

North Head Water Resource Recovery Facility

June Pollution Monitoring Summary



EPL 378

Summary period: 01-06-2023 to 30-06-2023

Date obtained: 02-07-2023

Date published: 13-07-2023

Licensee: Sydney Water Corporation

PO Box 399

PARRAMATTA NSW 2124

Table 1: 3 Day Geometric Mean data

EPA Point 8 Site code NH0008		Point description: In effluent channel downstream of the dropshaft			
pollutant	unit of measure	sampling frequency	3DGM limit	3DGM Actual	within limits
oil and grease	mg/L	monthly	85	57	yes
total suspended solids	mg/L	monthly	290	199	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 8 Site code NH0008		Point description: In effluent channel downstream of the dropshaft				
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
aluminium	ug/L	monthly	1	-	-	522
chlorpyrifos	ug/L	monthly	1	-	-	<0.05
copper	ug/L	monthly	1	-	-	111
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	120
nonylphenol ethoxylate	ug/L	monthly	1	-	-	82
oil and grease	mg/L	every 6 days	5	41	51	63
sea urchin fertilisation (EC50)	% Effluent/Vol	monthly	1	-	-	4
total suspended solids	mg/L	every 6 days	5	160	190	230

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

Effluent quality monitoring results obtained from EPA Point 8 are used to indicate the quality of water discharged at EPA Point 5 (deep water ocean outfall).

North Head Water Resource Recovery Facility

May Pollution Monitoring Summary



EPL 378

Summary period: 01-05-2023 to 31-05-2023

Date obtained: 07-06-2023

Date published: 21-06-2023

Licensee: Sydney Water Corporation

PO Box 399

PARRAMATTA NSW 2124

Table 1: 3 Day Geometric Mean data

EPA Point 8 Site code NH0008		Point description: In effluent channel downstream of the dropshaft			
pollutant	unit of measure	sampling frequency	3DGM limit	3DGM Actual	within limits
oil and grease	mg/L	monthly	85	41	yes
total suspended solids	mg/L	monthly	290	197	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 8 Site code NH0008		Point description: In effluent channel downstream of the dropshaft				
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
aluminium	ug/L	monthly	1	-	-	496
chlorpyrifos	ug/L	monthly	1	-	-	<0.05
copper	ug/L	monthly	1	-	-	100
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	53
nonylphenol ethoxylate	ug/L	monthly	1	-	-	15
oil and grease	mg/L	every 6 days	5	34	46	58
sea urchin fertilisation (EC50)	% Effluent/Vol	monthly	1	-	-	1.6
total suspended solids	mg/L	every 6 days	5	160	176	200

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

Effluent quality monitoring results obtained from EPA Point 8 are used to indicate the quality of water discharged at EPA Point 5 (deep water ocean outfall).

North Head Water Resource Recovery Facility

April Pollution Monitoring Summary



EPL 378

Summary period: 01-04-2023 to 30-04-2023

Date obtained: 15-05-2023

Date published: 19-05-2023

Licensee: Sydney Water Corporation

PO Box 399

PARRAMATTA NSW 2124

Table 1: 3 Day Geometric Mean data

EPA Point 8 Site code NH0008		Point description: In effluent channel downstream of the dropshaft			
pollutant	unit of measure	sampling frequency	3DGM limit	3DGM Actual	within limits
oil and grease	mg/L	monthly	85	23	yes
total suspended solids	mg/L	monthly	290	145	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 8 Site code NH0008		Point description: In effluent channel downstream of the dropshaft				
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
aluminium	ug/L	monthly	1	-	-	659
chlorpyrifos	ug/L	monthly	1	-	-	<0.05
copper	ug/L	monthly	1	-	-	65.6
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30
nonylphenol ethoxylate	ug/L	monthly	1	-	-	46
oil and grease	mg/L	every 6 days	5	18	34	49
sea urchin fertilisation (EC50)	% Effluent/Vol	monthly	1	-	-	4.5
total suspended solids	mg/L	every 6 days	5	120	166	210

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

Effluent quality monitoring results obtained from EPA Point 8 are used to indicate the quality of water discharged at EPA Point 5 (deep water ocean outfall).

North Head Water Resource Recovery Facility

March Pollution Monitoring Summary



EPL 378

Summary period: 01-03-2023 to 31-03-2023

Date obtained: 04-04-2023

Date published: 14-04-2023

Licensee: Sydney Water Corporation

PO Box 399

PARRAMATTA NSW 2124

Table 1: 3 Day Geometric Mean data

EPA Point 8 Site code NH0008		Point description: In effluent channel downstream of the dropshaft			
pollutant	unit of measure	sampling frequency	3DGM limit	3DGM Actual	within limits
oil and grease	mg/L	monthly	85	45	yes
total suspended solids	mg/L	monthly	290	203	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 8 Site code NH0008		Point description: In effluent channel downstream of the dropshaft				
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
aluminium	ug/L	monthly	1	-	-	531
chlorpyrifos	ug/L	monthly	1	-	-	<0.05
copper	ug/L	monthly	1	-	-	118
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30
nonylphenol ethoxylate	ug/L	monthly	1	-	-	147
oil and grease	mg/L	every 6 days	5	42	47	53
sea urchin fertilisation (EC50)	% Effluent/Vol	monthly	1	-	-	3.4
total suspended solids	mg/L	every 6 days	5	170	206	240

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

Effluent quality monitoring results obtained from EPA Point 8 are used to indicate the quality of water discharged at EPA Point 5 (deep water ocean outfall).

North Head Water Resource Recovery Facility

February Pollution Monitoring Summary



EPL 378

Summary period: 01-02-2023 to 28-02-2023

Date obtained: 06-03-2023

Date published: 17-03-2023

Licensee: Sydney Water Corporation

PO Box 399

PARRAMATTA NSW 2124

Table 1: 3 Day Geometric Mean data

EPA Point 8 Site code NH0008		Point description: In effluent channel downstream of the dropshaft			
pollutant	unit of measure	sampling frequency	3DGM limit	3DGM Actual	within limits
oil and grease	mg/L	monthly	85	48	yes
total suspended solids	mg/L	monthly	290	197	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 8 Site code NH0008		Point description: In effluent channel downstream of the dropshaft				
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
aluminium	ug/L	monthly	1	-	-	772
chlorpyrifos	ug/L	monthly	1	-	-	<0.05
copper	ug/L	monthly	1	-	-	127
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30
nonylphenol ethoxylate	ug/L	monthly	1	-	-	110
oil and grease	mg/L	every 6 days	5	32	41	54
sea urchin fertilisation (EC50)	% Effluent/Vol	monthly	1	-	-	1
total suspended solids	mg/L	every 6 days	5	170	204	250

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

Effluent quality monitoring results obtained from EPA Point 8 are used to indicate the quality of water discharged at EPA Point 5 (deep water ocean outfall).

North Head Water Resource Recovery Facility

January Pollution Monitoring Summary



EPL 378

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

Date obtained: 01-02-2023

Date published: 14-02-2023

Licensee: Sydney Water Corporation

PO Box 399

PARRAMATTA NSW 2124

Table 1: 3 Day Geometric Mean data

EPA Point 8 Site code NH0008		Point description: In effluent channel downstream of the dropshaft			
pollutant	unit of measure	sampling frequency	3DGM limit	3DGM Actual	within limits
oil and grease	mg/L	monthly	85	41	yes
total suspended solids	mg/L	monthly	290	198	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 8 Site code NH0008		Point description: In effluent channel downstream of the dropshaft				
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
aluminium	ug/L	monthly	1	-	-	468
chlorpyrifos	ug/L	monthly	1	-	-	<0.05
copper	ug/L	monthly	1	-	-	136
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30
nonylphenol ethoxylate	ug/L	monthly	1	-	-	41
oil and grease	mg/L	every 6 days	5	34	39	41
sea urchin fertilisation (EC50)	% Effluent/Vol	monthly	1	-	-	3.3
total suspended solids	mg/L	every 6 days	5	160	188	210

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

Effluent quality monitoring results obtained from EPA Point 8 are used to indicate the quality of water discharged at EPA Point 5 (deep water ocean outfall).

North Head Water Resource Recovery Facility

December Pollution Monitoring Summary



EPL 378

Summary period: 01-12-2022 to 31-12-2022

Date obtained: 04-01-2023

Date published: 10-01-2023

Licensee: Sydney Water Corporation

PO Box 399

PARRAMATTA NSW 2124

Table 1: 3 Day Geometric Mean data

EPA Point 8 Site code NH0008		Point description: In effluent channel downstream of the dropshaft			
pollutant	unit of measure	sampling frequency	3DGM limit	3DGM Actual	within limits
oil and grease	mg/L	monthly	85	44	yes
total suspended solids	mg/L	monthly	290	164	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 8 Site code NH0008		Point description: In effluent channel downstream of the dropshaft				
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
aluminium	ug/L	monthly	1	-	-	337
chlorpyrifos	ug/L	monthly	1	-	-	<0.05
copper	ug/L	monthly	1	-	-	112
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30
nonylphenol ethoxylate	ug/L	monthly	1	-	-	43
oil and grease	mg/L	every 6 days	5	44	52	55
sea urchin fertilisation (EC50)	% Effluent/Vol	monthly	1	-	-	2
total suspended solids	mg/L	every 6 days	5	130	200	230

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

Effluent quality monitoring results obtained from EPA Point 8 are used to indicate the quality of water discharged at EPA Point 5 (deep water ocean outfall).

North Head Water Resource Recovery Facility

November Pollution Monitoring Summary



EPL 378

Summary period: 01-11-2022 to 30-11-2022

Date obtained: 06-12-2022

Date published: 09-12-2022

Licensee: Sydney Water Corporation

PO Box 399

PARRAMATTA NSW 2124

Table 1: 3 Day Geometric Mean data

EPA Point 8 Site code NH0008		Point description: In effluent channel downstream of the dropshaft			
pollutant	unit of measure	sampling frequency	3DGM limit	3DGM Actual	within limits
oil and grease	mg/L	monthly	85	43	yes
total suspended solids	mg/L	monthly	290	164	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 8 Site code NH0008		Point description: In effluent channel downstream of the dropshaft				
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
aluminium	ug/L	monthly	1	-	-	436
chlorpyrifos	ug/L	monthly	1	-	-	<0.05
copper	ug/L	monthly	1	-	-	102
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30
nonylphenol ethoxylate	ug/L	monthly	1	-	-	74
oil and grease	mg/L	every 6 days	5	36	45	56
sea urchin fertilisation (EC50)	% Effluent/Vol	monthly	1	-	-	2.6
total suspended solids	mg/L	every 6 days	5	130	170	200

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

Effluent quality monitoring results obtained from EPA Point 8 are used to indicate the quality of water discharged at EPA Point 5 (deep water ocean outfall).

North Head Water Resource Recovery Facility

October Pollution Monitoring Summary



EPL 378

Summary period: 01-10-2022 to 31-10-2022

Date obtained: 07-11-2022

Date published: 16-11-2022

Licensee: Sydney Water Corporation

PO Box 399

PARRAMATTA NSW 2124

Table 1: 3 Day Geometric Mean data

EPA Point 8 Site code NH0008		Point description: In effluent channel downstream of the dropshaft			
pollutant	unit of measure	sampling frequency	3DGM limit	3DGM Actual	within limits
oil and grease	mg/L	monthly	85	10	yes
total suspended solids	mg/L	monthly	290	94	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 8 Site code NH0008		Point description: In effluent channel downstream of the dropshaft				
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
aluminium	ug/L	monthly	1	-	-	657
chlorpyrifos	ug/L	monthly	1	-	-	<0.05
copper	ug/L	monthly	1	-	-	68.1
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30
nonylphenol ethoxylate	ug/L	monthly	1	-	-	115
oil and grease	mg/L	every 6 days	5	14	22	38
sea urchin fertilisation (EC50)	% Effluent/Vol	monthly	1	-	-	2.5
total suspended solids	mg/L	every 6 days	5	120	154	180

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

Effluent quality monitoring results obtained from EPA Point 8 are used to indicate the quality of water discharged at EPA Point 5 (deep water ocean outfall).

North Head Water Resource Recovery Facility

September Pollution Monitoring Summary



EPL 378

Summary period: 01-09-2022 to 30-09-2022

Date obtained: 08-10-2022

Date published: 17-10-2022

Licensee: Sydney Water Corporation

PO Box 399

PARRAMATTA NSW 2124

Table 1: 3 Day Geometric Mean data

EPA Point 8 Site code NH0008		Point description: In effluent channel downstream of the dropshaft			
pollutant	unit of measure	sampling frequency	3DGM limit	3DGM Actual	within limits
oil and grease	mg/L	monthly	85	33	yes
total suspended solids	mg/L	monthly	290	150	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 8 Site code NH0008		Point description: In effluent channel downstream of the dropshaft				
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
aluminium	ug/L	monthly	1	-	-	550
chlorpyrifos	ug/L	monthly	1	-	-	<0.05
copper	ug/L	monthly	1	-	-	74
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30
nonylphenol ethoxylate	ug/L	monthly	1	-	-	62
oil and grease	mg/L	every 6 days	5	31	40	48
sea urchin fertilisation (EC50)	% Effluent/Vol	monthly	1	-	-	1.8
total suspended solids	mg/L	every 6 days	5	140	164	170

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

Effluent quality monitoring results obtained from EPA Point 8 are used to indicate the quality of water discharged at EPA Point 5 (deep water ocean outfall).

North Head Water Resource Recovery Facility

August Pollution Monitoring Summary



EPL 378

Summary period: 01-08-2022 to 31-08-2022

Date obtained: 08-09-2022

Date published: 14-09-2022

Licensee: Sydney Water Corporation

PO Box 399

PARRAMATTA NSW 2124

Table 1: 3 Day Geometric Mean data

EPA Point 8 Site code NH0008		Point description: In effluent channel downstream of the dropshaft			
pollutant	unit of measure	sampling frequency	3DGM limit	3DGM Actual	within limits
oil and grease	mg/L	monthly	85	39	yes
total suspended solids	mg/L	monthly	290	152	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 8 Site code NH0008		Point description: In effluent channel downstream of the dropshaft				
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
aluminium	ug/L	monthly	1	-	-	583
chlorpyrifos	ug/L	monthly	1	-	-	<0.05
copper	ug/L	monthly	1	-	-	99.9
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30
nonylphenol ethoxylate	ug/L	monthly	1	-	-	133
oil and grease	mg/L	every 6 days	5	34	43	51
sea urchin fertilisation (EC50)	% Effluent/Vol	monthly	1	-	-	0.9
total suspended solids	mg/L	every 6 days	5	130	174	280

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

Effluent quality monitoring results obtained from EPA Point 8 are used to indicate the quality of water discharged at EPA Point 5 (deep water ocean outfall).

North Head Water Resource Recovery Facility

July Pollution Monitoring Summary



EPL 378

Summary period: 01-07-2022 to 31-07-2022

Date obtained: 09-08-2022

Date published: 18-08-2022

Licensee: Sydney Water Corporation

PO Box 399

PARRAMATTA NSW 2124

Table 1: 3 Day Geometric Mean data

EPA Point 8 Site code NH0008		Point description: In effluent channel downstream of the dropshaft			
pollutant	unit of measure	sampling frequency	3DGM limit	3DGM Actual	within limits
oil and grease	mg/L	monthly	85	20	yes
total suspended solids	mg/L	monthly	290	93	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 8 Site code NH0008		Point description: In effluent channel downstream of the dropshaft				
pollutant	unit of measure	sampling frequency	number of samples	minimum result	mean result	maximum result
aluminium	ug/L	monthly	1	-	-	691
chlorpyrifos	ug/L	monthly	1	-	-	<0.05
copper	ug/L	monthly	1	-	-	32.3
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30
nonylphenol ethoxylate	ug/L	monthly	1	-	-	55
oil and grease	mg/L	every 6 days	6	15	30	40
sea urchin fertilisation (EC50)	% Effluent/Vol	monthly	1	-	-	0.44
total suspended solids	mg/L	every 6 days	6	66	139	170

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

Effluent quality monitoring results obtained from EPA Point 8 are used to indicate the quality of water discharged at EPA Point 5 (deep water ocean outfall).