Annual Environmental Report

2024

Kildare

D0178-01

CONTENTS

1 EXECUTIVE SUMMARY AND INTRODUCTION TO THE 2024 AER

This Annual Environmental Report has been prepared for D0178-01, Kildare, in Kildare in accordance with the requirements of the wastewater discharge licence for the agglomeration. Specified reports where relevant are included as an appendix to the AER.

1.1 ANNUAL STATEMENT OF MEASURES

A summary of any improvements undertaken is provided where applicable.

There were no capital works, significant changes or operational changes undertaken in 2024.

1.2 TREATMENT SUMMARY

The agglomeration is served by a wastewater treatment plant(s)

- Kildare Town WWTP with a Plant Capacity PE of 28000, the treatment type is 3P - Tertiary P removal.

1.3 ELV OVERVIEW

The overall compliance of the final effluent with the Emission Limit Values (ELVs) is shown below. More detailed information on the below ELV's can be found in Section 2.

Discharge Point Reference	Treatment Plant	Discharge Type	Compliance Status	Parameters failing if relevant
TPEFF1400D0178SW001	Kildare Town WWTP	Treated	Compliant	N/A
TPEFF1400D0178SW003	Kildare Town WWTP	Treated - Secondary	Compliant	N/A

1.4 LICENCE SPECIFIC REPORTING

Assessment / Report
There are no Licence Specific Reports included in this AER.

2 TREATMENT PLANT PERFORMANCE AND IMPACT SUMMARY

2.1 KILDARE TOWN WWTP - TREATED DISCHARGE

2.1.1 INFLUENT MONITORING SUMMARY - KILDARE TOWN WWTP

A summary of influent monitoring for the treatment plant is presented below. This monitoring is primarily undertaken in order to determine the overall efficiency of the plant in removing pollutants from the raw wastewater.

Parameters	Number of Samples	Annual Max	Annual Mean
Suspended Solids mg/l	12	652	337
Ammonia-Total (as N) mg/l	12	57	42
Total Phosphorus (as P) mg/l	12	21	9.86
COD-Cr mg/l	12	1135	758
ortho-Phosphate (as P) - unspecified mg/l	12	5.30	3.75
pH pH units	12	7.60	7.36
Total Nitrogen mg/l	12	72	58
BOD, 5 days with Inhibition (Carbonaceous BOD) mg/l	12	569	289
Hydraulic Capacity	N/A	5640	2379

If other inputs in the form of sludge / leachate are added to the WWTP then these are included in Section 2.1.5 if applicable.

Significance of Results:

The annual mean hydraulic loading is less than the peak Treatment Plant Capacity. The annual maximum hydraulic loading is less than the peak Treatment Plant Capacity. Further details on the plant capacity and efficiency can be found under the sectional 'Operational Performance Summary'. The design of the wastewater treatment plant allows for peak values and therefore the peak loads have not impacted on compliance with Emission Limit Values.

2.1.2 (A) EFFLUENT MONITORING SUMMARY - TPEFF1400D0178SW001

Parameter	WWDL ELV (Schedule A)	ELV with Condition 2 Interpretation included Note 1	Interim % reduction from influent concentration	Number of sample results	Number of exceedances	Number of exceedances with Condition 2 Interpretation included	Annual Mean	Overall Compliance (Pass/Fail)
COD-Cr mg/l	125	250	N/A	12	N/A	N/A	24	Pass
BOD, 5 days with Inhibition (Carbonaceous BOD) mg/l	25	50	N/A	12	N/A	N/A	2.24	Pass
Suspended Solids mg/l	25	62.5	N/A	12	N/A	N/A	5.13	Pass
pH pH units	6	9	N/A	12	N/A	N/A	7.39	Pass
Total Phosphorus (as P) mg/l	2	2.4	N/A	12	N/A	N/A	0.263	Pass
Ammonia-Total (as N) mg/l	2	2.4	N/A	12	N/A	N/A	0.224	Pass
ortho-Phosphate (as P) - unspecified mg/l	0.5	0.6	N/A	12	N/A	N/A	0.135	Pass

Parameter	WWDL ELV (Schedule A)	ELV with Condition 2 Interpretation included Note 1	Interim % reduction from influent concentration	Number of sample results	Number of exceedances	Number of exceedances with Condition 2 Interpretation included	Annual Mean	Overall Compliance (Pass/Fail)
Total Nitrogen mg/l	N/A	N/A	N/A	12	N/A	N/A	16	
Conductivity @20°C µS/cm	N/A	N/A	N/A	11	N/A	N/A	1127	

Notes:
1 – This represents the Emission Limit Values after the Interpretation provided for under Condition 2 of the licence is applied
2 – For pH the WWDA specifies a range of pH 6 - 9

Cause of Exceedance(s):

Not applicable

Significance of Results:

The WWTP is compliant with the ELV's set in the Wastewater Discharge Licence.

2.1.2 (B) EFFLUENT MONITORING SUMMARY - TPEFF3900D0178SW003

Parameter	WWDL ELV (Schedule A)	ELV with Condition 2 Interpretation included [Note 1]	Interim % reduction from influent concentration	Number of sample results	Number of exceedances	Number of exceedances with Condition 2 Interpretation included	Annual Mean	Overall Compliance (Pass/Fail)
COD-Cr mg/l	125	250	N/A	12	N/A	N/A	8.06	Pass
BOD, 5 days with Inhibition (Carbonaceous) mg/l	8	16	N/A	12	N/A	N/A	1.521	Pass
Suspended Solids mg/l	25	62.5	N/A	12	N/A	N/A	3.621	Pass
pH pH units	6	9	N/A	12	N/A	N/A	7.4	Pass
Total Phosphorus (as P) mg/l	2	2.4	N/A	12	N/A	N/A	0.049	Pass
Ammonia-Total (as N) mg/l	0.4	0.8	N/A	12	N/A	N/A	0.042	Pass
ortho-Phosphate (as P) - unspecified mg/l	0.25	0.5	N/A	12	N/A	N/A	0.113	Pass

Notes:
1 – This represents the Emission Limit Values after the Interpretation provided for under Condition 2 of the licence is applied
2 – For pH the WWDA specifies a range of pH 6 - 9

Cause of Exceedance(s):

Not applicable

Significance of Results:

The WWTP secondary discharge (SW003) is compliant with the ELV's set in the Wastewater Discharge Licence.

2.1.3 AMBIENT MONITORING SUMMARY FOR THE TREATMENT PLANT DISCHARGE TPEFF3900D0178SW001 & TPEFF3900D0178SW003

A summary of monitoring from ambient monitoring points associated with the wastewater discharge is provided in the sections below. For discharges to rivers upstream (U/S) and downstream (D/S) location data is provided. For other ambient points in lakes, coastal or transitional waters, monitoring data from the most appropriate monitoring station is selected.

The table below provides details of ambient monitoring locations and details of any designations as sensitive areas.

Ambient Monitoring Point from WWDL (or as agreed with EPA)	Irish Grid Reference	River Station Code	Bathing Water	Drinking Water	FWPM	Shellfish	WFD Ecological Status
Upstream	263312, 205758	RS14B011260	No	No	No	No	Good
Downstream	263682, 201768	RS14B011400	No	No	No	No	Good
Downstream	263419, 205468	RS14B011310	No	No	No	No	Good

The results for ambient results and / or additional monitoring data sets are included in the **Appendix 7.1 - Ambient Monitoring Summary.**

Significance of Results:

SW001

The WWTP discharge was compliant with the ELV's set in the wastewater discharge licence.

The ambient monitoring results do not meet the required EQS at the downstream monitoring location. The EQS relates to the Oxygenation and Nutrient Conditions set out in the Surface Water Regulations 2009.

Based on ambient monitoring results a deterioration in Ortho-P and Ammonia concentrations downstream of the effluent discharge is noted.

A deterioration in water quality has been identified, however it is not known if it is or is not caused by the WWTP.

Other causes of deterioration in water quality in the area are unknown.

The discharge from the wastewater treatment plant does not have an observable negative impact on the Water Framework Directive status.

SW003

The WWTP discharge was compliant with the ELV's set in the wastewater discharge licence.

The ambient monitoring results do not meet the required EQS at the upstream monitoring location. The EQS relates to the Oxygenation and Nutrient Conditions set out in the Surface Water Regulations 2009.

Based on ambient monitoring results a deterioration in Ortho-P and Ammonia concentrations downstream of the effluent discharge is noted.

A deterioration in water quality has been identified, however it is not known if it is or is not caused by the WWTP.

Other causes of deterioration in water quality in the area are unknown.

The secondary discharge from the wastewater treatment plant does not have an observable negative impact on the Water Framework Directive status.

2.1.4 OPERATIONAL PERFORMANCE SUMMARY - KILDARE TOWN WWTP

2.1.4.1 Treatment Efficiency Report - Kildare Town WWTP

Treatment efficiency is based on the removal of key pollutants from the influent wastewater by the treatment plant. In essence the calculation is based on the balance of load coming into the plant versus the load leaving the plant. The efficiency is presented as a percentage removal rate.

A summary presentation of the efficiency of the treatment process including information for all the parameters specified in the licence is included below:

Parameter	Influent mass loading (kg/year)	Effluent mass emission (kg/year)	Efficiency (% reduction of influent load)
cBOD	230770	1796	99
SS	269339	4102	98
TP	7877	210	97
TN	45947	12777	72
COD	605276	19080	97

Note: The above data is based on sample results for the number of dates reported.

2.1.4.2 Treatment Capacity Report Summary - Kildare Town WWTP

Treatment capacity is an assessment of the hydraulic (flow) and organic (the amount of pollutants) load a treatment plant is designed to treat versus the current loading of that plant.

Kildare Town WWTP	
Peak Hydraulic Capacity (m^3/day) - As Constructed	9450
DWF to the Treatment Plant (m^3/day)	3150
Current Hydraulic Loading - annual max (m^3/day)	5640
Average Hydraulic loading to the Treatment Plant (m^3/day)	2379
Organic Capacity (PE) - As Constructed	28000
Organic Capacity (PE) - Collected Load (peak week)[Note1]	12754
Organic Capacity (PE) - Remaining	15246
Will the capacity be exceeded in the next three years? (Yes/No)	No

Nominal design capacities can be based on conservative design principles. In some cases assessment of existing plants has shown organic capacities significantly higher than the nominal design capacity. Accordingly plants that appear to be overloaded when comparing a collected peak load with the nominal design capacity can be fully compliant due to the safety factors in the original design.

2.1.5 SLUDGE / OTHER INPUTS - KILDARE TOWN WWTP

'Other inputs' to the waste water treatment plant are summarised in table below

Input type	Quantity	Unit	P.E.	% of load to WWTP	Included in Influent Monitoring (Y/N)?	Is there a leachate/sludge acceptance procedure for the WWTP?	Is there a dedicated leachate/sludge acceptance facility for the WWTP? (Y/N)
There is no Sludge and Other Input data for the Treatment Plant included in the AER.							

3 COMPLAINTS AND INCIDENTS

3.1 COMPLAINTS SUMMARY

A summary of complaints of an environmental nature related to the discharge(s) to water from the WWTP and network is included below.

Number of Complaints	Nature of Complaint	Number Open Complaints	Number Closed Complaints
There were no relevant environmental complaints in 2024.			

3.2 REPORTED INCIDENTS SUMMARY

Environmental incidents that arise in an agglomeration are reported on an on-going basis in accordance with our waste water discharge licences. Where an incident occurs and it is reportable under the licence, it is reported to the Environmental Protection Agency through their Environmental Data Exchange Network, or in some instances by telephone. Some incidents which arise in the agglomeration are recorded by Uisce Éireann but may not be reportable under our licence for example where the incident does not have an impact on environmental performance.

A summary of reported incidents is included below.

3.2.1 SUMMARY OF INCIDENTS

Incident Type	Cause	Recurring (Y/N)	Closed (Y/N)
There were no reportable incidents in 2024.			

3.2.2 SUMMARY OF OVERALL INCIDENTS

Question	Answer
Number of Incidents in 2024	0
Number of Incidents reported to the EPA via EDEN in 2024	0
Explanation of any discrepancies between the two numbers above	N/A

4 INFRASTRUCTURAL ASSESSMENTS AND PROGRAMME OF IMPROVEMENTS

4.1 STORM WATER OVERFLOW IDENTIFICATION AND INSPECTION REPORT

A summary of the operation of the storm water overflows and their significance where known is included below:

4.1.1 SWO IDENTIFICATION

WWDL Name / Code for Storm Water Overflow (chamber) where applicable	Irish Grid Ref. (outfall)	Included in Schedule of the WWDL	Significance of the overflow(High / Medium / Low)	Assessed against DoEHLG Criteria	No. of times activated in 2024 (No. of events)	Total volume discharged in 2024 (m^3)	Monitoring Status
SW002	273410, 210764	Yes	Medium Significance	Meeting Criteria	6	1200	Monitored
TBC	272422, 211261	Yes	Medium Significance	Meeting Criteria	Unknown	Unknown	Not Monitored

The contents presented in this table include the most up to date information available at the time of writing. Any TBC SWO(s) were identified as part of the on-going National SWO programme and will be updated in subsequent AER(s) once the information is confirmed.

SWO Summary	
How much wastewater discharge by metered SWOs during the year (m^3)?	1200
Is each SWO identified as not meeting DoEHLG Guidance included in the Programme of Improvements?	N/A
The SWO Assessment included the requirements of relevant of WWDL schedules?	Yes
Have the EPA been advised of any additional SWOs / changes to Schedule C3 and A4 under Condition 1.7?	No

4.2 REPORT ON PROGRESS MADE AND PROPOSALS BEING DEVELOPED TO MEET THE IMPROVEMENT PROGRAMME REQUIREMENTS

4.2.1 SPECIFIED IMPROVEMENT PROGRAMME SUMMARY

A wastewater discharge licence may require a number of reports on specific subject areas to be prepared for the agglomeration in question. These reports are submitted to the EPA as part of the Annual Environmental Report. This section provides a list of the various reports required for this agglomeration and a brief summary of their recommendations.

Specified Improvement Programmes (under Schedule A and C of WWDL)	Description	Licence Schedule	Licence Completion Date	Date Expired? (N/NA/Y)	Status of Works	Timeframe for Completing the Work	Comments
D0178-SIP:01	Complete improvements to comply with ELVs specified in Schedule A.2: Secondary Waste Water discharge(s) & Monitoring. Implement, in accordance with Condition 5.4.2, either (a) an alternative secondary discharge point, or (b) an alternative means of managing the existing waste water discharge volume and quality during periods of low flow in the receiving water.	C	22/12/2019	Yes	Not Started		

A summary of the status of any other improvements identified by under Condition 5 assessments- is included below.

4.2.2 IMPROVEMENT PROGRAMME SUMMARY

Improvement Identifier	Improvement Description / or any Operational Improvements	Improvement Source	Expected Completion Date	Comments
No additional improvements planned at this time.				

4.2.3 SEWER INTEGRITY RISK ASSESSMENT

The utilisation of multiple capital maintenance programmes and the outputs of the workshops with the Local Authority Operations Staff held under the programme can be used to satisfy the requirements of Condition 5 regarding network integrity. Improvement works identified by way of these programmes and workshops will be included in the Improvements Summary Tables 4.2.1 and 4.2.2.

5 LICENCE SPECIFIC REPORTS

A wastewater discharge licence may require a number of reports on specific subject areas to be prepared for the agglomeration in question. These reports are submitted to the EPA as part of the Annual Environmental Report. This section provides a list of the various reports required for this agglomeration and a brief summary of their recommendations.

Licence Specific Report	Required by licence	Included in this AER
D0178-01-Priority Substances Assessment	Yes	No

6 CERTIFICATION AND SIGN OFF

6.1 SUMMARY OF AER CONTENTS

Parameter	Answer
Does the AER include an Executive Summary?	Yes
Does the AER include an assessment of the performance of the Waste Water Works (i.e. have the results of assessments been interpreted against WWDL requirements and or Environmental Quality Standards)?	Yes
Is there a need to advise the EPA for Consideration of a Technical Amendment/Review of the Licence?	No
List reason e.g. additional SWO identified	N/A
Is there a need to request/advise the EPA of any modification to the existing WWDL with respect to condition 4 changes to monitoring location, frequency etc	Yes
List reason e.g. changes to monitoring requirements	Ambient Monitoring Location Changes
Have these processes commenced?	No
Are all outstanding reports and assessments from previous AERs included as an appendix to this AER	N/A

I certify that the information given in this Annual Environmental Report is truthful, accurate and complete:

Date: 26/04/2025

This AER has been produced by Uisce Éireann's Environmental Information System (EIMS) and has been electronically signed off in that system for and on behalf of,

Eleanor Roche

Head of Environmental Regulation.

7 APPENDIX

Appendix
Appendix 7.1 - Ambient Monitoring Summary

Kildare Town Ambient Monitoring Summary 2024 – SW001 – Primary Discharge

			Receiving Waters Designation (Yes/No)					Mean (mg/l)		
Ambient Monitoring Point from WWDL (or as agreed with EPA)	**Irish National Grid Reference (Easting, Northing)**	**EPA Feature Coding Tool code**	**Bathing Water**	**Drinking Water**	**FWPM**	**Shellfish**	**Current WFD Status**	**cBOD**	**o-Phosphate (as P)**	**Ammonia (as N)**
Upstream Monitoring Point	263312, 205758	RS14B011260	No	No	No	No	Good	1.401	0.029	0.041
Downstream Monitoring Point	263419, 205468	RS14B011310	No	No	No	No	Good	1.340	0.032	0.069
Difference								*-0.062*	*0.003*	*0.028*
EQS								1.500	0.035	0.065
% of EQS								-4.103%	8.556%	43.347%

Kildare Town Ambient Monitoring Summary 2024 – SW003 – Secondary Discharge

			Receiving Waters Designation (Yes/No)					Mean (mg/l)		
Ambient Monitoring Point from WWDL (or as agreed with EPA)	**Irish National Grid Reference (Easting, Northing)**	**EPA Feature Coding Tool code**	**Bathing Water**	**Drinking Water**	**FWPM**	**Shellfish**	**Current WFD Status**	**cBOD**	**o-Phosphate (as P)**	**Ammonia (as N)**
Upstream Monitoring Point	273451, 210890	RS14T020100	No	No	No	No	Poor	2.124	0.008	0.029
Downstream Monitoring Point	273420, 210441	RS14T020200	No	No	No	No	Poor	1.423	0.009	0.034
Difference								*-0.701*	*0.001*	*0.006*
EQS								1.500	0.035	0.065
% of EQS								-46.710%	2.597%	9.006%

Kildare Town Ambient Monitoring Summary 2023 – SW001

Upstream Results						
Station Name	Sample Date	BOD mg/ l	Suspended solids mg/l	Total Phosphorus mg/l	Ammonia mg/l	Ortho-Phosphate mg/l
Upstream	18/01/2024	1	<5	0.04	0.08	<0.05
Upstream	22/02/2024	1.5	<5		<0.05	<0.05
Upstream	21/03/2024	1.3	6	0.65	<0.05	<0.05
Upstream	25/04/2024	1.1	9	0.04	0.024	0.027
Upstream	23/05/2024	<1	<5	0.02	0.021	0.012
Upstream	27/06/2024	2.1	<5	0.02	<0.01	<0.01
Upstream	25/07/2024	1.3	<5	0.04	0.014	0.02
Upstream	22/08/2024	1.2	<5	0.03	0.018	<0.01
Upstream	19/09/2024	1.4	10	<0.02	0.012	0.01
Upstream	24/10/2024	1.1	<5	0.09	0.043	0.07
Upstream	21/11/2024	2.7	9	0.1	0.106	0.046
Upstream	06/12/2024	2.1	<5	0.02	<0.05	<0.05
Upstream	12/12/2024	<1	<5	0.04	0.098	<0.05
	Mean	**1.401**	**5.063**	**0.092**	**0.041**	**0.029**
	95%ile	**2.340**	**9.400**	**0.348**	**0.101**	**0.056**

Downstream Results						
Station Name	Sample Date	BOD mg/ l	Suspended solids mg/l	Total Phosphorus mg/l	Ammonia mg/l	Ortho-Phosphate mg/l
Downstream	18/01/2024	1	<5	0.04	<0.05	<0.05
Downstream	22/02/2024	1.3	<5	n/a	<0.05	<0.05
Downstream	21/03/2024	1.3	6	0.05	<0.05	<0.05
Downstream	25/04/2024	1	7	0.04	0.093	0.024
Downstream	23/05/2024	<1	<5	0.02	0.022	0.012
Downstream	27/06/2024	1.8	<5	0.02	0.01	<0.01
Downstream	25/07/2024	1.7	<5	0.12	0.29	0.096
Downstream	22/08/2024	1.1	<5	0.07	0.019	0.01
Downstream	19/09/2024	1.4	<5	<0.02	0.058	0.013
Downstream	24/10/2024	1	<5	0.04	0.045	0.03
Downstream	21/11/2024	2.8	11	0.1	0.116	0.046
Downstream	06/12/2024	1.6	<5	0.03	<0.05	<0.05
Downstream	12/12/2024	<1	5	0.04	0.101	<0.05
	Mean	**1.340**	**4.678**	**0.049**	**0.069**	**0.032**
	95%ile	**2.200**	**8.600**	**0.109**	**0.186**	**0.066**

Note 1: Where the concentration in the result is less than the limit of detection (LOD), a value of LOD/sqrt(2) was used in calculating the mean and 95%ile concentrations.

Note 2: There is no Temperature or pH monitoring undertaken U/S or D/S of SW001 as confirmed with UÉ.

Kildare Town Ambient Monitoring Summary 2023 – SW003

Upstream Results									
Station Name	Sample Date	Temperature ° C	pH (Units)	BOD mg/ l	Suspended solids mg/l	Total Phosphorus mg/l	Ammonia mg/l	Ortho-Phosphate mg/l	DO mg/l
Upstream	27/03/2024	8.9	7.4	<1	4	0.09	< 0.015	< 0.01	9.57
Upstream	16/04/2024	8.9	7.5	< 1	3	< 0.05	< 0.015	< 0.01	6.86
Upstream	10/05/2024	14.4	7.5	<1	<2	<0.050	0.035	<0.010	7.33
Upstream	21/06/2024	15	7.4	1	< 2	< 0.05	<0.015	<0.010	7.25
Upstream	09/07/2024	13		< 1	< 2	0.07	< 0.015	< 0.01	7.25
Upstream	25/07/2024	14.3	8	<1	<2	<0.050	<0.015	<0.010	7.37
Upstream	20/08/2024	15.2	7.4	< 1	< 2	0.17	0.027	< 0.01	7.63
Upstream	19/09/2024	12.8	7.4	<1	3	<0.05	0.028	<0.01	6.84
Upstream	24/10/2024	13	7	16	<2	<0.05	0.15	0.02	9.37
Upstream	14/11/2024	10.6	7.5	<1	<2	<0.050	<0.015	<0.010	8.71
Upstream	12/12/2024	7.9	7.5	<1	2	<0.05	<0.015	<0.01	10.93
	Mean	**12.182**	**7.460**	**2.124**	**1.991**	**0.056**	**0.029**	**0.008**	**9.135**
	95%ile	**15.100**	**7.775**	**8.500**	**3.500**	**0.130**	**0.093**	**0.014**	**10.250**

Downstream Results									
Station Name	Sample Date	Temperature ° C	pH (Units)	BOD mg/ l	Suspended solids mg/l	Total Phosphorus mg/l	Ammonia mg/l	Ortho-Phosphate mg/l	DO mg/l
Downstream	27/03/2024	9.1	7.4	<1	5	<0.050	<0.015	<0.010	10.09
Downstream	16/04/2024	8.9	7.5	<1	4	<0.050	0.023	<0.010	6.8
Downstream	10/05/2024	13.5	7.3	< 1	2	<0.050	0.039	<0.010	6.92
Downstream	21/06/2024	15.2	7.4	1	2	< 0.05	<0.015	<0.010	6.9
Downstream	09/07/2024	13.2		8	3	0.11	< 0.015	< 0.01	8.15
Downstream	25/07/2024	14.9	7.4	<1	3	0.05	<0.015	<0.010	6.97
Downstream	20/08/2024	14.1	7.4	< 1	2	0.09	0.067	< 0.01	7.74
Downstream	19/09/2024	13.5	7.3	<1	<2	<0.05	0.016	<0.01	6.84
Downstream	24/10/2024	12.9	7	1	<2	<0.05	0.17	0.03	8.61
Downstream	14/11/2024	10.8	7.5	<1	2	<0.050	<0.015	<0.010	9.78
Downstream	12/12/2024	8.2	7.5	<1	<2	<0.05	<0.015	<0.01	11.26
	Mean	**12.209**	**7.370**	**1.423**	**2.477**	**0.048**	**0.034**	**0.009**	**8.187**
	95%ile	**15.050**	**7.500**	**4.500**	**4.500**	**0.100**	**0.119**	**0.019**	**10.675**

Note: Where the concentration in the result is less than the limit of detection (LOD), a value of LOD/sqrt(2) was used in calculating the mean and 95%ile concentration.

For SW003 – only 11 samples were taken in 2024.