



EPL 21054 Monitoring Data

30 March 2022 – 3 June 2022

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1. INTRODUCTION

Aspect Environmental Pty Ltd are engaged by the Licence Holder, LOGOS MLP DEVELOPMENT MANAGEMENT PTY LTD (LOGOS) to collate monitoring results pertaining to EPL 21054 and display them on the SIMTA -Moorebank Intermodal Terminal Precinct website.

2. PURPOSE

Summarise the Discharge Point Monitoring Results for the reporting period 30 March 2022 – 3 June 2022.

3. BACKGROUND

The Moorebank Intermodal Terminal Precinct construction site is located on Moorebank Avenue, Moorebank in Sydney's south-west.

EPL 21054 was issued on 4 June 2018 for the Scheduled Activity of “Crushing, grinding or separating”.

On 18 April 2019 the NSW EPA issued Variation No. 1 of EPL 21054 for the addition of Scheduled Activity “Extractive activities” and the provision of defined discharge monitoring points including parameters for monitoring discharges to water and land.

On 22 October 2020 the NSW EPA issued Variation No. 2 to remove the scheduled activity “Extractive activities”. The Licence was further varied in consideration of s45 of the Act to include condition relating to dust control, emergency response, minor administrative changes and an amendment to special condition E1.

On the 21 June 2021 the NSW EPA issued Variation No. 3 to remove discharge point 5 and to update the discharge point 7 pollution criteria to include PFOS, PFHxS and PFOA.

On 22 December 2021, the NSW EPA issued Variation No.4. In total nine variations were made to the licence, notably the variations included the addition of three discharge points and the removal of Total Suspended Solids as an approved pollutant.

On the 30 March 2022, the NSW EPA issued Variation No. 5, the transfer of the Licence holder from QUBE RE SERVICES (NO.2) to LOGOS. Subsequently, the current version of EPL 21054 was issued on 12 April 2022.

Monitoring Comments

The site is well contained with most of the rainwater either being absorbed, evaporated or reused for dust control. Further, there are no processes on site that generate water as a by-product for discharge. Hence, discharge is not regular and does not always occur after rain.

During the reporting period the site only discharged:

- six times at DP 3;
- six times at DP 5;
- four times at DP7;
- three times at DP4;
- twice at DP1; and
- no discharge at DPs 2 and 6.

On one occasion there were uncontrolled discharges at DPs 1, 3, 6, 7, 8 and an overland flow. The uncontrolled discharges were a consequence of approximately 82mm of rainfall over the preceding 4 days.

In reviewing the results, it was identified that the turbidity criterium was exceeded at DPs 3, 7, 8 and the overland flow. Additionally, an exceedance for PFOS at the overland flow was identified. This exceedance was subsequently reported – EPIC REF-NO-12447.

In accordance with condition L2.5 – The turbidity limits specified under Condition L2.4 for the discharge points identified as EPA licence discharge points 1, 2, 3, 4, 6, 7, 8, 9 and 10 do not apply when the discharge occurs solely as a result of rainfall measured at the premises which exceeds; - a total of 24.4 millimetre of rainfall over any consecutive 5-day period.

No other exceedances occurred in the reporting period.

4. CONCLUSION

The compliance obligations of the Licensee in regard to Discharge Point monitoring have been satisfactorily executed.

5. APPENDICES



Appendix 1: Discharge Monitoring Data Summary Table (per EPA annual return reporting requirements)

Appendix 2: Bureau of Meteorology Rainfall

Appendix 3: Discharge Monitoring Data Report

APPENDIX 1 – DISCHARGE MONITORING DATA SUMMARY TABLE

(per EPA Annual Return Reporting Requirements)

EPL 21054, Monitoring Period 30/03/2022-03/06/2022, DPs 1,2, 3, 4, 6, 7, 8, 9 and 10.

Discharge and Monitoring Point 1

| Pollutant | Unit of measure | No. of samples required | No. of samples collected and analysed | Lowest sample value | Mean of sample | Highest sample value |
|-----------|-----------------|-------------------------|---------------------------------------|---------------------|----------------|----------------------|
| pH | pH | 1 | 1 | 7.6 | 7.6 | 7.6 |
| Turbidity | ntu | 1 | 1 | 4.9 | 4.9 | 4.9 |

Discharge and Monitoring Point 2

| Pollutant | Unit of measure | No. of samples required | No. of samples collected and analysed | Lowest sample value | Mean of sample | Highest sample value |
|-----------|-----------------|-------------------------|---------------------------------------|---------------------|----------------|----------------------|
| pH | pH | 0 | N/A | - | - | - |
| Turbidity | ntu | 0 | N/A | - | - | - |

Discharge and Monitoring Point 3

| Pollutant | Unit of measure | No. of samples required | No. of samples collected and analysed | Lowest sample value | Mean of sample | Highest sample value |
|-----------|-----------------|-------------------------|---------------------------------------|---------------------|----------------|----------------------|
| pH | pH | 3 | 8 | 6.81 | 7.48 | 7.85 |
| Turbidity | ntu | 3 | 8 | 0.9 | 13.68 | 38 |
| PFHxS | µg/L | 3 | 8 | <0.01 | 0.01 | 0.04 |
| PFOS | µg/L | 3 | 8 | <0.01 | 0.01 | 0.05 |
| PFOA | µg/L | 3 | 8 | <0.01 | <0.01 | <0.01 |

Discharge and Monitoring Point 4

| Pollutant | Unit of measure | No. of samples required | No. of samples collected and analysed | Lowest sample value | Mean of sample | Highest sample value |
|-----------|-----------------|-------------------------|---------------------------------------|---------------------|----------------|----------------------|
| | | | | | | |

| | | | | | | |
|-----------|------|---|----|-------|-------|-------|
| pH | pH | 3 | 11 | 7.04 | 7.51 | 7.78 |
| Turbidity | ntu | 3 | 11 | 1.1 | 3.44 | 12.7 |
| PFHxS | µg/L | 3 | 11 | <0.01 | 0.02 | 0.05 |
| PFOS | µg/L | 3 | 11 | <0.01 | 0.03 | 0.07 |
| PFOA | µg/L | 3 | 11 | <0.01 | <0.01 | <0.01 |

Discharge and Monitoring Point 6

| Pollutant | Unit of measure | No. of samples required | No. of samples collected and analysed | Lowest sample value | Mean of sample | Highest sample value |
|-----------|-----------------|-------------------------|---------------------------------------|---------------------|----------------|----------------------|
| pH | pH | 1 | 1 | 7.7 | 7.7 | 7.7 |
| Turbidity | ntu | 1 | 1 | 6.4 | 6.4 | 6.4 |

Discharge and Monitoring Point 7

| Pollutant | Unit of measure | No. of samples required | No. of samples collected and analysed | Lowest sample value | Mean of sample | Highest sample value |
|-----------|-----------------|-------------------------|---------------------------------------|---------------------|----------------|----------------------|
| pH | pH | 3 | 3 | 7.8 | 7.86 | 7.9 |
| Turbidity | ntu | 3 | 3 | 5.6 | 7.37 | 64 |
| PFHxS | µg/L | 3 | 3 | <0.01 | <0.01 | <0.01 |
| PFOS | µg/L | 3 | 3 | <0.01 | <0.01 | <0.01 |
| PFOA | µg/L | 3 | 3 | <0.01 | <0.01 | <0.01 |

Discharge and Monitoring Point 8

| Pollutant | Unit of measure | No. of samples required | No. of samples collected and analysed | Lowest sample value | Mean of sample | Highest sample value |
|-----------|-----------------|-------------------------|---------------------------------------|---------------------|----------------|----------------------|
| pH | pH | 1 | 1 | 7.0 | 7.0 | 7.0 |
| Turbidity | ntu | 1 | 1 | 160 | 160 | 160 |
| PFHxS | µg/L | 1 | 1 | <0.01 | <0.01 | <0.01 |

| | | | | | | |
|------|------|---|---|-------|-------|-------|
| PFOS | µg/L | 1 | 1 | 0.04 | 0.04 | 0.04 |
| PFOA | µg/L | 1 | 1 | <0.01 | <0.01 | <0.01 |

Discharge and Monitoring Point 9

| Pollutant | Unit of measure | No. of samples required | No. of samples collected and analysed | Lowest sample value | Mean of sample | Highest sample value |
|-----------|-----------------|-------------------------|---------------------------------------|---------------------|----------------|----------------------|
| pH | pH | 0 | N/A | - | - | - |
| Turbidity | ntu | 0 | N/A | - | - | - |
| PFHxS | µg/L | 0 | N/A | - | - | - |
| PFOS | µg/L | 0 | N/A | - | - | - |
| PFOA | µg/L | 0 | N/A | - | - | - |

Discharge and Monitoring Point 10

| Pollutant | Unit of measure | No. of samples required | No. of samples collected and analysed | Lowest sample value | Mean of sample | Highest sample value |
|-----------|-----------------|-------------------------|---------------------------------------|---------------------|----------------|----------------------|
| pH | pH | 0 | N/A | - | - | - |
| Turbidity | ntu | 0 | N/A | - | - | - |
| PFHxS | µg/L | 0 | N/A | - | - | - |
| PFOS | µg/L | 0 | N/A | - | - | - |
| PFOA | µg/L | 0 | N/A | - | - | - |

APPENDIX 2 – BUREAU OF METEOROLOGY RAINFALL RECORDS

| Holsworthy Aerodrome Rainfall (mm) for EPL Annual Return Period | | | | |
|---|--------------|------------|-------------|-------------|
| Day | Mar-22 | Apr-22 | May-22 | Jun-22 |
| 1 | | 4.6 | 1.2 | 0.2 |
| 2 | | 0 | 0 | 0 |
| 3 | | 0 | 0.2 | 0 |
| 4 | | 0 | 0 | |
| 5 | | 0 | 0.4 | |
| 6 | | 1.8 | 0.2 | |
| 7 | | 44.8 | 0 | |
| 8 | | 19.4 | 0 | |
| 9 | | 10.2 | 0.8 | |
| 10 | | 7.6 | 4.6 | |
| 11 | | 0 | 5.6 | |
| 12 | | 0 | 29.8 | |
| 13 | | 0 | 7.4 | |
| 14 | | 4.2 | 0 | |
| 15 | | 0.2 | 0.2 | |
| 16 | | 0 | 0.2 | |
| 17 | | 0.2 | 0.2 | |
| 18 | | 0 | 0 | |
| 19 | | 0 | 0 | |
| 20 | | 11 | 0 | |
| 21 | | 0 | 14.4 | |
| 22 | | 0 | 3 | |
| 23 | | 3.2 | 9 | |
| 24 | | 0 | 4.8 | |
| 25 | | 4.4 | 0.8 | |
| 26 | | 0.2 | 0.2 | |
| 27 | | 1.2 | 0 | |
| 28 | | 2.4 | 0 | |
| 29 | | 7.2 | 0.2 | |
| 30 | 27.6 | 4.4 | 0 | |
| 31 | 5 | | 3.6 | |
| Total for reporting period | 32.6 | 127 | 86.8 | 0.2 |
| Total for the entire Month | 516.6 | 127 | 86.8 | 17.4 |

APPENDIX 3 – DISCHARGE MONITORING DATA REPORT

| Indicate results greater than Contractual Discharge Criteria | | | | | | | |
|--|--------------------------------------|---|-----------------|-----------------|-----------------|-----------------|-----------------|
| Job Number: | SRM372 | Updated EPL 21054 Licence - 4/06/2021 | Sample No. | 96 | 97 | 98 | 99 |
| Project: | Moorebank West Water Treatment Plant | Sample Date | 29/03/2022 | 4/04/2022 | 11/04/2022 | 19/04/2022 | 21/04/2022 |
| Table: | Synergy WTP Results Summary | Definition | Discharge Water |
| Sample ID Pre-fix: | SRM_Central MBW10_DW | Sample Type | Primary | Primary | Primary | Primary | Primary |
| Analytes | Units | Discharge Criteria | | | | | |
| Per and Poly Fluoroalkyl Substances PFAS (Standard Level) | | | | | | | |
| Perfluoroalkyl Sulfonic Acid | | | | | | | |
| Perfluorobutane sulfonic acid (PFBS) | µg/L | | <0 | <0.02 | <0.02 | <0.02 | <0.02 |
| Perfluoropentane sulfonic acid (PFPeS) | µg/L | | <0 | <0.02 | <0.02 | <0.02 | <0.02 |
| Perfluorohexane sulfonic acid (PFHxS) | µg/L | 2 | | 0.05 | <0.01 | 0.04 | 0.03 |
| Perfluoroheptane sulfonic acid (PFHpS) | µg/L | | <0 | <0.02 | <0.02 | <0.02 | <0.02 |
| Perfluorooctanesulfonic acid (PFOS) | µg/L | 0.13 | | 0.05 | <0.01 | 0.05 | 0.03 |
| Perfluorodecanesulfonic acid (PFDS) | µg/L | | <0 | <0.02 | <0.02 | <0.02 | <0.02 |
| Perfluoroalkyl Carboxylic Acid | | | | | | | |
| Perfluorobutanoic acid (PFBA) | µg/L | | < | <0.1 | <0.1 | <0.1 | <0.1 |
| Perfluoropentanoic acid (PFPeA) | µg/L | | <0 | <0.02 | <0.02 | <0.02 | <0.02 |
| Perfluorohexanoic acid (PFHxA) | µg/L | | | 0.06 | <0.02 | 0.05 | 0.05 |
| Perfluoroheptanoic acid (PFHpA) | µg/L | | <0 | <0.02 | <0.02 | <0.02 | <0.02 |
| Perfluoroctanoic acid (PFOA) | µg/L | 10 | <0 | <0.01 | <0.01 | <0.01 | <0.01 |
| Perfluorononanoic acid (PFNA) | µg/L | | <0 | <0.02 | <0.02 | <0.02 | <0.02 |
| Perfluorodecanoic acid (PFDA) | µg/L | | <0 | <0.02 | <0.02 | <0.02 | <0.02 |
| Perfluoroundecanoic acid (PFUnDA) | µg/L | | <0 | <0.02 | <0.02 | <0.02 | <0.02 |
| Perfluorododecanoic acid (PFDoDA) | µg/L | | <0 | <0.02 | <0.02 | <0.02 | <0.02 |
| Perfluorotridecanoic acid (PFTrDA) | µg/L | | <0 | <0.02 | <0.02 | <0.02 | <0.02 |
| Perfluorotetradecanoic acid (PFTeDA) | µg/L | | <0 | <0.05 | <0.05 | <0.05 | <0.05 |
| Perfluoroalkyl Sulfonamides | | | | | | | |
| Perfluorooctane sulfonamide (FOSA) | µg/L | | <0 | <0.02 | <0.02 | <0.02 | <0.02 |
| N-Methyl perfluorooctane sulfonamide (MeFOSA) | µg/L | | <0 | <0.05 | <0.05 | <0.05 | <0.05 |
| N-Ethyl perfluorooctane sulfonamide (EtFOSA) | µg/L | | <0 | <0.05 | <0.05 | <0.05 | <0.05 |
| N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE) | µg/L | | <0 | <0.05 | <0.05 | <0.05 | <0.05 |
| N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE) | µg/L | | <0 | <0.05 | <0.05 | <0.05 | <0.05 |
| N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA) | µg/L | | <0 | <0.02 | <0.02 | <0.02 | <0.02 |
| N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA) | µg/L | | <0 | <0.02 | <0.02 | <0.02 | <0.02 |
| (n:2) Fluorotelomer Sulfonic Acid | | | | | | | |
| 4:2 Fluorotelomer sulfonic acid (4:2 FTS) | µg/L | | <0 | <0.05 | <0.05 | <0.05 | <0.05 |
| 6:2 Fluorotelomer sulfonic acid (6:2 FTS) | µg/L | | <0 | <0.05 | <0.05 | <0.05 | <0.05 |
| 8:2 Fluorotelomer sulfonic acid (8:2 FTS) | µg/L | | <0 | <0.05 | <0.05 | <0.05 | <0.05 |
| 10:2 Fluorotelomer sulfonic acid (10:2 FTS) | µg/L | | <0 | <0.05 | <0.05 | <0.05 | <0.05 |
| Per- & Polyfluoroalkyl Substances Sums | | | | | | | |
| Sum of PFAS | µg/L | | | 0.16 | <0.01 | 0.14 | 0.11 |
| Sum of PFHxS and PFOS | µg/L | 2 | | 0.1 | <0.01 | 0.09 | 0.06 |
| Other (EPL 21054 Limits) | | | | | | | |
| pH | pH units | 6.5-8.5 | | 7.57 | 7.35 | 7.76 | 7.27 |
| Total Suspended Solids | mg/L | 50 | < | <5 | <5 | 6 | <5 |
| Turbidity | NTU | 25 | | 1.8 | 2.7 | 2.2 | 0.5 |
| Oil and Grease | Visible | Visible | Not | Not Visible | Not Visible | Not Visible | Not Visible |



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| Indicate results greater than Contractual Discharge Criteria | | | | | | |
|--|---|---------------------------------------|-----------------|-----------------|-----------------|-----------------|
| Job Number: SRM372 | Project: Moorebank West North Water Treatment Plant | Updated EPL 21054 Licence - 4/06/2021 | Sample No. | 27 | 28 | 29 |
| | | Sample Date | 4/04/2022 | 11/04/2022 | 19/04/2022 | 21/04/2022 |
| Table: Synergy North WTP Results Summary | Sample ID Pre-fix: SRM_Nth MBW10_SW | Definition | Discharge Water | Discharge Water | Discharge Water | Discharge Water |
| Analytes | Units | Sample Type | Primary | Primary | Primary | Primary |
| Per and Poly Fluoroalkyl Substances PFAS (Standard Level) | | | | | | |
| Perfluoroalkyl Sulfonic Acid | | | | | | |
| Perfluorobutane sulfonic acid (PFBS) | µg/L | | <0.02 | <0.02 | <0.02 | <0.02 |
| Perfluoropentane sulfonic acid (PFPeS) | µg/L | | <0.02 | <0.02 | <0.02 | <0.02 |
| Perfluorohexane sulfonic acid (PFHxS) | µg/L | 2 | <0.01 | 0.04 | <0.01 | 0.02 |
| Perfluoroheptane sulfonic acid (PFHpS) | µg/L | | <0.02 | <0.02 | <0.02 | <0.02 |
| Perfluorooctanesulfonic acid (PFOS) | µg/L | 0.13 | <0.01 | 0.05 | <0.01 | 0.03 |
| Perfluorodecanesulfonic acid (PFDS) | µg/L | | <0.02 | <0.02 | <0.02 | <0.02 |
| Perfluoroalkyl Carboxylic Acid | | | | | | |
| Perfluorobutanoic acid (PFBA) | µg/L | | <0.1 | <0.1 | <0.1 | <0.1 |
| Perfluoropentanoic acid (PFPeA) | µg/L | | <0.02 | <0.02 | <0.02 | <0.02 |
| Perfluorohexanoic acid (PFHxA) | µg/L | | <0.02 | 0.05 | <0.02 | <0.02 |
| Perfluoroheptanoic acid (PFHpA) | µg/L | | <0.02 | <0.02 | <0.02 | <0.02 |
| Perfluoroctanoic acid (PFOA) | µg/L | 10 | <0.01 | <0.01 | <0.01 | <0.01 |
| Perfluorononanoic acid (PFNA) | µg/L | | <0.02 | <0.02 | <0.02 | <0.02 |
| Perfluorodecanoic acid (PFDA) | µg/L | | <0.02 | <0.02 | <0.02 | <0.02 |
| Perfluoroundecanoic acid (PFUnDA) | µg/L | | <0.02 | <0.02 | <0.02 | <0.02 |
| Perfluorododecanoic acid (PFDoDA) | µg/L | | <0.02 | <0.02 | <0.02 | <0.02 |
| Perfluorotridecanoic acid (PFTrDA) | µg/L | | <0.02 | <0.02 | <0.02 | <0.02 |
| Perfluorotetradecanoic acid (PFTeDA) | µg/L | | <0.05 | <0.05 | <0.05 | <0.05 |
| Perfluoroalkyl Sulfonamides | | | | | | |
| Perfluorooctane sulfonamide (FOSA) | µg/L | | <0.02 | <0.02 | <0.02 | <0.02 |
| N-Methyl perfluorooctane sulfonamide (MeFOSA) | µg/L | | <0.05 | <0.05 | <0.05 | <0.05 |
| N-Ethyl perfluorooctane sulfonamide (EfFOSA) | µg/L | | <0.05 | <0.05 | <0.05 | <0.05 |
| N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE) | µg/L | | <0.05 | <0.05 | <0.05 | <0.05 |
| N-Ethyl perfluorooctane sulfonamidoethanol (EfFOSE) | µg/L | | <0.05 | <0.05 | <0.05 | <0.05 |
| N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA) | µg/L | | <0.02 | <0.02 | <0.02 | <0.02 |
| N-Ethyl perfluorooctane sulfonamidoacetic acid (EfFOSAA) | µg/L | | <0.02 | <0.02 | <0.02 | <0.02 |
| (n:2) Fluorotelomer Sulfonic Acid | | | | | | |
| 4:2 Fluorotelomer sulfonic acid (4:2 FTS) | µg/L | | <0.05 | <0.05 | <0.05 | <0.05 |
| 6:2 Fluorotelomer sulfonic acid (6:2 FTS) | µg/L | | <0.05 | <0.05 | <0.05 | <0.05 |
| 8:2 Fluorotelomer sulfonic acid (8:2 FTS) | µg/L | | <0.05 | <0.05 | <0.05 | <0.05 |
| 10:2 Fluorotelomer sulfonic acid (10:2 FTS) | µg/L | | <0.05 | <0.05 | <0.05 | <0.05 |
| Per- & Polyfluoroalkyl Substances Sums | | | | | | |
| Sum of PFAS | µg/L | | <0.01 | 0.14 | <0.01 | 0.05 |
| Sum of PFHxS and PFOS | µg/L | 2 | <0.01 | 0.09 | <0.01 | 0.05 |
| Other (EPL 21054 Limits) | | | | | | |
| pH | pH units | 6.5-8.5 | 6.81 | 7.76 | 7.33 | 7.85 |
| Total Suspended Solids | mg/L | 50 | <5 | 5 | <5 | 10 |
| Turbidity | NTU | 25 | 2.1 | 2.1 | 0.9 | 13 |
| Oil and Grease | Visibility | Visible | Not Visible | Not Visible | Not Visible | Not Visible |



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| Indicate results greater than Contractual Discharge Criteria | | | | | | | | | |
|--|---|--------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-------------|
| Job Number: SRM372 Project: Moorebank West Water Treatment Plant Table: Synergy WTP Results Summary Sample ID Pre-fix: SRM_Central MBW10_DW | Updated EPL 21054 Licence - 4/06/2021 | Sample No. | 100 | 101 | 102 | 103 | 104 | 105 | |
| | | Sample Date | 29/04/2022 | 4/05/2022 | 6/05/2022 | 11/05/2022 | 13/05/2022 | 23/05/2022 | |
| | | Definition | Discharge Water | |
| Sample Type | | Primary | Primary | Primary | Primary | Primary | Primary | Primary | |
| Analyses | Units | Discharge Criteria | | | | | | | |
| Per and Poly Fluoroalkyl Substances PFAS (Standard Level) | | | | | | | | | |
| Perfluoroalkyl Sulfonic Acid | | | | | | | | | |
| Perfluorobutane sulfonic acid (PFBS) | µg/L | <0 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 |
| Perfluoropentane sulfonic acid (PFPeS) | µg/L | <0 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 |
| Perfluorohexamane sulfonic acid (PFHxS) | µg/L | 2 | 0.05 | <0.01 | <0.01 | 0.01 | 0.04 | <0.01 | |
| Perfluoroheptane sulfonic acid (PFHxS) | µg/L | <0 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 |
| Perfluoroctanesulfonic acid (PFOS) | µg/L | 0.13 | 0.06 | <0.01 | <0.01 | 0.02 | 0.07 | <0.01 | |
| Perfluorodecanesulfonic acid (PFDS) | µg/L | <0 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 |
| Perfluoroalkyl Carboxylic Acid | | | | | | | | | |
| Perfluorobutanoic acid (FBBA) | µg/L | < | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 |
| Perfluoropentanoic acid (PFPeA) | µg/L | <0 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 |
| Perfluorohexanoic acid (PFHxA) | µg/L | | 0.04 | <0.02 | <0.02 | <0.02 | <0.02 | 0.03 | <0.02 |
| Perfluoroheptanoic acid (PFHpA) | µg/L | <0 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 |
| Perfluoroctanoic acid (PFOA) | µg/L | 10 | <0 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 |
| Perfluorononanoic acid (PFNA) | µg/L | <0 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 |
| Perfluorodecanoic acid (PFDA) | µg/L | <0 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 |
| Perfluoroundecanoic acid (PFUnDA) | µg/L | <0 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 |
| Perfluorododecanoic acid (PFDoDA) | µg/L | <0 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 |
| Perfluorotridecanoic acid (PFTrDA) | µg/L | <0 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 |
| Perfluorotetradecanoic acid (PFTeDA) | µg/L | <0 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Perfluoroalkyl Sulfonamides | | | | | | | | | |
| Perfluoroctane sulfonamide (FOSA) | µg/L | <0 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 |
| N-Methyl perfluorooctane sulfonamide (MeFOSA) | µg/L | <0 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| N-Ethyl perfluorooctane sulfonamide (EtFOSA) | µg/L | <0 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE) | µg/L | <0 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE) | µg/L | <0 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA) | µg/L | <0 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 |
| N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA) | µg/L | <0 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 |
| (n:2) Fluorotelomer Sulfonic Acid | | | | | | | | | |
| 4:2 Fluorotelomer sulfonic acid (4:2 FTS) | µg/L | <0 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| 6:2 Fluorotelomer sulfonic acid (6:2 FTS) | µg/L | <0 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| 8:2 Fluorotelomer sulfonic acid (8:2 FTS) | µg/L | <0 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| 10:2 Fluorotelomer sulfonic acid (10:2 FTS) | µg/L | <0 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Per- & Polyfluoroalkyl Substances Sums | | | | | | | | | |
| Sum of PFAS | µg/L | | 0.15 | <0.01 | <0.01 | 0.03 | 0.14 | <0.01 | |
| Sum of PFHxS and PFOS | µg/L | 2 | 0.11 | <0.01 | <0.01 | 0.03 | 0.11 | <0.01 | |
| Other (EPL 21054 Limits) | | | | | | | | | |
| pH | pH units | 6.5-8.5 | | 7.48 | 7.55 | 7.45 | 7.85 | 7.65 | 7.6 |
| Total Suspended Solids | mg/L | 50 | < | <5 | <5 | <5 | 15 | 9 | 6 |
| Turbidity | NTU | 25 | | 1.1 | 1.3 | 2.5 | 12.7 | 2.6 | 7.4 |
| Oil and Grease | Visible | Visible | | Not V | Not Visible | Not Visible | Not Visible | Not Visible | Not Visible |



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| Indicate results greater than Contractual Discharge Criteria | | | Sample No. | 31 | 32 | 33 |
|--|------------|--------------------|-------------|-----------------|-----------------|-----------------|
| Job Number: SRM372 Project: Moorebank West North Water Treatment Plant Table: Synergy North WTP Results Summary Sample ID Pre-fix: SRM_Nth MBW10_SW | | | Sample Date | 4/05/2022 | 6/05/2022 | 23/05/2022 |
| | | | Definition | Discharge Water | Discharge Water | Discharge Water |
| | | | Sample Type | Primary | Primary | Primary |
| Analytes | Units | Discharge Criteria | | | | |
| Per and Poly Fluoroalkyl Substances PFAS (Standard Level) | | | | | | |
| Perfluoroalkyl Sulfonic Acid | | | | | | |
| Perfluorobutane sulfonic acid (PFBS) | µg/L | | | <0.02 | <0.02 | <0.02 |
| Perfluoropentane sulfonic acid (PFPeS) | µg/L | | | <0.02 | <0.02 | <0.02 |
| Perfluorohexane sulfonic acid (PFHxS) | µg/L | 2 | | <0.01 | <0.01 | <0.01 |
| Perfluoroheptane sulfonic acid (PFHpS) | µg/L | | | <0.02 | <0.02 | <0.02 |
| Perfluorooctanesulfonic acid (PFOS) | µg/L | 0.13 | | <0.01 | <0.01 | <0.01 |
| Perfluorodecanesulfonic acid (PFDS) | µg/L | | | <0.02 | <0.02 | <0.02 |
| Perfluoroalkyl Carboxylic Acid | | | | | | |
| Perfluorobutanoic acid (PFBA) | µg/L | | | <0.1 | <0.1 | <0.1 |
| Perfluoropentanoic acid (PFPeA) | µg/L | | | <0.02 | <0.02 | <0.02 |
| Perfluorohexanoic acid (PFHxA) | µg/L | | | <0.02 | <0.02 | <0.02 |
| Perfluoroheptanoic acid (PFHpA) | µg/L | | | <0.02 | <0.02 | <0.02 |
| Perfluorooctanoic acid (PFOA) | µg/L | 10 | | <0.01 | <0.01 | <0.01 |
| Perfluorononanoic acid (PFNA) | µg/L | | | <0.02 | <0.02 | <0.02 |
| Perfluorodecanoic acid (PFDA) | µg/L | | | <0.02 | <0.02 | <0.02 |
| Perfluoroundecanoic acid (PFUnDA) | µg/L | | | <0.02 | <0.02 | <0.02 |
| Perfluorododecanoic acid (PFDoDA) | µg/L | | | <0.02 | <0.02 | <0.02 |
| Perfluorotridecanoic acid (PFTrDA) | µg/L | | | <0.02 | <0.02 | <0.02 |
| Perfluorotetradecanoic acid (PFTeDA) | µg/L | | | <0.05 | <0.05 | <0.05 |
| Perfluoroalkyl Sulfonamides | | | | | | |
| Perfluorooctane sulfonamide (FOSA) | µg/L | | | <0.02 | <0.02 | <0.02 |
| N-Methyl perfluorooctane sulfonamide (MeFOSA) | µg/L | | | <0.05 | <0.05 | <0.05 |
| N-Ethyl perfluorooctane sulfonamide (EfFOSA) | µg/L | | | <0.05 | <0.05 | <0.05 |
| N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE) | µg/L | | | <0.05 | <0.05 | <0.05 |
| N-Ethyl perfluorooctane sulfonamidoethanol (EfFOSE) | µg/L | | | <0.05 | <0.05 | <0.05 |
| N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA) | µg/L | | | <0.02 | <0.02 | <0.02 |
| N-Ethyl perfluorooctane sulfonamidoacetic acid (EfFOSAA) | µg/L | | | <0.02 | <0.02 | <0.02 |
| (n:2) Fluorotelomer Sulfonic Acid | | | | | | |
| 4:2 Fluorotelomer sulfonic acid (4:2 FTS) | µg/L | | | <0.05 | <0.05 | <0.05 |
| 6:2 Fluorotelomer sulfonic acid (6:2 FTS) | µg/L | | | <0.05 | <0.05 | <0.05 |
| 8:2 Fluorotelomer sulfonic acid (8:2 FTS) | µg/L | | | <0.05 | <0.05 | <0.05 |
| 10:2 Fluorotelomer sulfonic acid (10:2 FTS) | µg/L | | | <0.05 | <0.05 | <0.05 |
| Per- & Polyfluoroalkyl Substances Sums | | | | | | |
| Sum of PFAS | µg/L | | | <0.01 | <0.01 | <0.01 |
| Sum of PFHxS and PFOS | µg/L | 2 | | <0.01 | <0.01 | <0.01 |
| Other (EPL 21054 Limits) | | | | | | |
| pH | pH units | 6.5-8.5 | | 7.48 | 7.63 | 7.52 |
| Total Suspended Solids | mg/L | 50 | | <5 | <5 | 6 |
| Turbidity | NTU | 25 | | 1.5 | 2.2 | 7.4 |
| Oil and Grease | Visibility | Visible | | Not Visible | Not Visible | Not Visible |



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