

# St Marys Water Resource Recovery Facility

## June Pollution Monitoring Summary



### EPL 1729

Summary period: 01-06-2024 to 30-06-2024  
Date obtained: 08-07-2024  
Date published: 22-07-2024

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<br>measure  | sampling<br>frequency | 3DGM<br>limit | 3DGM<br>actual | 100<br>percentile<br>limit | 100<br>percentile<br>actual | within<br>limits |
| biochemical oxygen demand       | mg/L  | monthly               | 30            | <2             | -                          | -                           | yes              |
| nitrogen (total)                | mg/L  | every 6 days          | -             | -              | 45                         | 8.32                        | yes              |
| phosphorus                      | mg/L  | every 6 days          | -             | -              | 5                          | 0.03                        | yes              |
| total suspended solids          | mg/L  | monthly               | 10            | 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                 | -              | -           | 33             |
| 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                 | -              | -           | 15.4           |
| diazinon                                 | ug/L            | monthly   | 1                 | -              | -           | <0.1           |
| faecal coliforms                         | CFU/100mL       | every 6 days  | 5                 | <1             | 1           | 4              |
| hydrogen sulphide (unionised)            | ug/L            | monthly   | 1                 | -              | -           | <30            |
| iron                                     | ug/L            | monthly   | 1                 | -              | -           | 53             |
| nickel                                   | ug/L            | monthly   | 1                 | -              | -           | 3.7            |
| nitrogen (ammonia)                       | mg/L            | every 6 days  | 5                 | 0.01           | 0.03        | 0.06           |
| nitrogen (total)                         | mg/L            | every 6 days  | 5                 | 5.95           | 7.39        | 8.32           |
| phosphorus                               | mg/L            | every 6 days  | 5                 | 0.02           | 0.03        | 0.03           |
| 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.

Effluent quality monitoring results obtained from EPA Point 5 are used to indicate the quality of water discharged at EPA Point 1 (discharge to waters).

# St Marys Water Resource Recovery Facility

## May Pollution Monitoring Summary



### EPL 1729

Summary period: 01-05-2024 to 31-05-2024  
Date obtained: 12-06-2024  
Date published: 21-06-2024

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<br>measure  | sampling<br>frequency | 3DGM<br>limit | 3DGM<br>actual | 100<br>percentile<br>limit | 100<br>percentile<br>actual | within<br>limits |
| biochemical oxygen demand       | mg/L  | monthly               | 30            | <2             | -                          | -                           | yes              |
| nitrogen (total)                | mg/L  | every 6 days          | -             | -              | 45                         | 6.34                        | yes              |
| phosphorus                      | mg/L  | every 6 days          | -             | -              | 5                          | 0.04                        | yes              |
| total suspended solids          | mg/L  | monthly               | 10            | <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                 | -              | -           | 35             |
| 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                 | -              | -           | 12.6           |
| 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                 | -              | -           | 72             |
| nickel                                   | ug/L            | monthly   | 1                 | -              | -           | 3.7            |
| nitrogen (ammonia)                       | mg/L            | every 6 days  | 6                 | 0.01           | 0.03        | 0.07           |
| nitrogen (total)                         | mg/L            | every 6 days  | 6                 | 4.04           | 5.62        | 6.34           |
| phosphorus                               | mg/L            | every 6 days  | 6                 | 0.02           | 0.02        | 0.04           |
| 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.

Effluent quality monitoring results obtained from EPA Point 5 are used to indicate the quality of water discharged at EPA Point 1 (discharge to waters).

# St Marys Water Resource Recovery Facility

## April Pollution Monitoring Summary



### EPL 1729

Summary period: 01-04-2024 to 30-04-2024  
Date obtained: 06-05-2024  
Date published: 20-05-2024

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<br>measure  | sampling<br>frequency | 3DGM<br>limit | 3DGM<br>actual | 100<br>percentile<br>limit | 100<br>percentile<br>actual | within<br>limits |
| biochemical oxygen demand       | mg/L  | monthly               | 30            | <2             | -                          | -                           | yes              |
| nitrogen (total)                | mg/L  | every 6 days          | -             | -              | 45                         | 8.08                        | yes              |
| phosphorus                      | mg/L  | every 6 days          | -             | -              | 5                          | 0.03                        | yes              |
| total suspended solids          | mg/L  | monthly               | 10            | <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                 | -              | -           | 50             |
| 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                 | -              | -           | 10.9           |
| diazinon                                 | ug/L            | monthly   | 1                 | -              | -           | <0.1           |
| faecal coliforms                         | CFU/100mL       | every 6 days  | 5                 | 1              | 5           | 12             |
| hydrogen sulphide (unionised)            | ug/L            | monthly   | 1                 | -              | -           | <30            |
| iron                                     | ug/L            | monthly   | 1                 | -              | -           | 80             |
| nickel                                   | ug/L            | monthly   | 1                 | -              | -           | 3.8            |
| nitrogen (ammonia)                       | mg/L            | every 6 days  | 5                 | 0.01           | 0.02        | 0.02           |
| nitrogen (total)                         | mg/L            | every 6 days  | 5                 | 3.28           | 5.97        | 8.08           |
| phosphorus                               | mg/L            | every 6 days  | 5                 | 0.02           | 0.03        | 0.03           |
| 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.

Effluent quality monitoring results obtained from EPA Point 5 are used to indicate the quality of water discharged at EPA Point 1 (discharge to waters).

# St Marys Water Resource Recovery Facility

## March Pollution Monitoring Summary



### EPL 1729

Summary period: 01-03-2024 to 31-03-2024

Date obtained: 05-04-2024

Date published: 18-04-2024

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 |
| biochemical oxygen demand       | mg/L            | monthly   | 30         | <2          | -                    | -                     | yes           |
| nitrogen (total)                | mg/L            | every 6 days  | -          | -           | 45                   | 6.13                  | yes           |
| phosphorus                      | mg/L            | every 6 days  | -          | -           | 5                    | 0.04                  | yes           |
| total suspended solids          | mg/L            | monthly   | 10         | <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                 | -              | -           | 47             |
| 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                 | -              | -           | 14             |
| diazinon                                 | ug/L            | monthly   | 1                 | -              | -           | <0.1           |
| faecal coliforms                         | CFU/100mL       | every 6 days  | 5                 | <1             | 1           | 3              |
| hydrogen sulphide (unionised)            | ug/L            | monthly   | 1                 | -              | -           | <30            |
| iron                                     | ug/L            | monthly   | 1                 | -              | -           | 68             |
| nickel                                   | ug/L            | monthly   | 1                 | -              | -           | 4              |
| nitrogen (ammonia)                       | mg/L            | every 6 days  | 5                 | 0.02           | 0.02        | 0.02           |
| nitrogen (total)                         | mg/L            | every 6 days  | 5                 | 2.46           | 4.33        | 6.13           |
| 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                 | -              | -           | 19             |

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

Effluent quality monitoring results obtained from EPA Point 5 are used to indicate the quality of water discharged at EPA Point 1 (discharge to waters).

# St Marys Water Resource Recovery Facility

## February Pollution Monitoring Summary



### EPL 1729

Summary period: 01-02-2024 to 29-02-2024  
Date obtained: 12-03-2024  
Date published: 25-03-2024

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<br>measure  | sampling<br>frequency | 3DGM<br>limit | 3DGM<br>actual | 100<br>percentile<br>limit | 100<br>percentile<br>actual | within<br>limits |
| biochemical oxygen demand       | mg/L  | monthly               | 30            | <2             | -                          | -                           | yes              |
| nitrogen (total)                | mg/L  | every 6 days          | -             | -              | 45                         | 8.14                        | yes              |
| phosphorus                      | mg/L  | every 6 days          | -             | -              | 5                          | 0.12                        | yes              |
| total suspended solids          | mg/L  | monthly               | 10            | <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                 | -              | -           | 55             |
| 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                 | -              | -           | 6.8            |
| diazinon                                 | ug/L            | monthly   | 1                 | -              | -           | <0.1           |
| faecal coliforms                         | CFU/100mL       | every 6 days  | 5                 | <1             | 1           | 4              |
| hydrogen sulphide (unionised)            | ug/L            | monthly   | 1                 | -              | -           | <30            |
| iron                                     | ug/L            | monthly   | 1                 | -              | -           | 61             |
| nickel                                   | ug/L            | monthly   | 1                 | -              | -           | 3.1            |
| nitrogen (ammonia)                       | mg/L            | every 6 days  | 5                 | 0.02           | 0.06        | 0.23           |
| nitrogen (total)                         | mg/L            | every 6 days  | 5                 | 3.71           | 5.43        | 8.14           |
| phosphorus                               | mg/L            | every 6 days  | 5                 | 0.03           | 0.06        | 0.12           |
| total suspended solids                   | mg/L            | every 6 days  | 5                 | <2             | <2          | <2             |
| zinc                                     | ug/L            | monthly   | 1                 | -              | -           | 19             |

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

Effluent quality monitoring results obtained from EPA Point 5 are used to indicate the quality of water discharged at EPA Point 1 (discharge to waters).

# St Marys Water Resource Recovery Facility

## January Pollution Monitoring Summary



### EPL 1729

Summary period: 01-01-2024 to 31-01-2024  
Date obtained: 04-02-2024  
Date published: 15-02-2024

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<br>measure  | sampling<br>frequency | 3DGM<br>limit | 3DGM<br>actual | 100<br>percentile<br>limit | 100<br>percentile<br>actual | within<br>limits |
| biochemical oxygen demand       | mg/L  | monthly               | 30            | <2             | -                          | -                           | yes              |
| nitrogen (total)                | mg/L  | every 6 days          | -             | -              | 45                         | 6.18                        | yes              |
| phosphorus                      | mg/L  | every 6 days          | -             | -              | 5                          | 0.04                        | yes              |
| total suspended solids          | mg/L  | monthly               | 10            | <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                 | -              | -           | 38             |
| 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                 | -              | -           | 7.8            |
| diazinon                                 | ug/L            | monthly   | 1                 | -              | -           | <0.1           |
| faecal coliforms                         | CFU/100mL       | every 6 days  | 5                 | <1             | 7           | 14             |
| hydrogen sulphide (unionised)            | ug/L            | monthly   | 1                 | -              | -           | <30            |
| iron                                     | ug/L            | monthly   | 1                 | -              | -           | 55             |
| nickel                                   | ug/L            | monthly   | 1                 | -              | -           | 2.9            |
| nitrogen (ammonia)                       | mg/L            | every 6 days  | 5                 | 0.02           | 0.02        | 0.02           |
| nitrogen (total)                         | mg/L            | every 6 days  | 5                 | 3.41           | 4.62        | 6.18           |
| 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.

Effluent quality monitoring results obtained from EPA Point 5 are used to indicate the quality of water discharged at EPA Point 1 (discharge to waters).

# St Marys Water Resource Recovery Facility

## December Pollution Monitoring Summary



### EPL 1729

Summary period: 01-12-2023 to 31-12-2023

Date obtained: 12-01-2024

Date published: 22-01-2024

**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 |
| biochemical oxygen demand       | mg/L            | monthly   | 30         | <2          | -                    | -                     | yes           |
| nitrogen (total)                | mg/L            | every 6 days  | -          | -           | 45                   | 7.65                  | yes           |
| phosphorus                      | mg/L            | every 6 days  | -          | -           | 5                    | 0.18                  | yes           |
| total suspended solids          | mg/L            | monthly   | 10         | <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                 | -              | -           | 58             |
| 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                 | -              | -           | 13             |
| diazinon                                 | ug/L            | monthly   | 1                 | -              | -           | <0.1           |
| faecal coliforms                         | CFU/100mL       | every 6 days  | 5                 | <1             | 4           | 8              |
| hydrogen sulphide (unionised)            | ug/L            | monthly   | 1                 | -              | -           | <30            |
| iron                                     | ug/L            | monthly   | 1                 | -              | -           | 43             |
| nickel                                   | ug/L            | monthly   | 1                 | -              | -           | 3.3            |
| nitrogen (ammonia)                       | mg/L            | every 6 days  | 5                 | 0.02           | 0.18        | 0.8            |
| nitrogen (total)                         | mg/L            | every 6 days  | 5                 | 3.99           | 6.07        | 7.65           |
| phosphorus                               | mg/L            | every 6 days  | 5                 | 0.06           | 0.12        | 0.18           |
| 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.

Effluent quality monitoring results obtained from EPA Point 5 are used to indicate the quality of water discharged at EPA Point 1 (discharge to waters).



# St Mary's Water Resource Recovery Facility

## November Pollution Monitoring Summary



### EPL 1729

Summary period: 01-11-2023 to 30-11-2023

Date obtained: 06-12-2023

Date published: 14-12-2023

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 |
| biochemical oxygen demand       | mg/L            | monthly   | 30         | <2          | -                    | -                     | yes           |
| nitrogen (total)                | mg/L            | every 6 days  | -          | -           | 45                   | 7.17                  | yes           |
| phosphorus                      | mg/L            | every 6 days  | -          | -           | 5                    | 0.1                   | yes           |
| total suspended solids          | mg/L            | monthly   | 10         | <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                 | -              | -           | 61             |
| 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                 | -              | -           | 13.7           |
| diazinon                                 | ug/L            | monthly   | 1                 | -              | -           | <0.1           |
| faecal coliforms                         | CFU/100mL       | every 6 days  | 5                 | <1             | 6           | 16             |
| hydrogen sulphide (unionised)            | ug/L            | monthly   | 1                 | -              | -           | <30            |
| iron                                     | ug/L            | monthly   | 1                 | -              | -           | 72             |
| nickel                                   | ug/L            | monthly   | 1                 | -              | -           | 4.6            |
| nitrogen (ammonia)                       | mg/L            | every 6 days  | 5                 | 0.02           | 0.02        | 0.03           |
| nitrogen (total)                         | mg/L            | every 6 days  | 5                 | 4.31           | 5.47        | 7.17           |
| phosphorus                               | mg/L            | every 6 days  | 5                 | 0.02           | 0.04        | 0.1            |
| 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.

Effluent quality monitoring results obtained from EPA Point 5 are used to indicate the quality of water discharged at EPA Point 1 (discharge to waters).



# St Mary's Water Resource Recovery Facility

## October Pollution Monitoring Summary



### EPL 1729

Summary period: 01-10-2023 to 31-10-2023

Date obtained: 03-11-2023

Date published: 17-11-2023

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 |
| biochemical oxygen demand       | mg/L            | monthly   | 30         | <2          | -                    | -                     | yes           |
| nitrogen (total)                | mg/L            | every 6 days  | -          | -           | 45                   | 6.05                  | yes           |
| phosphorus                      | mg/L            | every 6 days  | -          | -           | 5                    | 0.04                  | yes           |
| total suspended solids          | mg/L            | monthly   | 10         | <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                 | -              | -           | 44             |
| 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                 | -              | -           | 10.4           |
| 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                 | -              | -           | 83             |
| nickel                                   | ug/L            | monthly   | 1                 | -              | -           | 6.6            |
| nitrogen (ammonia)                       | mg/L            | every 6 days  | 5                 | 0.02           | 0.03        | 0.05           |
| nitrogen (total)                         | mg/L            | every 6 days  | 5                 | 3.87           | 4.85        | 6.05           |
| 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                 | -              | -           | 32             |

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

Effluent quality monitoring results obtained from EPA Point 5 are used to indicate the quality of water discharged at EPA Point 1 (discharge to waters).

# St Mary's Water Resource Recovery Facility

## September Pollution Monitoring Summary



### EPL 1729

Summary period: 01-09-2023 to 30-09-2023

Date obtained: 09-10-2023

Date published: 13-10-2023

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 |
| biochemical oxygen demand       | mg/L            | monthly   | 30         | <2          | -                    | -                     | yes           |
| nitrogen (total)                | mg/L            | every 6 days  | -          | -           | 45                   | 8.74                  | yes           |
| phosphorus                      | mg/L            | every 6 days  | -          | -           | 5                    | 0.1                   | yes           |
| total suspended solids          | mg/L            | monthly   | 10         | <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                 | -              | -           | 146            |
| 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                 | -              | -           | 15.3           |
| diazinon                                 | ug/L            | monthly   | 1                 | -              | -           | <0.1           |
| faecal coliforms                         | CFU/100mL       | every 6 days  | 5                 | <1             | 9           | 25             |
| hydrogen sulphide (unionised)            | ug/L            | monthly   | 1                 | -              | -           | <30            |
| iron                                     | ug/L            | monthly   | 1                 | -              | -           | 102            |
| nickel                                   | ug/L            | monthly   | 1                 | -              | -           | 3.9            |
| nitrogen (ammonia)                       | mg/L            | every 6 days  | 5                 | 0.02           | 0.08        | 0.31           |
| nitrogen (total)                         | mg/L            | every 6 days  | 5                 | 4.14           | 6.58        | 8.74           |
| phosphorus                               | mg/L            | every 6 days  | 5                 | 0.04           | 0.07        | 0.1            |
| total suspended solids                   | mg/L            | every 6 days  | 5                 | <2             | <2          | <2             |
| zinc                                     | ug/L            | monthly   | 1                 | -              | -           | 34             |

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

Effluent quality monitoring results obtained from EPA Point 5 are used to indicate the quality of water discharged at EPA Point 1 (discharge to waters).

# St Mary's Water Resource Recovery Facility

## August Pollution Monitoring Summary



### EPL 1729

Summary period: 01-08-2023 to 31-08-2023

Date obtained: 05-09-2023

Date published: 14-09-2023

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 |
| biochemical oxygen demand       | mg/L            | monthly   | 30         | <2          | -                    | -                     | yes           |
| nitrogen (total)                | mg/L            | every 6 days  | -          | -           | 45                   | 6.17                  | yes           |
| phosphorus                      | mg/L            | every 6 days  | -          | -           | 5                    | 0.06                  | yes           |
| total suspended solids          | mg/L            | monthly   | 10         | 3           | -                    | -                     | 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                 | -              | -           | 128            |
| 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                 | -              | -           | 9.9            |
| diazinon                                 | ug/L            | monthly   | 1                 | -              | -           | <0.1           |
| faecal coliforms                         | CFU/100mL       | every 6 days  | 5                 | <1             | 1           | 3              |
| hydrogen sulphide (unionised)            | ug/L            | monthly   | 1                 | -              | -           | <30            |
| iron                                     | ug/L            | monthly   | 1                 | -              | -           | 79             |
| nickel                                   | ug/L            | monthly   | 1                 | -              | -           | 3.3            |
| nitrogen (ammonia)                       | mg/L            | every 6 days  | 5                 | 0.02           | 0.02        | 0.03           |
| nitrogen (total)                         | mg/L            | every 6 days  | 5                 | 3.73           | 4.75        | 6.17           |
| phosphorus                               | mg/L            | every 6 days  | 5                 | 0.05           | 0.05        | 0.06           |
| total suspended solids                   | mg/L            | every 6 days  | 5                 | <2             | <2          | 5              |
| zinc                                     | ug/L            | monthly   | 1                 | -              | -           | 27             |

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

Effluent quality monitoring results obtained from EPA Point 5 are used to indicate the quality of water discharged at EPA Point 1 (discharge to waters).

# St Mary's Water Resource Recovery Facility

## July Pollution Monitoring Summary



### EPL 1729

Summary period: 01-07-2023 to 31-07-2023

Date obtained: 08-08-2023

Date published: 15-08-2023

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 |
| biochemical oxygen demand       | mg/L            | monthly   | 30         | <2          | -                    | -                     | yes           |
| nitrogen (total)                | mg/L            | every 6 days  | -          | -           | 45                   | 4.51                  | yes           |
| phosphorus                      | mg/L            | every 6 days  | -          | -           | 5                    | 0.06                  | yes           |
| total suspended solids          | mg/L            | monthly   | 10         | <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                 | -              | -           | 137            |
| 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                 | -              | -           | 9.7            |
| diazinon                                 | ug/L            | monthly   | 1                 | -              | -           | <0.1           |
| faecal coliforms                         | CFU/100mL       | every 6 days  | 6                 | 2              | 3           | 7              |
| hydrogen sulphide (unionised)            | ug/L            | monthly   | 1                 | -              | -           | <30            |
| iron                                     | ug/L            | monthly   | 1                 | -              | -           | 66             |
| nickel                                   | ug/L            | monthly   | 1                 | -              | -           | 3.2            |
| nitrogen (ammonia)                       | mg/L            | every 6 days  | 5                 | 0.02           | 0.04        | 0.08           |
| nitrogen (total)                         | mg/L            | every 6 days  | 5                 | 4.11           | 4.31        | 4.51           |
| phosphorus                               | mg/L            | every 6 days  | 5                 | 0.04           | 0.05        | 0.06           |
| total suspended solids                   | mg/L            | every 6 days  | 5                 | <2             | <2          | <2             |
| zinc                                     | ug/L            | monthly   | 1                 | -              | -           | 31             |

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

Effluent quality monitoring results obtained from EPA Point 5 are used to indicate the quality of water discharged at EPA Point 1 (discharge to waters).