

North Richmond Water Resource Recovery Facility

March Pollution Monitoring Summary



EPL 190

Summary period: 01-03-2025 to 31-03-2025
 Date obtained: 08-04-2025
 Date published: 22-04-2025

Licensee: Sydney Water Corporation
 PO Box 399
 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 measure	sampling frequency	3DGM limit	3DGM Actual	within limits
biochemical oxygen demand	mg/L	monthly	30	<2	yes
total suspended solids	mg/L	monthly	10	3	yes

3 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	-	-	194
biochemical oxygen demand	mg/L	every 6 days	6	<2	<2	5
copper	ug/L	monthly	1	-	-	3.5
diazinon	ug/L	monthly	1	-	-	<0.1
iron	ug/L	monthly	1	-	-	19
nitrogen (ammonia)	mg/L	every 6 days	6	0.79	0.86	1
nitrogen (total)	mg/L	every 6 days	6	4.9	7.26	9.21
phosphorus (total)	mg/L	every 6 days	6	0.07	0.25	0.54
total suspended solids	mg/L	every 6 days	6	<2	3	8
zinc	ug/L	monthly	1	-	-	20

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	17	66
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30

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

Effluent quality monitoring results obtained from EPA Points 4 and 5 are used to indicate the quality of water discharged at EPA Point 1 (discharge to waters).

North Richmond Water Resource Recovery Facility

February Pollution Monitoring Summary



EPL 190

Summary period: 01-02-2025 to 28-02-2025
 Date obtained: 04-03-2025
 Date published: 15-03-2025

Licensee: Sydney Water Corporation
 PO Box 399
 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 measure	sampling frequency	3DGM limit	3DGM Actual	within limits
biochemical oxygen demand	mg/L	monthly	30	<2	yes
total suspended solids	mg/L	monthly	10	3	yes

3 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	-	-	369
biochemical oxygen demand	mg/L	every 6 days	4	<2	<2	<2
copper	ug/L	monthly	1	-	-	6
cyanide	ug/L	biannually	1	-	-	<5
diazinon	ug/L	monthly	1	-	-	<0.1
iron	ug/L	monthly	1	-	-	19
nitrogen (ammonia)	mg/L	every 6 days	4	0.32	0.76	0.95
nitrogen (total)	mg/L	every 6 days	4	7.5	8.44	9.22
phosphorus (total)	mg/L	every 6 days	4	0.33	0.43	0.53
total suspended solids	mg/L	every 6 days	4	3	4	5
zinc	ug/L	monthly	1	-	-	15

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	2	4	6
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30

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

Effluent quality monitoring results obtained from EPA Points 4 and 5 are used to indicate the quality of water discharged at EPA Point 1 (discharge to waters).

North Richmond Water Resource Recovery Facility

January Pollution Monitoring Summary



EPL 190

Summary period: 01-01-2025 to 31-01-2025
 Date obtained: 09-02-2025
 Date published: 14-02-2025

Licensee: Sydney Water Corporation
 PO Box 399
 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 measure	sampling frequency	3DGM limit	3DGM Actual	within limits
biochemical oxygen demand	mg/L	monthly	30	<2	yes
total suspended solids	mg/L	monthly	10	4	yes

3 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	-	-	265
biochemical oxygen demand	mg/L	every 6 days	5	<2	<2	3
copper	ug/L	monthly	1	-	-	6.7
diazinon	ug/L	monthly	1	-	-	<0.1
iron	ug/L	monthly	1	-	-	15
nitrogen (ammonia)	mg/L	every 6 days	5	0.34	0.39	0.55
nitrogen (total)	mg/L	every 6 days	5	6.8	8.64	10.2
phosphorus (total)	mg/L	every 6 days	5	0.38	0.5	0.57
total suspended solids	mg/L	every 6 days	5	2	4	5
zinc	ug/L	monthly	1	-	-	16

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	14	19	27
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30

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

Effluent quality monitoring results obtained from EPA Points 4 and 5 are used to indicate the quality of water discharged at EPA Point 1 (discharge to waters).

North Richmond Water Resource Recovery Facility

December Pollution Monitoring Summary



EPL 190

Summary period: 01-12-2024 to 31-12-2024
Date obtained: 09-01-2025
Date published: 23-01-2025

Licensee: Sydney Water Corporation
PO Box 399
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 measure	sampling frequency	3DGM limit	3DGM Actual	within limits
biochemical oxygen demand	mg/L	monthly	30	2	yes
total suspended solids	mg/L	monthly	10	3	yes

3 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	-	-	270
biochemical oxygen demand	mg/L	every 6 days	6	<2	<2	3
copper	ug/L	monthly	1	-	-	5.1
diazinon	ug/L	monthly	1	-	-	<0.1
iron	ug/L	monthly	1	-	-	24
nitrogen (ammonia)	mg/L	every 6 days	6	0.25	0.87	1.09
nitrogen (total)	mg/L	every 6 days	6	5.95	9.95	13.6
phosphorus (total)	mg/L	every 6 days	6	0.26	0.78	1.42
total suspended solids	mg/L	every 6 days	6	3	4	5
zinc	ug/L	monthly	1	-	-	26

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	15	31	50
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30

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

Effluent quality monitoring results obtained from EPA Points 4 and 5 are used to indicate the quality of water discharged at EPA Point 1 (discharge to waters).

North Richmond Water Resource Recovery Facility

November Pollution Monitoring Summary



EPL 190

Summary period: 01-11-2024 to 30-11-2024
Date obtained: 03-12-2024
Date published: 13-12-2024

Licensee: Sydney Water Corporation
PO Box 399
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 measure	sampling frequency	3DGM limit	3DGM Actual	within limits
biochemical oxygen demand	mg/L	monthly	30	<2	yes
total suspended solids	mg/L	monthly	10	2	yes

3 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	-	-	412
biochemical oxygen demand	mg/L	every 6 days	5	<2	<2	<2
copper	ug/L	monthly	1	-	-	7.6
diazinon	ug/L	monthly	1	-	-	<0.1
iron	ug/L	monthly	1	-	-	28
nitrogen (ammonia)	mg/L	every 6 days	5	0.43	0.44	0.48
nitrogen (total)	mg/L	every 6 days	5	7.34	7.81	8.80
phosphorus (total)	mg/L	every 6 days	5	0.48	0.60	0.73
total suspended solids	mg/L	every 6 days	5	2	3	4
zinc	ug/L	monthly	1	-	-	19

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	5	29	65
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30

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

Effluent quality monitoring results obtained from EPA Points 4 and 5 are used to indicate the quality of water discharged at EPA Point 1 (discharge to waters).

North Richmond Water Resource Recovery Facility

October Pollution Monitoring Summary



EPL 190

Summary period: 01-10-2024 to 31-10-2024
Date obtained: 04-11-2024
Date published: 15-11-2024

Licensee: Sydney Water Corporation
PO Box 399
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 measure	sampling frequency	3DGM limit	3DGM Actual	within limits
biochemical oxygen demand	mg/L	monthly	30	2	yes
total suspended solids	mg/L	monthly	10	5	yes

3 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	-	-	538
biochemical oxygen demand	mg/L	every 6 days	5	<2	<2	2
copper	ug/L	monthly	1	-	-	8.9
diazinon	ug/L	monthly	1	-	-	<0.1
iron	ug/L	monthly	1	-	-	36
nitrogen (ammonia)	mg/L	every 6 days	5	0.30	0.41	0.57
nitrogen (total)	mg/L	every 6 days	5	6.71	7.99	9.05
phosphorus (total)	mg/L	every 6 days	5	0.24	0.47	0.75
total suspended solids	mg/L	every 6 days	5	4	5	7
zinc	ug/L	monthly	1	-	-	21

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	5	20	46
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30

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

Effluent quality monitoring results obtained from EPA Points 4 and 5 are used to indicate the quality of water discharged at EPA Point 1 (discharge to waters).

North Richmond Water Resource Recovery Facility

September Pollution Monitoring Summary



EPL 190

Summary period: 01-09-2024 to 30-09-2024
Date obtained: 09-10-2024
Date published: 23-10-2024

Licensee: Sydney Water Corporation
PO Box 399
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 measure	sampling frequency	3DGM limit	3DGM Actual	within limits
biochemical oxygen demand	mg/L	monthly	30	2	yes
total suspended solids	mg/L	monthly	10	5	yes

3 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	-	-	448
biochemical oxygen demand	mg/L	every 6 days	5	<2	<2	<2
copper	ug/L	monthly	1	-	-	6.6
diazinon	ug/L	monthly	1	-	-	<0.1
iron	ug/L	monthly	1	-	-	16
nitrogen (ammonia)	mg/L	every 6 days	5	0.23	0.48	0.82
nitrogen (total)	mg/L	every 6 days	5	6.9	7.83	8.61
phosphorus (total)	mg/L	every 6 days	5	0.17	0.22	0.26
total suspended solids	mg/L	every 6 days	5	<2	3	4
zinc	ug/L	monthly	1	-	-	24

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.

Effluent quality monitoring results obtained from EPA Points 4 and 5 are used to indicate the quality of water discharged at EPA Point 1 (discharge to waters).

North Richmond Water Resource Recovery Facility

August Pollution Monitoring Summary



EPL 190

Summary period: 01-08-2024 to 31-08-2024
Date obtained: 07-09-2024
Date published: 13-09-2024

Licensee: Sydney Water Corporation
PO Box 399
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 measure	sampling frequency	3DGM limit	3DGM Actual	within limits
biochemical oxygen demand	mg/L	monthly	30	<2	yes
total suspended solids	mg/L	monthly	10	3	yes

3 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	-	-	300
biochemical oxygen demand	mg/L	every 6 days	5	<2	<2	2
copper	ug/L	monthly	1	-	-	7.5
cyanide	ug/L	bi-annually	1	-	-	<5
diazinon	ug/L	monthly	1	-	-	<0.1
iron	ug/L	monthly	1	-	-	16
nitrogen (ammonia)	mg/L	every 6 days	5	0.45	0.53	0.62
nitrogen (total)	mg/L	every 6 days	5	8.18	9.85	12.2
phosphorus (total)	mg/L	every 6 days	5	0.24	0.24	0.25
total suspended solids	mg/L	every 6 days	5	<2	3	4
zinc	ug/L	monthly	1	-	-	21

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	2
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30

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

Effluent quality monitoring results obtained from EPA Points 4 and 5 are used to indicate the quality of water discharged at EPA Point 1 (discharge to waters).

North Richmond Water Resource Recovery Facility

July Pollution Monitoring Summary



EPL 190

Summary period: 01-07-2024 to 31-07-2024
Date obtained: 13-08-2024
Date published: 27-08-2024

Licensee: Sydney Water Corporation
PO Box 399
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 measure	sampling frequency	3DGM limit	3DGM Actual	within limits
biochemical oxygen demand	mg/L	monthly	30	2	yes
total suspended solids	mg/L	monthly	10	4	yes

3 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	-	-	428
biochemical oxygen demand	mg/L	every 6 days	5	<2	<2	3
copper	ug/L	monthly	1	-	-	6.3
diazinon	ug/L	monthly	1	-	-	<0.1
iron	ug/L	monthly	1	-	-	13
nitrogen (ammonia)	mg/L	every 6 days	5	0.51	0.59	0.64
nitrogen (total)	mg/L	every 6 days	5	8.26	9.37	10.2
phosphorus (total)	mg/L	every 6 days	5	0.17	0.24	0.31
total suspended solids	mg/L	every 6 days	5	<2	3	4
zinc	ug/L	monthly	1	-	-	24

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	74	370
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30

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

Effluent quality monitoring results obtained from EPA Points 4 and 5 are used to indicate the quality of water discharged at EPA Point 1 (discharge to waters).