

North Head Wastewater Treatment Plant

January Pollution Monitoring Summary



EPL 378

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

Date obtained: 12-02-2021

Date published: 23-02-2021

Licensee: Sydney Water Corporation

PO Box 399

PARRAMATTA NSW 2124

Table 1: 3 Day Geometric Mean data

| EPA Point 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 | 163 | 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 | - | - | 359 |
| chlorpyrifos | ug/L | monthly | 1 | - | - | <0.05 |
| copper | ug/L | monthly | 1 | - | - | 140 |
| hydrogen sulphide (unionised) | ug/L | monthly | 1 | - | - | 32 |
| nonylphenol ethoxylate | ug/L | monthly | 1 | - | - | 22 |
| oil and grease | mg/L | every 6 days | 5 | 37 | 42 | 47 |
| sea urchin fertilisation (EC50) | % Effluent/Vol | monthly | 1 | - | - | 4.1 |
| total suspended solids | mg/L | every 6 days | 5 | 150 | 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).

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.

North Head Wastewater Treatment Plant

December Pollution Monitoring Summary



EPL 378

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

Date obtained: 08-01-2021

Date published: 18-01-2021

Licensee: Sydney Water Corporation

PO Box 399

PARRAMATTA NSW 2124

Table 1: 3 Day Geometric Mean data

| EPA Point 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 | 51 | yes |
| total suspended solids | mg/L | monthly | 290 | 249 | 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 | - | - | 512 |
| chlorpyrifos | ug/L | monthly | 1 | - | - | <0.05 |
| copper | ug/L | monthly | 1 | - | - | 149 |
| hydrogen sulphide (unionised) | ug/L | monthly | 1 | - | - | 110 |
| nonylphenol ethoxylate | ug/L | monthly | 1 | - | - | 41 |
| oil and grease | mg/L | every 6 days | 6 | 34 | 42 | 47 |
| sea urchin fertilisation (EC50) | % Effluent/Vol | monthly | 1 | - | - | 0.7 |
| total suspended solids | mg/L | every 6 days | 6 | 180 | 197 | 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).

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.

North Head Wastewater Treatment Plant

November Pollution Monitoring Summary



EPL 378

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

Date obtained: 10-12-2020

Date published: 15-12-2020

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 | 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 | - | - | 661 |
| chlorpyrifos | ug/L | monthly | 1 | - | - | <0.05 |
| copper | ug/L | monthly | 1 | - | - | 128 |
| hydrogen sulphide (unionised) | ug/L | monthly | 1 | - | - | <30 |
| nonylphenol ethoxylate | ug/L | monthly | 1 | - | - | 67 |
| oil and grease | mg/L | every 6 days | 5 | 36 | 43 | 50 |
| sea urchin fertilisation (EC50) | % Effluent/Vol | monthly | 1 | - | - | 0.8 |
| total suspended solids | mg/L | every 6 days | 5 | 170 | 186 | 220 |

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).

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.

North Head Wastewater Treatment Plant

October Pollution Monitoring Summary



EPL 378

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 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 | 46 | yes |
| total suspended solids | mg/L | monthly | 290 | 213 | 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 | - | - | 405 |
| chlorpyrifos | ug/L | monthly | 1 | - | - | <0.05 |
| copper | ug/L | monthly | 1 | - | - | 123 |
| hydrogen sulphide (unionised) | ug/L | monthly | 1 | - | - | 211 |
| nonylphenol ethoxylate | ug/L | monthly | 1 | - | - | 48 |
| oil and grease | mg/L | every 6 days | 5 | 31 | 44 | 52 |
| sea urchin fertilisation (EC50) | % Effluent/Vol | monthly | 1 | - | - | 6.8 |
| total suspended solids | mg/L | every 6 days | 5 | 180 | 220 | 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).

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.

North Head Wastewater Treatment Plant

September Pollution Monitoring Summary



EPL 378

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

Date obtained: 07-10-2020

Date published: 19-10-2020

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 | 186 | 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 | - | - | 511 |
| chlorpyrifos | ug/L | monthly | 1 | - | - | <0.05 |
| copper | ug/L | monthly | 1 | - | - | 119 |
| hydrogen sulphide (unionised) | ug/L | monthly | 1 | - | - | <30 |
| nonylphenol ethoxylate | ug/L | monthly | 1 | - | - | 32 |
| oil and grease | mg/L | every 6 days | 5 | 45 | 48 | 54 |
| sea urchin fertilisation (EC50) | % Effluent/Vol | monthly | 1 | - | - | 6.7 |
| total suspended solids | mg/L | every 6 days | 5 | 170 | 184 | 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).

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.

North Head Wastewater Treatment Plant

August Pollution Monitoring Summary



EPL 378

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 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 | 175 | 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 | - | - | 529 |
| 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 | - | - | 23 |
| oil and grease | mg/L | every 6 days | 5 | 27 | 38 | 49 |
| sea urchin fertilisation (EC50) | % Effluent/Vol | monthly | 1 | - | - | 3.5 |
| total suspended solids | mg/L | every 6 days | 5 | 120 | 152 | 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).

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.

North Head Wastewater Treatment Plant

July Pollution Monitoring Summary



EPL 378

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

Date obtained: 10-08-2020

Date published: 14-08-2020

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 | 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 | - | - | 512 |
| chlorpyrifos | ug/L | monthly | 1 | - | - | <0.05 |
| copper | ug/L | monthly | 1 | - | - | 140 |
| hydrogen sulphide (unionised) | ug/L | monthly | 1 | - | - | 60 |
| nonylphenol ethoxylate | ug/L | monthly | 1 | - | - | 81 |
| oil and grease | mg/L | every 6 days | 6 | 32 | 43 | 53 |
| sea urchin fertilisation (EC50) | % Effluent/Vol | monthly | 1 | - | - | 2.6 |
| total suspended solids | mg/L | every 6 days | 6 | 150 | 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).

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.