

West Hornsby Water Resource Recovery Facility

September Pollution Monitoring Summary



EPL 1695

Summary period: 01-09-2024 to 30-09-2024

Date obtained: 09-10-2024

Date published: 23-10-2024

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
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	-	-	161
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
faecal coliforms	CFU/100mL	every 6 days	5	3	8	12
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30
iron	ug/L	monthly	1	-	-	31
nitrogen (ammonia)	mg/L	every 6 days	5	0.02	0.04	0.07
nitrogen (total)	mg/L	every 6 days	5	2.30	2.83	3.56
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	-	-	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 September monitoring period.

West Hornsby Water Resource Recovery Facility

August Pollution Monitoring Summary



EPL 1695

Summary period: 01-08-2024 to 31-08-2024

Date obtained: 07-09-2024

Date published: 13-09-2024

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
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	-	-	172
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
cyanide	ug/L	biannually	1	-	-	<5
faecal coliforms	CFU/100mL	every 6 days	5	1	15	60
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30
iron	ug/L	monthly	1	-	-	39
nitrogen (ammonia)	mg/L	every 6 days	5	0.02	0.14	0.53
nitrogen (total)	mg/L	every 6 days	5	2.12	2.53	2.88
phosphorus (total)	mg/L	every 6 days	5	0.03	0.05	0.06
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 August monitoring period.

West Hornsby Water Resource Recovery Facility

July Pollution Monitoring Summary



EPL 1695

Summary period: 01-07-2024 to 31-07-2024

Date obtained: 13-08-2024

Date published: 27-08-2024

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
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	-	-	155
biochemical oxygen demand	mg/L	every 6 days	5	<2	<2	6
Ceriodaphnia dubia immobilisation (EC50)	% Effluent/Vol	monthly	1	-	-	100
copper	ug/L	monthly	1	-	-	2.2
faecal coliforms	CFU/100mL	every 6 days	5	<1	3,401	17,000
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30
iron	ug/L	monthly	1	-	-	36
nitrogen (ammonia)	mg/L	every 6 days	5	0.02	0.59	2.27
nitrogen (total)	mg/L	every 6 days	5	1.44	2.69	3.92
phosphorus (total)	mg/L	every 6 days	5	0.02	0.08	0.31
total suspended solids	mg/L	every 6 days	5	<2	<2	6
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 July monitoring period.