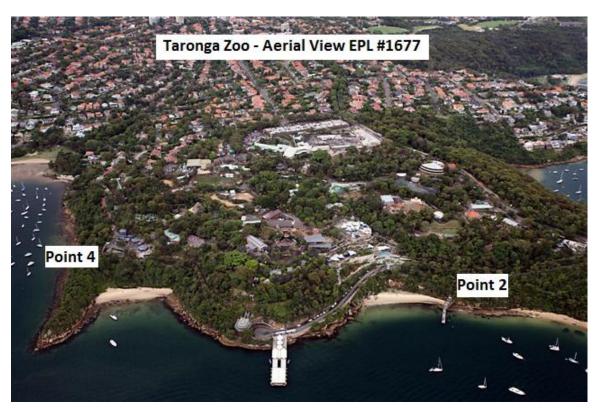
Taronga Zoo holds an Environment Protection Licence (EPL #: 1677) to discharge water into Sydney Harbour. This licence is issued under the Protection of the Environment Operations Act 1997 (POEO Act).

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 203	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	Frequency	Pollutant	Measurement	Limit	Unit
Point					
2	Monthly	pН	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	Frequency	Pollutant	Measurement	Limit	Unit
Point					
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	рН	8.1	-	-		
	frequency	TSS	<2	50	mg/L		
		BOD	<2	20	mg/L		
4	Monthly	рН	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 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 201	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				
Data obtained by Licensee	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						
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	14 August 201	5				
by Licensee						
Monitoring	Frequency	Pollutant	Measurement	Limit	Unit	
Point						
2	Monthly	рН	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 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 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 20	26 February 2016						
Monitoring Point	Frequency	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 2	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 2016						
Data obtained by Licensee	3 November 20	3 November 2016					
Monitoring Point	Frequency	Pollutant	Measurement	Limit	Unit		
2	Monthly	pН	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 Point	Frequency	Pollutant	Measurement	Limit	Unit		
2	Monthly	pН	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	21 March 2017				
by Licensee					
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	7.60	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	рН	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	pН	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 201	20 October 2017					
Data obtained	26 October 201	7					
by Licensee							
Monitoring	Frequency	Pollutant	Measurement	Limit	Unit		
Point							
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 2	04 December 2017						
Monitoring Point	Frequency	Pollutant	Measurement	Limit	Unit			
2	Monthly	рН	8	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	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	pН	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 20	26 February 2018						
Monitoring Point	Frequency	Pollutant	Measurement	Limit	Unit			
2	Monthly	pH	8.14	6.5-8.5	-			
	frequency	TSS	43	50	mg/L			
		BOD	<2	20	mg/L			
4	Monthly	рН	7.76	6.5-8.5	-			
	frequency	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	рН	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	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	рН	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	-			
frequ	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
4	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 2018							
Data obtained by Licensee	12 December 2	12 December 2018						
Monitoring Point	Frequency	Pollutant	Measurement	Limit	Unit			
2	Monthly	pН	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 201	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		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					
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	-			
	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 Point	Frequency	Pollutant	Measurement	Limit	Unit
2	Monthly	pН	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 – Mc	onitoring Point 2	
Data obtained by Licensee*	18 July 2019 –	18 July 2019 – Monitoring Point 4 25 July 2019 – Monitoring Point				
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	

<sup>\*</sup>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	09 August 201	L9 – Monitoring Po	oint 4	07 August 2019 – Monitoring			
sampled*	Point 2	Point 2					
Data obtained by Licensee*	16 August 201 Point 2	16 August 2019 – Monitoring Point 4 14 August 2019 – Monitoring Point 2					
Monitoring	Frequency	Pollutant	Measurement	Limit	Unit		
Point 2	Monthly	pH	7.87	6.5-8.5	_		
2	frequency	TSS	<5	50	mg/L		
		BOD	<2	20	mg/L		
4	Monthly	рН	7.20	6.5-8.5	-		
	frequency	TSS	14	20	mg/L		
		BOD	5	15	mg/L		
		Enterococci	<1	40	CFU/100mL		

Date sampled		03 September 2019 – Monitoring Point 2 & 4						
Data obtained		19 September 2019 – Monitoring Point 2 & 4						
by Licensee		13 Septembe	i 2019 – Monitori	ing Fullit 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 Z & 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	pН	7.6	6.5-8.5	-			
fre	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	Frequency	Pollutant	Measurement	Limit	Unit			
Point								
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	2020 – ΜΟΠΙΙΟΠΙΙ	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	-			
	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				
	I	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 — IVIOTITOTITIE	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		TO MIGICII Z	.020 — Monitoring	3 POIIIL 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		U9 April 20	J20 – Monitoring	POIIIL 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	Frequency	Pollutant	Measurement	Limit	Unit		
Point							
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		

	Enterococci	<1	40	CFU/100mL

Date sampled	10 June 2020 –Point 2 & 4				
Data obtained		17 1	une 2020 –Point 2	) Ω. Λ	
by Licensee		17 30	une 2020 Font 2	2 0. 4	
EPL	Frequency	Pollutant	Measurement	Limit	Unit
monitoring					
point					
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 Λ	ugust 2020 –Point	- 2 2 4			
by Licensee		21 A	ugust 2020 –Poiiti	. 2 & 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 September 2020	n			
by Licensee			z september zozi	U			
EPL	Required	Pollutant	Measurement	Limit	Unit		
monitoring	monitoring						
point	frequency						
2	Fortnightly	ortnightly pH 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 Se	ptember 2020 - P	OIIIt 2			
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	vint 2			
by Licensee		29	October 2020- PC	JIIIL Z			
EPL	Required	Pollutant	Measurement	Limit	Unit		
monitoring	monitoring						
point	frequency						
2	Fortnightly	Fortnightly pH 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		12 November 2020–Point 2 & 4					
by Licensee		12 1100	rember 2020–Poli	11 2 0 4			
EPL	Required	Pollutant	Measurement	Limit	Unit		
monitoring	monitoring						
point	frequency						
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		26 N	ovember 2020- Po	oint 2			
by Licensee		20 110	overriber 2020- Pr	JIIIL Z			
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 Dec	ember 2020–Poii	nt 2 & 1			
by Licensee		10 Dec	terriber 2020-r on	11 2 0 4			
EPL monitoring point	Required monitoring frequency	nonitoring					
2	Fortnightly	рН	7.83	6.5-8.5	-		
		TSS	28	50	mg/L		
		BOD	<2	20	mg/L		
4	Monthly	рН	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	monitoring						
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	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	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 Fobruary 2021 Point 2					
by Licensee	25 February 2021- Point 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° Walch 2021–Point 2 & 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- Point 2					
by Licensee	25 March 2021- Point 2					
EPL	Required	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	