

North Head Water Resource Recovery Facility

September Pollution Monitoring Summary



EPL 378

Summary period: 01-09-2024 to 30-09-2024

Date obtained: 10-10-2024

Date published: 23-10-2024

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 | 51 | 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 | - | - | 462 |
| chlorpyrifos | ug/L | monthly | 1 | - | - | <0.05 |
| copper | ug/L | monthly | 1 | - | - | 124 |
| hydrogen sulphide (unionised) | ug/L | monthly | 1 | - | - | 89 |
| nonylphenol ethoxylate | ug/L | monthly | 1 | - | - | 97 |
| oil and grease | mg/L | every 6 days | 5 | 49 | 53 | 58 |
| sea urchin fertilisation (EC50) | % Effluent/Vol | monthly | 1 | - | - | 2.4 |
| total suspended solids | mg/L | every 6 days | 5 | 190 | 208 | 250 |

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: 01-08-2024 to 31-08-2024

Date obtained: 11-09-2024

Date published: 13-09-2024

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 | 45 | yes |
| total suspended solids | mg/L | monthly | 290 | 200 | 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 | - | - | 560 |
| chlorpyrifos | ug/L | monthly | 1 | - | - | <0.05 |
| copper | ug/L | monthly | 1 | - | - | 122 |
| hydrogen sulphide (unionised) | ug/L | monthly | 1 | - | - | <30 |
| nonylphenol ethoxylate | ug/L | monthly | 1 | - | - | 88 |
| oil and grease | mg/L | every 6 days | 6 | 42 | 46 | 49 |
| sea urchin fertilisation (EC50) | % Effluent/Vol | monthly | 1 | - | - | 2.4 |
| total suspended solids | mg/L | every 6 days | 6 | 160 | 185 | 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: 01-07-2024 to 31-07-2024

Date obtained: 08-08-2024

Date published: 16-08-2024

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 | 32 | yes |
| total suspended solids | mg/L | monthly | 290 | 155 | 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 | - | - | 402 |
| chlorpyrifos | ug/L | monthly | 1 | - | - | <0.05 |
| copper | ug/L | monthly | 1 | - | - | 75.7 |
| hydrogen sulphide (unionised) | ug/L | monthly | 1 | - | - | <30 |
| nonylphenol ethoxylate | ug/L | monthly | 1 | - | - | 62 |
| oil and grease | mg/L | every 6 days | 5 | 30 | 37 | 45 |
| sea urchin fertilisation (EC50) | % Effluent/Vol | monthly | 1 | - | - | 2.9 |
| total suspended solids | mg/L | every 6 days | 5 | 130 | 154 | 170 |

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).