Annual Environmental Report

2024

Tralee

D0040-01

CONTENTS

1 EXECUTIVE SUMMARY AND INTRODUCTION TO THE 2024 AER

This Annual Environmental Report has been prepared for D0040-01, Tralee, in Kerry 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 major capital or operational changes undertaken.

1.2 TREATMENT SUMMARY

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

- Tralee WWTP with a Plant Capacity PE of 50333, the treatment type is 3NP - Tertiary N&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
TPEFF1300D0040SW001	Tralee WWTP	Treated	Non-Compliant	Ammonia-Total (as N) mg/l Total Phosphorus (as P) mg/l

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 TRALEE WWTP - TREATED DISCHARGE

2.1.1 INFLUENT MONITORING SUMMARY - TRALEE 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
Ammonia-Total (as N) mg/l	26	26	14
Total Phosphorus (as P) mg/l	25	9.60	3.31
Total Nitrogen mg/l	24	76	21
pH pH units	26	7.70	7.44
ortho-Phosphate (as P) - unspecified mg/l	2	1.09	0.813
Suspended Solids mg/l	26	239	123
COD-Cr mg/l	26	608	289
BOD, 5 days with Inhibition (Carbonaceo mg/l	26	365	128
Hydraulic Capacity	N/A	14370	8477

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'.

2.1.2 EFFLUENT MONITORING SUMMARY - TPEFF1300D0040SW001

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	26	1	N/A	43	Pass
Suspended Solids mg/l	35	87.5	N/A	26	2	N/A	17	Pass
BOD, 5 days with Inhibition (Carbonaceo mg/l	25	50	N/A	26	N/A	N/A	5.06	Pass
Total Nitrogen mg/l	15	18	N/A	26	3	N/A	8.52	Pass
Total Oxidised Nitrogen (as N) mg/l	15	18	N/A	26	N/A	N/A	5.55	Pass
pH pH units	9	9	N/A	26	N/A	N/A	7.68	Pass
Ammonia-Total (as N) mg/l	5	6	N/A	26	1	1	1.08	Fail

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 Phosphorus (as P) mg/l	2	2.4	N/A	26	1	1	0.600	Fail
Faecal coliforms no./100mls	N/A	N/A	N/A	5	N/A	N/A	346	
Visual Inspection Descriptive	N/A	N/A	N/A	26	N/A	N/A	N/A	
ortho-Phosphate (as P) - unspecified mg/l	N/A	N/A	N/A	26	N/A	N/A	0.238	
Salinity 0/oo	N/A	N/A	N/A	1	N/A	N/A	0.100	
Alkalinity-total (as CaCO3) mg/l	N/A	N/A	N/A	1	N/A	N/A	145	
Salinity(Lab) 0/oo	N/A	N/A	N/A	2	N/A	N/A	2.88	
E. Coli no./100mls	N/A	N/A	N/A	5	N/A	N/A	490	

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)
Enterococci (Intestinal) no./100mls	N/A	N/A	N/A	5	N/A	N/A	437	
Conductivity @20°C µS/cm	N/A	N/A	N/A	18	N/A	N/A	1877	

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):

Refer to Incident Section of Report

Significance of Results:

The WWTP is non compliant with the ELV's set in the Wastewater Discharge Licence. The impact on receiving waters is assessed further in Section 2.

2.1.3 AMBIENT MONITORING SUMMARY FOR THE TREATMENT PLANT DISCHARGE TPEFF1300D0040SW001

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	81255, 113045	TW13004117LT1001	No	No	No	Yes	Moderate
Downstream	79826, 113892	TW13004117LT1002	No	No	No	Yes	Moderate
Downstream	79796, 113503	TW13004117LT1003	No	No	No	Yes	Moderate

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

Significance of Results:

The coastal/transitional ambient monitoring results meet the required EQS. The EQS relates to the Oxygenation and Nutrient Conditions set out in the Surface Water Regulations 2009.

The WWTP discharge was not compliant with the ELV's set in the wastewater discharge licence for the following: Ammonia-Total (as N) mg/l, Total Phosphorus (as P) mg/l.

Based on ambient monitoring results a deterioration in TW13004117LT1002: pH, Salinity, Salinity (Lab), Temperature, Total Phosphorus TW13004117LT1003: E. Coli, Faecal Coliforms, pH, Salinity (Lab), Temperature, Total Nitrogen, Total Phosphorus, concentrations downstream of the effluent discharge is noted.

A deterioration in water quality has been identified, however it is not known if it 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.

The discharge from the wastewater treatment plant does have an observable impact on the designated shellfish water quality.

The discharge from the wastewater treatment plant does have an observable impact on the coastal/transitional water quality.

2.1.4 OPERATIONAL PERFORMANCE SUMMARY - TRALEE WWTP

2.1.4.1 Treatment Efficiency Report - Tralee 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)
SS	365727	50326	86
cBOD	380082	15211	96
COD	859947	128242	85
TN	62444	25610	59
TP	9672	1806	81

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

2.1.4.2 Treatment Capacity Report Summary - Tralee 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.

Tralee WWTP	
Peak Hydraulic Capacity (m^3/day) - As Constructed	19050
DWF to the Treatment Plant (m^3/day)	6350
Current Hydraulic Loading - annual max (m^3/day)	14370

Tralee WWTP	
Average Hydraulic loading to the Treatment Plant (m^3/day)	8477
Organic Capacity (PE) - As Constructed	50333
Organic Capacity (PE) - Collected Load (peak week)[Note1]	34484
Organic Capacity (PE) - Remaining	15849
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 - TRALEE 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)
Landfill Leachate (delivered by tanker)	23648	Volume (m3)	50333	0.57	Yes	Yes	No
Domestic /Septic Tank Sludge	2113	Volume (m3)	50333	0.05	Yes	Yes	No
Domestic /Septic Tank Sludge	7566	Volume (m3)	50333	0.18	Yes	Yes	No
Domestic /Septic Tank Sludge	3837	Volume (m3)	50333	0.09	Yes	Yes	No

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)
Uncontrolled release	Plant or equipment breakdown at WWTP	No	No
Uncontrolled release	Broken Sewer Pipe	No	No
Breach of ELV	WWTP not designed for P removal	Yes	No

3.2.2 SUMMARY OF OVERALL INCIDENTS

Question	Answer
Number of Incidents in 2024	3
Number of Incidents reported to the EPA via EDEN in 2024	3
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 (m3)	Monitoring Status
SW002	80323, 113892	Yes	Medium Significance	Not Meeting Criteria	Unknown	2227303	Monitored
SW003	84956, 115882	Yes	Low Significance	Not Meeting Criteria	Unknown	Unknown	Not Monitored
SW004	84259, 115115	Yes	Low Significance	Not Meeting Criteria	Unknown	Unknown	Not Monitored
SW005	84503, 115396	Yes	Low Significance	Not Meeting Criteria	Unknown	Unknown	Not Monitored
SW006	84038, 114834	Yes	Low Significance	Meeting Criteria	Unknown	Unknown	Not Monitored
SW007	84078, 113569	Yes	Low Significance	Not Meeting Criteria	Unknown	Unknown	Not Monitored

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 (m3)	Monitoring Status
SW008	84109, 113554	Yes	Low Significance	Not Meeting Criteria	Unknown	Unknown	Not Monitored
SW009	82996, 113738	Yes	Low Significance	Meeting Criteria	Unknown	Unknown	Not Monitored
SW010	81559, 113113	Yes	Low Significance	Not Meeting Criteria	Unknown	Unknown	Not Monitored
SW012	80323, 113892	Yes	Medium Significance	Meeting Criteria	Unknown	Unknown	Monitored
TBC	83932, 114685	No	Low Significance	Meeting Criteria	Unknown	Unknown	Not Monitored
TBC	83885, 114619	No	Low Significance	Meeting Criteria	Unknown	Unknown	Not Monitored
TBC	84503, 115396	No	Low Significance	Not Meeting Criteria	Unknown	Unknown	Not Monitored
TBC	84503, 115396	No	Low Significance	Not Meeting Criteria	Unknown	Unknown	Not Monitored
TBC	83659, 114387	No	Low Significance	Meeting Criteria	Unknown	Unknown	Not Monitored
TBC	83864, 114603	No	Low Significance	Meeting Criteria	Unknown	Unknown	Not Monitored

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 (m3)	Monitoring Status
TBC	83456, 114419	No	Low Significance	Not Meeting Criteria	Unknown	Unknown	Not Monitored
TBC	83484, 114614	No	Low Significance	Not Meeting Criteria	Unknown	Unknown	Not Monitored
TBC	83420, 114445	No	Low Significance	Not Meeting Criteria	Unknown	Unknown	Not Monitored
TBC	83506, 115350	No	Low Significance	Meeting Criteria	Unknown	Unknown	Not Monitored
TBC	83349, 115336	No	Low Significance	Meeting Criteria	Unknown	Unknown	Not Monitored
TBC	83208, 115232	No	Low Significance	Not Meeting Criteria	Unknown	Unknown	Not Monitored
TBC	83296, 114654	No	Low Significance	Meeting Criteria	Unknown	Unknown	Not Monitored
TBC	84705, 113240	No	Low Significance	Not Meeting Criteria	Unknown	Unknown	Not Monitored
TBC	84096, 113562	No	Low Significance	Not Meeting Criteria	Unknown	Unknown	Not Monitored
TBC	83437, 113587	No	Low Significance	Not Meeting Criteria	Unknown	Unknown	Not Monitored

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 (m3)	Monitoring Status
TBC	83122, 113687	No	Low Significance	Meeting Criteria	Unknown	Unknown	Not Monitored
TBC	83301, 113613	No	Low Significance	Meeting Criteria	Unknown	Unknown	Not Monitored
TBC	83212, 113901	No	Low Significance	Meeting Criteria	Unknown	Unknown	Not Monitored
TBC	83748, 113699	No	Low Significance	Not Meeting Criteria	Unknown	Unknown	Not Monitored
TBC	84605, 113230	No	Low Significance	Meeting Criteria	Unknown	Unknown	Not Monitored
TBC	83618, 114220	No	Low Significance	Meeting Criteria	Unknown	Unknown	Not Monitored
TBC	83196, 114796	No	Low Significance	Meeting Criteria	Unknown	Unknown	Not Monitored
TBC	83416, 114345	No	Low Significance	Not Meeting Criteria	Unknown	Unknown	Not Monitored
TBC	82747, 113832	No	Low Significance	Meeting Criteria	Unknown	Unknown	Not Monitored
TBC	81396, 113107	No	Low Significance	Meeting Criteria	Unknown	Unknown	Not Monitored

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 (m3)	Monitoring Status
TBC	84038, 114834	No	Low Significance	Meeting Criteria	Unknown	Unknown	Not Monitored
TBC	83209, 113896	No	Low Significance	Meeting Criteria	Unknown	Unknown	Not Monitored
TBC	83682, 114384	No	Low Significance	Not 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 (m3)?	2227303
Is each SWO identified as not meeting DoEHLG Guidance included in the Programme of Improvements?	Yes
The SWO Assessment included the requirements of relevant of WWDL schedules?	No
Have the EPA been advised of any additional SWOs / changes to Schedule C3 and A4 under Condition 1.7?	N/A

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
D0040-SIP:01	Upgrade all stormwaters overflow to comply with criteria outlined in the DoECLG document "Procedures and criteria in relation to stormwater overflows" (1995)	C	31/12/2015	Yes	At Planning Stage	2035	DAP to be completed 2024

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
D0040-01-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?	N/A
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	N/A
List reason e.g. changes to monitoring requirements	N/A
Have these processes commenced?	N/A
Are all outstanding reports and assessments from previous AERs included as an appendix to this AER	No

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

Signed: Date: 10/07/2025

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

Ambient Points

Ambient Monitoring Point from WWDL (or as agreed with EPA)	*Irish Grid Reference*	EPA Feature Coding Tool code	Receiving Waters Designation (Y/N)				WFD Status
			Bathing Water	Drinking Water	FWPM	Shellfish	
TW13004117LT1001	81255, 113045	TPEFF1300D0040SW001	No	No	No	Yes	Moderate
TW13004117LT1002	79826, 113892	TPEFF1300D0040SW001	No	No	No	Yes	Moderate
TW13004117LT1003	79796, 113503	TPEFF1300D0040SW001	No	No	No	Yes	Moderate

Ambient Impact Assessment Table

Parameter Name	Upstream Monitoring Point Location	Upstream Monitoring Point Annual Mean	Downstream Monitoring Point Location	Downstream Monitoring Point Annual Mean	EQS (Mean)	%EQS
Ammonia-Total (as N) mg/l	TW13004117LT1001	0.266	TW13004117LT1002	0.223		
Ammonia-Total (as N) mg/l	TW13004117LT1001	0.266	TW13004117LT1003	0.176		
Dissolved Oxygen % Saturation	TW13004117LT1001	98.817	TW13004117LT1002	98.629	70 -130	-0.2
Dissolved Oxygen % Saturation	TW13004117LT1001	98.817	TW13004117LT1003	97.886	70 - 130	-0.9
Dissolved Oxygen mg/l	TW13004117LT1001	9.383	TW13004117LT1002	9.229		
Dissolved Oxygen mg/l	TW13004117LT1001	9.383	TW13004117LT1003	9.229		
E. Coli no./100mls	TW13004117LT1001	1207.036	TW13004117LT1002	922.018		
E. Coli no./100mls	TW13004117LT1001	1207.036	TW13004117LT1003	6082.786		
Enterococci (Intestinal) no./100mls	TW13004117LT1001	10221.363	TW13004117LT1002	412.518		
Enterococci (Intestinal) no./100mls	TW13004117LT1001	10221.363	TW13004117LT1003	8568.846		
Faecal coliforms no./100mls	TW13004117LT1001	1243.000	TW13004117LT1002	764.500		
Faecal coliforms no./100mls	TW13004117LT1001	1243.000	TW13004117LT1003	2631.500		
ortho-Phosphate (as P) – unspecified mg/l	TW13004117LT1001		TW13004117LT1003	0.028	0.06	
pH pH units	TW13004117LT1001	8.000	TW13004117LT1002	8.071		

pH pH units	TW13004117LT1001	8.000	TW13004117LT1003	8.071		
Salinity 0/oo	TW13004117LT1001	28.500	TW13004117LT1002	29.900		
Salinity 0/oo	TW13004117LT1001	28.500	TW13004117LT1003	26.500		
Salinity(Lab) 0/oo	TW13004117LT1001	31.500	TW13004117LT1002	32.800		
Salinity(Lab) 0/oo	TW13004117LT1001	31.500	TW13004117LT1003	31.900		
Temperature °C	TW13004117LT1001	14.850	TW13004117LT1002	15.329		
Temperature °C	TW13004117LT1001	14.850	TW13004117LT1003	15.329		
Total Nitrogen mg/l	TW13004117LT1001	0.585	TW13004117LT1002	0.453		
Total Nitrogen mg/l	TW13004117LT1001	0.585	TW13004117LT1003	0.615		
Total Oxidised Nitrogen (as N) mg/l	TW13004117LT1001	0.056	TW13004117LT1002	0.045		
Total Oxidised Nitrogen (as N) mg/l	TW13004117LT1001	0.056	TW13004117LT1003	0.056		
Total Phosphorus (as P) mg/l	TW13004117LT1001	0.254	TW13004117LT1002	0.212		
Total Phosphorus (as P) mg/l	TW13004117LT1001	0.254	TW13004117LT1003	0.226		

Ambient Data Tables

Monitored Entity	Station	Monitoring Point	Sample date	Ammonia-Total (as N) mg/l	Dissolved Oxygen % Saturation	Dissolved Oxygen mg/l	E. Coli no./100mls	Enterococci (Intestinal) no./100mls	Faecal coliforms no./100mls	pH pH units	Salinity 0/oo	Salinity(Lab) 0/oo	Temperature °C	Total Nitrogen mg/l	Total Oxidised Nitrogen (as N) mg/l	Total Phosphorus (as P) mg/l
Lee K Estruary	TW13004117 LT1001	Upstream	06/06/2024	<0.035	108.6	10.9	<10	<10	97	8.2			15.7	<0.5	<0.020	0.04
Lee K Estruary	TW13004117 LT1001	Upstream	23/07/2024	0.55	104.5	9	<10	<10	86	8.2			18	<0.5	0.05	<0.040
Lee K Estruary	TW13004117 LT1001	Upstream	20/08/2024	<0.035	104.2	9.8				8.1			16	0.6	<0.020	<0.040
Lee K Estruary	TW13004117 LT1001	Upstream	17/10/2024	<0.035	105.9	9.7	3255	>24196	3	7.8		31.5	14.2	0.6	0.04	0.08
Lee K Estruary	TW13004117 LT1001	Upstream	14/11/2024	0.054	89.1	9.4				7.8			16.5	0.7	0.14	1.32
Lee K Estruary	TW13004117 LT1001	Upstream	16/12/2024	<0.035	80.6	7.5	1559	6653	4786	7.9	28.5		8.7	0.9	0.08	<0.040
			Mean	0.266	98.817	9.383	1207.036	10221.363	1243.000	8.000	28.500	31.500	14.850	0.585	0.056	0.254

Monitored Entity	Station	Monitoring Point	Sample date	Ammonia-Total (as N) mg/l	Dissolved Oxygen % Saturation	Dissolved Oxygen mg/l	E. Coli no./100mls	Enterococci (Intestinal) no./100mls	Faecal coliforms no./100mls	pH pH units	Salinity 0/oo	Salinity(Lab) 0/oo	Temperature °C	Total Nitrogen mg/l	Total Oxidised Nitrogen (as N) mg/l	Total Phosphorus (as P) mg/l
Lee K Estruary	TW13004117 LT1002	Downstream	06/06/2024	<0.035	105.9	10.1	<10	<10	20	8.3			16	<0.5	<0.020	<0.040
Lee K Estruary	TW13004117 LT1002	Downstream	23/07/2024	<0.035	104.2	9	108	41	84	8.2			18	<0.5	<0.020	<0.040
Lee K Estruary	TW13004117 LT1002	Downstream	20/08/2024	<0.035	103.2	9.7				8.2			16.2	<0.5	<0.020	<0.040
Lee K Estruary	TW13004117 LT1002	Downstream	19/09/2024	<0.035	100.9	9				8.1			17.7	<0.5	<0.020	<0.040
Lee K Estruary	TW13004117 LT1002	Downstream	17/10/2024	<0.035	103.7	9.9	2613	73	2187	8		32.8	14.2	<0.5	0.04	0.07
Lee K Estruary	TW13004117 LT1002	Downstream	14/11/2024	0.078	89.9	9.5				7.8			16.1	0.6	0.13	1.27
Lee K Estruary	TW13004117 LT1002	Downstream	16/12/2024	<0.035	82.6	7.4	960	1529	767	7.9	29.9		9.1	0.8	0.09	<0.040
			Mean	0.223	98.629	9.229	922.018	412.518	764.500	8.071	29.900	32.800	15.329	0.453	0.045	0.212

				Ammonia-Total (as N)	Dissolved Oxygen	Dissolved Oxygen	E. Coli	Enterococci (Intestinal)	Faecal coliforms	ortho-Phosphate (as P) - unspecified	pH	Salinity	Salinity(Lab)	Temperature	Total Nitrogen	Total Oxidised Nitrogen (as N)	Total Phosphorus (as P)
Monitored Entity	Station	Monitoring Point	Sample date	mg/l	% Saturation	mg/l	no./100mls	no./100mls	no./100mls	mg/l	pH units	0/oo	0/oo	°C	mg/l	mg/l	mg/l
Lee K Estruary	TW13004117LT1003	Downstream	06/06/2024	<0.035	102.3	10.1	<10	<10	10		8.3			16	<0.5	<0.020	<0.040
Lee K Estruary	TW13004117LT1003	Downstream	23/07/2024	0.063	103.7	9	<10	30	20		8.2			17.8	<0.5	<0.020	0.04
Lee K Estruary	TW13004117LT1003	Downstream	20/08/2024	0.045	104	9.9					8.2			16.3	0.8	<0.020	<0.040
Lee K Estruary	TW13004117LT1003	Downstream	19/09/2024	<0.035	99.7	8.9				<0.040	8.1			18.3	0.6	<0.020	<0.040
Lee K Estruary	TW13004117LT1003	Downstream	17/10/2024	<0.035	103.9	9.8	121	20	384		8		31.9	14	0.5	0.05	0.07
Lee K Estruary	TW13004117LT1003	Downstream	14/11/2024	0.133	89.6	9.4					7.8			16.3	0.8	0.17	1.11
Lee K Estruary	TW13004117LT1003	Downstream	16/12/2024	<0.035	82	7.5	24196	>241964	10112		7.9	26.5		8.6	0.9	0.06	0.28
			Mean	0.176	97.886	9.229	6082.786	8568.846	2631.500	0.028	8.071	26.500	31.900	15.329	0.615	0.056	0.226

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 concentrations.