

# West Hornsby Water Resource Recovery Facility

## June Pollution Monitoring Summary



### EPL 1695

Summary period: 01-06-2023 to 30-06-2023

Date obtained: 10-07-2023

Date published: 24-07-2023

Licensee: Sydney Water Corporation

PO Box 399

PARRAMATTA NSW 2124

**Table 1: 3 Day Geometric Mean data**

EPA Point 5 Site code WH0005		Point description: Downstream of the disinfection facilities			
pollutant	unit of measure	sampling frequency	3DGM limit	3DGM Actual	within limits
biochemical oxygen demand	mg/L	monthly	30	<2	yes
carbonaceous biochemical oxygen demand	mg/L	monthly	30	<2	yes
total suspended solids	mg/L	monthly	10	<2	yes

3 Day Geometric Mean (3DGM) is a way to average a set of values and is commonly used with water quality assessments which show a great deal of variability. 3DGM is calculated by multiplying the results of the analysis of three samples collected on three consecutive days and then taking the cubed root of that amount.

**Table 2: Routine monitoring data**

EPA Point 5 Site code WH0005		Point description: Downstream of the disinfection facilities				
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
aluminium	ug/L	monthly	1	-	-	174
biochemical oxygen demand	mg/L	every 6 days	5	<2	<2	<2
carbonaceous biochemical oxygen demand	mg/L	every 6 days	5	<2	<2	<2
Ceriodaphnia dubia immobilisation (EC50)	% Effluent/Vol	monthly	1	-	-	100
copper	ug/L	monthly	1	-	-	4.2
faecal coliforms	CFU/100mL	every 6 days	5	5	19	42
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30
iron	ug/L	monthly	1	-	-	40
nitrogen (ammonia)	mg/L	every 6 days	5	0.01	0.06	0.11
nitrogen (total)	mg/L	every 6 days	5	2.78	3.65	4.1
phosphorus (total)	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	-	-	17

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).

As per clause M2.4 under EPL 1695, collection of daily samples from EPA Points 7 or 10 is required during the occurrence of any bypass or discharge from EPA Point 8 or 9, greater than 2 hours during normal working hours. There was no bypass recorded from EPA Point 8 or 9 during normal working hours greater than 2 hours in the June monitoring period.

# West Hornsby Water Resource Recovery Facility

## May Pollution Monitoring Summary



### EPL 1695

Summary period: 01-05-2023 to 31-05-2023

Date obtained: 08-06-2023

Date published: 22-06-2023

Licensee: Sydney Water Corporation

PO Box 399

PARRAMATTA NSW 2124

**Table 1: 3 Day Geometric Mean data**

EPA Point 5 Site code WH0005		Point description: Downstream of the disinfection facilities			
pollutant	unit of measure	sampling frequency	3DGM limit	3DGM Actual	within limits
biochemical oxygen demand	mg/L	monthly	30	<2	yes
carbonaceous biochemical oxygen demand	mg/L	monthly	30	<2	yes
total suspended solids	mg/L	monthly	10	<2	yes

3 Day Geometric Mean (3DGM) is a way to average a set of values and is commonly used with water quality assessments which show a great deal of variability. 3DGM is calculated by multiplying the results of the analysis of three samples collected on three consecutive days and then taking the cubed root of that amount.

**Table 2: Routine monitoring data**

EPA Point 5 Site code WH0005		Point description: Downstream of the disinfection facilities				
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
aluminium	ug/L	monthly	1	-	-	156
biochemical oxygen demand	mg/L	every 6 days	6	<2	<2	<2
carbonaceous biochemical oxygen demand	mg/L	every 6 days	6	<2	<2	<2
Ceriodaphnia dubia immobilisation (EC50)	% Effluent/Vol	monthly	1	-	-	100
copper	ug/L	monthly	1	-	-	4.1
faecal coliforms	CFU/100mL	every 6 days	5	12	21	37
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30
iron	ug/L	monthly	1	-	-	48
nitrogen (ammonia)	mg/L	every 6 days	6	0.01	0.02	0.03
nitrogen (total)	mg/L	every 6 days	6	2.9	3.76	4.65
phosphorus (total)	mg/L	every 6 days	6	0.03	0.04	0.04
total suspended solids	mg/L	every 6 days	6	<2	<2	<2
zinc	ug/L	monthly	1	-	-	11

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).

As per clause M2.4 under EPL 1695, collection of daily samples from EPA Points 7 or 10 is required during the occurrence of any bypass or discharge from EPA Point 8 or 9, greater than 2 hours during normal working hours. There was no bypass recorded from EPA Point 8 or 9 during normal working hours greater than 2 hours in the May monitoring period.

# West Hornsby Water Resource Recovery Facility

## April Pollution Monitoring Summary



### EPL 1695

Summary period: 01-04-2023 to 30-04-2023

Date obtained: 10-05-2023

Date published: 19-05-2023

Licensee: Sydney Water Corporation

PO Box 399

PARRAMATTA NSW 2124

**Table 1: 3 Day Geometric Mean data**

EPA Point 5 Site code WH0005		Point description: Downstream of the disinfection facilities			
pollutant	unit of measure	sampling frequency	3DGM limit	3DGM Actual	within limits
biochemical oxygen demand	mg/L	monthly	30	<2	yes
carbonaceous biochemical oxygen demand	mg/L	monthly	30	<2	yes
total suspended solids	mg/L	monthly	10	<2	yes

3 Day Geometric Mean (3DGM) is a way to average a set of values and is commonly used with water quality assessments which show a great deal of variability. 3DGM is calculated by multiplying the results of the analysis of three samples collected on three consecutive days and then taking the cubed root of that amount.

**Table 2: Routine monitoring data**

EPA Point 5 Site code WH0005		Point description: Downstream of the disinfection facilities				
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
aluminium	ug/L	monthly	1	-	-	123
biochemical oxygen demand	mg/L	every 6 days	5	<2	<2	<2
carbonaceous biochemical oxygen demand	mg/L	every 6 days	5	<2	<2	<2
Ceriodaphnia dubia immobilisation (EC50)	% Effluent/Vol	monthly	1	-	-	100
copper	ug/L	monthly	1	-	-	4
faecal coliforms	CFU/100mL	every 6 days	5	30	37	44
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30
iron	ug/L	monthly	1	-	-	27
nitrogen (ammonia)	mg/L	every 6 days	5	0.01	0.01	0.02
nitrogen (total)	mg/L	every 6 days	5	3.74	4.16	4.87
phosphorus (total)	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	-	-	10

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).

As per clause M2.4 under EPL 1695, collection of daily samples from EPA Points 7 or 10 is required during the occurrence of any bypass or discharge from EPA Point 8 or 9, greater than 2 hours during normal working hours. There was no bypass recorded from EPA Point 8 or 9 during normal working hours greater than 2 hours in the April monitoring period.

# West Hornsby Water Resource Recovery Facility

## March Pollution Monitoring Summary



### EPL 1695

Summary period: 01-03-2023 to 31-03-2023

Date obtained: 04-04-2023

Date published: 14-04-2023

Licensee: Sydney Water Corporation

PO Box 399

PARRAMATTA NSW 2124

**Table 1: 3 Day Geometric Mean data**

EPA Point 5 Site code WH0005		Point description: Downstream of the disinfection facilities			
pollutant	unit of measure	sampling frequency	3DGM limit	3DGM Actual	within limits
biochemical oxygen demand	mg/L	monthly	30	<2	yes
carbonaceous biochemical oxygen demand	mg/L	monthly	30	<2	yes
total suspended solids	mg/L	monthly	10	<2	yes

3 Day Geometric Mean (3DGM) is a way to average a set of values and is commonly used with water quality assessments which show a great deal of variability. 3DGM is calculated by multiplying the results of the analysis of three samples collected on three consecutive days and then taking the cubed root of that amount.

**Table 2: Routine monitoring data**

EPA Point 5 Site code WH0005		Point description: Downstream of the disinfection facilities				
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
aluminium	ug/L	monthly	1	-	-	103
biochemical oxygen demand	mg/L	every 6 days	5	<2	<2	<2
carbonaceous biochemical oxygen demand	mg/L	every 6 days	5	<2	<2	<2
Ceriodaphnia dubia immobilisation (EC50)	% Effluent/Vol	monthly	1	-	-	100
copper	ug/L	monthly	1	-	-	3.1
faecal coliforms	CFU/100mL	every 6 days	5	13	27	57
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30
iron	ug/L	monthly	1	-	-	24
nitrogen (ammonia)	mg/L	every 6 days	5	0.01	0.01	0.02
nitrogen (total)	mg/L	every 6 days	5	1.68	3.04	4.65
phosphorus (total)	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	-	-	9

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).

As per clause M2.4 under EPL 1695, collection of daily samples from EPA Points 7 or 10 is required during the occurrence of any bypass or discharge from EPA Point 8 or 9, greater than 2 hours during normal working hours. There was no bypass recorded from EPA Point 8 or 9 during normal working hours greater than 2 hours in the March monitoring period.

# West Hornsby Water Resource Recovery Facility

## February Pollution Monitoring Summary



### EPL 1695

Summary period: 01-02-2023 to 28-02-2023

Date obtained: 06-03-2023

Date published: 17-03-2023

Licensee: Sydney Water Corporation

PO Box 399

PARRAMATTA NSW 2124

**Table 1: 3 Day Geometric Mean data**

EPA Point 5 Site code WH0005		Point description: Downstream of the disinfection facilities			
pollutant	unit of measure	sampling frequency	3DGM limit	3DGM Actual	within limits
biochemical oxygen demand	mg/L	monthly	30	<2	yes
carbonaceous biochemical oxygen demand	mg/L	monthly	30	<2	yes
total suspended solids	mg/L	monthly	10	<2	yes

3 Day Geometric Mean (3DGM) is a way to average a set of values and is commonly used with water quality assessments which show a great deal of variability. 3DGM is calculated by multiplying the results of the analysis of three samples collected on three consecutive days and then taking the cubed root of that amount.

**Table 2: Routine monitoring data**

EPA Point 5 Site code WH0005		Point description: Downstream of the disinfection facilities				
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
aluminium	ug/L	monthly	1	-	-	143
biochemical oxygen demand	mg/L	every 6 days	4	<2	<2	<2
carbonaceous biochemical oxygen demand	mg/L	every 6 days	4	<2	<2	<2
Ceriodaphnia dubia immobilisation (EC50)	% Effluent/Vol	monthly	1	-	-	100
copper	ug/L	monthly	1	-	-	3.8
cyanide	ug/L	bi-annual	1	-	-	<5
faecal coliforms	CFU/100mL	every 6 days	5	12	32	86
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30
iron	ug/L	monthly	1	-	-	31
nitrogen (ammonia)	mg/L	every 6 days	4	0.02	0.2	0.7
nitrogen (total)	mg/L	every 6 days	4	2.26	3.22	4.21
phosphorus (total)	mg/L	every 6 days	4	0.05	0.06	0.09
total suspended solids	mg/L	every 6 days	4	<2	<2	<2
zinc	ug/L	monthly	1	-	-	12

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

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

As per clause M2.4 under EPL 1695, collection of daily samples from EPA Points 7 or 10 is required during the occurrence of any bypass or discharge from EPA Point 8 or 9, greater than 2 hours during normal working hours. There was no bypass recorded from EPA Point 8 or 9 during normal working hours greater than 2 hours in the February monitoring period.

# West Hornsby Water Resource Recovery Facility

## January Pollution Monitoring Summary



### EPL 1695

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

Date obtained: 08-02-2023

Date published: 15-02-2023

Licensee: Sydney Water Corporation

PO Box 399

PARRAMATTA NSW 2124

**Table 1: 3 Day Geometric Mean data**

EPA Point 5 Site code WH0005		Point description: Downstream of the disinfection facilities			
pollutant	unit of measure	sampling frequency	3DGM limit	3DGM Actual	within limits
biochemical oxygen demand	mg/L	monthly	30	<2	yes
carbonaceous biochemical oxygen demand	mg/L	monthly	30	<2	yes
total suspended solids	mg/L	monthly	10	<2	yes

3 Day Geometric Mean (3DGM) is a way to average a set of values and is commonly used with water quality assessments which show a great deal of variability. 3DGM is calculated by multiplying the results of the analysis of three samples collected on three consecutive days and then taking the cubed root of that amount.

**Table 2: Routine monitoring data**

EPA Point 5 Site code WH0005		Point description: Downstream of the disinfection facilities				
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
aluminium	ug/L	monthly	1	-	-	173
biochemical oxygen demand	mg/L	every 6 days	6	<2	<2	8
carbonaceous biochemical oxygen demand	mg/L	every 6 days	6	<2	<2	7
Ceriodaphnia dubia immobilisation (EC50)	% Effluent/Vol	monthly	1	-	-	100
copper	ug/L	monthly	1	-	-	2.5
faecal coliforms	CFU/100mL	every 6 days	5	1	16	32
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30
iron	ug/L	monthly	1	-	-	49
nitrogen (ammonia)	mg/L	every 6 days	6	0.01	0.48	2.62
nitrogen (total)	mg/L	every 6 days	6	2.35	3.4	5.43
phosphorus (total)	mg/L	every 6 days	6	0.05	0.13	0.48
total suspended solids	mg/L	every 6 days	6	<2	2	12
zinc	ug/L	monthly	1	-	-	13

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

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

As per clause M2.4 under EPL 1695, collection of daily samples from EPA Points 7 or 10 is required during the occurrence of any bypass or discharge from EPA Point 8 or 9, greater than 2 hours during normal working hours. There was no bypass recorded from EPA Point 8 or 9 during normal working hours greater than 2 hours in the January monitoring period.

# West Hornsby Water Resource Recovery Facility

## December Pollution Monitoring Summary



### EPL 1695

Summary period: 01-12-2022 to 31-12-2022

Date obtained: 01-01-2023

Date published: 10-01-2023

Licensee: Sydney Water Corporation

PO Box 399

PARRAMATTA NSW 2124

**Table 1: 3 Day Geometric Mean data**

EPA Point 5 Site code WH0005		Point description: Downstream of the disinfection facilities			
pollutant	unit of measure	sampling frequency	3DGM limit	3DGM Actual	within limits
biochemical oxygen demand	mg/L	monthly	30	<2	yes
carbonaceous biochemical oxygen demand	mg/L	monthly	30	<2	yes
total suspended solids	mg/L	monthly	10	<2	yes

3 Day Geometric Mean (3DGM) is a way to average a set of values and is commonly used with water quality assessments which show a great deal of variability. 3DGM is calculated by multiplying the results of the analysis of three samples collected on three consecutive days and then taking the cubed root of that amount.

**Table 2: Routine monitoring data**

EPA Point 5 Site code WH0005		Point description: Downstream of the disinfection facilities				
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
aluminium	ug/L	monthly	1	-	-	170
biochemical oxygen demand	mg/L	every 6 days	5	<2	<2	<2
carbonaceous biochemical oxygen demand	mg/L	every 6 days	5	<2	<2	<2
Ceriodaphnia dubia immobilisation (EC50)	% Effluent/Vol	monthly	1	-	-	100
copper	ug/L	monthly	1	-	-	3.3
faecal coliforms	CFU/100mL	every 6 days	5	6	574	2,800
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30
iron	ug/L	monthly	1	-	-	40
nitrogen (ammonia)	mg/L	every 6 days	5	0.01	0.02	0.04
nitrogen (total)	mg/L	every 6 days	5	1.84	2.59	3.16
phosphorus (total)	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	-	-	11

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).

As per clause M2.4 under EPL 1695, collection of daily samples from EPA Points 7 or 10 is required during the occurrence of any bypass or discharge from EPA Point 8 or 9, greater than 2 hours during normal working hours. There was no bypass recorded from EPA Point 8 or 9 during normal working hours greater than 2 hours in the December monitoring period.

# West Hornsby Water Resource Recovery Facility

## November Pollution Monitoring Summary



### EPL 1695

Summary period: 01-11-2022 to 30-11-2022

Date obtained: 06-12-2022

Date published: 09-12-2022

Licensee: Sydney Water Corporation

PO Box 399

PARRAMATTA NSW 2124

**Table 1: 3 Day Geometric Mean data**

EPA Point 5 Site code WH0005		Point description: Downstream of the disinfection facilities			
pollutant	unit of measure	sampling frequency	3DGM limit	3DGM Actual	within limits
biochemical oxygen demand	mg/L	monthly	30	<2	yes
carbonaceous biochemical oxygen demand	mg/L	monthly	30	<2	yes
total suspended solids	mg/L	monthly	10	<2	yes

3 Day Geometric Mean (3DGM) is a way to average a set of values and is commonly used with water quality assessments which show a great deal of variability. 3DGM is calculated by multiplying the results of the analysis of three samples collected on three consecutive days and then taking the cubed root of that amount.

**Table 2: Routine monitoring data**

EPA Point 5 Site code WH0005		Point description: Downstream of the disinfection facilities				
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
aluminium	ug/L	monthly	1	-	-	180
biochemical oxygen demand	mg/L	every 6 days	5	<2	<2	<2
carbonaceous biochemical oxygen demand	mg/L	every 6 days	5	<2	<2	<2
Ceriodaphnia dubia immobilisation (EC50)	% Effluent/Vol	monthly	1	-	-	100
copper	ug/L	monthly	1	-	-	2.7
faecal coliforms	CFU/100mL	every 6 days	5	21	78	200
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30
iron	ug/L	monthly	1	-	-	44
nitrogen (ammonia)	mg/L	every 6 days	5	0.02	0.12	0.48
nitrogen (total)	mg/L	every 6 days	5	1.62	2.39	2.92
phosphorus (total)	mg/L	every 6 days	5	0.03	0.06	0.11
total suspended solids	mg/L	every 6 days	5	<2	<2	3
zinc	ug/L	monthly	1	-	-	13

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

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

As per clause M2.4 under EPL 1695, collection of daily samples from EPA Points 7 or 10 is required during the occurrence of any bypass or discharge from EPA Point 8 or 9, greater than 2 hours during normal working hours. There was no bypass recorded from EPA Point 8 or 9 during normal working hours greater than 2 hours in the November monitoring period.



# West Hornsby Water Resource Recovery Facility

## October Pollution Monitoring Summary



### EPL 1695

Summary period: 01-10-2022 to 31-10-2022

Date obtained: 03-11-2022

Date published: 16-11-2022

Licensee: Sydney Water Corporation

PO Box 399

PARRAMATTA NSW 2124

**Table 1: 3 Day Geometric Mean data**

EPA Point 5 Site code WH0005		Point description: Downstream of the disinfection facilities			
pollutant	unit of measure	sampling frequency	3DGM limit	3DGM Actual	within limits
biochemical oxygen demand	mg/L	monthly	30	<2	yes
carbonaceous biochemical oxygen demand	mg/L	monthly	30	<2	yes
total suspended solids	mg/L	monthly	10	<2	yes

3 Day Geometric Mean (3DGM) is a way to average a set of values and is commonly used with water quality assessments which show a great deal of variability. 3DGM is calculated by multiplying the results of the analysis of three samples collected on three consecutive days and then taking the cubed root of that amount.

**Table 2: Routine monitoring data**

EPA Point 5 Site code WH0005		Point description: Downstream of the disinfection facilities				
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
aluminium	ug/L	monthly	1	-	-	143
biochemical oxygen demand	mg/L	every 6 days	5	<2	2.4	12
carbonaceous biochemical oxygen demand	mg/L	every 6 days	5	<2	2	12
Ceriodaphnia dubia immobilisation (EC50)	% Effluent/Vol	monthly	1	-	-	100
copper	ug/L	monthly	1	-	-	2.6
faecal coliforms	CFU/100mL	every 6 days	5	29	318	950
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30
iron	ug/L	monthly	1	-	-	34
nitrogen (ammonia)	mg/L	every 6 days	5	0.01	0.48	2.35
nitrogen (total)	mg/L	every 6 days	5	1.2	2.93	6.9
phosphorus (total)	mg/L	every 6 days	5	0.03	0.13	0.54
total suspended solids	mg/L	every 6 days	5	<2	3	16
zinc	ug/L	monthly	1	-	-	11

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).

As per clause M2.4 under EPL 1695, collection of daily samples from EPA Points 7 or 10 is required during the occurrence of any bypass or discharge from EPA Point 8 or 9, greater than 2 hours during normal working hours. There was no bypass recorded from EPA Point 8 or 9 during normal working hours greater than 2 hours in the October monitoring period.

# West Hornsby Water Resource Recovery Facility

## September Pollution Monitoring Summary



### EPL 1695

Summary period: 01-09-2022 to 30-09-2022

Date obtained: 10-10-2022

Date published: 21-10-2022

Licensee: Sydney Water Corporation

PO Box 399

PARRAMATTA NSW 2124

**Table 1: 3 Day Geometric Mean data**

EPA Point 5 Site code WH0005		Point description: Downstream of the disinfection facilities			
pollutant	unit of measure	sampling frequency	3DGM limit	3DGM Actual	within limits
biochemical oxygen demand	mg/L	monthly	30	<2	yes
carbonaceous biochemical oxygen demand	mg/L	monthly	30	<2	yes
total suspended solids	mg/L	monthly	10	<2	yes

3 Day Geometric Mean (3DGM) is a way to average a set of values and is commonly used with water quality assessments which show a great deal of variability. 3DGM is calculated by multiplying the results of the analysis of three samples collected on three consecutive days and then taking the cubed root of that amount.

**Table 2: Routine monitoring data**

EPA Point 5 Site code WH0005		Point description: Downstream of the disinfection facilities				
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
aluminium	ug/L	monthly	1	-	-	168
biochemical oxygen demand	mg/L	every 6 days	5	<2	<2	<2
carbonaceous biochemical oxygen demand	mg/L	every 6 days	5	<2	<2	<2
Ceriodaphnia dubia immobilisation (EC50)	% Effluent/Vol	monthly	1	-	-	100
copper	ug/L	monthly	1	-	-	2.8
faecal coliforms	CFU/100mL	every 6 days	5	<1	134	600
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30
iron	ug/L	monthly	1	-	-	52
nitrogen (ammonia)	mg/L	every 6 days	5	0.01	0.15	0.7
nitrogen (total)	mg/L	every 6 days	5	1.52	2.28	3.1
phosphorus (total)	mg/L	every 6 days	5	0.03	0.04	0.08
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.

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).

As per clause M2.4 under EPL 1695, collection of daily samples from EPA Points 7 or 10 is required during the occurrence of any bypass or discharge from EPA Point 8 or 9, greater than 2 hours during normal working hours. There was no bypass recorded from EPA Point 8 or 9 during normal working hours greater than 2 hours in the September monitoring period.

# West Hornsby Water Resource Recovery Facility

## August Pollution Monitoring Summary



### EPL 1695

Summary period: 01-08-2022 to 31-08-2022

Date obtained: 08-09-2022

Date published: 14-09-2022

Licensee: Sydney Water Corporation

PO Box 399

PARRAMATTA NSW 2124

**Table 1: 3 Day Geometric Mean data**

EPA Point 5 Site code WH0005		Point description: Downstream of the disinfection facilities			
pollutant	unit of measure	sampling frequency	3DGM limit	3DGM Actual	within limits
biochemical oxygen demand	mg/L	monthly	30	<2	yes
carbonaceous biochemical oxygen demand	mg/L	monthly	30	<2	yes
total suspended solids	mg/L	monthly	10	<2	yes

3 Day Geometric Mean (3DGM) is a way to average a set of values and is commonly used with water quality assessments which show a great deal of variability. 3DGM is calculated by multiplying the results of the analysis of three samples collected on three consecutive days and then taking the cubed root of that amount.

**Table 2: Routine monitoring data**

EPA Point 5 Site code WH0005		Point description: Downstream of the disinfection facilities				
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
aluminium	ug/L	monthly	1	-	-	267
biochemical oxygen demand	mg/L	every 6 days	5	<2	<2	<2
carbonaceous biochemical oxygen demand	mg/L	every 6 days	5	<2	<2	<2
Ceriodaphnia dubia immobilisation (EC50)	% Effluent/Vol	monthly	1	-	-	100
copper	ug/L	monthly	1	-	-	2.3
cyanide	ug/L	monthly	1	-	-	<5
faecal coliforms	CFU/100mL	every 6 days	5	86	113	180
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30
iron	ug/L	monthly	1	-	-	85
nitrogen (ammonia)	mg/L	every 6 days	5	0.01	0.06	0.23
nitrogen (total)	mg/L	every 6 days	5	1.62	2.01	2.3
phosphorus (total)	mg/L	every 6 days	5	0.03	0.04	0.05
total suspended solids	mg/L	every 6 days	5	<2	<2	<2
zinc	ug/L	monthly	1	-	-	15

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

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

As per clause M2.4 under EPL 1695, collection of daily samples from EPA Points 7 or 10 is required during the occurrence of any bypass or discharge from EPA Point 8 or 9, greater than 2 hours during normal working hours. There was no bypass recorded from EPA Point 8 or 9 during normal working hours greater than 2 hours in the August monitoring period.

# West Hornsby Water Resource Recovery Facility

## July Pollution Monitoring Summary



### EPL 1695

Summary period: 01-07-2022 to 31-07-2022

Date obtained: 11-08-2022

Date published: 25-08-2022

Licensee: Sydney Water Corporation

PO Box 399

PARRAMATTA NSW 2124

**Table 1: 3 Day Geometric Mean data**

EPA Point 5 Site code WH0005		Point description: Downstream of the disinfection facilities			
pollutant	unit of measure	sampling frequency	3DGM limit	3DGM Actual	within limits
biochemical oxygen demand	mg/L	monthly	30	3	yes
carbonaceous biochemical oxygen demand	mg/L	monthly	30	3	yes
total suspended solids	mg/L	monthly	10	3	yes

3 Day Geometric Mean (3DGM) is a way to average a set of values and is commonly used with water quality assessments which show a great deal of variability. 3DGM is calculated by multiplying the results of the analysis of three samples collected on three consecutive days and then taking the cubed root of that amount.

**Table 2: Routine monitoring data**

EPA Point 5 Site code WH0005		Point description: Downstream of the disinfection facilities				
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
aluminium	ug/L	monthly	1	-	-	389
biochemical oxygen demand	mg/L	every 6 days	5	<2	6.6	13
carbonaceous biochemical oxygen demand	mg/L	every 6 days	5	<2	7	13
Ceriodaphnia dubia immobilisation (EC50)	% Effluent/Vol	monthly	1	-	-	100
copper	ug/L	monthly	1	-	-	6.5
faecal coliforms	CFU/100mL	every 6 days	5	12	19810	98,000
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30
iron	ug/L	monthly	1	-	-	228
nitrogen (ammonia)	mg/L	every 6 days	5	0.06	1.39	2.48
nitrogen (total)	mg/L	every 6 days	5	1.91	3.96	5.8
phosphorus (total)	mg/L	every 6 days	5	0.03	0.26	0.57
total suspended solids	mg/L	every 6 days	5	<2	5	13
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).

As per clause M2.4 under EPL 1695, collection of daily samples from EPA Points 7 or 10 is required during the occurrence of any bypass or discharge from EPA Point 8 or 9, greater than 2 hours during normal working hours. There was no bypass recorded from EPA Point 8 or 9 during normal working hours greater than 2 hours in the July monitoring period.