

# North Head Wastewater Treatment Plant

## June Pollution Monitoring Summary



### EPL 378

Summary period: 01-06-2017 to 30-06-2017

Date obtained: 20-07-2017

Date published: 25-07-2017

**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	130	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	-	-	532
chlorpyrifos	ug/L	monthly	1	-	-	<0.05
copper	ug/L	monthly	1	-	-	123
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	40
nonylphenol ethoxylate	ug/L	monthly	1	-	-	110
oil and grease	mg/L	every 6 days	5	18	38	49
sea urchin fertilisation (EC50)	% Effluent/Vol	monthly	1	-	-	6.7
total suspended solids	mg/L	every 6 days	5	93	187	240

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

# North Head Wastewater Treatment Plant

## May Pollution Monitoring Summary



### EPL 378

Summary period: 01-05-2017 to 31-05-2017

Date obtained: 20-06-2017

Date published: 23-06-2017

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	-	-	569
chlorpyrifos	ug/L	monthly	1	-	-	<0.05
copper	ug/L	monthly	1	-	-	114
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30
nonylphenol ethoxylate	ug/L	monthly	1	-	-	76
oil and grease	mg/L	every 6 days	5	43	45	46
sea urchin fertilisation (EC50)	% Effluent/Vol	monthly	1	-	-	1.6
total suspended solids	mg/L	every 6 days	5	160	198	230

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

# North Head Wastewater Treatment Plant

## April Pollution Monitoring Summary



### EPL 378

Summary period: 01-04-2017 to 30-04-2017

Date obtained: 16-05-2017

Date published: 24-05-2017

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	34	yes
total suspended solids	mg/L	monthly	290	149	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	-	-	833
chlorpyrifos	ug/L	monthly	1	-	-	<0.05
copper	ug/L	monthly	1	-	-	71.8
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	300
nonylphenol ethoxylate	ug/L	monthly	1	-	-	96
oil and grease	mg/L	every 6 days	5	29	37	44
sea urchin fertilisation (EC50)	% Effluent/Vol	monthly	1	-	-	4.8
total suspended solids	mg/L	every 6 days	5	130	164	180

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

# North Head Wastewater Treatment Plant

## March Pollution Monitoring Summary



### EPL 378

Summary period: 01-03-2017 to 31-03-2017

Date obtained: 11-04-2017

Date published: 19-04-2017

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	24	yes
total suspended solids	mg/L	monthly	290	136	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	-	-	971
chlorpyrifos	ug/L	monthly	1	-	-	<0.05
copper	ug/L	monthly	1	-	-	90.9
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30
nonylphenol ethoxylate	ug/L	monthly	1	-	-	93
oil and grease	mg/L	every 6 days	6	5	23	35
sea urchin fertilisation (EC50)	% Effluent/Vol	monthly	1	-	-	20
total suspended solids	mg/L	every 6 days	6	48	143	230

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

# North Head Wastewater Treatment Plant

## February Pollution Monitoring Summary



### EPL 378

Summary period: 01-02-2017 to 28-02-2017

Date obtained: 02-03-2017

Date published: 14-03-2017

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	99	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	-	-	786
chlorpyrifos	ug/L	monthly	1	-	-	<0.05
copper	ug/L	monthly	1	-	-	138
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	130
nonylphenol ethoxylate	ug/L	monthly	1	-	-	101
oil and grease	mg/L	every 6 days	4	38	41	44
sea urchin fertilisation (EC50)	% Effluent/Vol	monthly	1	-	-	1.7
total suspended solids	mg/L	every 6 days	4	180	208	220

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

# North Head Wastewater Treatment Plant

## January Pollution Monitoring Summary



### EPL 378

Summary period: 01-01-2017 to 31-01-2017

Date obtained: 09-02-2017

Date published: 15-02-2017

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	40	yes
total suspended solids	mg/L	monthly	290	172	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	-	-	949
chlorpyrifos	ug/L	monthly	1	-	-	0.11
copper	ug/L	monthly	1	-	-	145
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	70
nonylphenol ethoxylate	ug/L	monthly	1	-	-	179
oil and grease	mg/L	every 6 days	5	32	41	46
sea urchin fertilisation (EC50)	% Effluent/Vol	monthly	1	-	-	7.1
total suspended solids	mg/L	every 6 days	5	180	210	230

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

# North Head Wastewater Treatment Plant

## December Pollution Monitoring Summary



### EPL 378

Summary period: 01-12-2016 to 31-12-2016

Date obtained: 10-01-2017

Date published: 13-01-2017

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	30	yes
total suspended solids	mg/L	monthly	290	226	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	-	-	888
chlorpyrifos	ug/L	monthly	1	-	-	<0.05
copper	ug/L	monthly	1	-	-	137
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30
nonylphenol ethoxylate	ug/L	monthly	1	-	-	260
oil and grease	mg/L	every 6 days	6	29	38	48
sea urchin fertilisation (EC50)	% Effluent/Vol	monthly	1	-	-	1.75
total suspended solids	mg/L	every 6 days	6	160	210	290

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

# North Head Wastewater Treatment Plant

## November Pollution Monitoring Summary



### EPL 378

Summary period: 01-11-2016 to 30-11-2016

Date obtained: 05-12-2016

Date published: 12-12-2016

**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	40	yes
total suspended solids	mg/L	monthly	290	232	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	-	-	596
chlorpyrifos	ug/L	monthly	1	-	-	<0.05
copper	ug/L	monthly	1	-	-	119
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	110
nonylphenol ethoxylate	ug/L	monthly	1	-	-	84
oil and grease	mg/L	every 6 days	5	36	42	50
sea urchin fertilisation (EC50)	% Effluent/Vol	monthly	1	-	-	2.1
total suspended solids	mg/L	every 6 days	5	150	190	230

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



# North Head Wastewater Treatment Plant

## October Pollution Monitoring Summary



### EPL 378

Summary period: 01-10-2016 to 31-10-2016

Date obtained: 06-11-2016

Date published: 11-11-2016

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	36	yes
total suspended solids	mg/L	monthly	290	167	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	-	-	680
chlorpyrifos	ug/L	monthly	1	-	-	<0.05
copper	ug/L	monthly	1	-	-	136
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	140
nonylphenol ethoxylate	ug/L	monthly	1	-	-	93
oil and grease	mg/L	every 6 days	5	37	39	43
sea urchin fertilisation (EC50)	% Effluent/Vol	monthly	1	-	-	0.67
total suspended solids	mg/L	every 6 days	5	170	196	260

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

# North Head Wastewater Treatment Plant

## September Pollution Monitoring Summary



### EPL 378

Summary period: 01-09-2016 to 30-09-2016

Date obtained: 05-10-2016

Date published: 14-10-2016

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	32	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	-	-	578
chlorpyrifos	ug/L	monthly	1	-	-	<0.05
copper	ug/L	monthly	1	-	-	107
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	140
nonylphenol ethoxylate	ug/L	monthly	1	-	-	139
oil and grease	mg/L	every 6 days	5	27	33	39
sea urchin fertilisation (EC50)	% Effluent/Vol	monthly	1	-	-	4.6
total suspended solids	mg/L	every 6 days	5	140	170	220

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

# North Head Wastewater Treatment Plant

## August Pollution Monitoring Summary



### EPL 378

Summary period: 01-08-2016 to 31-08-2016

Date obtained: 06-09-2016

Date published: 12-09-2016

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	31	yes
total suspended solids	mg/L	monthly	290	188	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	-	-	740
chlorpyrifos	ug/L	monthly	1	-	-	<0.05
copper	ug/L	monthly	1	-	-	79
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	30
nonylphenol ethoxylate	ug/L	monthly	1	-	-	150
oil and grease	mg/L	every 6 days	5	30	34	39
sea urchin fertilisation (EC50)	% Effluent/Vol	monthly	1	-	-	2.2
total suspended solids	mg/L	every 6 days	5	130	174	260

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

# North Head Wastewater Treatment Plant

## July Pollution Monitoring Summary



### EPL 378

Summary period: 01-07-2016 to 31-07-2016

Date obtained: 04-08-2016

Date published: 19-08-2016

**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	29	yes
total suspended solids	mg/L	monthly	290	136	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	-	-	757
chlorpyrifos	ug/L	monthly	1	-	-	<0.05
copper	ug/L	monthly	1	-	-	68.3
hydrogen sulphide (unionised)	ug/L	monthly	1	-	-	<30
nonylphenol ethoxylate	ug/L	monthly	1	-	-	40
oil and grease	mg/L	every 6 days	5	21	31	43
sea urchin fertilisation (EC50)	% Effluent/Vol	monthly	1	-	-	1.6
total suspended solids	mg/L	every 6 days	5	130	164	190

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