

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	30	<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	30	<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	30	<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	30	<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	30	<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	30	<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	30	<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).