# West Hornsby Wastewater Treatment Plant June Pollution Monitoring Summary



## EPL 1695

Summary period: 01-06-2022 to 30-06-2022 Date obtained: 07-07-2022 Date published: 15-07-2022 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	-	-	275	
biochemical oxygen demand	mg/L	every 6 days	5	<2	<2	3	
carbonaceous biochemical oxygen demand	mg/L	every 6 days	5	<2	<2	3	
Ceriodaphnia dubia immobilisation (EC50)	% Effluent/Vol	monthly	1	-	-	100	
copper	ug/L	monthly	1	-	-	2.7	
faecal coliforms	CFU/100mL	every 6 days	5	37	69	120	
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30	
iron	ug/L	monthly	1	-	-	53	
nitrogen (ammonia)	mg/L	every 6 days	5	0.01	0.04	0.14	
nitrogen (total)	mg/L	every 6 days	5	2.02	3.12	3.83	
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	-	-	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 June monitoring period.

# West Hornsby Wastewater Treatment Plant May Pollution Monitoring Summary



## EPL 1695

Summary period: 01-05-2022 to 31-05-2022 Date obtained: 06-06-2022 Date published: 17-06-2022 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	-	-	156	
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	-	-	2.4	
faecal coliforms	CFU/100mL	every 6 days	5	32	104	290	
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30	
iron	ug/L	monthly	1	-	-	33	
nitrogen (ammonia)	mg/L	every 6 days	5	0.01	0.01	0.02	
nitrogen (total)	mg/L	every 6 days	5	1.96	2.53	3.8	
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	-	-	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 May monitoring period.

# West Hornsby Wastewater Treatment Plant April Pollution Monitoring Summary



## EPL 1695

Summary period: 01-04-2022 to 30-04-2022 Date obtained: 09-05-2022 Date published: 20-05-2022 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	-	-	153	
biochemical oxygen demand	mg/L	every 6 days	5	<2	3	12	
carbonaceous biochemical oxygen demand	mg/L	every 6 days	5	<2	2	10	
Ceriodaphnia dubia immobilisation (EC50)	% Effluent/Vol	monthly	1	-	-	100	
copper	ug/L	monthly	1	-	-	2.9	
faecal coliforms	CFU/100mL	every 6 days	5	<1	19	49	
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30	
iron	ug/L	monthly	1	-	-	30	
nitrogen (ammonia)	mg/L	every 6 days	5	0.01	0.64	2.3	
nitrogen (total)	mg/L	every 6 days	5	1.65	3.18	5.77	
phosphorus (total)	mg/L	every 6 days	5	0.03	0.16	0.52	
total suspended solids	mg/L	every 6 days	5	<2	4	14	
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).

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 Wastewater Treatment Plant March Pollution Monitoring Summary



## EPL 1695

Summary period: 01-03-2022 to 31-03-2022 Date obtained: 05-04-2022 Date published: 15-04-2022 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	-	-	332	
biochemical oxygen demand	mg/L	every 6 days	5	<2	10.2	18	
carbonaceous biochemical oxygen demand	mg/L	every 6 days	5	<2	8	14	
Ceriodaphnia dubia immobilisation (EC50)	% Effluent/Vol	monthly	1	-	-	100	
copper	ug/L	monthly	1	-	-	3.7	
faecal coliforms	CFU/100mL	every 6 days	5	4	586	2,100	
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30	
iron	ug/L	monthly	1	-	-	54	
nitrogen (ammonia)	mg/L	every 6 days	5	<0.01	1.3	3.1	
nitrogen (total)	mg/L	every 6 days	5	1.74	4.6	6.53	
phosphorus (total)	mg/L	every 6 days	5	0.04	0.4	0.69	
total suspended solids	mg/L	every 6 days	5	<2	17	37	
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 March monitoring period.

# West Hornsby Wastewater Treatment Plant February Pollution Monitoring Summary



## EPL 1695

Summary period: 01-02-2022 to 28-02-2022 Date obtained: 12-03-2022 Date published: 24-03-2022 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	-	-	141	
biochemical oxygen demand	mg/L	every 6 days	5	<2	3	15	
carbonaceous biochemical oxygen demand	mg/L	every 6 days	5	<2	3	13	
Ceriodaphnia dubia immobilisation (EC50)	% Effluent/Vol	monthly	1	-	-	100	
copper	ug/L	monthly	1	-	-	3.4	
cyanide	ug/L	bi-annually	1	-	-	<5	
faecal coliforms	CFU/100mL	every 6 days	5	<1	100000	500,000	
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30	
iron	ug/L	monthly	1	-	-	37	
nitrogen (ammonia)	mg/L	every 6 days	5	0.01	0.73	3.6	
nitrogen (total)	mg/L	every 6 days	5	2.16	3.59	7.92	
phosphorus (total)	mg/L	every 6 days	5	0.02	0.17	0.74	
total suspended solids	mg/L	every 6 days	5	<2	7	36	
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 Wastewater Treatment Plant January Pollution Monitoring Summary



## EPL 1695

Summary period: 01-01-2022 to 31-01-2022 Date obtained: 08-02-2022 Date published: 11-02-2022 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	-	-	174	
biochemical oxygen demand	mg/L	every 6 days	5	<2	2.8	9	
carbonaceous biochemical oxygen demand	mg/L	every 6 days	5	<2	3	9	
Ceriodaphnia dubia immobilisation (EC50)	% Effluent/Vol	monthly	1	-	-	100	
copper	ug/L	monthly	1	-	-	3.4	
faecal coliforms	CFU/100mL	every 6 days	5	1	12	29	
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30	
iron	ug/L	monthly	1	-	-	42	
nitrogen (ammonia)	mg/L	every 6 days	5	0.01	0.39	1.8	
nitrogen (total)	mg/L	every 6 days	5	1.47	2.17	4.27	
phosphorus (total)	mg/L	every 6 days	5	0.03	0.1	0.27	
total suspended solids	mg/L	every 6 days	5	<2	<2	9	
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 r 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 Wastewater Treatment Plant December Pollution Monitoring Summary



## EPL 1695

Summary period: 01-12-2021 to 31-12-2021 Date obtained: 04-01-2022 Date published: 14-01-2022 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	-	-	116	
biochemical oxygen demand	mg/L	every 6 days	5	<2	6.4	25	
carbonaceous biochemical oxygen demand	mg/L	every 6 days	5	<2	6	22	
Ceriodaphnia dubia immobilisation (EC50)	% Effluent/Vol	monthly	1	-	-	100	
copper	ug/L	monthly	1	-	-	5.2	
faecal coliforms	CFU/100mL	every 6 days	5	<1	15	64	
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30	
iron	ug/L	monthly	1	-	-	30	
nitrogen (ammonia)	mg/L	every 6 days	5	0.01	0.01	0.02	
nitrogen (total)	mg/L	every 6 days	5	3.08	3.52	4.29	
phosphorus (total)	mg/L	every 6 days	5	0.03	0.03	0.03	
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).

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 Wastewater Treatment Plant November Pollution Monitoring Summary



## EPL 1695

Summary period: 01-11-2021 to 30-11-2021 Date obtained: 08-12-2021 Date published: 17-12-2021 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	-	-	204	
biochemical oxygen demand	mg/L	every 6 days	5	<2	2	10	
carbonaceous biochemical oxygen demand	mg/L	every 6 days	5	<2	<2	8	
Ceriodaphnia dubia immobilisation (EC50)	% Effluent/Vol	monthly	1	-	-	100	
copper	ug/L	monthly	1	-	-	3.8	
faecal coliforms	CFU/100mL	every 6 days	5	5	27	62	
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30	
iron	ug/L	monthly	1	-	-	71	
nitrogen (ammonia)	mg/L	every 6 days	5	0.01	0.66	3.14	
nitrogen (total)	mg/L	every 6 days	5	2.99	3.72	5.8	
phosphorus (total)	mg/L	every 6 days	5	0.03	0.12	0.46	
total suspended solids	mg/L	every 6 days	5	<2	3	13	
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 November monitoring period.

# West Hornsby Wastewater Treatment Plant October Pollution Monitoring Summary



## EPL 1695

Summary period: 01-10-2021 to 31-10-2021 Date obtained: 08-11-2021 Date published: 12-11-2021 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	-	-	179	
biochemical oxygen demand	mg/L	every 6 days	5	<2	<2	3	
carbonaceous biochemical oxygen demand	mg/L	every 6 days	5	<2	<2	3	
Ceriodaphnia dubia immobilisation (EC50)	% Effluent/Vol	monthly	1	-	-	100	
copper	ug/L	monthly	1	-	-	4.1	
faecal coliforms	CFU/100mL	every 6 days	5	5	8	16	
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30	
iron	ug/L	monthly	1	-	-	41	
nitrogen (ammonia)	mg/L	every 6 days	5	0.02	0.1	0.2	
nitrogen (total)	mg/L	every 6 days	5	3.68	4.05	4.57	
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 October monitoring period.

# West Hornsby Wastewater Treatment Plant September Pollution Monitoring Summary



## EPL 1695

Summary period: 01-09-2021 to 30-09-2021 Date obtained: 05-10-2021 Date published: 13-10-2021 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	-	-	206	
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	-	-	5	
faecal coliforms	CFU/100mL	every 6 days	5	1	6	23	
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30	
iron	ug/L	monthly	1	-	-	49	
nitrogen (ammonia)	mg/L	every 6 days	5	0.01	0.06	0.26	
nitrogen (total)	mg/L	every 6 days	5	2.9	3.99	4.71	
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	-	-	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 September monitoring period.

# West Hornsby Wastewater Treatment Plant August Pollution Monitoring Summary



## EPL 1695

Summary period: 01-08-2021 to 31-08-2021 Date obtained: 06-09-2021 Date published: 13-09-2021 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	4	yes		
carbonaceous biochemical oxygen demand	mg/L	monthly	30	4	yes		
total suspended solids	mg/L	monthly	30	7	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	-	-	275	
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	-	-	3.9	
cyanide	ug/L	bi-annually	1	-	-	<5	
faecal coliforms	CFU/100mL	every 6 days	5	1	7	27	
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30	
iron	ug/L	monthly	1	-	-	45	
nitrogen (ammonia)	mg/L	every 6 days	5	0.02	0.06	0.16	
nitrogen (total)	mg/L	every 6 days	5	3.11	4.53	5.31	
phosphorus (total)	mg/L	every 6 days	5	0.05	0.06	0.06	
total suspended solids	mg/L	every 6 days	5	<2	<2	2	
zinc	ug/L	monthly	1	-	-	20	

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

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 Wastewater Treatment Plant July Pollution Monitoring Summary



## EPL 1695

Summary period: 01-07-2021 to 31-07-2021 Date obtained: 07-08-2021 Date published: 18-08-2021 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	3DGM limit 3DGM Actual wit						
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	-	-	232	
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	-	-	4.4	
faecal coliforms	CFU/100mL	every 6 days	6	2	10	20	
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30	
iron	ug/L	monthly	1	-	-	34	
nitrogen (ammonia)	mg/L	every 6 days	5	0.01	0.01	0.01	
nitrogen (total)	mg/L	every 6 days	5	4.76	5.68	6.11	
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).

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.