# St Marys Wastewater Treatment Plant
# June Pollution Monitoring Summary

## EPL 1729

Summary period: 01-06-2019 to 30-06-2019
Date obtained: 11-07-2019
Date published: 17-07-2019

**Licensee:** Sydney Water Corporation
PO Box 399
PARRAMATTA NSW 2124

**Table 1: 3 Day Geometric Mean and 100 percentile data**

| EPA Point 5<br>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 | 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<br>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 | 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 | - | - | 2.9 |
| 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 | - | - | 39 |
| nickel | ug/L | monthly | 1 | - | - | 2.2 |
| nitrogen (ammonia) | mg/L | every 6 days | 5 | 0.02 | 0.11 | 0.47 |
| nitrogen (total) | mg/L | every 6 days | 5 | 4.36 | 5.47 | 6 |
| 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 | - | - | 23 |

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

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# St Marys Wastewater Treatment Plant
# May Pollution Monitoring Summary

## EPL 1729

Summary period: 01-05-2019 to 31-05-2019
Date obtained: 06-06-2019
Date published: 12-06-2019

**Licensee:** Sydney Water Corporation
PO Box 399
PARRAMATTA NSW 2124

**Table 1: 3 Day Geometric Mean and 100 percentile data**

| EPA Point 5<br>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 | 6.64 | 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<br>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 | - | - | 94 |
| 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 | - | - | 3.4 |
| 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 | - | - | 42 |
| nickel | ug/L | monthly | 1 | - | - | 2.7 |
| nitrogen (ammonia) | mg/L | every 6 days | 5 | 0.01 | 0.37 | 1.11 |
| nitrogen (total) | mg/L | every 6 days | 5 | 4.48 | 5.44 | 6.64 |
| 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 | - | - | 20 |

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

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# St Marys Wastewater Treatment Plant
# April Pollution Monitoring Summary

## EPL 1729

Summary period: 01-04-2019 to 30-04-2019
Date obtained: 06-05-2019
Date published: 13-05-2019

**Licensee:** Sydney Water Corporation
PO Box 399
PARRAMATTA NSW 2124

**Table 1: 3 Day Geometric Mean and 100 percentile data**

| EPA Point 5<br>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 | 7.61 | yes |
| phosphorus | mg/L | every 6 days | - | - | 5 | 0.02 | 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<br>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 | - | - | 62 |
| 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 | - | - | 3.4 |
| 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 | - | - | 28 |
| nickel | ug/L | monthly | 1 | - | - | 2.6 |
| nitrogen (ammonia) | mg/L | every 6 days | 5 | 0.01 | 0.27 | 0.78 |
| nitrogen (total) | mg/L | every 6 days | 5 | 4.49 | 5.92 | 7.61 |
| phosphorus | mg/L | every 6 days | 5 | 0.02 | 0.02 | 0.02 |
| total suspended solids | mg/L | every 6 days | 5 | <2 | <2 | <2 |
| zinc | ug/L | monthly | 1 | - | - | 27 |

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

# St Marys Wastewater Treatment Plant
# March Pollution Monitoring Summary

## EPL 1729

Summary period: 01-03-2019 to 31-03-2019
Date obtained: 08-04-2019
Date published: 12-04-2019

**Licensee:** Sydney Water Corporation
PO Box 399
PARRAMATTA NSW 2124

**Table 1: 3 Day Geometric Mean and 100 percentile data**

| EPA Point 5<br>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 | 5.14 | 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<br>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 | - | - | 80 |
| 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 | - | - | 3.4 |
| diazinon | ug/L | monthly | 1 | - | - | <0.1 |
| faecal coliforms | CFU/100mL | every 6 days | 5 | <1 | 3 | 11 |
| hydrogen sulphide (unionised) | ug/L | monthly | 1 | - | - | <30 |
| iron | ug/L | monthly | 1 | - | - | 28 |
| nickel | ug/L | monthly | 1 | - | - | 2.9 |
| nitrogen (ammonia) | mg/L | every 6 days | 5 | 0.02 | 0.04 | 0.09 |
| nitrogen (total) | mg/L | every 6 days | 5 | 3.61 | 4.38 | 5.14 |
| 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 | - | - | 20 |

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

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# St Marys Wastewater Treatment Plant
# February Pollution Monitoring Summary

## EPL 1729

Summary period: 01-02-2019 to 28-02-2019
Date obtained: 13-03-2019
Date published: 15-03-2019

**Licensee:** Sydney Water Corporation
PO Box 399
PARRAMATTA NSW 2124

**Table 1: 3 Day Geometric Mean and 100 percentile data**

| EPA Point 5<br>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 | 5.11 | yes |
| phosphorus | mg/L | every 6 days | - | - | 5 | 0.02 | 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<br>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 | - | - | 57 |
| 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 | - | - | 3.1 |
| diazinon | ug/L | monthly | 1 | - | - | <0.1 |
| faecal coliforms | CFU/100mL | every 6 days | 5 | 2 | 5 | 15 |
| hydrogen sulphide (unionised) | ug/L | monthly | 1 | - | - | <30 |
| iron | ug/L | monthly | 1 | - | - | 44 |
| nickel | ug/L | monthly | 1 | - | - | 2.7 |
| nitrogen (ammonia) | mg/L | every 6 days | 5 | 0.01 | 0.05 | 0.16 |
| nitrogen (total) | mg/L | every 6 days | 5 | 3.22 | 3.89 | 5.11 |
| phosphorus | mg/L | every 6 days | 5 | 0.02 | 0.02 | 0.02 |
| 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: 01-01-2019 to 31-01-2019
Date obtained: 14-02-2019
Date published: 22-02-2019

**Licensee:** Sydney Water Corporation
PO Box 399
PARRAMATTA NSW 2124

**Table 1: 3 Day Geometric Mean and 100 percentile data**

| EPA Point 5<br>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 | 4.34 | 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<br>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 | - | - | 120 |
| 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 | - | - | 1.5 |
| diazinon | ug/L | monthly | 1 | - | - | <0.1 |
| faecal coliforms | CFU/100mL | every 6 days | 5 | <1 | 11 | 48 |
| hydrogen sulphide (unionised) | ug/L | monthly | 1 | - | - | <30 |
| iron | ug/L | monthly | 1 | - | - | 38 |
| nickel | ug/L | monthly | 1 | - | - | 2.1 |
| nitrogen (ammonia) | mg/L | every 6 days | 5 | 0.01 | 0.3 | 1.27 |
| nitrogen (total) | mg/L | every 6 days | 5 | 3.03 | 3.49 | 4.34 |
| 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 | - | - | 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
# December Pollution Monitoring Summary

## EPL 1729

Summary period: 01-12-2018 to 31-12-2018
Date obtained: 14-01-2019
Date published: 18-01-2019

**Licensee:** Sydney Water Corporation
PO Box 399
PARRAMATTA NSW 2124

**Table 1: 3 Day Geometric Mean and 100 percentile data**

| EPA Point 5<br>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 | 5.12 | 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<br>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 | - | - | 3.3 |
| diazinon | ug/L | monthly | 1 | - | - | <0.1 |
| faecal coliforms | CFU/100mL | every 6 days | 5 | <1 | 9 | 30 |
| hydrogen sulphide (unionised) | ug/L | monthly | 1 | - | - | <30 |
| iron | ug/L | monthly | 1 | - | - | 26 |
| nickel | ug/L | monthly | 1 | - | - | 2.8 |
| nitrogen (ammonia) | mg/L | every 6 days | 5 | 0.02 | 0.15 | 0.55 |
| nitrogen (total) | mg/L | every 6 days | 5 | 2.34 | 4.26 | 5.12 |
| phosphorus | mg/L | every 6 days | 5 | 0.03 | 0.03 | 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
# November Pollution Monitoring Summary

## EPL 1729

Summary period: 01-11-2018 to 30-11-2018
Date obtained: 07-12-2018
Date published: 18-12-2018

**Licensee:** Sydney Water Corporation
PO Box 399
PARRAMATTA NSW 2124

**Table 1: 3 Day Geometric Mean and 100 percentile data**

| EPA Point 5<br>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 | 5.62 | 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<br>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 | - | - | 112 |
| 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 | 3 | 4 | 7 |
| hydrogen sulphide (unionised) | ug/L | monthly | 1 | - | - | <30 |
| iron | ug/L | monthly | 1 | - | - | 30 |
| nickel | ug/L | monthly | 1 | - | - | 3.8 |
| nitrogen (ammonia) | mg/L | every 6 days | 5 | 0.02 | 0.04 | 0.08 |
| nitrogen (total) | mg/L | every 6 days | 5 | 3.7 | 4.16 | 5.62 |
| phosphorus | mg/L | every 6 days | 5 | 0.02 | 0.03 | 0.04 |
| total suspended solids | mg/L | every 6 days | 5 | <2 | <2 | 3 |
| 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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# St Marys Wastewater Treatment Plant
# October Pollution Monitoring Summary

## EPL 1729

Summary period: 01-10-2018 to 31-10-2018
Date obtained: 12-11-2018
Date published: 23-11-2018

**Licensee:** Sydney Water Corporation
PO Box 399
PARRAMATTA NSW 2124

**Table 1: 3 Day Geometric Mean and 100 percentile data**

| EPA Point 5<br>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 | 6.54 | 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<br>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 | - | - | 140 |
| 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 | - | - | 2.3 |
| diazinon | ug/L | monthly | 1 | - | - | <0.1 |
| faecal coliforms | CFU/100mL | every 6 days | 6 | <1 | 2 | 4 |
| hydrogen sulphide (unionised) | ug/L | monthly | 1 | - | - | <30 |
| iron | ug/L | monthly | 1 | - | - | 45 |
| nickel | ug/L | monthly | 1 | - | - | 3.2 |
| nitrogen (ammonia) | mg/L | every 6 days | 5 | 0.02 | 0.19 | 0.44 |
| nitrogen (total) | mg/L | every 6 days | 5 | 4.6 | 5.34 | 6.54 |
| phosphorus | mg/L | every 6 days | 5 | 0.02 | 0.03 | 0.04 |
| 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.

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# St Marys Wastewater Treatment Plant
# September Pollution Monitoring Summary

## EPL 1729

Summary period: 01-09-2018 to 30-09-2018
Date obtained: 15-10-2018
Date published: 19-10-2018

**Licensee:** Sydney Water Corporation
PO Box 399
PARRAMATTA NSW 2124

**Table 1: 3 Day Geometric Mean and 100 percentile data**

| EPA Point 5<br>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 | 5.44 | 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<br>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 | - | - | 75 |
| 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 | - | - | 2.1 |
| 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 | - | - | 47 |
| nickel | ug/L | monthly | 1 | - | - | 3.6 |
| nitrogen (ammonia) | mg/L | every 6 days | 5 | 0.02 | 0.34 | 0.94 |
| nitrogen (total) | mg/L | every 6 days | 5 | 4.08 | 4.62 | 5.44 |
| phosphorus | mg/L | every 6 days | 5 | 0.02 | 0.03 | 0.04 |
| 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.

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# St Marys Wastewater Treatment Plant
# August Pollution Monitoring Summary

## EPL 1729

Summary period: 01-08-2018 to 31-08-2018
Date obtained: 11-09-2018
Date published: 14-09-2018

**Licensee:** Sydney Water Corporation
PO Box 399
PARRAMATTA NSW 2124

**Table 1: 3 Day Geometric Mean and 100 percentile data**

| EPA Point 5<br>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 | 5.64 | 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<br>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 | - | - | 147 |
| 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 | - | - | 3 |
| 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 | - | - | 52 |
| nickel | ug/L | monthly | 1 | - | - | 3.1 |
| nitrogen (ammonia) | mg/L | every 6 days | 6 | 0.03 | 0.49 | 1.87 |
| nitrogen (total) | mg/L | every 6 days | 6 | 4.19 | 4.73 | 5.64 |
| phosphorus | mg/L | every 6 days | 6 | 0.02 | 0.03 | 0.03 |
| total suspended solids | mg/L | every 6 days | 6 | <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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# St Marys Wastewater Treatment Plant
# July Pollution Monitoring Summary

## EPL 1729

Summary period: 01-07-2018 to 31-07-2018
Date obtained: 09-08-2018
Date published: 14-08-2018

**Licensee:** Sydney Water Corporation
PO Box 399
PARRAMATTA NSW 2124

**Table 1: 3 Day Geometric Mean and 100 percentile data**

| EPA Point 5<br>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 | 4.63 | 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<br>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 | - | - | 119 |
| 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 | - | - | 3.3 |
| 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 | - | - | 58 |
| nickel | ug/L | monthly | 1 | - | - | 2.8 |
| nitrogen (ammonia) | mg/L | every 6 days | 5 | 0.21 | 0.54 | 1.06 |
| nitrogen (total) | mg/L | every 6 days | 5 | 3.85 | 4.36 | 4.63 |
| phosphorus | mg/L | every 6 days | 5 | 0.02 | 0.02 | 0.03 |
| total suspended solids | mg/L | every 6 days | 5 | <2 | <2 | 3 |
| zinc | ug/L | monthly | 1 | - | - | 19 |

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

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