West Hornsby Water Resource Recovery Facility March Pollution Monitoring Summary

EPL 1695

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 WH0005	Point descrip	Point description: Downstream of the disinfection facilities						
pollutant	unit of measure	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	_	-	115
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	-	-	4.1
faecal coliforms	CFU/100mL	every 6 days	5	3	5	8
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30
iron	ug/L	monthly	1	-	-	26
nitrogen (ammonia)	mg/L	every 6 days	5	0.01	0.02	0.02
nitrogen (total)	mg/L	every 6 days	5	2.54	3.01	3.44
phosphorus (total)	mg/L	every 6 days	5	0.04	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 March monitoring period.

West Hornsby Water Resource Recovery Facility February Pollution Monitoring Summary

EPL 1695

Summary period: 01-02-2024 to 29-02-2024

Date obtained: 12-03-2024

Date published: 25-03-2024

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Table 1: 3 Day Geometric Mean data

EPA Point 5 Site code WH0005	Point descrip	Point description: Downstream of the disinfection facilities						
pollutant	unit of measure	3DGM limit 3DGM Actual within limits						
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	-	_	147
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	-	_	3.6
cyanide	ug/L	bi-annual	1	-	_	<5
faecal coliforms	CFU/100mL	every 6 days	5	7	21	49
hydrogen sulphide (unionised)	ug/L	monthly	1	-	_	<30
iron	ug/L	monthly	1	-	_	34
nitrogen (ammonia)	mg/L	every 6 days	5	0.01	0.03	0.08
nitrogen (total)	mg/L	every 6 days	5	1.88	2.48	3.3
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	<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 February monitoring period.

West Hornsby Water Resource Recovery Facility January Pollution Monitoring Summary

EPL 1695

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

Date obtained: 04-02-2024

Date published: 15-02-2024

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Table 1: 3 Day Geometric Mean data

EPA Point 5 Site code WH0005	Point descrip	Point description: Downstream of the disinfection facilities						
pollutant	unit of measure	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	_	-	151
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	-	-	3.6
faecal coliforms	CFU/100mL	every 6 days	5	5	1829	9,100
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30
iron	ug/L	monthly	1	_	-	22
nitrogen (ammonia)	mg/L	every 6 days	5	0.01	0.02	0.03
nitrogen (total)	mg/L	every 6 days	5	1.64	2.31	3.17
phosphorus (total)	mg/L	every 6 days	5	0.05	0.05	0.07
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 January monitoring period.

West Hornsby Water Resource Recovery Facility December Pollution Monitoring Summary



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

Date obtained: 12-01-2024

Date published: 22-01-2024

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Table 1: 3 Day Geometric Mean data

EPA Point 5 Site code WH0005	Point descrip	Point description: Downstream of the disinfection facilities						
pollutant	unit of measure	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	_	-	227
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	-	-	6.3
faecal coliforms	CFU/100mL	every 6 days	5	4	9	18
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30
iron	ug/L	monthly	1	-	-	51
nitrogen (ammonia)	mg/L	every 6 days	5	0.03	0.07	0.18
nitrogen (total)	mg/L	every 6 days	5	2.29	2.74	3.31
phosphorus (total)	mg/L	every 6 days	5	0.05	0.08	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).

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



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

Date obtained: 06-12-2023

Date published: 14-12-2023

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Table 1: 3 Day Geometric Mean data

EPA Point 5 Site code WH0005	Point descrip	Point description: Downstream of the disinfection facilities						
pollutant	unit of measure	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	_	_	186
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	_	_	4.5
faecal coliforms	CFU/100mL	every 6 days	5	5	9	14
hydrogen sulphide (unionised)	ug/L	monthly	1	-	_	<30
iron	ug/L	monthly	1	-	_	28
nitrogen (ammonia)	mg/L	every 6 days	5	0.03	0.03	0.04
nitrogen (total)	mg/L	every 6 days	5	1.68	2.81	3.85
phosphorus (total)	mg/L	every 6 days	5	0.06	0.08	0.1
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 November monitoring period.

West Hornsby Water Resource Recovery Facility October Pollution Monitoring Summary



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

Date obtained: 03-11-2023

Date published: 17-11-2023

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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 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	_	_	196
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	8	36	100
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30
iron	ug/L	monthly	1	-	-	34
nitrogen (ammonia)	mg/L	every 6 days	5	0.03	0.05	0.07
nitrogen (total)	mg/L	every 6 days	5	1.76	3.21	5
phosphorus (total)	mg/L	every 6 days	5	0.06	0.08	0.11
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 October monitoring period.

West Hornsby Water Resource Recovery Facility September Pollution Monitoring Summary



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

Date obtained: 05-10-2023

Date published: 13-10-2023

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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	_	_	181
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	_	_	3.7
faecal coliforms	CFU/100mL	every 6 days	5	4	13	24
hydrogen sulphide (unionised)	ug/L	monthly	1	_	_	<30
iron	ug/L	monthly	1	-	_	36
nitrogen (ammonia)	mg/L	every 6 days	5	0.01	0.02	0.04
nitrogen (total)	mg/L	every 6 days	5	2.43	3.08	3.85
phosphorus (total)	mg/L	every 6 days	5	0.04	0.05	0.05
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 September monitoring period.

West Hornsby Water Resource Recovery Facility August Pollution Monitoring Summary

EPL 1695

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

Date obtained: 05-09-2023

Date published: 14-09-2023

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Table 1: 3 Day Geometric Mean data

EPA Point 5 Site code WH0005	Point descrip	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	-	-	279
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
cyanide	ug/L	bi-annual	1	-	-	<5
faecal coliforms	CFU/100mL	every 6 days	5	14	42	76
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30
iron	ug/L	monthly	1	-	-	32
nitrogen (ammonia)	mg/L	every 6 days	5	0.02	0.04	0.1
nitrogen (total)	mg/L	every 6 days	5	2.17	3.09	3.92
phosphorus (total)	mg/L	every 6 days	5	0.05	0.05	0.06
total suspended solids	mg/L	every 6 days	5	<2	<2	3
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: 01-07-2023 to 31-07-2023

Date obtained: 07-08-2023

Date published: 15-08-2023

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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	_	_	297
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	6	1	6	10
hydrogen sulphide (unionised)	ug/L	monthly	1	-	_	<30
iron	ug/L	monthly	1	-	_	28
nitrogen (ammonia)	mg/L	every 6 days	5	0.01	0.01	0.03
nitrogen (total)	mg/L	every 6 days	5	1.7	2.45	3.03
phosphorus (total)	mg/L	every 6 days	5	0.02	0.03	0.05
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 July monitoring period.