Shellharbour Wastewater Treatment Plant
June Pollution Monitoring Summary

EPL 211

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 4 Site code SH0004	Point description: At the southern end of the secondary effluent channel				
pollutant	unit of measure	sampling frequency	3DGM limit	3DGM Actual	within limits
total suspended solids	mg/L	monthly	50	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 4 Site code SH0004	Point description: At the southern end of the secondary effluent channel					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
aluminium	ug/L	monthly	1	-	-	34
biochemical oxygen demand	mg/L	every 6 days	5	<2	3.6	8
carbonaceous biochemical oxygen demand	mg/L	every 6 days	5	<2	3	8
copper	ug/L	monthly	1	-	-	3.3
diazinon	ug/L	monthly	1	-	-	<0.1
faecal coliforms	CFU/100mL	every 6 days	5	3	116	300
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30
nitrogen (ammonia)	mg/L	monthly	1	-	-	<0.1
nonylphenol ethoxylate	ug/L	monthly	1	-	-	<5
sea urchin fertilisation (EC50)	% Effluent/Vol	monthly	1	-	-	50
total suspended solids	mg/L	every 6 days	5	4	9	16

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

Effluent quality monitoring results obtained from EPA Point 4 are used to indicate the quality of water discharged at EPA Point 1 (discharge to waters).

Shellharbour Wastewater Treatment Plant
May Pollution Monitoring Summary

EPL 211

Summary period: 01-05-2022 to 31-05-2022
Date obtained: 12-06-2022
Date published: 22-06-2022

Licensee: Sydney Water Corporation
PO Box 399
PARRAMATTA NSW 2124

Table 1: 3 Day Geometric Mean data

EPA Point 4 Site code SH0004	Point description: At the southern end of the secondary effluent channel				
pollutant	unit of measure	sampling frequency	3DGM limit	3DGM Actual	within limits
total suspended solids	mg/L	monthly	50	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 4 Site code SH0004	Point description: At the southern end of the secondary effluent channel					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
aluminium	ug/L	monthly	1	-	-	19
biochemical oxygen demand	mg/L	every 6 days	5	<2	7.2	21
carbonaceous biochemical oxygen demand	mg/L	every 6 days	5	<2	4	12
copper	ug/L	monthly	1	-	-	1.8
diazinon	ug/L	monthly	1	-	-	<0.1
faecal coliforms	CFU/100mL	every 6 days	5	4	48004	230,000
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30
nitrogen (ammonia)	mg/L	monthly	1	-	-	<0.1
nonylphenol ethoxylate	ug/L	monthly	1	-	-	<5
sea urchin fertilisation (EC50)	% Effluent/Vol	monthly	1	-	-	100
total suspended solids	mg/L	every 6 days	5	2	11	24

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

Effluent quality monitoring results obtained from EPA Point 4 are used to indicate the quality of water discharged at EPA Point 1 (discharge to waters).

Shellharbour Wastewater Treatment Plant
April Pollution Monitoring Summary

EPL 211

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 4 Site code SH0004	Point description: At the southern end of the secondary effluent channel				
pollutant	unit of measure	sampling frequency	3DGM limit	3DGM Actual	within limits
total suspended solids	mg/L	monthly	50	9	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 4 Site code SH0004	Point description: At the southern end of the secondary effluent channel					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
aluminium	ug/L	monthly	1	-	-	28
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
copper	ug/L	monthly	1	-	-	4.4
diazinon	ug/L	monthly	1	-	-	<0.1
faecal coliforms	CFU/100mL	every 6 days	5	6	23	48
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30
nitrogen (ammonia)	mg/L	monthly	1	-	-	0.3
nonylphenol ethoxylate	ug/L	monthly	1	-	-	<5
sea urchin fertilisation (EC50)	% Effluent/Vol	monthly	1	-	-	100
total suspended solids	mg/L	every 6 days	5	2	3	4

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

Effluent quality monitoring results obtained from EPA Point 4 are used to indicate the quality of water discharged at EPA Point 1 (discharge to waters).

Shellharbour Wastewater Treatment Plant
March Pollution Monitoring Summary

EPL 211

Summary period: 01-03-2022 to 31-03-2022
Date obtained: 08-04-2022
Date published: 15-04-2022

Licensee: Sydney Water Corporation
PO Box 399
PARRAMATTA NSW 2124

Table 1: 3 Day Geometric Mean data

EPA Point 4 Site code SH0004	Point description: At the southern end of the secondary effluent channel				
pollutant	unit of measure	sampling frequency	3DGM limit	3DGM Actual	within limits
total suspended solids	mg/L	monthly	50	20	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 4 Site code SH0004	Point description: At the southern end of the secondary effluent channel					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
aluminium	ug/L	monthly	1	-	-	253
biochemical oxygen demand	mg/L	every 6 days	5	2	7.2	13
carbonaceous biochemical oxygen demand	mg/L	every 6 days	5	<2	4	8
copper	ug/L	monthly	1	-	-	14.8
diazinon	ug/L	monthly	1	-	-	<0.1
faecal coliforms	CFU/100mL	every 6 days	6	35	325006	910,000
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30
nitrogen (ammonia)	mg/L	monthly	1	-	-	1.7
nonylphenol ethoxylate	ug/L	monthly	1	-	-	<5
sea urchin fertilisation (EC50)	% Effluent/Vol	monthly	1	-	-	76.1
total suspended solids	mg/L	every 6 days	5	5	9	16

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

Effluent quality monitoring results obtained from EPA Point 4 are used to indicate the quality of water discharged at EPA Point 1 (discharge to waters).

Shellharbour Wastewater Treatment Plant
February Pollution Monitoring Summary

EPL 211

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 4 Site code SH0004	Point description: At the southern end of the secondary effluent channel				
pollutant	unit of measure	sampling frequency	3DGM limit	3DGM Actual	within limits
total suspended solids	mg/L	monthly	50	10	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 4 Site code SH0004	Point description: At the southern end of the secondary effluent channel					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
aluminium	ug/L	monthly	1	-	-	26
biochemical oxygen demand	mg/L	every 6 days	5	2	6	12
carbonaceous biochemical oxygen demand	mg/L	every 6 days	5	<2	5	12
copper	ug/L	monthly	1	-	-	2.9
diazinon	ug/L	monthly	1	-	-	<0.1
faecal coliforms	CFU/100mL	every 6 days	4	20	245032	980,000
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30
nitrogen (ammonia)	mg/L	monthly	1	-	-	0.9
nonylphenol ethoxylate	ug/L	monthly	1	-	-	<5
sea urchin fertilisation (EC50)	% Effluent/Vol	monthly	1	-	-	100
total suspended solids	mg/L	every 6 days	5	6	11	20

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

Effluent quality monitoring results obtained from EPA Point 4 are used to indicate the quality of water discharged at EPA Point 1 (discharge to waters).

Shellharbour Wastewater Treatment Plant
January Pollution Monitoring Summary

EPL 211

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 4 Site code SH0004	Point description: At the southern end of the secondary effluent channel				
pollutant	unit of measure	sampling frequency	3DGM limit	3DGM Actual	within limits
total suspended solids	mg/L	monthly	50	8	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 4 Site code SH0004	Point description: At the southern end of the secondary effluent channel					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
aluminium	ug/L	monthly	1	-	-	37
biochemical oxygen demand	mg/L	every 6 days	5	3	4	5
carbonaceous biochemical oxygen demand	mg/L	every 6 days	5	<2	3	5
copper	ug/L	monthly	1	-	-	2.4
diazinon	ug/L	monthly	1	-	-	<0.1
faecal coliforms	CFU/100mL	every 6 days	5	6	126	520
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30
nitrogen (ammonia)	mg/L	monthly	1	-	-	1.4
nonylphenol ethoxylate	ug/L	monthly	1	-	-	<5
sea urchin fertilisation (EC50)	% Effluent/Vol	monthly	1	-	-	100
total suspended solids	mg/L	every 6 days	5	4	9	13

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

Effluent quality monitoring results obtained from EPA Point 4 are used to indicate the quality of water discharged at EPA Point 1 (discharge to waters).

Shellharbour Wastewater Treatment Plant
December Pollution Monitoring Summary

EPL 211

Summary period: 01-12-2021 to 31-12-2021
Date obtained: 07-01-2022
Date published: 20-01-2022

Licensee: Sydney Water Corporation
PO Box 399
PARRAMATTA NSW 2124

Table 1: 3 Day Geometric Mean data

EPA Point 4 Site code SH0004	Point description: At the southern end of the secondary effluent channel				
pollutant	unit of measure	sampling frequency	3DGM limit	3DGM Actual	within limits
total suspended solids	mg/L	monthly	50	6	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 4 Site code SH0004	Point description: At the southern end of the secondary effluent channel					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
aluminium	ug/L	monthly	1	-	-	32
biochemical oxygen demand	mg/L	every 6 days	5	<2	<2	4
carbonaceous biochemical oxygen demand	mg/L	every 6 days	5	<2	<2	4
copper	ug/L	monthly	1	-	-	2.9
diazinon	ug/L	monthly	1	-	-	<0.1
faecal coliforms	CFU/100mL	every 6 days	6	6	20	43
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30
nitrogen (ammonia)	mg/L	monthly	1	-	-	0.2
nonylphenol ethoxylate	ug/L	monthly	1	-	-	<5
sea urchin fertilisation (EC50)	% Effluent/Vol	monthly	1	-	-	100
total suspended solids	mg/L	every 6 days	5	4	6	8

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

Effluent quality monitoring results obtained from EPA Point 4 are used to indicate the quality of water discharged at EPA Point 1 (discharge to waters).

Shellharbour Wastewater Treatment Plant
November Pollution Monitoring Summary

EPL 211

Summary period: 01-11-2021 to 30-11-2021
Date obtained: 10-12-2021
Date published: 17-12-2021

Licensee: Sydney Water Corporation
PO Box 399
PARRAMATTA NSW 2124

Table 1: 3 Day Geometric Mean data

EPA Point 4 Site code SH0004	Point description: At the southern end of the secondary effluent channel				
pollutant	unit of measure	sampling frequency	3DGM limit	3DGM Actual	within limits
total suspended solids	mg/L	monthly	50	4	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 4 Site code SH0004	Point description: At the southern end of the secondary effluent channel					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
aluminium	ug/L	monthly	1	-	-	21
biochemical oxygen demand	mg/L	every 6 days	5	<2	2.6	8
carbonaceous biochemical oxygen demand	mg/L	every 6 days	5	<2	<2	6
copper	ug/L	monthly	1	-	-	2.2
diazinon	ug/L	monthly	1	-	-	<0.1
faecal coliforms	CFU/100mL	every 6 days	5	2	570	2,700
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30
nitrogen (ammonia)	mg/L	monthly	1	-	-	<0.1
nonylphenol ethoxylate	ug/L	monthly	1	-	-	<5
sea urchin fertilisation (EC50)	% Effluent/Vol	monthly	1	-	-	95.2
total suspended solids	mg/L	every 6 days	5	3	9	26

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

Effluent quality monitoring results obtained from EPA Point 4 are used to indicate the quality of water discharged at EPA Point 1 (discharge to waters).

Shellharbour Wastewater Treatment Plant
October Pollution Monitoring Summary

EPL 211

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 4 Site code SH0004	Point description: At the southern end of the secondary effluent channel				
pollutant	unit of measure	sampling frequency	3DGM limit	3DGM Actual	within limits
total suspended solids	mg/L	monthly	50	13	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 4 Site code SH0004	Point description: At the southern end of the secondary effluent channel					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
aluminium	ug/L	monthly	1	-	-	45
biochemical oxygen demand	mg/L	every 6 days	6	4	5.17	10
carbonaceous biochemical oxygen demand	mg/L	every 6 days	6	<2	3	7
copper	ug/L	monthly	1	-	-	6.5
diazinon	ug/L	monthly	1	-	-	<0.1
faecal coliforms	CFU/100mL	every 6 days	5	37	366	1,200
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30
nitrogen (ammonia)	mg/L	monthly	1	-	-	0.1
nonylphenol ethoxylate	ug/L	monthly	1	-	-	<5
sea urchin fertilisation (EC50)	% Effluent/Vol	monthly	1	-	-	49.1
total suspended solids	mg/L	every 6 days	6	6	13	29

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

Effluent quality monitoring results obtained from EPA Point 4 are used to indicate the quality of water discharged at EPA Point 1 (discharge to waters).

Shellharbour Wastewater Treatment Plant
September Pollution Monitoring Summary

EPL 211

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 4 Site code SH0004	Point description: At the southern end of the secondary effluent channel				
pollutant	unit of measure	sampling frequency	3DGM limit	3DGM Actual	within limits
total suspended solids	mg/L	monthly	50	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 4 Site code SH0004	Point description: At the southern end of the secondary effluent channel					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
aluminium	ug/L	monthly	1	-	-	18
biochemical oxygen demand	mg/L	every 6 days	5	<2	4	8
carbonaceous biochemical oxygen demand	mg/L	every 6 days	5	<2	2	6
copper	ug/L	monthly	1	-	-	1.5
diazinon	ug/L	monthly	1	-	-	<0.1
faecal coliforms	CFU/100mL	every 6 days	5	31	1577	4,300
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30
nitrogen (ammonia)	mg/L	monthly	1	-	-	0.2
nonylphenol ethoxylate	ug/L	monthly	1	-	-	<5
sea urchin fertilisation (EC50)	% Effluent/Vol	monthly	1	-	-	100
total suspended solids	mg/L	every 6 days	5	2	9	24

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

Effluent quality monitoring results obtained from EPA Point 4 are used to indicate the quality of water discharged at EPA Point 1 (discharge to waters).

Shellharbour Wastewater Treatment Plant
August Pollution Monitoring Summary

EPL 211

Summary period: 01-08-2021 to 31-08-2021
Date obtained: 07-09-2021
Date published: 13-09-2021

Licensee: Sydney Water Corporation
PO Box 399
PARRAMATTA NSW 2124

Table 1: 3 Day Geometric Mean data

EPA Point 4 Site code SH0004	Point description: At the southern end of the secondary effluent channel				
pollutant	unit of measure	sampling frequency	3DGM limit	3DGM Actual	within limits
total suspended solids	mg/L	monthly	50	8	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 4 Site code SH0004	Point description: At the southern end of the secondary effluent channel					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
aluminium	ug/L	monthly	1	-	-	29
biochemical oxygen demand	mg/L	every 6 days	5	3	6.4	14
carbonaceous biochemical oxygen demand	mg/L	every 6 days	5	2	5	12
copper	ug/L	monthly	1	-	-	3
diazinon	ug/L	monthly	1	-	-	<0.1
faecal coliforms	CFU/100mL	every 6 days	5	5	13613	68,000
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30
nitrogen (ammonia)	mg/L	monthly	1	-	-	0.4
nonylphenol ethoxylate	ug/L	monthly	1	-	-	<5
sea urchin fertilisation (EC50)	% Effluent/Vol	monthly	1	-	-	100
total suspended solids	mg/L	every 6 days	5	5	12	31

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

Effluent quality monitoring results obtained from EPA Point 4 are used to indicate the quality of water discharged at EPA Point 1 (discharge to waters).

Shellharbour Wastewater Treatment Plant
July Pollution Monitoring Summary

EPL 211

Summary period: 01-07-2021 to 31-07-2021
Date obtained: 04-08-2021
Date published: 18-08-2021

Licensee: Sydney Water Corporation
PO Box 399
PARRAMATTA NSW 2124

Table 1: 3 Day Geometric Mean data

EPA Point 4 Site code SH0004	Point description: At the southern end of the secondary effluent channel				
pollutant	unit of measure	sampling frequency	3DGM limit	3DGM Actual	within limits
total suspended solids	mg/L	monthly	50	5	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 4 Site code SH0004	Point description: At the southern end of the secondary effluent channel					
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
aluminium	ug/L	monthly	1	-	-	26
biochemical oxygen demand	mg/L	every 6 days	5	3	3	3
carbonaceous biochemical oxygen demand	mg/L	every 6 days	5	2	2	2
copper	ug/L	monthly	1	-	-	1.8
diazinon	ug/L	monthly	1	-	-	<0.1
faecal coliforms	CFU/100mL	every 6 days	5	1	22	60
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30
nitrogen (ammonia)	mg/L	monthly	1	-	-	0.6
nonylphenol ethoxylate	ug/L	monthly	1	-	-	<5
sea urchin fertilisation (EC50)	% Effluent/Vol	monthly	1	-	-	100
total suspended solids	mg/L	every 6 days	5	4	5	6

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

Effluent quality monitoring results obtained from EPA Point 4 are used to indicate the quality of water discharged at EPA Point 1 (discharge to waters).