St Marys Wastewater Treatment Plant
February Pollution Monitoring Summary

EPL 1729

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 and 100 percentile data

EPA Point 5 Site code SM0005	Point description: At the outlet of the chlorine contact tank						
pollutant	unit of measure	sampling frequency	3DGM limit	3DGM actual	100 percentile limit	100 percentile actual	within limits
carbonaceous biochemical oxygen demand	mg/L	monthly	30	<2	-	-	yes
nitrogen (total)	mg/L	every 6 days	-	-	45	12.3	yes
phosphorus	mg/L	every 6 days	-	-	5	0.13	yes
total suspended solids	mg/L	monthly	30	<2	-	-	yes

100 percentile means that 100 % of samples (or all samples) taken must not exceed the limit for that pollutant.

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 5 Site code SM0005	Point description: At the outlet of the chlorine contact tank					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
aluminium	ug/L	monthly	1	-	-	48
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	-	-	3.8
diazinon	ug/L	monthly	1	-	-	<0.1
faecal coliforms	CFU/100mL	every 6 days	5	1	2	4
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30
iron	ug/L	monthly	1	-	-	21
nickel	ug/L	monthly	1	-	-	2.5
nitrogen (ammonia)	mg/L	every 6 days	5	0.01	2.07	10.3
nitrogen (total)	mg/L	every 6 days	5	3.04	5.87	12.3
phosphorus	mg/L	every 6 days	5	0.01	0.04	0.13
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.

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St Marys Wastewater Treatment Plant
January Pollution Monitoring Summary

EPL 1729

Summary period: 01-01-2020 to 31-01-2020
Date obtained: 06-02-2020
Date published: 14-02-2020

Licensee: Sydney Water Corporation
PO Box 399
PARRAMATTA NSW 2124

Table 1: 3 Day Geometric Mean and 100 percentile data

EPA Point 5 Site code SM0005	Point description: At the outlet of the chlorine contact tank						
pollutant	unit of measure	sampling frequency	3DGM limit	3DGM actual	100 percentile limit	100 percentile actual	within limits
carbonaceous biochemical oxygen demand	mg/L	monthly	30	<2	-	-	yes
nitrogen (total)	mg/L	every 6 days	-	-	45	8.92	yes
phosphorus	mg/L	every 6 days	-	-	5	0.13	yes
total suspended solids	mg/L	monthly	30	<2	-	-	yes

100 percentile means that 100 % of samples (or all samples) taken must not exceed the limit for that pollutant.

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 5 Site code SM0005	Point description: At the outlet of the chlorine contact tank					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
aluminium	ug/L	monthly	1	-	-	44
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	0.07	0.37
copper	ug/L	monthly	1	-	-	2.6
diazinon	ug/L	monthly	1	-	-	<0.1
faecal coliforms	CFU/100mL	every 6 days	5	<1	2	5
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30
iron	ug/L	monthly	1	-	-	34
nickel	ug/L	monthly	1	-	-	2.3
nitrogen (ammonia)	mg/L	every 6 days	5	0.02	2.11	6
nitrogen (total)	mg/L	every 6 days	5	2.68	5.4	8.92
phosphorus	mg/L	every 6 days	5	0.01	0.04	0.13
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.

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St Marys Wastewater Treatment Plant
December Pollution Monitoring Summary

EPL 1729

Summary period: 01-12-2019 to 31-12-2019
Date obtained: 07-01-2020
Date published: 10-01-2020

Licensee: Sydney Water Corporation
PO Box 399
PARRAMATTA NSW 2124

Table 1: 3 Day Geometric Mean and 100 percentile data

EPA Point 5 Site code SM0005	Point description: At the outlet of the chlorine contact tank						
pollutant	unit of measure	sampling frequency	3DGM limit	3DGM actual	100 percentile limit	100 percentile actual	within limits
carbonaceous biochemical oxygen demand	mg/L	monthly	30	<2	-	-	yes
nitrogen (total)	mg/L	every 6 days	-	-	45	4.66	yes
phosphorus	mg/L	every 6 days	-	-	5	0.03	yes
total suspended solids	mg/L	monthly	30	<2	-	-	yes

100 percentile means that 100 % of samples (or all samples) taken must not exceed the limit for that pollutant.

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 5 Site code SM0005	Point description: At the outlet of the chlorine contact tank					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
aluminium	ug/L	monthly	1	-	-	71
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	0.12
copper	ug/L	monthly	1	-	-	2
diazinon	ug/L	monthly	1	-	-	<0.1
faecal coliforms	CFU/100mL	every 6 days	6	<1	3	11
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30
iron	ug/L	monthly	1	-	-	28
nickel	ug/L	monthly	1	-	-	3
nitrogen (ammonia)	mg/L	every 6 days	5	0.02	0.02	0.02
nitrogen (total)	mg/L	every 6 days	5	3.51	3.93	4.66
phosphorus	mg/L	every 6 days	5	0.02	0.02	0.03
total suspended solids	mg/L	every 6 days	5	<2	<2	<2
zinc	ug/L	monthly	1	-	-	24

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

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St Marys Wastewater Treatment Plant
November Pollution Monitoring Summary

EPL 1729

Summary period: 01-11-2019 to 30-11-2019
Date obtained: 06-12-2019
Date published: 12-12-2019

Licensee: Sydney Water Corporation
PO Box 399
PARRAMATTA NSW 2124

Table 1: 3 Day Geometric Mean and 100 percentile data

EPA Point 5 Site code SM0005	Point description: At the outlet of the chlorine contact tank						
pollutant	unit of measure	sampling frequency	3DGM limit	3DGM actual	100 percentile limit	100 percentile actual	within limits
carbonaceous biochemical oxygen demand	mg/L	monthly	30	<2	-	-	yes
nitrogen (total)	mg/L	every 6 days	-	-	45	4.42	yes
phosphorus	mg/L	every 6 days	-	-	5	0.04	yes
total suspended solids	mg/L	monthly	30	<2	-	-	yes

100 percentile means that 100 % of samples (or all samples) taken must not exceed the limit for that pollutant.

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 5 Site code SM0005	Point description: At the outlet of the chlorine contact tank					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
aluminium	ug/L	monthly	1	-	-	55
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	-	-	1.6
diazinon	ug/L	monthly	1	-	-	<0.1
faecal coliforms	CFU/100mL	every 6 days	5	<1	3	13
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30
iron	ug/L	monthly	1	-	-	24
nickel	ug/L	monthly	1	-	-	2.5
nitrogen (ammonia)	mg/L	every 6 days	5	0.02	0.05	0.17
nitrogen (total)	mg/L	every 6 days	5	3.19	3.75	4.42
phosphorus	mg/L	every 6 days	5	0.02	0.02	0.04
total suspended solids	mg/L	every 6 days	5	<2	<2	<2
zinc	ug/L	monthly	1	-	-	22

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

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St Marys Wastewater Treatment Plant
October Pollution Monitoring Summary

EPL 1729

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 and 100 percentile data

EPA Point 5 Site code SM0005	Point description: At the outlet of the chlorine contact tank						
pollutant	unit of measure	sampling frequency	3DGM limit	3DGM actual	100 percentile limit	100 percentile actual	within limits
carbonaceous biochemical oxygen demand	mg/L	monthly	30	<2	-	-	yes
nitrogen (total)	mg/L	every 6 days	-	-	45	5.98	yes
phosphorus	mg/L	every 6 days	-	-	5	0.04	yes
total suspended solids	mg/L	monthly	30	<2	-	-	yes

100 percentile means that 100 % of samples (or all samples) taken must not exceed the limit for that pollutant.

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 5 Site code SM0005	Point description: At the outlet of the chlorine contact tank					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
aluminium	ug/L	monthly	1	-	-	114
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	-	-	1.9
diazinon	ug/L	monthly	1	-	-	<0.1
faecal coliforms	CFU/100mL	every 6 days	5	<1	16	77
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30
iron	ug/L	monthly	1	-	-	37
nickel	ug/L	monthly	1	-	-	2.9
nitrogen (ammonia)	mg/L	every 6 days	6	0.02	0.27	1.09
nitrogen (total)	mg/L	every 6 days	6	3.76	4.53	5.98
phosphorus	mg/L	every 6 days	6	0.02	0.03	0.04
total suspended solids	mg/L	every 6 days	6	<2	<2	<2
zinc	ug/L	monthly	1	-	-	22

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

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St Marys Wastewater Treatment Plant
September Pollution Monitoring Summary

EPL 1729

Summary period: 01-09-2019 to 30-09-2019
Date obtained: 02-10-2019
Date published: 08-10-2019

Licensee: Sydney Water Corporation
PO Box 399
PARRAMATTA NSW 2124

Table 1: 3 Day Geometric Mean and 100 percentile data

EPA Point 5 Site code SM0005	Point description: At the outlet of the chlorine contact tank						
pollutant	unit of measure	sampling frequency	3DGM limit	3DGM actual	100 percentile limit	100 percentile actual	within limits
carbonaceous biochemical oxygen demand	mg/L	monthly	30	<2	-	-	yes
nitrogen (total)	mg/L	every 6 days	-	-	45	7.26	yes
phosphorus	mg/L	every 6 days	-	-	5	0.03	yes
total suspended solids	mg/L	monthly	30	<2	-	-	yes

100 percentile means that 100 % of samples (or all samples) taken must not exceed the limit for that pollutant.

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 5 Site code SM0005	Point description: At the outlet of the chlorine contact tank					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
aluminium	ug/L	monthly	1	-	-	70
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	0.13
copper	ug/L	monthly	1	-	-	3.1
diazinon	ug/L	monthly	1	-	-	<0.1
faecal coliforms	CFU/100mL	every 6 days	5	<1	1	2
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30
iron	ug/L	monthly	1	-	-	20
nickel	ug/L	monthly	1	-	-	2.1
nitrogen (ammonia)	mg/L	every 6 days	5	0.75	1.62	2.56
nitrogen (total)	mg/L	every 6 days	5	5.86	6.5	7.26
phosphorus	mg/L	every 6 days	5	0.01	0.03	0.03
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.

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St Marys Wastewater Treatment Plant
August Pollution Monitoring Summary

EPL 1729

Summary period: 01-08-2019 to 31-08-2019
Date obtained: 04-09-2019
Date published: 16-09-2019

Licensee: Sydney Water Corporation
PO Box 399
PARRAMATTA NSW 2124

Table 1: 3 Day Geometric Mean and 100 percentile data

EPA Point 5 Site code SM0005	Point description: At the outlet of the chlorine contact tank						
pollutant	unit of measure	sampling frequency	3DGM limit	3DGM actual	100 percentile limit	100 percentile actual	within limits
carbonaceous biochemical oxygen demand	mg/L	monthly	30	<2	-	-	yes
nitrogen (total)	mg/L	every 6 days	-	-	45	6.38	yes
phosphorus	mg/L	every 6 days	-	-	5	0.06	yes
total suspended solids	mg/L	monthly	30	<2	-	-	yes

100 percentile means that 100 % of samples (or all samples) taken must not exceed the limit for that pollutant.

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 5 Site code SM0005	Point description: At the outlet of the chlorine contact tank					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
aluminium	ug/L	monthly	1	-	-	85
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	-	-	1.7
diazinon	ug/L	monthly	1	-	-	<0.1
faecal coliforms	CFU/100mL	every 6 days	5	<1	<1	<1
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30
iron	ug/L	monthly	1	-	-	39
nickel	ug/L	monthly	1	-	-	2.7
nitrogen (ammonia)	mg/L	every 6 days	5	0.22	0.54	1.12
nitrogen (total)	mg/L	every 6 days	5	4.47	5.2	6.38
phosphorus	mg/L	every 6 days	5	0.03	0.04	0.06
total suspended solids	mg/L	every 6 days	5	<2	<2	<2
zinc	ug/L	monthly	1	-	-	25

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

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St Marys Wastewater Treatment Plant
July Pollution Monitoring Summary

EPL 1729

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 and 100 percentile data

EPA Point 5 Site code SM0005	Point description: At the outlet of the chlorine contact tank						
pollutant	unit of measure	sampling frequency	3DGM limit	3DGM actual	100 percentile limit	100 percentile actual	within limits
carbonaceous biochemical oxygen demand	mg/L	monthly	30	<2	-	-	yes
nitrogen (total)	mg/L	every 6 days	-	-	45	6.74	yes
phosphorus	mg/L	every 6 days	-	-	5	0.04	yes
total suspended solids	mg/L	monthly	30	2	-	-	yes

100 percentile means that 100 % of samples (or all samples) taken must not exceed the limit for that pollutant.

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 5 Site code SM0005	Point description: At the outlet of the chlorine contact tank					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
aluminium	ug/L	monthly	1	-	-	316
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	-	-	2.2
diazinon	ug/L	monthly	1	-	-	<0.1
faecal coliforms	CFU/100mL	every 6 days	5	<1	<1	2
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30
iron	ug/L	monthly	1	-	-	50
nickel	ug/L	monthly	1	-	-	3.2
nitrogen (ammonia)	mg/L	every 6 days	5	0.05	0.51	0.87
nitrogen (total)	mg/L	every 6 days	5	4.85	6.1	6.74
phosphorus	mg/L	every 6 days	5	0.03	0.04	0.04
total suspended solids	mg/L	every 6 days	5	<2	<2	2
zinc	ug/L	monthly	1	-	-	23

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

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