# North Richmond Wastewater Treatment Plant June Pollution Monitoring Summary



# **EPL 190**

Summary period: 01-06-2018 to 30-06-2018 Licensee: Sydney Water Corporation

Date obtained: 05-07-2018 PO Box 399

Date published: 11-07-2018 PARRAMATTA NSW 2124

### Table 1: 3 Day Geometric Mean data

EPA Point 4 Site code NR0004	Point description: Downstream of the weir from the disinfection facilities						
pollutant	unit of sampling measure frequency 3DGM limit 3DGM Actual within limits						
carbonaceous biochemical oxygen demand	mg/L	monthly	30	<2	yes		
total suspended solids	mg/L	monthly	40	4	yes		

<sup>3</sup> Day Geometric Mean (3DGM) is a way to average a set of values and is commonly used with water quality assessments which show a great deal of variability. 3DGM is calculated by multiplying the results of the analysis of three samples collected on three consecutive days and then taking the cubed root of that amount.

# Table 2: Routine monitoring data

EPA Point 4 Site code NR0004	Point description: Downstream of the weir from the disinfection facilities					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
aluminium	ug/L	monthly	1	_	_	318
carbonaceous biochemical oxygen demand	mg/L	every 6 days	5	<2	<2	<2
copper	ug/L	monthly	1	-	_	4.2
cyanide	ug/L	monthly	1	-	_	<5
diazinon	ug/L	monthly	1	-	_	<0.1
iron	ug/L	monthly	1	-	_	22
nitrogen (ammonia)	mg/L	every 6 days	5	0.26	0.4	0.58
nitrogen (total)	mg/L	every 6 days	5	5.75	6.06	6.52
phosphorus (total)	mg/L	every 6 days	5	0.11	0.12	0.15
total suspended solids	mg/L	every 6 days	5	<2	2	4
zinc	ug/L	monthly	1	_	_	34

EPA Point 5 Site code NR0005	Point description: Outlet of the disinfection facilities					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
Ceriodaphnia dubia immobilisation (EC50)	% Effluent/Vol	monthly	1	-	-	100
faecal coliforms	CFU/100mL	every 6 days	5	<1	2	7
hydrogen sulphide (unionised)	ug/L	monthly	1	-	_	<30

Average and percentile limits are only applied annually for routine monitoring data in Table 2

# North Richmond Wastewater Treatment Plant May Pollution Monitoring Summary



# **EPL 190**

Summary period: 01-05-2018 to 31-05-2018 Licensee: Sydney Water Corporation

Date obtained: 05-06-2018 PO Box 399

Date published: 13-06-2018 PARRAMATTA NSW 2124

### Table 1: 3 Day Geometric Mean data

EPA Point 4 Site code NR0004	Point description: Downstream of the weir from the disinfection facilities						
pollutant	unit of sampling measure frequency 3DGM limit 3DGM Actual within limits						
carbonaceous biochemical oxygen demand	mg/L	monthly	30	<2	yes		
total suspended solids	mg/L	monthly	40	4	yes		

<sup>3</sup> Day Geometric Mean (3DGM) is a way to average a set of values and is commonly used with water quality assessments which show a great deal of variability. 3DGM is calculated by multiplying the results of the analysis of three samples collected on three consecutive days and then taking the cubed root of that amount.

# Table 2: Routine monitoring data

EPA Point 4 Site code NR0004	Point description: Downstream of the weir from the disinfection facilities					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
aluminium	ug/L	monthly	1	_	-	370
carbonaceous biochemical oxygen demand	mg/L	every 6 days	5	<2	<2	<2
copper	ug/L	monthly	1	_	_	6
cyanide	ug/L	monthly	1	-	_	<5
diazinon	ug/L	monthly	1	-	_	<0.1
iron	ug/L	monthly	1	-	_	33
nitrogen (ammonia)	mg/L	every 6 days	5	0.3	0.41	0.5
nitrogen (total)	mg/L	every 6 days	5	5.77	6.19	6.67
phosphorus (total)	mg/L	every 6 days	5	0.16	0.24	0.36
total suspended solids	mg/L	every 6 days	5	2	3	4
zinc	ua/L	monthly	1	_	_	43

EPA Point 5 Site code NR0005	Point description: Outlet of the disinfection facilities					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
Ceriodaphnia dubia immobilisation (EC50)	% Effluent/Vol	monthly	1	-	_	100
faecal coliforms	CFU/100mL	every 6 days	5	<1	2	6
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30

Average and percentile limits are only applied annually for routine monitoring data in Table 2

# North Richmond Wastewater Treatment Plant April Pollution Monitoring Summary



# **EPL 190**

Summary period: 01-04-2018 to 30-04-2018 Licensee: Sydney Water Corporation

Date obtained: 07-05-2018 PO Box 399

Date published: 11-05-2018 PARRAMATTA NSW 2124

### Table 1: 3 Day Geometric Mean data

EPA Point 4 Site code NR0004	Point description: Downstream of the weir from the disinfection facilities						
pollutant	unit of sampling measure frequency 3DGM limit 3DGM Actual within limits						
carbonaceous biochemical oxygen demand	mg/L	monthly	30	<2	yes		
total suspended solids	mg/L	monthly	40	5	yes		

<sup>3</sup> Day Geometric Mean (3DGM) is a way to average a set of values and is commonly used with water quality assessments which show a great deal of variability. 3DGM is calculated by multiplying the results of the analysis of three samples collected on three consecutive days and then taking the cubed root of that amount.

# Table 2: Routine monitoring data

EPA Point 4 Site code NR0004	Point description: Downstream of the weir from the disinfectio facilities					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
aluminium	ug/L	monthly	1	_	-	324
carbonaceous biochemical oxygen demand	mg/L	every 6 days	5	<2	<2	<2
copper	ug/L	monthly	1	_	-	6
cyanide	ug/L	monthly	1	-	-	<5
diazinon	ug/L	monthly	1	-	-	<0.1
iron	ug/L	monthly	1	-	-	81
nitrogen (ammonia)	mg/L	every 6 days	5	0.18	0.27	0.34
nitrogen (total)	mg/L	every 6 days	5	5.45	6.34	7.21
phosphorus (total)	mg/L	every 6 days	5	0.15	0.23	0.39
total suspended solids	mg/L	every 6 days	5	4	4	6
zinc	ug/L	monthly	1	_	_	43

EPA Point 5 Site code NR0005	Point description: Outlet of the disinfection facilities					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
Ceriodaphnia dubia immobilisation (EC50)	% Effluent/Vol	monthly	1	-	-	100
faecal coliforms	CFU/100mL	every 6 days	5	<0	7	32
hydrogen sulphide (unionised)	ug/L	monthly	1	-	_	<30

Average and percentile limits are only applied annually for routine monitoring data in Table 2

# North Richmond Wastewater Treatment Plant March Pollution Monitoring Summary



# **EPL 190**

Summary period: 01-03-2018 to 31-03-2018 Licensee: Sydney Water Corporation

Date obtained: 10-04-2018 PO Box 399

Date published: 13-04-2018 PARRAMATTA NSW 2124

### Table 1: 3 Day Geometric Mean data

EPA Point 4 Site code NR0004	Point description: Downstream of the weir from the disinfection facilities						
pollutant	unit of sampling measure frequency 3DGM limit 3DGM Actual within limits						
carbonaceous biochemical oxygen demand	mg/L	monthly	30	<2	yes		
total suspended solids	mg/L	monthly	40	5	yes		

<sup>3</sup> Day Geometric Mean (3DGM) is a way to average a set of values and is commonly used with water quality assessments which show a great deal of variability. 3DGM is calculated by multiplying the results of the analysis of three samples collected on three consecutive days and then taking the cubed root of that amount.

### Table 2: Routine monitoring data

EPA Point 4 Site code NR0004	Point description: Downstream of the weir from the disinfection facilities					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
aluminium	ug/L	monthly	1	_	-	343
carbonaceous biochemical oxygen demand	mg/L	every 6 days	5	<2	3	10
copper	ug/L	monthly	1	_	-	4.2
cyanide	ug/L	monthly	1	-	-	<5
diazinon	ug/L	monthly	1	-	-	<0.1
iron	ug/L	monthly	1	-	-	25
nitrogen (ammonia)	mg/L	every 6 days	5	0.24	0.39	0.55
nitrogen (total)	mg/L	every 6 days	5	7.15	7.77	8.44
phosphorus (total)	mg/L	every 6 days	5	0.08	0.12	0.2
total suspended solids	mg/L	every 6 days	5	3	3	4
zinc	ug/L	monthly	1	_	_	34

EPA Point 5 Site code NR0005	Point description: Outlet of the disinfection facilities					
pollutant	unit of sampling number of minimum mean maximu measure frequency samples result result result					
Ceriodaphnia dubia immobilisation (EC50)	% Effluent/Vol	monthly	1	_	_	100
faecal coliforms	CFU/100mL	every 6 days	6	2	55	280
hydrogen sulphide (unionised)	ug/L	monthly	1	_	_	<30

Average and percentile limits are only applied annually for routine monitoring data in Table 2

# North Richmond Wastewater Treatment Plant February Pollution Monitoring Summary



# **EPL 190**

Summary period: 01-02-2018 to 28-02-2018 Licensee: Sydney Water Corporation

Date obtained: 08-03-2018 PO Box 399

Date published: 15-03-2018 PARRAMATTA NSW 2124

### Table 1: 3 Day Geometric Mean data

EPA Point 4 Site code NR0004	Point description: Downstream of the weir from the disinfection facilities							
pollutant	unit of sampling measure frequency 3DGM limit 3DGM Actual within limits							
carbonaceous biochemical oxygen demand	mg/L	monthly	30	2	yes			
total suspended solids	mg/L	mg/L monthly 40 2 yes						

<sup>3</sup> Day Geometric Mean (3DGM) is a way to average a set of values and is commonly used with water quality assessments which show a great deal of variability. 3DGM is calculated by multiplying the results of the analysis of three samples collected on three consecutive days and then taking the cubed root of that amount.

# Table 2: Routine monitoring data

EPA Point 4 Site code NR0004	Point descrip facilities	Point description: Downstream of the weir from the disinfection facilities						
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result		
aluminium	ug/L	monthly	1	-	_	257		
carbonaceous biochemical oxygen demand	mg/L	every 6 days	5	<2	<2	3		
copper	ug/L	monthly	1	-	-	4.7		
cyanide	ug/L	monthly	1	_	_	<5		
diazinon	ug/L	monthly	1	_	_	<0.1		
iron	ug/L	monthly	1	-	-	19		
nitrogen (ammonia)	mg/L	every 6 days	5	0.45	0.62	0.74		
nitrogen (total)	mg/L	every 6 days	5	6.51	7.71	9.07		
phosphorus (total)	mg/L	every 6 days	5	0.05	0.08	0.12		
total suspended solids	mg/L	every 6 days	5	<2	2	6		
zinc	ug/L	monthly	1	-	_	36		

EPA Point 5 Site code NR0005	Point description: Outlet of the disinfection facilities					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
Ceriodaphnia dubia immobilisation (EC50)	% Effluent/Vol	monthly	1	-	_	100
faecal coliforms	CFU/100mL	every 6 days	4	<1	4	7
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30

Average and percentile limits are only applied annually for routine monitoring data in Table 2

# North Richmond Wastewater Treatment Plant January Pollution Monitoring Summary



# **EPL 190**

Summary period: 01-01-2018 to 31-01-2018 Licensee: Sydney Water Corporation

Date obtained: 19-02-2018 PO Box 399

Date published: 23-02-2018 PARRAMATTA NSW 2124

### Table 1: 3 Day Geometric Mean data

EPA Point 4 Site code NR0004	Point description: Downstream of the weir from the disinfection facilities							
pollutant	unit of sampling measure frequency 3DGM limit 3DGM Actual within limits							
carbonaceous biochemical oxygen demand	mg/L	monthly	30	<2	yes			
total suspended solids	mg/L							

<sup>3</sup> Day Geometric Mean (3DGM) is a way to average a set of values and is commonly used with water quality assessments which show a great deal of variability. 3DGM is calculated by multiplying the results of the analysis of three samples collected on three consecutive days and then taking the cubed root of that amount.

# Table 2: Routine monitoring data

EPA Point 4 Site code NR0004	Point description: Downstream of the weir from the disinfection facilities					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
aluminium	ug/L	monthly	1	_	_	269
carbonaceous biochemical oxygen demand	mg/L	every 6 days	5	<2	<2	4
copper	ug/L	monthly	1	-	_	4
cyanide	ug/L	monthly	1	-	_	<5
diazinon	ug/L	monthly	1	-	_	<0.1
iron	ug/L	monthly	1	-	-	18
nitrogen (ammonia)	mg/L	every 6 days	5	0.44	0.55	0.66
nitrogen (total)	mg/L	every 6 days	5	6.58	7.47	9.24
phosphorus (total)	mg/L	every 6 days	5	0.05	0.1	0.27
total suspended solids	mg/L	every 6 days	5	<2	3	11
zinc	ug/L	monthly	1	_	_	29

EPA Point 5 Site code NR0005	Point description: Outlet of the disinfection facilities						
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result	
Ceriodaphnia dubia immobilisation (EC50)	% Effluent/Vol	monthly	1	_	_	100	
faecal coliforms	CFU/100mL	every 6 days	5	2	10	22	
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	36	

Average and percentile limits are only applied annually for routine monitoring data in Table 2

# North Richmond Wastewater Treatment Plant December Pollution Monitoring Summary



# **EPL 190**

Summary period: 01-12-2017 to 31-12-2017 Licensee: Sydney Water Corporation

Date obtained: 23-01-2018 PO Box 399

Date published: 29-01-2018 PARRAMATTA NSW 2124

### Table 1: 3 Day Geometric Mean data

EPA Point 4 Site code NR0004	Point description: Downstream of the weir from the disinfection facilities						
pollutant	unit of sampling measure frequency 3DGM limit 3DGM Actual within limits						
carbonaceous biochemical oxygen demand	mg/L	monthly	30	3	yes		
total suspended solids	mg/L	monthly	40	7	yes		

<sup>3</sup> Day Geometric Mean (3DGM) is a way to average a set of values and is commonly used with water quality assessments which show a great deal of variability. 3DGM is calculated by multiplying the results of the analysis of three samples collected on three consecutive days and then taking the cubed root of that amount.

### Table 2: Routine monitoring data

EPA Point 4 Site code NR0004	Point description: Downstream of the weir from the disinfection facilities					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
aluminium	ug/L	monthly	1	_	_	478
carbonaceous biochemical oxygen demand	mg/L	every 6 days	5	<2	<2	3
copper	ug/L	monthly	1	_	_	4.5
cyanide	ug/L	monthly	1	_	_	<5
diazinon	ug/L	monthly	1	-	_	<0.1
iron	ug/L	monthly	1	_	_	49
nitrogen (ammonia)	mg/L	every 6 days	5	0.51	1.09	1.93
nitrogen (total)	mg/L	every 6 days	5	6.19	7.13	8.41
phosphorus (total)	mg/L	every 6 days	5	0.14	0.27	0.36
total suspended solids	mg/L	every 6 days	5	6	7	8
zinc	ug/L	monthly	1	-	-	30

EPA Point 5 Site code NR0005	Point description: Outlet of the disinfection facilities					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
Ceriodaphnia dubia immobilisation (EC50)	% Effluent/Vol	monthly	1	-	-	100
faecal coliforms	CFU/100mL	every 6 days	6	4	12	25
hydrogen sulphide (unionised)	ug/L	monthly	1	-	_	<30

Average and percentile limits are only applied annually for routine monitoring data in Table 2

# North Richmond Wastewater Treatment Plant November Pollution Monitoring Summary



# **EPL 190**

Summary period: 01-11-2017 to 30-11-2017 Licensee: Sydney Water Corporation

Date obtained: 17-12-2017 PO Box 399

Date published: 21-12-2017 PARRAMATTA NSW 2124

### Table 1: 3 Day Geometric Mean data

EPA Point 4 Site code NR0004	Point description: Downstream of the weir from the disinfection facilities						
pollutant	unit of sampling sampling and some sampling sampling sampling specified sampling sampling specified sampling sa						
carbonaceous biochemical oxygen demand	mg/L	monthly	30	2	yes		
total suspended solids	mg/L	monthly	40	4	yes		

<sup>3</sup> Day Geometric Mean (3DGM) is a way to average a set of values and is commonly used with water quality assessments which show a great deal of variability. 3DGM is calculated by multiplying the results of the analysis of three samples collected on three consecutive days and then taking the cubed root of that amount.

Table 2: Routine monitoring data

EPA Point 4 Site code NR0004	Point description: Downstream of the weir from the disinfection facilities						
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result	
aluminium	ug/L	monthly	1	-	_	554	
carbonaceous biochemical oxygen demand	mg/L	every 6 days	5	<2	<2	3	
copper	ug/L	monthly	1	-	_	4.5	
cyanide	ug/L	monthly	1	-	_	<5	
diazinon	ug/L	monthly	1	-	_	<0.1	
iron	ug/L	monthly	1	-	_	38	
nitrogen (ammonia)	mg/L	every 6 days	5	0.36	0.49	0.58	
nitrogen (total)	mg/L	every 6 days	5	5.71	6.21	6.76	
phosphorus (total)	mg/L	every 6 days	5	0.1	0.14	0.17	
total suspended solids	mg/L	every 6 days	5	4	6	10	
zinc	ug/L	monthly	1	_	-	34	

EPA Point 5 Site code NR0005	Point description: Outlet of the disinfection facilities					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
Ceriodaphnia dubia immobilisation (EC50)	% Effluent/Vol	monthly	1	-	_	100
faecal coliforms	CFU/100mL	every 6 days	5	1	20	82
hydrogen sulphide (unionised)	ug/L	monthly	1	-	_	33

Average and percentile limits are only applied annually for routine monitoring data in Table 2

# North Richmond Wastewater Treatment Plant October Pollution Monitoring Summary



# **EPL 190**

Summary period: 01-10-2017 to 31-10-2017 Licensee: Sydney Water Corporation

Date obtained: 13-11-2017 PO Box 399

Date published: 22-11-2017 PARRAMATTA NSW 2124

### Table 1: 3 Day Geometric Mean data

EPA Point 4 Site code NR0004	Point description: Downstream of the weir from the disinfection facilities						
pollutant	unit of sampling measure sampling frequency 3DGM limit 3DGM Actual within limits						
carbonaceous biochemical oxygen demand	mg/L	monthly	30	<2	yes		
total suspended solids	mg/L	monthly	40	9	yes		

<sup>3</sup> Day Geometric Mean (3DGM) is a way to average a set of values and is commonly used with water quality assessments which show a great deal of variability. 3DGM is calculated by multiplying the results of the analysis of three samples collected on three consecutive days and then taking the cubed root of that amount.

# Table 2: Routine monitoring data

EPA Point 4 Site code NR0004	Point description: Downstream of the weir from the disinfection facilities					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
aluminium	ug/L	monthly	1	-	-	794
carbonaceous biochemical oxygen demand	mg/L	every 6 days	6	<2	<2	<2
copper	ug/L	monthly	1	-	-	3.7
cyanide	ug/L	monthly	1	-	-	<5
diazinon	ug/L	monthly	1	-	-	<0.1
iron	ug/L	monthly	1	-	-	21
nitrogen (ammonia)	mg/L	every 6 days	6	0.38	0.43	0.47
nitrogen (total)	mg/L	every 6 days	6	6.05	6.35	6.58
phosphorus (total)	mg/L	every 6 days	6	0.05	0.13	0.21
total suspended solids	mg/L	every 6 days	6	4	6	10
zinc	ug/L	monthly	1	-	-	39

EPA Point 5 Site code NR0005	Point description: Outlet of the disinfection facilities					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
Ceriodaphnia dubia immobilisation (EC50)	% Effluent/Vol	monthly	1	-	_	100
faecal coliforms	CFU/100mL	every 6 days	5	2	5	9
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30

Average and percentile limits are only applied annually for routine monitoring data in Table 2

# North Richmond Wastewater Treatment Plant September Pollution Monitoring Summary



# **EPL 190**

Summary period: 01-09-2017 to 30-09-2017 Licensee: Sydney Water Corporation

Date obtained: 09-10-2017 PO Box 399

Date published: 19-10-2017 PARRAMATTA NSW 2124

### Table 1: 3 Day Geometric Mean data

EPA Point 4 Site code NR0004	Point description: Downstream of the weir from the disinfection facilities						
pollutant	unit of sampling measure frequency 3DGM limit 3DGM Actual within limits						
carbonaceous biochemical oxygen demand	mg/L	monthly	30	2	yes		
total suspended solids	mg/L	monthly	40	4	yes		

<sup>3</sup> Day Geometric Mean (3DGM) is a way to average a set of values and is commonly used with water quality assessments which show a great deal of variability. 3DGM is calculated by multiplying the results of the analysis of three samples collected on three consecutive days and then taking the cubed root of that amount.

# Table 2: Routine monitoring data

EPA Point 4 Site code NR0004	Point description: Downstream of the weir from the disinfection facilities					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
aluminium	ug/L	monthly	1	-	-	465
carbonaceous biochemical oxygen demand	mg/L	every 6 days	5	<2	<2	3
copper	ug/L	monthly	1	-	-	3.6
cyanide	ug/L	monthly	1	-	-	<5
diazinon	ug/L	monthly	1	-	-	<0.1
iron	ug/L	monthly	1	-	-	30
nitrogen (ammonia)	mg/L	every 6 days	5	0.44	0.81	1.28
nitrogen (total)	mg/L	every 6 days	5	6.19	6.49	6.73
phosphorus (total)	mg/L	every 6 days	5	0.08	0.08	0.08
total suspended solids	mg/L	every 6 days	5	<2	<2	4
zinc	ug/L	monthly	1	-	-	44

EPA Point 5 Site code NR0005	Point description: Outlet of the disinfection facilities					
pollutant	unit of sampling number of minimum mean maximum measure frequency samples result result result					
Ceriodaphnia dubia immobilisation (EC50)	% Effluent/Vol	monthly	1	-	_	100
faecal coliforms	CFU/100mL	every 6 days	5	<1	11	55
hydrogen sulphide (unionised)	ug/L	monthly	1	-	_	<30

Average and percentile limits are only applied annually for routine monitoring data in Table 2

# North Richmond Wastewater Treatment Plant August Pollution Monitoring Summary



# **EPL 190**

Summary period: 01-08-2017 to 31-08-2017 Licensee: Sydney Water Corporation

Date obtained: 18-09-2017 PO Box 399

Date published: 21-09-2017 PARRAMATTA NSW 2124

### Table 1: 3 Day Geometric Mean data

EPA Point 4 Site code NR0004	Point description: Downstream of the weir from the disinfection facilities						
pollutant	unit of sampling measure frequency 3DGM limit 3DGM Actual within limits						
carbonaceous biochemical oxygen demand	mg/L	monthly	30	<2	yes		
total suspended solids	mg/L	monthly	40	4	yes		

<sup>3</sup> Day Geometric Mean (3DGM) is a way to average a set of values and is commonly used with water quality assessments which show a great deal of variability. 3DGM is calculated by multiplying the results of the analysis of three samples collected on three consecutive days and then taking the cubed root of that amount.

# Table 2: Routine monitoring data

EPA Point 4 Site code NR0004	Point description: Downstream of the weir from the disinfection facilities					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
aluminium	ug/L	monthly	1	_	-	472
carbonaceous biochemical oxygen demand	mg/L	every 6 days	5	<2	3	10
copper	ug/L	monthly	1	_	-	4.2
cyanide	ug/L	monthly	1	_	_	<5
diazinon	ug/L	monthly	1	-	_	<0.1
iron	ug/L	monthly	1	-	_	28
nitrogen (ammonia)	mg/L	every 6 days	5	0.54	0.66	0.79
nitrogen (total)	mg/L	every 6 days	5	5.53	6.06	6.33
phosphorus (total)	mg/L	every 6 days	5	0.08	0.12	0.16
total suspended solids	mg/L	every 6 days	5	3	5	8
zinc	ug/L	monthly	1	_	_	52

EPA Point 5 Site code NR0005	Point description: Outlet of the disinfection facilities					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
Ceriodaphnia dubia immobilisation (EC50)	% Effluent/Vol	monthly	1	-	-	100
faecal coliforms	CFU/100mL	every 6 days	5	<1	<1	<1
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30

Average and percentile limits are only applied annually for routine monitoring data in Table 2.

# North Richmond Wastewater Treatment Plant July Pollution Monitoring Summary



# **EPL 190**

Summary period: 01-07-2017 to 31-07-2017 Licensee: Sydney Water Corporation

Date obtained: 18-08-2017 PO Box 399

Date published: 23-08-2017 PARRAMATTA NSW 2124

### Table 1: 3 Day Geometric Mean data

EPA Point 4 Site code NR0004	Point description: Downstream of the weir from the disinfection facilities							
pollutant	unit of sampling measure frequency 3DGM limit 3DGM Actual within limits							
carbonaceous biochemical oxygen demand	mg/L	monthly	30	3	yes			
total suspended solids	mg/L							

<sup>3</sup> Day Geometric Mean (3DGM) is a way to average a set of values and is commonly used with water quality assessments which show a great deal of variability. 3DGM is calculated by multiplying the results of the analysis of three samples collected on three consecutive days and then taking the cubed root of that amount.

### Table 2: Routine monitoring data

EPA Point 4 Site code NR0004	Point description: Downstream of the weir from the disinfection facilities					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
aluminium	ug/L	monthly	1	_	-	812
carbonaceous biochemical oxygen demand	mg/L	every 6 days	5	<2	<2	3
copper	ug/L	monthly	1	-	-	3.7
cyanide	ug/L	monthly	1	-	-	<5
diazinon	ug/L	monthly	1	_	-	<0.1
iron	ug/L	monthly	1	_	-	33
nitrogen (ammonia)	mg/L	every 6 days	5	0.27	0.5	0.79
nitrogen (total)	mg/L	every 6 days	5	5.74	6.06	6.5
phosphorus (total)	mg/L	every 6 days	5	0.05	0.09	0.13
total suspended solids	mg/L	every 6 days	5	5	6	8
zinc	ug/L	monthly	1	_	_	45

EPA Point 5 Site code NR0005	Point description: Outlet of the disinfection facilities					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
Ceriodaphnia dubia immobilisation (EC50)	% Effluent/Vol	monthly	1	-	_	100
faecal coliforms	CFU/100mL	every 6 days	5	<1	<1	<1
hydrogen sulphide (unionised)	ug/L	monthly	1	-	_	<30

Average and percentile limits are only applied annually for routine monitoring data in Table 2.