

North Head Water Resource Recovery Facility

March Pollution Monitoring Summary



EPL 378

Summary period: 01-03-2024 to 31-03-2024

Date obtained: 08-04-2024

Date published: 18-04-2024

Licensee: Sydney Water Corporation

PO Box 399

PARRAMATTA NSW 2124

Table 1: 3 Day Geometric Mean data

EPA Point 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	206	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	-	-	503
chlorpyrifos	ug/L	monthly	1	-	-	<0.05
copper	ug/L	monthly	1	-	-	131
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30
nonylphenol ethoxylate	ug/L	monthly	1	-	-	12
oil and grease	mg/L	every 6 days	5	42	46	51
sea urchin fertilisation (EC50)	% Effluent/Vol	monthly	1	-	-	1.2
total suspended solids	mg/L	every 6 days	5	200	216	240

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

As per clause M2.4 under EPL 378, collection of samples from EPA Point 9 is required when sewage or effluent is discharged from EPA Point 6.

There was no discharge from EPA Point 6 during the March monitoring period.

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: 01-02-2024 to 29-02-2024

Date obtained: 14-03-2024

Date published: 25-03-2024

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	47	yes
total suspended solids	mg/L	monthly	290	193	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	-	-	442
chlorpyrifos	ug/L	monthly	1	-	-	0.06
copper	ug/L	monthly	1	-	-	134
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30
nonylphenol ethoxylate	ug/L	monthly	1	-	-	67
oil and grease	mg/L	every 6 days	5	23	38	48
sea urchin fertilisation (EC50)	% Effluent/Vol	monthly	1	-	-	1.3
total suspended solids	mg/L	every 6 days	5	160	210	260

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

As per clause M2.4 under EPL 378, collection of samples from EPA Point 9 is required when sewage or effluent is discharged from EPA Point 6.

There was no discharge from EPA Point 6 during the February monitoring period.

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: 01-01-2024 to 31-01-2024

Date obtained: 06-02-2024

Date published: 19-02-2024

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	176	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	-	-	415
chlorpyrifos	ug/L	monthly	1	-	-	<0.05
copper	ug/L	monthly	1	-	-	121
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30
nonylphenol ethoxylate	ug/L	monthly	1	-	-	78
oil and grease	mg/L	every 6 days	5	12	40	54
sea urchin fertilisation (EC50)	% Effluent/Vol	monthly	1	-	-	4.2
total suspended solids	mg/L	every 6 days	5	120	168	190

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

As per clause M2.4 under EPL 378, collection of samples from EPA Point 9 is required when sewage or effluent is discharged from EPA Point 6.

There was no discharge from EPA Point 6 during the January monitoring period.

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: 01-12-2023 to 31-12-2023

Date obtained: 10-01-2024

Date published: 22-01-2024

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	42	yes
total suspended solids	mg/L	monthly	290	166	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	-	-	430
chlorpyrifos	ug/L	monthly	1	-	-	<0.05
copper	ug/L	monthly	1	-	-	133
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	114
nonylphenol ethoxylate	ug/L	monthly	1	-	-	88
oil and grease	mg/L	every 6 days	5	37	46	54
sea urchin fertilisation (EC50)	% Effluent/Vol	monthly	1	-	-	6.4
total suspended solids	mg/L	every 6 days	5	140	162	190

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

As per clause M2.4 under EPL 378, collection of samples from EPA Point 9 is required when sewage or effluent is discharged from EPA Point 6. There was no discharge from EPA Point 6 during the December monitoring period.

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: 01-11-2023 to 30-11-2023

Date obtained: 11-12-2023

Date published: 14-12-2023

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	33	yes
total suspended solids	mg/L	monthly	290	158	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	-	-	883
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	-	-	<5
oil and grease	mg/L	every 6 days	5	32	43	52
sea urchin fertilisation (EC50)	% Effluent/Vol	monthly	1	-	-	3.4
total suspended solids	mg/L	every 6 days	5	170	194	240

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

As per clause M2.4 under EPL 378, collection of samples from EPA Point 9 is required when sewage or effluent is discharged from EPA Point 6. There was no discharge from EPA Point 6 during the November monitoring period.

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: 01-10-2023 to 31-10-2023

Date obtained: 03-11-2023

Date published: 17-11-2023

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	176	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	-	-	432
chlorpyrifos	ug/L	monthly	1	-	-	<0.05
copper	ug/L	monthly	1	-	-	123
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	77
nonylphenol ethoxylate	ug/L	monthly	1	-	-	59
oil and grease	mg/L	every 6 days	5	34	43	52
sea urchin fertilisation (EC50)	% Effluent/Vol	monthly	1	-	-	3.4
total suspended solids	mg/L	every 6 days	5	160	182	200

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

As per clause M2.4 under EPL 378, collection of samples from EPA Point 9 is required when sewage or effluent is discharged from EPA Point 6. There was no discharge from EPA Point 6 during the October monitoring period.

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: 01-09-2023 to 30-09-2023

Date obtained: 05-10-2023

Date published: 13-10-2023

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	216	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	-	-	386
chlorpyrifos	ug/L	monthly	1	-	-	<0.05
copper	ug/L	monthly	1	-	-	119
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	218
nonylphenol ethoxylate	ug/L	monthly	1	-	-	40
oil and grease	mg/L	every 6 days	5	30	45	54
sea urchin fertilisation (EC50)	% Effluent/Vol	monthly	1	-	-	2.1
total suspended solids	mg/L	every 6 days	5	170	204	240

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

As per clause M2.4 under EPL 378, collection of samples from EPA Point 9 is required when sewage or effluent is discharged from EPA Point 6. There was no discharge from EPA Point 6 during the September monitoring period.

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: 01-08-2023 to 31-08-2023

Date obtained: 08-09-2023

Date published: 14-09-2023

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	50	yes
total suspended solids	mg/L	monthly	290	183	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	-	-	525
chlorpyrifos	ug/L	monthly	1	-	-	<0.05
copper	ug/L	monthly	1	-	-	126
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	230
nonylphenol ethoxylate	ug/L	monthly	1	-	-	85
oil and grease	mg/L	every 6 days	6	40	47	54
sea urchin fertilisation (EC50)	% Effluent/Vol	monthly	1	-	-	1
total suspended solids	mg/L	every 6 days	6	170	197	220

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

As per clause M2.4 under EPL 378, collection of samples from EPA Point 9 is required when sewage or effluent is discharged from EPA Point 6. There was no discharge from EPA Point 6 during the August monitoring period.

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: 01-07-2023 to 31-07-2023

Date obtained: 05-08-2023

Date published: 15-08-2023

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	54	yes
total suspended solids	mg/L	monthly	290	179	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	-	-	558
chlorpyrifos	ug/L	monthly	1	-	-	<0.05
copper	ug/L	monthly	1	-	-	132
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	60
nonylphenol ethoxylate	ug/L	monthly	1	-	-	6
oil and grease	mg/L	every 6 days	5	51	56	63
sea urchin fertilisation (EC50)	% Effluent/Vol	monthly	1	-	-	3.8
total suspended solids	mg/L	every 6 days	5	170	194	200

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

As per clause M2.4 under EPL 378, collection of samples from EPA Point 9 is required when sewage or effluent is discharged from EPA Point 6. There was no discharge from EPA Point 6 during the July monitoring period.

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).