

# Winmalee Wastewater Treatment Plant

## June Pollution Monitoring Summary



### EPL 1963

Summary period: 01-06-2021 to 30-06-2021

Date obtained: 09-07-2021

Date published: 20-07-2021

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	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 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	-	-	6
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	-	-	4.6
diazinon	ug/L	monthly	1	-	-	<0.1
faecal coliforms	CFU/100mL	every 6 days	5	<1	<1	1
iron	ug/L	monthly	1	-	-	70
nitrogen (ammonia)	mg/L	every 6 days	5	0.01	0.18	0.65
nitrogen (total)	mg/L	every 6 days	5	7.61	9.19	10.5
phosphorus (total)	mg/L	every 6 days	5	0.15	0.17	0.22
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 Wastewater Treatment Plant

## May Pollution Monitoring Summary



### EPL 1963

Summary period: 01-05-2021 to 31-05-2021

Date obtained: 09-06-2021

Date published: 21-06-2021

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	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 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	4
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	-	-	5.3
diazinon	ug/L	monthly	1	-	-	<0.1
faecal coliforms	CFU/100mL	every 6 days	5	<1	<1	1
iron	ug/L	monthly	1	-	-	78
nitrogen (ammonia)	mg/L	every 6 days	6	0.34	1.63	3.65
nitrogen (total)	mg/L	every 6 days	6	6.43	8.59	11.4
phosphorus (total)	mg/L	every 6 days	6	0.19	0.23	0.27
total suspended solids	mg/L	every 6 days	6	<2	<2	3
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 Wastewater Treatment Plant

## April Pollution Monitoring Summary



### EPL 1963

Summary period: 01-04-2021 to 30-04-2021

Date obtained: 07-05-2021

Date published: 17-05-2021

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	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 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	-	-	4.4
diazinon	ug/L	monthly	1	-	-	<0.1
faecal coliforms	CFU/100mL	every 6 days	5	<1	1261	6,300
iron	ug/L	monthly	1	-	-	90
nitrogen (ammonia)	mg/L	every 6 days	5	0.06	1.2	2.25
nitrogen (total)	mg/L	every 6 days	5	6.15	7.94	8.85
phosphorus (total)	mg/L	every 6 days	5	0.1	0.17	0.27
total suspended solids	mg/L	every 6 days	5	<2	<2	<2
zinc	ug/L	monthly	1	-	-	15

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 Wastewater Treatment Plant

## March Pollution Monitoring Summary



### EPL 1963

Summary period: 01-03-2021 to 31-03-2021

Date obtained: 06-04-2021

Date published: 16-04-2021

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	10	yes
carbonaceous biochemical oxygen demand	mg/L	monthly	30	3	yes
total suspended solids	mg/L	monthly	10	13	<sup>1</sup> no

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	-	-	207
biochemical oxygen demand	mg/L	every 6 days	5	<2	<2	7
carbonaceous biochemical oxygen demand	mg/L	every 6 days	5	<2	<2	3
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	-	-	7.6
diazinon	ug/L	monthly	1	-	-	<0.1
faecal coliforms	CFU/100mL	every 6 days	5	<1	382	1,900
iron	ug/L	monthly	1	-	-	1,200
nitrogen (ammonia)	mg/L	every 6 days	5	0.14	0.71	1.26
nitrogen (total)	mg/L	every 6 days	5	4.82	6.25	7.96
phosphorus (total)	mg/L	every 6 days	5	0.13	0.25	0.36
total suspended solids	mg/L	every 6 days	5	<2	2	11
zinc	ug/L	monthly	1	-	-	26

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

<sup>1</sup>Under condition L3.5 in the Environment Protection Licence 2269, as set by the NSW Environment Protection Authority, when a wet weather bypass flow is occurring, exceedances of the 3DGM concentration limit in condition L3.4 are permitted at point 4 for the duration of the bypass where the bypass was the sole cause of the exceedance. Wet weather flows between 19-22 March was the sole cause of the 3DGM exceedance.

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 Wastewater Treatment Plant

## February Pollution Monitoring Summary



### EPL 1963

Summary period: 01-02-2021 to 28-02-2021

Date obtained: 07-03-2021

Date published: 17-03-2021

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	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 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	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	5	<0.04	<0.04	<0.04
copper	ug/L	monthly	1	-	-	4.1
diazinon	ug/L	monthly	1	-	-	<0.1
faecal coliforms	CFU/100mL	every 6 days	5	1	107	430
iron	ug/L	monthly	1	-	-	42
nitrogen (ammonia)	mg/L	every 6 days	4	0.01	0.01	0.02
nitrogen (total)	mg/L	every 6 days	4	4.93	5.78	6.5
phosphorus (total)	mg/L	every 6 days	4	0.22	0.23	0.24
total suspended solids	mg/L	every 6 days	4	<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 Wastewater Treatment Plant

## January Pollution Monitoring Summary



### EPL 1963

Summary period: 01-01-2021 to 31-01-2021

Date obtained: 14-02-2021

Date published: 23-02-2021

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	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 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
cobalt	ug/L	bi-annually	1	-	-	0.8
copper	ug/L	monthly	1	-	-	5.4
diazinon	ug/L	monthly	1	-	-	<0.1
faecal coliforms	CFU/100mL	every 6 days	5	<1	1	3
iron	ug/L	monthly	1	-	-	70
nitrogen (ammonia)	mg/L	every 6 days	6	0.01	0.59	1.77
nitrogen (total)	mg/L	every 6 days	6	5.31	6.44	7.23
phosphorus (total)	mg/L	every 6 days	6	0.18	0.32	0.42
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 Wastewater Treatment Plant

## December Pollution Monitoring Summary



### EPL 1963

Summary period: 01-12-2020 to 31-12-2020

Date obtained: 06-01-2021

Date published: 18-01-2021

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	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 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	-	-	3.6
diazinon	ug/L	monthly	1	-	-	<0.1
faecal coliforms	CFU/100mL	every 6 days	5	<1	<1	1
iron	ug/L	monthly	1	-	-	147
nitrogen (ammonia)	mg/L	every 6 days	5	0.14	0.77	2.48
nitrogen (total)	mg/L	every 6 days	5	6.09	8.19	9.08
phosphorus (total)	mg/L	every 6 days	5	0.13	0.31	0.42
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 Wastewater Treatment Plant

## November Pollution Monitoring Summary



### EPL 1963

Summary period: 01-11-2020 to 30-11-2020

Date obtained: 10-12-2020

Date published: 15-12-2020

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	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 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	-	-	5.5
diazinon	ug/L	monthly	1	-	-	<0.1
faecal coliforms	CFU/100mL	every 6 days	5	<1	1	3
iron	ug/L	monthly	1	-	-	80
nitrogen (ammonia)	mg/L	every 6 days	5	0.01	0.02	0.05
nitrogen (total)	mg/L	every 6 days	5	5.85	7.69	9.14
phosphorus (total)	mg/L	every 6 days	5	0.25	0.31	0.38
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 Wastewater Treatment Plant

## October Pollution Monitoring Summary



### EPL 1963

Summary period: 01-10-2020 to 31-10-2020

Date obtained: 05-11-2020

Date published: 13-11-2020

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	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 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	-	-	7.3
diazinon	ug/L	monthly	1	-	-	<0.1
faecal coliforms	CFU/100mL	every 6 days	5	<1	7	32
iron	ug/L	monthly	1	-	-	60
nitrogen (ammonia)	mg/L	every 6 days	5	0.04	0.43	1.02
nitrogen (total)	mg/L	every 6 days	5	5.33	8.15	9.93
phosphorus (total)	mg/L	every 6 days	5	0.23	0.28	0.32
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 Wastewater Treatment Plant

## September Pollution Monitoring Summary



### EPL 1963

Summary period: 01-09-2020 to 30-09-2020

Date obtained: 15-10-2020

Date published: 23-10-2020

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	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 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	-	-	5.1
diazinon	ug/L	monthly	1	-	-	<0.1
faecal coliforms	CFU/100mL	every 6 days	5	1	11	42
iron	ug/L	monthly	1	-	-	102
nitrogen (ammonia)	mg/L	every 6 days	5	0.1	1.29	4.62
nitrogen (total)	mg/L	every 6 days	5	7.8	9.14	10
phosphorus (total)	mg/L	every 6 days	5	0.15	0.2	0.29
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).

Note: biochemical oxygen demand monitoring commenced from September 2020.

# Winmalee Wastewater Treatment Plant

## August Pollution Monitoring Summary



### EPL 1963

Summary period: 01-08-2020 to 31-08-2020

Date obtained: 07-09-2020

Date published: 16-09-2020

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
carbonaceous 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 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
carbonaceous biochemical oxygen demand	mg/L	every 6 days	5	<2	<2	4
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	3	10
iron	ug/L	monthly	1	-	-	72
nitrogen (ammonia)	mg/L	every 6 days	5	0.02	0.7	2.45
nitrogen (total)	mg/L	every 6 days	5	6.53	8.38	10.1
phosphorus (total)	mg/L	every 6 days	5	0.09	0.18	0.49
total suspended solids	mg/L	every 6 days	5	<2	3	14
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 Wastewater Treatment Plant

## July Pollution Monitoring Summary



### EPL 1963

Summary period: 01-07-2020 to 31-07-2020

Date obtained: 07-08-2020

Date published: 14-08-2020

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
carbonaceous 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 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
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	monthly	1	-	-	0.4
copper	ug/L	monthly	1	-	-	6.2
diazinon	ug/L	monthly	1	-	-	<0.1
faecal coliforms	CFU/100mL	every 6 days	5	<1	<1	1
iron	ug/L	monthly	1	-	-	279
nitrogen (ammonia)	mg/L	every 6 days	5	0.02	0.18	0.67
nitrogen (total)	mg/L	every 6 days	5	5.56	8.15	9.3
phosphorus (total)	mg/L	every 6 days	5	0.07	0.08	0.11
total suspended solids	mg/L	every 6 days	5	<2	<2	2
zinc	ug/L	monthly	1	-	-	15

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).