

Winmalee Water Resource Recovery Facility

June Pollution Monitoring Summary



EPL 1963

Summary period: 01-06-2023 to 30-06-2023

Date obtained: 10-07-2023

Date published: 24-07-2023

Licensee: Sydney Water Corporation

PO Box 399

PARRAMATTA NSW 2124

Table 1: 3 Day Geometric Mean data

EPA Point 4 Site code WM0004	Point description: Downstream of the chamber prior to discharge				
pollutant	unit of measure	sampling frequency	3DGM limit	3DGM Actual	within limits
biochemical oxygen demand	mg/L	monthly	30	<2	yes
carbonaceous biochemical oxygen demand	mg/L	monthly	30	<2	yes
total suspended solids	mg/L	monthly	15	<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 WM0004	Point description: Downstream of the chamber prior to discharge					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
aluminium	ug/L	monthly	1	-	-	51
biochemical oxygen demand	mg/L	every 6 days	5	<2	<2	<2
carbonaceous biochemical oxygen demand	mg/L	every 6 days	5	<2	<2	<2
Ceriodaphnia dubia immobilisation (EC50)	% Effluent/Vol	monthly	1	-	-	100
chlorine (total residual)	mg/L	every 6 days	5	<0.04	<0.04	<0.04
copper	ug/L	monthly	1	-	-	2.8
diazinon	ug/L	monthly	1	-	-	<0.1
faecal coliforms	CFU/100mL	every 6 days	5	<1	1	3
iron	ug/L	monthly	1	-	-	71
nitrogen (ammonia)	mg/L	every 6 days	5	0.04	0.51	1.63
nitrogen (total)	mg/L	every 6 days	5	9.43	11.05	11.8
phosphorus (total)	mg/L	every 6 days	5	1.03	1.39	1.68
total suspended solids	mg/L	every 6 days	5	<2	<2	<2
zinc	ug/L	monthly	1	-	-	12

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

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

Winmalee Water Resource Recovery Facility

May Pollution Monitoring Summary



EPL 1963

Summary period: 01-05-2023 to 31-05-2023

Date obtained: 08-06-2023

Date published: 22-06-2023

Licensee: Sydney Water Corporation

PO Box 399

PARRAMATTA NSW 2124

Table 1: 3 Day Geometric Mean data

EPA Point 4 Site code WM0004		Point description: Downstream of the chamber prior to discharge			
pollutant	unit of measure	sampling frequency	3DGM limit	3DGM Actual	within limits
biochemical oxygen demand	mg/L	monthly	30	<2	yes
carbonaceous biochemical oxygen demand	mg/L	monthly	30	<2	yes
total suspended solids	mg/L	monthly	15	<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 WM0004		Point description: Downstream of the chamber prior to discharge				
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
aluminium	ug/L	monthly	1	-	-	38
biochemical oxygen demand	mg/L	every 6 days	5	<2	<2	<2
carbonaceous biochemical oxygen demand	mg/L	every 6 days	5	<2	<2	<2
Ceriodaphnia dubia immobilisation (EC50)	% Effluent/Vol	monthly	1	-	-	100
chlorine (total residual)	mg/L	every 6 days	6	<0.04	<0.04	<0.04
copper	ug/L	monthly	1	-	-	3.1
diazinon	ug/L	monthly	1	-	-	<0.1
faecal coliforms	CFU/100mL	every 6 days	6	<1	7	39
iron	ug/L	monthly	1	-	-	78
nitrogen (ammonia)	mg/L	every 6 days	5	0.02	0.33	1.34
nitrogen (total)	mg/L	every 6 days	5	8.7	10.54	12.1
phosphorus (total)	mg/L	every 6 days	5	0.72	1.13	1.42
total suspended solids	mg/L	every 6 days	5	<2	<2	<2
zinc	ug/L	monthly	1	-	-	18

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

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

Winmalee Water Resource Recovery Facility

April Pollution Monitoring Summary



EPL 1963

Summary period: 01-04-2023 to 30-04-2023

Date obtained: 10-05-2023

Date published: 19-05-2023

Licensee: Sydney Water Corporation

PO Box 399

PARRAMATTA NSW 2124

Table 1: 3 Day Geometric Mean data

EPA Point 4 Site code WM0004	Point description: Downstream of the chamber prior to discharge				
pollutant	unit of measure	sampling frequency	3DGM limit	3DGM Actual	within limits
biochemical oxygen demand	mg/L	monthly	30	2	yes
carbonaceous biochemical oxygen demand	mg/L	monthly	30	<2	yes
total suspended solids	mg/L	monthly	15	<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 WM0004	Point description: Downstream of the chamber prior to discharge					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
aluminium	ug/L	monthly	1	-	-	25
biochemical oxygen demand	mg/L	every 6 days	5	<2	<2	7
carbonaceous biochemical oxygen demand	mg/L	every 6 days	5	<2	<2	<2
Ceriodaphnia dubia immobilisation (EC50)	% Effluent/Vol	monthly	1	-	-	100
chlorine (total residual)	mg/L	every 6 days	5	<0.04	<0.04	<0.04
copper	ug/L	monthly	1	-	-	4
diazinon	ug/L	monthly	1	-	-	<0.1
faecal coliforms	CFU/100mL	every 6 days	5	<1	35	170
iron	ug/L	monthly	1	-	-	55
nitrogen (ammonia)	mg/L	every 6 days	5	0.02	1.24	2
nitrogen (total)	mg/L	every 6 days	5	9.27	11.08	13.7
phosphorus (total)	mg/L	every 6 days	5	0.5	0.86	1.44
total suspended solids	mg/L	every 6 days	5	<2	<2	3
zinc	ug/L	monthly	1	-	-	18

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

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

Winmalee Water Resource Recovery Facility

March Pollution Monitoring Summary



EPL 1963

Summary period: 01-03-2023 to 31-03-2023

Date obtained: 12-04-2023

Date published: 14-04-2023

Licensee: Sydney Water Corporation

PO Box 399

PARRAMATTA NSW 2124

Table 1: 3 Day Geometric Mean data

EPA Point 4 Site code WM0004		Point description: Downstream of the chamber prior to discharge			
pollutant	unit of measure	sampling frequency	3DGM limit	3DGM Actual	within limits
biochemical oxygen demand	mg/L	monthly	30	<2	yes
carbonaceous biochemical oxygen demand	mg/L	monthly	30	<2	yes
total suspended solids	mg/L	monthly	15	<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 WM0004		Point description: Downstream of the chamber prior to discharge				
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
aluminium	ug/L	monthly	1	-	-	16
biochemical oxygen demand	mg/L	every 6 days	6	<2	<2	<2
carbonaceous biochemical oxygen demand	mg/L	every 6 days	6	<2	<2	<2
Ceriodaphnia dubia immobilisation (EC50)	% Effluent/Vol	monthly	1	-	-	100
chlorine (total residual)	mg/L	every 6 days	5	<0.04	<0.04	<0.04
copper	ug/L	monthly	1	-	-	4.9
diazinon	ug/L	monthly	1	-	-	<0.1
faecal coliforms	CFU/100mL	every 6 days	5	<1	4	14
iron	ug/L	monthly	1	-	-	52
nitrogen (ammonia)	mg/L	every 6 days	6	0.04	0.98	3.42
nitrogen (total)	mg/L	every 6 days	6	9.89	12.77	14.7
phosphorus (total)	mg/L	every 6 days	6	0.21	0.27	0.34
total suspended solids	mg/L	every 6 days	6	<2	<2	2
zinc	ug/L	monthly	1	-	-	20

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

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

Winmalee Water Resource Recovery Facility

February Pollution Monitoring Summary



EPL 1963

Summary period: 01-02-2023 to 28-02-2023

Date obtained: 08-03-2023

Date published: 17-03-2023

Licensee: Sydney Water Corporation

PO Box 399

PARRAMATTA NSW 2124

Table 1: 3 Day Geometric Mean data

EPA Point 4 Site code WM0004		Point description: Downstream of the chamber prior to discharge			
pollutant	unit of measure	sampling frequency	3DGM limit	3DGM Actual	within limits
biochemical oxygen demand	mg/L	monthly	30	<2	yes
carbonaceous biochemical oxygen demand	mg/L	monthly	30	<2	yes
total suspended solids	mg/L	monthly	15	<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 WM0004		Point description: Downstream of the chamber prior to discharge				
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
aluminium	ug/L	monthly	1	-	-	7
biochemical oxygen demand	mg/L	every 6 days	4	<2	<2	<2
carbonaceous biochemical oxygen demand	mg/L	every 6 days	4	<2	<2	<2
Ceriodaphnia dubia immobilisation (EC50)	% Effluent/Vol	monthly	1	-	-	100
chlorine (total residual)	mg/L	every 6 days	4	<0.04	<0.04	<0.04
cobalt	ug/L	bi-annual	1	-	-	0.3
copper	ug/L	monthly	1	-	-	4.5
diazinon	ug/L	monthly	1	-	-	<0.1
faecal coliforms	CFU/100mL	every 6 days	4	<1	<1	1
iron	ug/L	monthly	1	-	-	68
nitrogen (ammonia)	mg/L	every 6 days	4	0.17	0.34	0.49
nitrogen (total)	mg/L	every 6 days	4	9.68	11.72	13
phosphorus (total)	mg/L	every 6 days	4	0.27	0.3	0.35
total suspended solids	mg/L	every 6 days	4	<2	<2	<2
zinc	ug/L	monthly	1	-	-	18

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

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

Winmalee Water Resource Recovery Facility

January Pollution Monitoring Summary



EPL 1963

Summary period: 01-01-2023 to 31-01-2023

Date obtained: 08-02-2023

Date published: 15-02-2023

Licensee: Sydney Water Corporation

PO Box 399

PARRAMATTA NSW 2124

Table 1: 3 Day Geometric Mean data

EPA Point 4 Site code WM0004		Point description: Downstream of the chamber prior to discharge			
pollutant	unit of measure	sampling frequency	3DGM limit	3DGM Actual	within limits
biochemical oxygen demand	mg/L	monthly	30	<2	yes
carbonaceous biochemical oxygen demand	mg/L	monthly	30	<2	yes
total suspended solids	mg/L	monthly	15	<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 WM0004		Point description: Downstream of the chamber prior to discharge				
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
aluminium	ug/L	monthly	1	-	-	7
biochemical oxygen demand	mg/L	every 6 days	5	<2	<2	3
carbonaceous biochemical oxygen demand	mg/L	every 6 days	5	<2	<2	<2
Ceriodaphnia dubia immobilisation (EC50)	% Effluent/Vol	monthly	1	-	-	100
chlorine (total residual)	mg/L	every 6 days	6	<0.04	<0.04	<0.04
copper	ug/L	monthly	1	-	-	5
diazinon	ug/L	monthly	1	-	-	<0.1
faecal coliforms	CFU/100mL	every 6 days	6	<1	54	320
iron	ug/L	monthly	1	-	-	85
nitrogen (ammonia)	mg/L	every 6 days	5	0.01	0.34	1.06
nitrogen (total)	mg/L	every 6 days	5	9.87	12.09	13.9
phosphorus (total)	mg/L	every 6 days	5	0.24	0.33	0.39
total suspended solids	mg/L	every 6 days	5	<2	<2	<2
zinc	ug/L	monthly	1	-	-	17

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

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

Winmalee Water Resource Recovery Facility

December Pollution Monitoring Summary



EPL 1963

Summary period: 01-12-2022 to 31-12-2022

Date obtained: 09-01-2023

Date published: 18-01-2023

Licensee: Sydney Water Corporation

PO Box 399

PARRAMATTA NSW 2124

Table 1: 3 Day Geometric Mean data

EPA Point 4 Site code WM0004		Point description: Downstream of the chamber prior to discharge			
pollutant	unit of measure	sampling frequency	3DGM limit	3DGM Actual	within limits
biochemical oxygen demand	mg/L	monthly	30	<2	yes
carbonaceous biochemical oxygen demand	mg/L	monthly	30	<2	yes
total suspended solids	mg/L	monthly	15	<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 WM0004		Point description: Downstream of the chamber prior to discharge				
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
aluminium	ug/L	monthly	1	-	-	<5
biochemical oxygen demand	mg/L	every 6 days	6	<2	<2	<2
carbonaceous biochemical oxygen demand	mg/L	every 6 days	6	<2	<2	<2
Ceriodaphnia dubia immobilisation (EC50)	% Effluent/Vol	monthly	1	-	-	100
chlorine (total residual)	mg/L	every 6 days	5	<0.04	<0.04	<0.04
copper	ug/L	monthly	1	-	-	6.6
diazinon	ug/L	monthly	1	-	-	<0.1
faecal coliforms	CFU/100mL	every 6 days	5	1	2	5
iron	ug/L	monthly	1	-	-	54
nitrogen (ammonia)	mg/L	every 6 days	6	0.01	0.02	0.02
nitrogen (total)	mg/L	every 6 days	6	10.2	11.88	15
phosphorus (total)	mg/L	every 6 days	6	0.2	0.28	0.32
total suspended solids	mg/L	every 6 days	6	<2	<2	<2
zinc	ug/L	monthly	1	-	-	14

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

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

Winmalee Water Resource Recovery Facility

November Pollution Monitoring Summary



EPL 1963

Summary period: 01-11-2022 to 30-11-2022

Date obtained: 06-12-2022

Date published: 09-12-2022

Licensee: Sydney Water Corporation

PO Box 399

PARRAMATTA NSW 2124

Table 1: 3 Day Geometric Mean data

EPA Point 4 Site code WM0004		Point description: Downstream of the chamber prior to discharge			
pollutant	unit of measure	sampling frequency	3DGM limit	3DGM Actual	within limits
biochemical oxygen demand	mg/L	monthly	30	<2	yes
carbonaceous biochemical oxygen demand	mg/L	monthly	30	<2	yes
total suspended solids	mg/L	monthly	15	<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 WM0004		Point description: Downstream of the chamber prior to discharge				
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
aluminium	ug/L	monthly	1	-	-	8
biochemical oxygen demand	mg/L	every 6 days	5	<2	<2	<2
carbonaceous biochemical oxygen demand	mg/L	every 6 days	5	<2	<2	<2
Ceriodaphnia dubia immobilisation (EC50)	% Effluent/Vol	monthly	1	-	-	100
chlorine (total residual)	mg/L	every 6 days	5	<0.04	<0.04	0.09
copper	ug/L	monthly	1	-	-	5.8
diazinon	ug/L	monthly	1	-	-	<0.1
faecal coliforms	CFU/100mL	every 6 days	5	<1	<1	1
iron	ug/L	monthly	1	-	-	61
nitrogen (ammonia)	mg/L	every 6 days	5	0.01	0.03	0.05
nitrogen (total)	mg/L	every 6 days	5	9.05	10.93	12.3
phosphorus (total)	mg/L	every 6 days	5	0.23	0.25	0.27
total suspended solids	mg/L	every 6 days	5	<2	<2	<2
zinc	ug/L	monthly	1	-	-	13

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

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

Winmalee Water Resource Recovery Facility

October Pollution Monitoring Summary



EPL 1963

Summary period: 01-10-2022 to 31-10-2022

Date obtained: 12-11-2022

Date published: 16-11-2022

Licensee: Sydney Water Corporation

PO Box 399

PARRAMATTA NSW 2124

Table 1: 3 Day Geometric Mean data

EPA Point 4 Site code WM0004		Point description: Downstream of the chamber prior to discharge			
pollutant	unit of measure	sampling frequency	3DGM limit	3DGM Actual	within limits
biochemical oxygen demand	mg/L	monthly	30	<2	yes
carbonaceous biochemical oxygen demand	mg/L	monthly	30	<2	yes
total suspended solids	mg/L	monthly	15	<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 WM0004		Point description: Downstream of the chamber prior to discharge				
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
aluminium	ug/L	monthly	1	-	-	15
biochemical oxygen demand	mg/L	every 6 days	5	<2	<2	<2
carbonaceous biochemical oxygen demand	mg/L	every 6 days	5	<2	<2	<2
Ceriodaphnia dubia immobilisation (EC50)	% Effluent/Vol	monthly	1	-	-	100
chlorine (total residual)	mg/L	every 6 days	5	<0.04	<0.04	<0.04
copper	ug/L	monthly	1	-	-	4
diazinon	ug/L	monthly	1	-	-	<0.1
faecal coliforms	CFU/100mL	every 6 days	5	<1	<1	2
iron	ug/L	monthly	1	-	-	66
nitrogen (ammonia)	mg/L	every 6 days	5	0.01	0.09	0.33
nitrogen (total)	mg/L	every 6 days	5	7.44	8.4	10.4
phosphorus (total)	mg/L	every 6 days	5	0.16	0.19	0.25
total suspended solids	mg/L	every 6 days	5	<2	<2	<2
zinc	ug/L	monthly	1	-	-	13

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

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

Winmalee Water Resource Recovery Facility

September Pollution Monitoring Summary



EPL 1963

Summary period: 01-09-2022 to 30-09-2022

Date obtained: 05-10-2022

Date published: 14-10-2022

Licensee: Sydney Water Corporation

PO Box 399

PARRAMATTA NSW 2124

Table 1: 3 Day Geometric Mean data

EPA Point 4 Site code WM0004		Point description: Downstream of the chamber prior to discharge			
pollutant	unit of measure	sampling frequency	3DGM limit	3DGM Actual	within limits
biochemical oxygen demand	mg/L	monthly	30	<2	yes
carbonaceous biochemical oxygen demand	mg/L	monthly	30	<2	yes
total suspended solids	mg/L	monthly	15	<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 WM0004		Point description: Downstream of the chamber prior to discharge				
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
aluminium	ug/L	monthly	1	-	-	<5
biochemical oxygen demand	mg/L	every 6 days	5	<2	<2	<2
carbonaceous biochemical oxygen demand	mg/L	every 6 days	5	<2	<2	<2
Ceriodaphnia dubia immobilisation (EC50)	% Effluent/Vol	monthly	1	-	-	100
chlorine (total residual)	mg/L	every 6 days	5	<0.04	<0.04	<0.04
copper	ug/L	monthly	1	-	-	4.5
diazinon	ug/L	monthly	1	-	-	<0.1
faecal coliforms	CFU/100mL	every 6 days	5	1	162	760
iron	ug/L	monthly	1	-	-	66
nitrogen (ammonia)	mg/L	every 6 days	5	<0.01	0.01	0.02
nitrogen (total)	mg/L	every 6 days	5	7.01	9.12	10.4
phosphorus (total)	mg/L	every 6 days	5	0.21	0.23	0.26
total suspended solids	mg/L	every 6 days	5	<2	<2	<2
zinc	ug/L	monthly	1	-	-	14

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

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

Winmalee Water Resource Recovery Facility

August Pollution Monitoring Summary



EPL 1963

Summary period: 01-08-2022 to 31-08-2022

Date obtained: 06-09-2022

Date published: 09-09-2022

Licensee: Sydney Water Corporation

PO Box 399

PARRAMATTA NSW 2124

Table 1: 3 Day Geometric Mean data

EPA Point 4 Site code WM0004	Point description: Downstream of the chamber prior to discharge				
pollutant	unit of measure	sampling frequency	3DGM limit	3DGM Actual	within limits
biochemical oxygen demand	mg/L	monthly	30	<2	yes
carbonaceous biochemical oxygen demand	mg/L	monthly	30	<2	yes
total suspended solids	mg/L	monthly	15	<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 WM0004	Point description: Downstream of the chamber prior to discharge					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
aluminium	ug/L	monthly	1	-	-	<5
biochemical oxygen demand	mg/L	every 6 days	5	<2	<2	<2
carbonaceous biochemical oxygen demand	mg/L	every 6 days	5	<2	<2	<2
Ceriodaphnia dubia immobilisation (EC50)	% Effluent/Vol	monthly	1	-	-	100
chlorine (total residual)	mg/L	every 6 days	5	<0.04	<0.04	<0.04
cobalt	ug/L	bi-annual	1	-	-	0.7
copper	ug/L	monthly	1	-	-	4.1
diazinon	ug/L	monthly	1	-	-	<0.1
faecal coliforms	CFU/100mL	every 6 days	5	<1	<1	2
iron	ug/L	monthly	1	-	-	90
nitrogen (ammonia)	mg/L	every 6 days	5	0.01	0.31	0.83
nitrogen (total)	mg/L	every 6 days	5	8.11	9.94	11.5
phosphorus (total)	mg/L	every 6 days	5	0.15	0.16	0.17
total suspended solids	mg/L	every 6 days	5	<2	<2	<2
zinc	ug/L	monthly	1	-	-	21

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

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

Winmalee Water Resource Recovery Facility

July Pollution Monitoring Summary



EPL 1963

Summary period: 01-07-2022 to 31-07-2022

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Licensee: Sydney Water Corporation

PO Box 399

PARRAMATTA NSW 2124

Table 1: 3 Day Geometric Mean data

EPA Point 4 Site code WM0004		Point description: Downstream of the chamber prior to discharge			
pollutant	unit of measure	sampling frequency	3DGM limit	3DGM Actual	within limits
biochemical oxygen demand	mg/L	monthly	30	2	yes
carbonaceous biochemical oxygen demand	mg/L	monthly	30	<2	yes
total suspended solids	mg/L	monthly	15	<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 WM0004		Point description: Downstream of the chamber prior to discharge				
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
aluminium	ug/L	monthly	1	-	-	10
biochemical oxygen demand	mg/L	every 6 days	5	<2	<2	3
carbonaceous biochemical oxygen demand	mg/L	every 6 days	5	<2	<2	2
Ceriodaphnia dubia immobilisation (EC50)	% Effluent/Vol	monthly	1	-	-	100
chlorine (total residual)	mg/L	every 6 days	5	<0.04	<0.04	<0.04
copper	ug/L	monthly	1	-	-	3.9
diazinon	ug/L	monthly	1	-	-	<0.1
faecal coliforms	CFU/100mL	every 6 days	5	<1	<1	1
iron	ug/L	monthly	1	-	-	136
nitrogen (ammonia)	mg/L	every 6 days	5	0.12	2.72	6.13
nitrogen (total)	mg/L	every 6 days	5	3.48	7.69	10.2
phosphorus (total)	mg/L	every 6 days	5	0.09	0.11	0.14
total suspended solids	mg/L	every 6 days	5	<2	<2	4
zinc	ug/L	monthly	1	-	-	18

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

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