

Winmalee Wastewater Treatment Plant

May Pollution Monitoring Summary



EPL 1963

Summary period: 01-05-2020 to 31-05-2020

Date obtained: 09-06-2020

Date published: 11-06-2020

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	-	-	6
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
cobalt	ug/L	monthly	1	-	-	0.6
copper	ug/L	monthly	1	-	-	10.5
diazinon	ug/L	monthly	1	-	-	<0.1
faecal coliforms	CFU/100mL	every 6 days	6	1	3	6
iron	ug/L	monthly	1	-	-	299
nitrogen (ammonia)	mg/L	every 6 days	5	0.01	0.06	0.26
nitrogen (total)	mg/L	every 6 days	5	6.76	7.7	9.52
phosphorus (total)	mg/L	every 6 days	5	0.1	0.12	0.14
total suspended solids	mg/L	every 6 days	5	<2	<2	<2
zinc	ug/L	monthly	1	-	-	16

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

Winmalee Wastewater Treatment Plant

April Pollution Monitoring Summary



EPL 1963

Summary period: 01-04-2020 to 30-04-2020

Date obtained: 07-05-2020

Date published: 15-05-2020

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	-	-	0.3
copper	ug/L	monthly	1	-	-	5.6
diazinon	ug/L	monthly	1	-	-	<0.1
faecal coliforms	CFU/100mL	every 6 days	5	<1	1	3
iron	ug/L	monthly	1	-	-	398
nitrogen (ammonia)	mg/L	every 6 days	5	0.01	0.03	0.07
nitrogen (total)	mg/L	every 6 days	5	7.05	8.56	9.68
phosphorus (total)	mg/L	every 6 days	5	0.12	0.14	0.18
total suspended solids	mg/L	every 6 days	5	<2	<2	<2
zinc	ug/L	monthly	1	-	-	16

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

Winmalee Wastewater Treatment Plant

March Pollution Monitoring Summary



EPL 1963

Summary period: 01-03-2020 to 31-03-2020

Date obtained: 07-04-2020

Date published: 11-04-2020

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	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	monthly	1	-	-	0.2
copper	ug/L	monthly	1	-	-	4.3
diazinon	ug/L	monthly	1	-	-	<0.1
faecal coliforms	CFU/100mL	every 6 days	5	<1	802	4,000
iron	ug/L	monthly	1	-	-	392
nitrogen (ammonia)	mg/L	every 6 days	6	0.01	0.08	0.29
nitrogen (total)	mg/L	every 6 days	6	5.55	7.45	8.49
phosphorus (total)	mg/L	every 6 days	6	0.12	0.15	0.22
total suspended solids	mg/L	every 6 days	6	<2	<2	<2
zinc	ug/L	monthly	1	-	-	16

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

Winmalee Wastewater Treatment Plant

February Pollution Monitoring Summary



EPL 1963

Summary period: 01-02-2020 to 29-02-2020

Date obtained: 18-03-2020

Date published: 27-03-2020

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	-	-	12
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
cobalt	ug/L	monthly	1	-	-	0.2
copper	ug/L	monthly	1	-	-	5.4
diazinon	ug/L	monthly	1	-	-	<0.1
faecal coliforms	CFU/100mL	every 6 days	5	<1	59	240
iron	ug/L	monthly	1	-	-	335
nitrogen (ammonia)	mg/L	every 6 days	4	0.02	0.32	0.97
nitrogen (total)	mg/L	every 6 days	4	6.01	6.97	8.06
phosphorus (total)	mg/L	every 6 days	4	0.11	0.22	0.47
total suspended solids	mg/L	every 6 days	4	<2	3	12
zinc	ug/L	monthly	1	-	-	22

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

Winmalee Wastewater Treatment Plant

January Pollution Monitoring Summary



EPL 1963

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

Date obtained: 07-02-2020

Date published: 14-02-2020

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	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	monthly	1	-	-	0.3
copper	ug/L	monthly	1	-	-	4.8
diazinon	ug/L	monthly	1	-	-	<0.1
faecal coliforms	CFU/100mL	every 6 days	5	<1	120	550
iron	ug/L	monthly	1	-	-	462
nitrogen (ammonia)	mg/L	every 6 days	6	0.02	0.09	0.42
nitrogen (total)	mg/L	every 6 days	6	5.42	7.94	9.78
phosphorus (total)	mg/L	every 6 days	6	0.15	0.19	0.25
total suspended solids	mg/L	every 6 days	6	<2	<2	3
zinc	ug/L	monthly	1	-	-	12

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

Winmalee Wastewater Treatment Plant

December Pollution Monitoring Summary



EPL 1963

Summary period: 01-12-2019 to 31-12-2019

Date obtained: 02-01-2020

Date published: 10-01-2020

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	-	-	6
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	-	-	6.3
diazinon	ug/L	monthly	1	-	-	<0.1
faecal coliforms	CFU/100mL	every 6 days	5	<1	<1	2
iron	ug/L	monthly	1	-	-	826
nitrogen (ammonia)	mg/L	every 6 days	5	0.02	0.58	1.83
nitrogen (total)	mg/L	every 6 days	5	7.01	8.3	9.02
phosphorus (total)	mg/L	every 6 days	5	0.24	0.27	0.3
total suspended solids	mg/L	every 6 days	5	<2	<2	<2
zinc	ug/L	monthly	1	-	-	11

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

Winmalee Wastewater Treatment Plant

November Pollution Monitoring Summary



EPL 1963

Summary period: 01-11-2019 to 30-11-2019

Date obtained: 04-12-2019

Date published: 12-12-2019

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	-	-	6
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	-	-	0.5
copper	ug/L	monthly	1	-	-	4.5
diazinon	ug/L	monthly	1	-	-	<0.1
faecal coliforms	CFU/100mL	every 6 days	5	<1	2	7
iron	ug/L	monthly	1	-	-	828
nitrogen (ammonia)	mg/L	every 6 days	5	0.04	1.02	2.8
nitrogen (total)	mg/L	every 6 days	5	7.63	8.56	9.9
phosphorus (total)	mg/L	every 6 days	5	0.22	0.27	0.37
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

Winmalee Wastewater Treatment Plant

October Pollution Monitoring Summary



EPL 1963

Summary period: 01-10-2019 to 31-10-2019

Date obtained: 12-11-2019

Date published: 22-11-2019

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	-	-	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
cobalt	ug/L	monthly	1	-	-	0.6
copper	ug/L	monthly	1	-	-	4.5
diazinon	ug/L	monthly	1	-	-	<0.1
faecal coliforms	CFU/100mL	every 6 days	5	<1	2	7
iron	ug/L	monthly	1	-	-	818
nitrogen (ammonia)	mg/L	every 6 days	5	0.25	2.7	4.78
nitrogen (total)	mg/L	every 6 days	5	8.17	9.61	11.5
phosphorus (total)	mg/L	every 6 days	5	0.16	0.19	0.21
total suspended solids	mg/L	every 6 days	5	<2	<2	<2
zinc	ug/L	monthly	1	-	-	20

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

Winmalee Wastewater Treatment Plant

September Pollution Monitoring Summary



EPL 1963

Summary period: 01-09-2019 to 30-09-2019

Date obtained: 04-10-2019

Date published: 15-10-2019

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	-	-	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
cobalt	ug/L	monthly	1	-	-	0.4
copper	ug/L	monthly	1	-	-	4.4
diazinon	ug/L	monthly	1	-	-	<0.1
faecal coliforms	CFU/100mL	every 6 days	5	<1	<1	1
iron	ug/L	monthly	1	-	-	490
nitrogen (ammonia)	mg/L	every 6 days	5	0.01	0.83	2.75
nitrogen (total)	mg/L	every 6 days	5	5.61	7.62	9.78
phosphorus (total)	mg/L	every 6 days	5	0.05	0.11	0.15
total suspended solids	mg/L	every 6 days	5	<2	<2	<2
zinc	ug/L	monthly	1	-	-	60

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

Winmalee Wastewater Treatment Plant

August Pollution Monitoring Summary



EPL 1963

Summary period: 01-08-2019 to 31-08-2019

Date obtained: 06-09-2019

Date published: 16-09-2019

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	-	-	0.6
copper	ug/L	monthly	1	-	-	4.5
diazinon	ug/L	monthly	1	-	-	<0.1
faecal coliforms	CFU/100mL	every 6 days	5	<1	1	3
iron	ug/L	monthly	1	-	-	687
nitrogen (ammonia)	mg/L	every 6 days	5	0.5	1.35	3.43
nitrogen (total)	mg/L	every 6 days	5	7.92	9.39	10.2
phosphorus (total)	mg/L	every 6 days	5	0.11	0.12	0.13
total suspended solids	mg/L	every 6 days	5	<2	<2	<2
zinc	ug/L	monthly	1	-	-	16

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

Winmalee Wastewater Treatment Plant

July Pollution Monitoring Summary



EPL 1963

Summary period: 01-07-2019 to 31-07-2019

Date obtained: 07-08-2019

Date published: 17-08-2019

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	-	-	0.5
copper	ug/L	monthly	1	-	-	4.6
diazinon	ug/L	monthly	1	-	-	<0.1
faecal coliforms	CFU/100mL	every 6 days	5	<1	<1	2
iron	ug/L	monthly	1	-	-	568
nitrogen (ammonia)	mg/L	every 6 days	5	0.02	2.54	5.71
nitrogen (total)	mg/L	every 6 days	5	7.05	9.55	12.8
phosphorus (total)	mg/L	every 6 days	5	0.09	0.1	0.11
total suspended solids	mg/L	every 6 days	5	<2	<2	3
zinc	ug/L	monthly	1	-	-	14

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