

Brooklyn Wastewater Treatment Plant

January Pollution Monitoring Summary



EPL 12438

Summary period: 01-01-2021 to 31-01-2021

Date obtained: 14-02-2021

Date published: 23-02-2021

Licensee: Sydney Water Corporation

PO Box 399

PARRAMATTA NSW 2124

Table 1: 3 Day Geometric Mean data

EPA Point 5 Site code BK0005		Point description: In the discharge pipeline after the UV lamps			
pollutant	unit of measure	sampling frequency	3DGM limit	3DGM Actual	within limits
biochemical oxygen demand	mg/L	monthly	20	<2	yes
carbonaceous biochemical oxygen demand	mg/L	monthly	20	<2	yes
total suspended solids	mg/L	monthly	25	<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 BK0005		Point description: In the discharge pipeline after the UV lamps				
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
biochemical oxygen demand	mg/L	every 6 days	5	<2	<2	9
carbonaceous biochemical oxygen demand	mg/L	every 6 days	5	<2	<2	9
Ceriodaphnia dubia immobilisation (EC50)	% Effluent/Vol	monthly	1	-	-	100
faecal coliforms	CFU/100mL	every 6 days	6	<1	3	16
nitrogen (ammonia)	mg/L	every 6 days	5	0.01	0.01	0.01
nitrogen (total)	mg/L	every 6 days	5	3.5	4.7	5.89
phosphorus (total)	mg/L	every 6 days	5	0.01	0.01	0.01
total suspended solids	mg/L	every 6 days	5	<2	<2	<2

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 2 (discharge to waters).

Brooklyn Wastewater Treatment Plant

December Pollution Monitoring Summary



EPL 12438

Summary period: 01-12-2020 to 31-12-2020

Date obtained: 12-01-2021

Date published: 18-01-2021

Licensee: Sydney Water Corporation

PO Box 399

PARRAMATTA NSW 2124

Table 1: 3 Day Geometric Mean data

EPA Point 5 Site code BK0005		Point description: In the discharge pipeline after the UV lamps			
pollutant	unit of measure	sampling frequency	3DGM limit	3DGM Actual	within limits
biochemical oxygen demand	mg/L	monthly	20	<2	yes
carbonaceous biochemical oxygen demand	mg/L	monthly	20	<2	yes
total suspended solids	mg/L	monthly	25	<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 BK0005		Point description: In the discharge pipeline after the UV lamps				
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
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
faecal coliforms	CFU/100mL	every 6 days	5	<1	<1	<1
nitrogen (ammonia)	mg/L	every 6 days	6	0.01	0.05	0.24
nitrogen (total)	mg/L	every 6 days	6	4.57	6.62	9.63
phosphorus (total)	mg/L	every 6 days	6	0.02	0.05	0.11
total suspended solids	mg/L	every 6 days	6	<2	<2	<2

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 2 (discharge to waters).

Brooklyn Wastewater Treatment Plant

November Pollution Monitoring Summary



EPL 12438

Summary period: 01-11-2020 to 30-11-2020

Date obtained: 15-12-2020

Date published: 17-12-2020

Licensee: Sydney Water Corporation

PO Box 399

PARRAMATTA NSW 2124

Table 1: 3 Day Geometric Mean data

EPA Point 5 Site code BK0005		Point description: In the discharge pipeline after the UV lamps			
pollutant	unit of measure	sampling frequency	3DGM limit	3DGM Actual	within limits
biochemical oxygen demand	mg/L	monthly	20	<2	yes
carbonaceous biochemical oxygen demand	mg/L	monthly	20	<2	yes
total suspended solids	mg/L	monthly	25	<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 BK0005		Point description: In the discharge pipeline after the UV lamps				
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
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
faecal coliforms	CFU/100mL	every 6 days	5	<1	<1	<1
nitrogen (ammonia)	mg/L	every 6 days	5	0.01	0.01	0.01
nitrogen (total)	mg/L	every 6 days	5	4.48	6.71	10.1
phosphorus (total)	mg/L	every 6 days	5	<0.01	0.01	0.04
total suspended solids	mg/L	every 6 days	5	<2	<2	<2

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 2 (discharge to waters).

Brooklyn Wastewater Treatment Plant

October Pollution Monitoring Summary



EPL 12438

Summary period: 01-10-2020 to 31-10-2020

Date obtained: 05-11-2020

Date published: 13-11-2020

Licensee: Sydney Water Corporation

PO Box 399

PARRAMATTA NSW 2124

Table 1: 3 Day Geometric Mean data

EPA Point 5 Site code BK0005		Point description: In the discharge pipeline after the UV lamps			
pollutant	unit of measure	sampling frequency	3DGM limit	3DGM Actual	within limits
biochemical oxygen demand	mg/L	monthly	20	<2	yes
carbonaceous biochemical oxygen demand	mg/L	monthly	20	<2	yes
total suspended solids	mg/L	monthly	25	<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 BK0005		Point description: In the discharge pipeline after the UV lamps				
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
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
faecal coliforms	CFU/100mL	every 6 days	5	<1	<1	3
nitrogen (ammonia)	mg/L	every 6 days	5	0.01	0.03	0.11
nitrogen (total)	mg/L	every 6 days	5	4.36	5.51	7.16
phosphorus (total)	mg/L	every 6 days	5	<0.01	<0.01	0.02
total suspended solids	mg/L	every 6 days	5	<2	<2	<2

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 2 (discharge to waters).

Brooklyn Wastewater Treatment Plant

September Pollution Monitoring Summary



EPL 12438

Summary period: 01-09-2020 to 30-09-2020

Date obtained: 15-10-2020

Date published: 23-10-2020

Licensee: Sydney Water Corporation

PO Box 399

PARRAMATTA NSW 2124

Table 1: 3 Day Geometric Mean data

EPA Point 5 Site code BK0005		Point description: In the discharge pipeline after the UV lamps			
pollutant	unit of measure	sampling frequency	3DGM limit	3DGM Actual	within limits
biochemical oxygen demand	mg/L	monthly	20	<2	yes
carbonaceous biochemical oxygen demand	mg/L	monthly	20	<2	yes
total suspended solids	mg/L	monthly	25	<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 BK0005		Point description: In the discharge pipeline after the UV lamps				
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
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
faecal coliforms	CFU/100mL	every 6 days	5	<1	<1	2
nitrogen (ammonia)	mg/L	every 6 days	5	0.01	0.01	0.02
nitrogen (total)	mg/L	every 6 days	5	3.78	4.97	6.26
phosphorus (total)	mg/L	every 6 days	5	<0.01	<0.01	0.01
total suspended solids	mg/L	every 6 days	5	<2	<2	<2

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 2 (discharge to waters).

Note: biochemical oxygen demand monitoring commenced from September 2020.

Brooklyn Wastewater Treatment Plant

August Pollution Monitoring Summary



EPL 12438

Summary period: 01-08-2020 to 31-08-2020

Date obtained: 05-09-2020

Date published: 16-09-2020

Licensee: Sydney Water Corporation

PO Box 399

PARRAMATTA NSW 2124

Table 1: 3 Day Geometric Mean data

EPA Point 5 Site code BK0005		Point description: In the discharge pipeline after the UV lamps			
pollutant	unit of measure	sampling frequency	3DGM limit	3DGM Actual	within limits
carbonaceous biochemical oxygen demand	mg/L	monthly	20	<2	yes
total suspended solids	mg/L	monthly	25	<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 BK0005		Point description: In the discharge pipeline after the UV lamps				
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
carbonaceous biochemical oxygen demand	mg/L	every 6 days	5	<2	<2	<2
Ceriodaphnia dubia immobilisation (EC50)	% Effluent/Vol	monthly	1	-	-	100
faecal coliforms	CFU/100mL	every 6 days	5	<1	<1	<1
nitrogen (ammonia)	mg/L	every 6 days	5	0.01	0.36	1.69
nitrogen (total)	mg/L	every 6 days	5	3.42	4.79	7.84
phosphorus (total)	mg/L	every 6 days	5	<0.01	<0.01	<0.01
total suspended solids	mg/L	every 6 days	5	<2	<2	2

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 2 (discharge to waters).

Brooklyn Wastewater Treatment Plant

July Pollution Monitoring Summary



EPL 12438

Summary period: 01-07-2020 to 31-07-2020

Date obtained: 06-08-2020

Date published: 25-08-2020

Licensee: Sydney Water Corporation

PO Box 399

PARRAMATTA NSW 2124

Table 1: 3 Day Geometric Mean data

EPA Point 5 Site code BK0005		Point description: In the discharge pipeline after the UV lamps			
pollutant	unit of measure	sampling frequency	3DGM limit	3DGM Actual	within limits
carbonaceous biochemical oxygen demand	mg/L	monthly	20	<2	yes
total suspended solids	mg/L	monthly	25	<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 BK0005		Point description: In the discharge pipeline after the UV lamps				
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
carbonaceous biochemical oxygen demand	mg/L	every 6 days	5	<2	<2	<2
Ceriodaphnia dubia immobilisation (EC50)	% Effluent/Vol	monthly	1	-	-	100
faecal coliforms	CFU/100mL	every 6 days	5	<1	<1	<1
nitrogen (ammonia)	mg/L	every 6 days	5	0.01	0.02	0.03
nitrogen (total)	mg/L	every 6 days	5	1.88	3.49	4.22
phosphorus (total)	mg/L	every 6 days	5	<0.01	<0.01	0.01
total suspended solids	mg/L	every 6 days	5	<2	<2	<2

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 2 (discharge to waters).

**Brooklyn Wastewater Treatment Plant
Pollution Monitoring Summary Correction Log**

EPL 12438

Licensee: Sydney Water Corporation
PO Box 399
PARRAMATTA NSW 2124



EPA Point 5 Site code BK0005	Point description: In the discharge pipeline after the UV lamps										
Pollutant	unit of measure	Original data			Corrected data			Date corrected	Date originally published	Monthly report	Reason
		minimum	mean	maximum	minimum	mean	maximum				
nitrogen (total)	mg/L	1.88	5.09	12.2	1.88	3.49	4.22	25-08-20	14-08-20	July	Incorrect mean and max result reported
phosphorus (total)	mg/L	<0.01	0.01	0.06	<0.01	<0.01	0.01	25-08-20	14-08-20	July	Incorrect mean and max result reported