# Bombo Wastewater Treatment Plant
# January Pollution Monitoring Summary

## EPL 2269

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 4<br>Site code BO0004 | Point description: At the end of the chlorine contact tanks | | | | |
|---|---|---|---|---|---|
| pollutant | unit of measure | sampling frequency | 3DGM limit | 3DGM Actual | within limits |
| total suspended solids | mg/L | monthly | 50 | 98 | no[1] |

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 4<br>Site code BO0004 | Point description: At the end of the chlorine contact tanks | | | | | |
|---|---|---|---|---|---|---|
| pollutant | unit of measure | sampling frequency | number of samples | minimum result | mean result | maximum result |
| aluminium | ug/L | monthly | 1 | - | - | 475 |
| biochemical oxygen demand | mg/L | every 6 days | 5 | <2 | 5.6 | 28 |
| carbonaceous biochemical oxygen demand | mg/L | every 6 days | 5 | <2 | 5 | 25 |
| copper | ug/L | monthly | 1 | - | - | 55.1 |
| diazinon | ug/L | monthly | 1 | - | - | <0.1 |
| nitrogen (ammonia) | mg/L | monthly | 1 | - | - | 12.4 |
| nonylphenol ethoxylate | ug/L | monthly | 1 | - | - | <5 |
| total suspended solids | mg/L | every 6 days | 5 | 4 | 32 | 130 |

| EPA Point 13<br>Site code BO0013 | Point description: In the channel after the dechlorination unit | | | | | |
|---|---|---|---|---|---|---|
| pollutant | unit of measure | sampling frequency | number of samples | minimum result | mean result | maximum result |
| faecal coliforms | CFU/100mL | every 6 days | 5 | <1 | 681 | 3,400 |
| hydrogen sulphide (unionised) | ug/L | monthly | 1 | - | - | <30 |
| sea urchin fertilisation (EC50) | % Effluent/Vol | monthly | 1 | - | - | 100 |

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

Effluent quality monitoring results obtained from EPA Point 4 and 13 are used to indicate the quality of water discharged at EPA Point 1 (discharge to waters).

[1]Under condition L3.5 in the Environment Protection Licence 2269, as set by the NSW Environment Protection Authority, when a wet weather bypass flow is occurring, exceedances of the 3DGM concentration limit in condition L3.4 are permitted at point 1 for the duration of the bypass where the bypass was the sole cause of the exceedance. Wet weather flows between 4-6 January was the sole cause of the 3DGM exceedance.

# Bombo Wastewater Treatment Plant
# December Pollution Monitoring Summary

## EPL 2269

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 4<br>Site code BO0004 | Point description: At the end of the chlorine contact tanks | | | | |
|---|---|---|---|---|---|
| pollutant | unit of measure | sampling frequency | 3DGM limit | 3DGM Actual | within limits |
| total suspended solids | mg/L | monthly | 50 | 6 | 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 4<br>Site code BO0004 | Point description: At the end of the chlorine contact tanks | | | | | |
|---|---|---|---|---|---|---|
| pollutant | unit of measure | sampling frequency | number of samples | minimum result | mean result | maximum result |
| aluminium | ug/L | monthly | 1 | - | - | 28 |
| biochemical oxygen demand | mg/L | every 6 days | 5 | <2 | <2 | <2 |
| carbonaceous biochemical oxygen demand | mg/L | every 6 days | 5 | <2 | <2 | <2 |
| copper | ug/L | monthly | 1 | - | - | 2 |
| diazinon | ug/L | monthly | 1 | - | - | <0.1 |
| nitrogen (ammonia) | mg/L | monthly | 1 | - | - | 16.2 |
| nonylphenol ethoxylate | ug/L | monthly | 1 | - | - | <5 |
| total suspended solids | mg/L | every 6 days | 5 | 3 | 9 | 18 |

| EPA Point 13<br>Site code BO0013 | Point description: In the channel after the dechlorination unit | | | | | |
|---|---|---|---|---|---|---|
| pollutant | unit of measure | sampling frequency | number of samples | minimum result | mean result | maximum result |
| faecal coliforms | CFU/100mL | every 6 days | 4 | <1 | <1 | 2 |
| hydrogen sulphide (unionised) | ug/L | monthly | 1 | - | - | <30 |
| sea urchin fertilisation (EC50) | % Effluent/Vol | monthly | 1 | - | - | 100 |

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

Effluent quality monitoring results obtained from EPA Point 4 and 13 are used to indicate the quality of water discharged at EPA Point 1 (discharge to waters).

# Bombo Wastewater Treatment Plant
# November Pollution Monitoring Summary

## EPL 2269

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 4<br>Site code BO0004 | Point description: At the end of the chlorine contact tanks | | | | |
|---|---|---|---|---|---|
| pollutant | unit of measure | sampling frequency | 3DGM limit | 3DGM Actual | within limits |
| total suspended solids | mg/L | monthly | 50 | 28 | 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 4<br>Site code BO0004 | Point description: At the end of the chlorine contact tanks | | | | | |
|---|---|---|---|---|---|---|
| pollutant | unit of measure | sampling frequency | number of samples | minimum result | mean result | maximum result |
| aluminium | ug/L | monthly | 1 | - | - | 380 |
| biochemical oxygen demand | mg/L | every 6 days | 5 | <2 | 6.2 | 31 |
| carbonaceous biochemical oxygen demand | mg/L | every 6 days | 5 | <2 | 5 | 26 |
| copper | ug/L | monthly | 1 | - | - | 29.9 |
| diazinon | ug/L | monthly | 1 | - | - | <0.1 |
| nitrogen (ammonia) | mg/L | monthly | 1 | - | - | 7.7 |
| nonylphenol ethoxylate | ug/L | monthly | 1 | - | - | <5 |
| total suspended solids | mg/L | every 6 days | 5 | 5 | 30 | 110 |

| EPA Point 13<br>Site code BO0013 | Point description: In the channel after the dechlorination unit | | | | | |
|---|---|---|---|---|---|---|
| pollutant | unit of measure | sampling frequency | number of samples | minimum result | mean result | maximum result |
| faecal coliforms | CFU/100mL | every 6 days | 5 | <1 | 21 | 95 |
| hydrogen sulphide (unionised) | ug/L | monthly | 1 | - | - | <30 |
| sea urchin fertilisation (EC50) | % Effluent/Vol | monthly | 1 | - | - | 100 |

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

Effluent quality monitoring results obtained from EPA Point 4 and 13 are used to indicate the quality of water discharged at EPA Point 1 (discharge to waters).

# Bombo Wastewater Treatment Plant
# October Pollution Monitoring Summary

## EPL 2269

Summary period: 01-10-2020 to 31-10-2020
Date obtained: 10-11-2020
Date published: 13-11-2020

**Licensee:** Sydney Water Corporation
PO Box 399
PARRAMATTA NSW 2124

**Table 1: 3 Day Geometric Mean data**

| EPA Point 4<br>Site code BO0004 | Point description: At the end of the chlorine contact tanks | | | | |
|---|---|---|---|---|---|
| pollutant | unit of measure | sampling frequency | 3DGM limit | 3DGM Actual | within limits |
| total suspended solids | mg/L | monthly | 50 | 4 | 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 4<br>Site code BO0004 | Point description: At the end of the chlorine contact tanks | | | | | |
|---|---|---|---|---|---|---|
| pollutant | unit of measure | sampling frequency | number of samples | minimum result | mean result | maximum result |
| aluminium | ug/L | monthly | 1 | - | - | 30 |
| biochemical oxygen demand | mg/L | every 6 days | 5 | <2 | <2 | <2 |
| carbonaceous biochemical oxygen demand | mg/L | every 6 days | 5 | <2 | <2 | <2 |
| copper | ug/L | monthly | 1 | - | - | 2.8 |
| diazinon | ug/L | monthly | 1 | - | - | <0.1 |
| nitrogen (ammonia) | mg/L | monthly | 1 | - | - | 2.6 |
| nonylphenol ethoxylate | ug/L | monthly | 1 | - | - | <5 |
| total suspended solids | mg/L | every 6 days | 5 | 2 | 3 | 7 |

| EPA Point 13<br>Site code BO0013 | Point description: In the channel after the dechlorination unit | | | | | |
|---|---|---|---|---|---|---|
| pollutant | unit of measure | sampling frequency | number of samples | minimum result | mean result | maximum result |
| faecal coliforms | CFU/100mL | every 6 days | 6 | <1 | <1 | 2 |
| hydrogen sulphide (unionised) | ug/L | monthly | 1 | - | - | <30 |
| sea urchin fertilisation (EC50) | % Effluent/Vol | monthly | 1 | - | - | 100 |

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

Effluent quality monitoring results obtained from EPA Point 4 and 13 are used to indicate the quality of water discharged at EPA Point 1 (discharge to waters).

# Bombo Wastewater Treatment Plant
# September Pollution Monitoring Summary

## EPL 2269

Summary period: 01-09-2020 to 30-09-2020
Date obtained: 12-10-2020
Date published: 19-10-2020

**Licensee:** Sydney Water Corporation
PO Box 399
PARRAMATTA NSW 2124

**Table 1: 3 Day Geometric Mean data**

| EPA Point 4<br>Site code BO0004 | Point description: At the end of the chlorine contact tanks | | | | |
|---|---|---|---|---|---|
| pollutant | unit of measure | sampling frequency | 3DGM limit | 3DGM Actual | within limits |
| total suspended solids | mg/L | monthly | 50 | 4 | 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 4<br>Site code BO0004 | Point description: At the end of the chlorine contact tanks | | | | | |
|---|---|---|---|---|---|---|
| pollutant | unit of measure | sampling frequency | number of samples | minimum result | mean result | maximum result |
| aluminium | ug/L | monthly | 1 | - | - | 32 |
| biochemical oxygen demand | mg/L | every 6 days | 5 | <2 | <2 | <2 |
| carbonaceous biochemical oxygen demand | mg/L | every 6 days | 5 | <2 | <2 | <2 |
| copper | ug/L | monthly | 1 | - | - | 2.9 |
| diazinon | ug/L | monthly | 1 | - | - | <0.1 |
| nitrogen (ammonia) | mg/L | monthly | 1 | - | - | 10.6 |
| nonylphenol ethoxylate | ug/L | monthly | 1 | - | - | <5 |
| total suspended solids | mg/L | every 6 days | 5 | <2 | 3 | 5 |

| EPA Point 13<br>Site code BO0013 | Point description: In the channel after the dechlorination unit | | | | | |
|---|---|---|---|---|---|---|
| pollutant | unit of measure | sampling frequency | number of samples | minimum result | mean result | maximum result |
| faecal coliforms | CFU/100mL | every 6 days | 5 | <1 | <1 | 1 |
| hydrogen sulphide (unionised) | ug/L | monthly | 1 | - | - | <30 |
| sea urchin fertilisation (EC50) | % Effluent/Vol | monthly | 1 | - | - | 69.1 |

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

Effluent quality monitoring results obtained from EPA Point 4 and 13 are used to indicate the quality of water discharged at EPA Point 1 (discharge to waters).

Note: biochemical oxygen demand monitoring commenced from September 2020.

# Bombo Wastewater Treatment Plant
# August Pollution Monitoring Summary

## EPL 2269

Summary period: 01-08-2020 to 31-08-2020
Date obtained: 07-09-2020
Date published: 16-09-2020

**Licensee:** Sydney Water Corporation
PO Box 399
PARRAMATTA NSW 2124

**Table 1: 3 Day Geometric Mean data**

| EPA Point 4<br>Site code BO0004 | Point description: At the end of the chlorine contact tanks | | | | |
|---|---|---|---|---|---|
| pollutant | unit of measure | sampling frequency | 3DGM limit | 3DGM Actual | within limits |
| total suspended solids | mg/L | monthly | 50 | 64 | no[1] |

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 4<br>Site code BO0004 | Point description: At the end of the chlorine contact tanks | | | | | |
|---|---|---|---|---|---|---|
| pollutant | unit of measure | sampling frequency | number of samples | minimum result | mean result | maximum result |
| aluminium | ug/L | monthly | 1 | - | - | 91 |
| carbonaceous biochemical oxygen demand | mg/L | every 6 days | 6 | <2 | <2 | 4 |
| copper | ug/L | monthly | 1 | - | - | 6.7 |
| diazinon | ug/L | monthly | 1 | - | - | <0.1 |
| nitrogen (ammonia) | mg/L | monthly | 1 | - | - | 4.9 |
| nonylphenol ethoxylate | ug/L | monthly | 1 | - | - | <5 |
| total suspended solids | mg/L | every 6 days | 6 | 3 | 7 | 15 |

| EPA Point 13<br>Site code BO0013 | Point description: In the channel after the dechlorination unit | | | | | |
|---|---|---|---|---|---|---|
| pollutant | unit of measure | sampling frequency | number of samples | minimum result | mean result | maximum result |
| faecal coliforms | CFU/100mL | every 6 days | 5 | 2 | 72004 | 360,000 |
| hydrogen sulphide (unionised) | ug/L | monthly | 1 | - | - | <30 |
| sea urchin fertilisation (EC50) | % Effluent/Vol | monthly | 1 | - | - | 59.6 |

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

Effluent quality monitoring results obtained from EPA Point 4 and 13 are used to indicate the quality of water discharged at EPA Point 1 (discharge to waters).

[1.] Under condition L3.5 in the Environment Protection Licence 2269, as set by the NSW Environment Protection Authority, when a wet weather bypass flow is occurring, exceedances of the 3DGM concentration limit in condition L3.4 are permitted at point 1 for the duration of the bypass where the bypass was the sole cause of the exceedance. Wet weather flows between 7-11 August was the sole cause of the 3DGM exceedance.

# Bombo Wastewater Treatment Plant
# July Pollution Monitoring Summary

## EPL 2269

Summary period: 01-07-2020 to 31-07-2020
Date obtained: 04-08-2020
Date published: 14-08-2020

**Licensee:** Sydney Water Corporation
PO Box 399
PARRAMATTA NSW 2124

**Table 1: 3 Day Geometric Mean data**

| EPA Point 4<br>Site code BO0004 | Point description: At the end of the chlorine contact tanks | | | | |
|---|---|---|---|---|---|
| pollutant | unit of measure | sampling frequency | 3DGM limit | 3DGM Actual | within limits |
| total suspended solids | mg/L | monthly | 50 | 3 | 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 4<br>Site code BO0004 | Point description: At the end of the chlorine contact tanks | | | | | |
|---|---|---|---|---|---|---|
| pollutant | unit of measure | sampling frequency | number of samples | minimum result | mean result | maximum result |
| aluminium | ug/L | monthly | 1 | - | - | 26 |
| carbonaceous biochemical oxygen demand | mg/L | every 6 days | 5 | <2 | 8 | 36 |
| copper | ug/L | monthly | 1 | - | - | 2.8 |
| diazinon | ug/L | monthly | 1 | - | - | <0.1 |
| nitrogen (ammonia) | mg/L | monthly | 1 | - | - | 16.2 |
| nonylphenol ethoxylate | ug/L | monthly | 1 | - | - | <5 |
| total suspended solids | mg/L | every 6 days | 5 | 2 | 19 | 78 |

| EPA Point 13<br>Site code BO0013 | Point description: In the channel after the dechlorination unit | | | | | |
|---|---|---|---|---|---|---|
| pollutant | unit of measure | sampling frequency | number of samples | minimum result | mean result | maximum result |
| faecal coliforms | CFU/100mL | every 6 days | 5 | <1 | 20002 | 100,000 |
| hydrogen sulphide (unionised) | ug/L | monthly | 1 | - | - | <30 |
| sea urchin fertilisation (EC50) | % Effluent/Vol | monthly | 1 | - | - | 100 |

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

Effluent quality monitoring results obtained from EPA Point 4 and 13 are used to indicate the quality of water discharged at EPA Point 1 (discharge to waters).