

# Hornsby Heights Water Resource Recovery Facility

## April Pollution Monitoring Summary



### EPL 750

Summary period: 01-04-2024 to 30-04-2024

Date obtained: 03-05-2024

Date published: 13-05-2024

Licensee: Sydney Water Corporation

PO Box 399

PARRAMATTA NSW 2124

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

EPA Point 5 Site code HH0005		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
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 HH0005		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	-	-	80
biochemical oxygen demand	mg/L	every 6 days	5	<2	<2	9
Ceriodaphnia dubia immobilisation (EC50)	% Effluent/Vol	monthly	1	-	-	100
copper	ug/L	monthly	1	-	-	1.9
diazinon	ug/L	monthly	1	-	-	<0.1
faecal coliforms	CFU/100mL	every 6 days	5	<1	158	780
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30
iron	ug/L	monthly	1	-	-	20
nitrogen (ammonia)	mg/L	every 6 days	5	0.01	0.36	1.75
nitrogen (total)	mg/L	every 6 days	5	1.49	3.58	4.81
phosphorus (total)	mg/L	every 6 days	5	0.03	0.1	0.34
total suspended solids	mg/L	every 6 days	5	<2	2	10
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).

# Hornsby Heights Water Resource Recovery Facility

## March Pollution Monitoring Summary



### EPL 750

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 data**

EPA Point 5 Site code HH0005		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
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 HH0005		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	-	-	101
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	-	-	3.2
diazinon	ug/L	monthly	1	-	-	<0.1
faecal coliforms	CFU/100mL	every 6 days	5	<1	2	7
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30
iron	ug/L	monthly	1	-	-	23
nitrogen (ammonia)	mg/L	every 6 days	5	0.01	0.01	0.02
nitrogen (total)	mg/L	every 6 days	5	1.06	2.37	6.36
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	-	-	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).

# Hornsby Heights Water Resource Recovery Facility

## February Pollution Monitoring Summary



### EPL 750

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 data**

EPA Point 5 Site code HH0005		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	9	yes
total suspended solids	mg/L	monthly	10	20	no <sup>1</sup>

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 HH0005		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	-	-	415
biochemical oxygen demand	mg/L	every 6 days	5	<2	4.6	23
Ceriodaphnia dubia immobilisation (EC50)	% Effluent/Vol	monthly	1	-	-	100
cobalt	ug/L	bi-annually	1	-	-	0.4
copper	ug/L	monthly	1	-	-	15.1
cyanide	ug/L	bi-annually	1	-	-	<5
diazinon	ug/L	monthly	1	-	-	<0.1
faecal coliforms	CFU/100mL	every 6 days	5	<1	121	510
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30
iron	ug/L	monthly	1	-	-	674
nickel	ug/L	bi-annually	1	-	-	2.2
nitrogen (ammonia)	mg/L	every 6 days	5	0.01	0.45	2.17
nitrogen (total)	mg/L	every 6 days	5	1.68	3.05	4.83
phosphorus (total)	mg/L	every 6 days	5	0.03	0.16	0.65
total suspended solids	mg/L	every 6 days	5	<2	9	43
zinc	ug/L	monthly	1	-	-	30

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).

<sup>1</sup>Total suspended solids 3DGM exceedance allowable under L3.6 when wet weather bypass was the sole cause of the exceedance.

# Hornsby Heights Water Resource Recovery Facility

## January Pollution Monitoring Summary



### EPL 750

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

Date obtained: 06-02-2024

Date published: 19-02-2024

Licensee: Sydney Water Corporation

PO Box 399

PARRAMATTA NSW 2124

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

EPA Point 5 Site code HH0005		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
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 HH0005		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	-	-	65
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	-	-	4.4
diazinon	ug/L	monthly	1	-	-	<0.1
faecal coliforms	CFU/100mL	every 6 days	5	<1	72006	360,000
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30
iron	ug/L	monthly	1	-	-	22
nitrogen (ammonia)	mg/L	every 6 days	5	0.02	0.04	0.08
nitrogen (total)	mg/L	every 6 days	5	1.84	3.92	6.89
phosphorus (total)	mg/L	every 6 days	5	0.04	0.16	0.54
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).

# Hornsby Heights Water Resource Recovery Facility

## December Pollution Monitoring Summary



### EPL 750

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 data**

EPA Point 5 Site code HH0005		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
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 HH0005		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	-	-	102
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	-	-	2.4
diazinon	ug/L	monthly	1	-	-	<0.1
faecal coliforms	CFU/100mL	every 6 days	5	<1	5	10
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30
iron	ug/L	monthly	1	-	-	25
nitrogen (ammonia)	mg/L	every 6 days	5	0.01	0.02	0.03
nitrogen (total)	mg/L	every 6 days	5	1.31	2.39	2.98
phosphorus (total)	mg/L	every 6 days	5	0.03	0.09	0.24
total suspended solids	mg/L	every 6 days	5	<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).

# Hornsby Heights Water Resource Recovery Facility

## November Pollution Monitoring Summary



### EPL 750

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

Date obtained: 11-12-2023

Date published: 14-12-2023

Licensee: Sydney Water Corporation

PO Box 399

PARRAMATTA NSW 2124

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

EPA Point 5 Site code HH0005		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
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 HH0005		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	-	-	106
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	-	-	1.4
diazinon	ug/L	monthly	1	-	-	<0.1
faecal coliforms	CFU/100mL	every 6 days	5	<1	2	3
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30
iron	ug/L	monthly	1	-	-	28
nitrogen (ammonia)	mg/L	every 6 days	5	0.02	0.02	0.03
nitrogen (total)	mg/L	every 6 days	5	1.45	4.21	13.6
phosphorus (total)	mg/L	every 6 days	5	0.03	0.08	0.2
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).

# Hornsby Heights Water Resource Recovery Facility

## October Pollution Monitoring Summary



### EPL 750

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 data**

EPA Point 5 Site code HH0005		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
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 HH0005		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	-	-	152
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	-	-	1.6
diazinon	ug/L	monthly	1	-	-	<0.1
faecal coliforms	CFU/100mL	every 6 days	5	<1	51	250
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30
iron	ug/L	monthly	1	-	-	33
nitrogen (ammonia)	mg/L	every 6 days	5	0.01	0.18	0.86
nitrogen (total)	mg/L	every 6 days	5	2.28	3.61	4.62
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	-	-	14

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).

# Hornsby Heights Water Resource Recovery Facility

## September Pollution Monitoring Summary



### EPL 750

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 data**

EPA Point 5 Site code HH0005		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
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 HH0005		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	-	-	136
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	-	-	2.4
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	-	-	30
nitrogen (ammonia)	mg/L	every 6 days	5	0.01	0.07	0.22
nitrogen (total)	mg/L	every 6 days	5	2.44	3.48	4.26
phosphorus (total)	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	-	-	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).



# Hornsby Heights Water Resource Recovery Facility

## August Pollution Monitoring Summary



### EPL 750

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 data**

EPA Point 5 Site code HH0005		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
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 HH0005		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	-	-	140
biochemical oxygen demand	mg/L	every 6 days	5	<2	<2	<2
Ceriodaphnia dubia immobilisation (EC50)	% Effluent/Vol	monthly	1	-	-	100
cobalt	ug/L	bi-annually	1	-	-	0.4
copper	ug/L	monthly	1	-	-	1.5
cyanide	ug/L	bi-annually	1	-	-	<5
diazinon	ug/L	monthly	1	-	-	<0.1
faecal coliforms	CFU/100mL	every 6 days	5	<1	3	16
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30
iron	ug/L	monthly	1	-	-	23
nickel	ug/L	bi-annually	1	-	-	1.6
nitrogen (ammonia)	mg/L	every 6 days	5	0.01	0.02	0.07
nitrogen (total)	mg/L	every 6 days	5	2.08	3.08	4
phosphorus (total)	mg/L	every 6 days	5	0.04	0.04	0.05
total suspended solids	mg/L	every 6 days	5	<2	<2	8
zinc	ug/L	monthly	1	-	-	14

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).

# Hornsby Heights Water Resource Recovery Facility

## July Pollution Monitoring Summary



### EPL 750

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

Date obtained: 07-08-2023

Date published: 15-08-2023

Licensee: Sydney Water Corporation

PO Box 399

PARRAMATTA NSW 2124

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

EPA Point 5 Site code HH0005		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
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 HH0005		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	<2
Ceriodaphnia dubia immobilisation (EC50)	% Effluent/Vol	monthly	1	-	-	100
copper	ug/L	monthly	1	-	-	1.7
diazinon	ug/L	monthly	1	-	-	<0.1
faecal coliforms	CFU/100mL	every 6 days	6	<1	<1	<1
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30
iron	ug/L	monthly	1	-	-	21
nitrogen (ammonia)	mg/L	every 6 days	5	0.01	0.18	0.71
nitrogen (total)	mg/L	every 6 days	5	2.65	4.27	6.71
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	-	-	14

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).