Annual Environmental Report

2020

Youghal

D0139-01

CONTENTS

1 EXECUTIVE SUMMARY AND INTRODUCTION TO THE 2020 AER

This Annual Environmental Report has been prepared for D0139-01, Youghal, in Cork 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.

1.2 TREATMENT SUMMARY

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

- Youghal WWTP - 2020 with a Plant Capacity PE of 16000, the treatment type is 3N - Tertiary N 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
TPEFF0500D0139SW001	Youghal WWTP - 2020	Treated	Compliant	N/A

1.4 LICENCE SPECIFIC REPORTING INCLUDED IN AER

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

2 TREATMENT PLANT PERFORMANCE AND IMPACT SUMMARY

2.1 YOUGHAL WWTP - 2020 - TREATED DISCHARGE

2.1.1 INFLUENT MONITORING SUMMARY - YOUGHAL WWTP - 2020

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
BOD, 5 days with Inhibition (Carbonaceo mg/l	12	308	140.62
Total Phosphorus (as P) mg/l	12	6.39	3.15
Total Nitrogen mg/l	12	51	21.66
COD-Cr mg/l	12	671	379.43
Hydraulic Capacity	N/A	10267	3926

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 section ‘Operational Performance Summary’. The design of the wastewater tretament plant allows for peak values and therefore the peak loads have not impacted on compliance with Emission Limit Values.

2.1.2 EFFLUENT MONITORING SUMMARY - TPEFF0500D0139SW001

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 with Condition 2 Interpretation included	Annual Mean	Overall Compliance (Pass/Fail)
COD-Cr mg/l	125	250	N/A	13	N/A	N/A	43.04	Pass
Suspended Solids mg/l	35	87.5	N/A	13	N/A	N/A	12.56	Pass
BOD, 5 days with Inhibition (Carbonaceo mg/l	25	50	N/A	13	N/A	N/A	4.41	Pass
Total Nitrogen mg/l	15	18	N/A	13	N/A	N/A	5.31	Pass
pH pH units	9	9	N/A	13	N/A	N/A	7.7	Pass
Ammonia-Total (as N) mg/l	N/A	N/A	N/A	13	N/A	N/A	1.42	
Barium - filtered µg/l	N/A	N/A	N/A	1	N/A	N/A	8.6	
Benzo(g,h,i)perylene µg/l	N/A	N/A	N/A	1	N/A	N/A	N/A	
alpha BHC / Alpha-HCH µg/l	N/A	N/A	N/A	1	N/A	N/A	N/A	
Acenaphthene µg/l	N/A	N/A	N/A	1	N/A	N/A	N/A	
Carbon Tetrachloride µg/l	N/A	N/A	N/A	1	N/A	N/A	N/A	

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 with Condition 2 Interpretation included	Annual Mean	Overall Compliance (Pass/Fail)
Cadmium - unspecified µg/l	N/A	N/A	N/A	1	N/A	N/A	N/A	
Acenaphthylene µg/l	N/A	N/A	N/A	1	N/A	N/A	N/A	
Antimony - filtered µg/l	N/A	N/A	N/A	1	N/A	N/A	0.9	
Enterococci (Intestinal) no./100mls	N/A	N/A	N/A	2	N/A	N/A	28.12	
Arsenic - unspecified µg/l	N/A	N/A	N/A	1	N/A	N/A	1	
Cobalt - filtered µg/l	N/A	N/A	N/A	1	N/A	N/A	N/A	
E. Coli no./100mls	N/A	N/A	N/A	2	N/A	N/A	473.42	
Fluorene µg/l	N/A	N/A	N/A	1	N/A	N/A	N/A	
Glyphosate µg/l	N/A	N/A	N/A	1	N/A	N/A	0.2	
Dieldrin µg/l	N/A	N/A	N/A	1	N/A	N/A	N/A	
Fluoranthene µg/l	N/A	N/A	N/A	1	N/A	N/A	N/A	
Mercury - unspecified µg/l	N/A	N/A	N/A	1	N/A	N/A	N/A	
Lead - unspecified µg/l	N/A	N/A	N/A	1	N/A	N/A	N/A	

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 with Condition 2 Interpretation included	Annual Mean	Overall Compliance (Pass/Fail)
Copper - unspecified µg/l	N/A	N/A	N/A	1	N/A	N/A	N/A	
Chromium - unspecified µg/l	N/A	N/A	N/A	1	N/A	N/A	2.1	
Molybdenum - filtered µg/l	N/A	N/A	N/A	1	N/A	N/A	N/A	
Vanadium - filtered µg/l	N/A	N/A	N/A	1	N/A	N/A	N/A	
Phenanthrene µg/l	N/A	N/A	N/A	1	N/A	N/A	N/A	
Selenium - filtered µg/l	N/A	N/A	N/A	1	N/A	N/A	N/A	
MCPA µg/l	N/A	N/A	N/A	1	N/A	N/A	0.11	
Xylenes (Total) µg/l	N/A	N/A	N/A	1	N/A	N/A	N/A	
Total Hardness (as CaCO3) mg/l	N/A	N/A	N/A	1	N/A	N/A	640.4	
Trichlorobenzene (all isomers) µg/l	N/A	N/A	N/A	1	N/A	N/A	N/A	
Toluene µg/l	N/A	N/A	N/A	1	N/A	N/A	N/A	
Tin - filtered µg/l	N/A	N/A	N/A	1	N/A	N/A	N/A	

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 with Condition 2 Interpretation included	Annual Mean	Overall Compliance (Pass/Fail)
Total Phosphorus (as P) mg/l	N/A	N/A	N/A	13	N/A	N/A	1.78	
Benzene µg/l	N/A	N/A	N/A	1	N/A	N/A	N/A	
Atrazine µg/l	N/A	N/A	N/A	1	N/A	N/A	N/A	
Benzo(a)pyrene µg/l	N/A	N/A	N/A	1	N/A	N/A	N/A	
Anthracene µg/l	N/A	N/A	N/A	1	N/A	N/A	N/A	
2,4-Dichlorophenol µg/l	N/A	N/A	N/A	1	N/A	N/A	0.17	
Benzo(b)fluoranthene µg/l	N/A	N/A	N/A	1	N/A	N/A	N/A	
Benzo(k)fluoranthene µg/l	N/A	N/A	N/A	1	N/A	N/A	N/A	
Boron - filtered µg/l	N/A	N/A	N/A	1	N/A	N/A	N/A	
Chrysene µg/l	N/A	N/A	N/A	1	N/A	N/A	N/A	
Dichlobenil µg/l	N/A	N/A	N/A	1	N/A	N/A	N/A	
Conductivity @20°C µS/cm	N/A	N/A	N/A	12	N/A	N/A	5596.38	
Diuron µg/l	N/A	N/A	N/A	1	N/A	N/A	N/A	

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 with Condition 2 Interpretation included	Annual Mean	Overall Compliance (Pass/Fail)
Chloride mg/l	N/A	N/A	N/A	1	N/A	N/A	1500	
Dibenzo(a,h)anthracene µg/l	N/A	N/A	N/A	1	N/A	N/A	N/A	
Ethylbenzene µg/l	N/A	N/A	N/A	1	N/A	N/A	N/A	
Faecal coliforms no./100mls	N/A	N/A	N/A	2	N/A	N/A	695.8	
Naphthalene µg/l	N/A	N/A	N/A	1	N/A	N/A	N/A	
Fluoride mg/l	N/A	N/A	N/A	1	N/A	N/A	0.26	
ortho-Phosphate (as P) - unspecified mg/l	N/A	N/A	N/A	13	N/A	N/A	1.57	
Chloromethane µg/l	N/A	N/A	N/A	1	N/A	N/A	N/A	
Isodrin µg/l	N/A	N/A	N/A	1	N/A	N/A	N/A	
Hexachlorobenzene µg/l	N/A	N/A	N/A	1	N/A	N/A	N/A	
Cyanide (unspecified) µg/l	N/A	N/A	N/A	1	N/A	N/A	1.2	
Nickel - unspecified µg/l	N/A	N/A	N/A	1	N/A	N/A	N/A	
Isoproturon µg/l	N/A	N/A	N/A	1	N/A	N/A	N/A	

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 with Condition 2 Interpretation included	Annual Mean	Overall Compliance (Pass/Fail)
Polyaromatic Hydrocarbons (PAH) - Sum µg/l	N/A	N/A	N/A	1	N/A	N/A	N/A	
Mecoprop µg/l	N/A	N/A	N/A	1	N/A	N/A	N/A	
Total Oxidised Nitrogen (as N) mg/l	N/A	N/A	N/A	13	N/A	N/A	0.86	
Simazine µg/l	N/A	N/A	N/A	1	N/A	N/A	N/A	
Zinc - unspecified µg/l	N/A	N/A	N/A	1	N/A	N/A	30	
Linuron µg/l	N/A	N/A	N/A	1	N/A	N/A	N/A	
Indeno(1,2,3-c,d)pyrene µg/l	N/A	N/A	N/A	1	N/A	N/A	N/A	
Hexachlorobutadiene µg/l	N/A	N/A	N/A	1	N/A	N/A	N/A	
Tetrachloroethylene µg/l	N/A	N/A	N/A	1	N/A	N/A	N/A	
2,6-Dichlorobenzamide µg/l	N/A	N/A	N/A	1	N/A	N/A	N/A	
Trichloroethene (all isomers) µg/l	N/A	N/A	N/A	1	N/A	N/A	N/A	

Notes:
1 – This represents the Emission Limit Values after the Interpretation provided for under Condition 2 of the licence is applied

Cause of Exceedance(s):

Not applicable

Significance of Results:

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

2.1.3 AMBIENT MONITORING SUMMARY FOR THE TREATMENT PLANT DISCHARGE TPEFF0500D0139SW001

Attached as an appendix to this report.

2.1.4 OPERATIONAL PERFORMANCE SUMMARY - YOUGHAL WWTP - 2020

2.1.4.1 Treatment Efficiency Report - Youghal WWTP - 2020

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)
COD	591790	62488	89

Parameter	Influent mass loading (kg/year)	Effluent mass emission (kg/year)	Efficiency (% reduction of influent load)
TP	4910	2582	47
TN	33789	7712	77
cBOD	219321	6338	97
SS	N/A	17701	N/A

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

2.1.4.2 Treatment Capacity Report Summary - Youghal WWTP - 2020

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.

Youghal WWTP - 2020	
Peak Hydraulic Capacity (m^3/day) - As Constructed	10800
DWF to the Treatment Plant (m^3/day)	3600
Current Hydraulic Loading - annual max (m^3/day)	10267
Average Hydraulic loading to the Treatment Plant (m^3/day)	3926
Organic Capacity (PE) - As Constructed	16000
Organic Capacity (PE) - Collected Load (peak week)[Note1]	11263
Organic Capacity (PE) - Remaining	4737
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 - YOUGHAL WWTP - 2020

'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 is included below.

Number of Complaints	Nature of Complaint	Number Open Complaints	Number Closed Complaints
There were no relevant environmental complaints in 2020.			

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 Irish Water 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	No. of incident occurrences	Recurring (Y/N)	Closed (Y/N)
Uncontrolled release	EO caused by power failure	1	No	Yes
Uncontrolled release	Broken Sewer Pipe	1	No	Yes
Uncontrolled release	Adverse Weather	1	No	Yes

Incident Type	Cause	No. of incident occurrences	Recurring (Y/N)	Closed (Y/N)
Uncontrolled release	Adverse Weather	1	Yes	Yes
Abatement Equipment offline	Plant or equipment breakdown at WWTP	1	No	Yes
Uncontrolled release	EO caused by ragging or blocking	1	No	Yes
Uncontrolled release	Adverse Weather	1	Yes	Yes
Uncontrolled release	Adverse Weather	1	Yes	Yes
Uncontrolled release	Adverse Weather	1	Yes	Yes

3.2.2 SUMMARY OF OVERALL INCIDENTS

Question	Answer
Number of Incidents in 2020	9
Number of Incidents reported to the EPA via EDEN in 2020	9
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	Irish Grid Ref.	Included in Schedule A4 of the WWDL	Significance of the overflow(High / Medium / Low)	Assessed against DoEHLG Criteria	No. of times activated in 2020 (No. of events)	Total volume discharged in 2020 (m3)	Monitoring Status
SW005	210504, 76113	No	Unknown	Not yet Assessed	Unknown	Unknown	Not Monitored
SW006	210971, 77117	No	Unknown	Not yet Assessed	Unknown	Unknown	Not Monitored
SW007	210256, 78405	No	Unknown	Not yet Assessed	Unknown	Unknown	Monitored
SW010	209272, 76143	No	Unknown	Not yet Assessed	Unknown	Unknown	Unknown
TBC	210941, 77404	No	Unknown	Not yet Assessed	Unknown	2975	Monitored

SWO Summary	
How much sewage was discharged via SWOs in the agglomeration in the year (m3)?	Unknown
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?	No
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 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
D0139-SIP:01	Decommissioning of Cork Hill comminutor station	C	31/12/2015	No	Works Completed		
D0139-SIP:02	New waste water treatment plant (with denitrification) and ancillary works	C	30/11/2017	No	Works Completed		

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
D0139-SIP:03	SW000 Dunn's Park Discharge to cease as Primary Discharge and to operate as a SWO	A		No	Work ongoing on-site		Dunne's park outfall in use as primary discharge as per TA
D0139-SIP:04	SW002 Paxe's Lane Discharge as a Secondary Discharge to cease and discharge point to operate as an emergency Overflow	A	30/11/2017	Yes	Works Completed		
D0139-SIP:05	SW003 Foxhole Discharge as a Secondary Discharge to cease and discharge point to be decommissioned	A	30/11/2017	Yes	Works Completed		
D0139-SIP:06	SW007 Dunn's Park Discharge as a SWO to cease and discharge point to operate as an Emergency Overflow	A	31/12/2019	Yes	Not Started		The improvement programme will be reviewed by Irish Water to assess the works required to comply with the licence condition on a prioritised basis
D0139-SIP:07	SW008 Foxhole Discharge as a SWO to cease and discharge point to operate as an Emergency Overflow	A	30/11/2017	Yes	Works Completed		
D0139-SIP:08	SW009 Kilcoran Discharge as a SWO to cease and	A	30/11/2017	Yes	Works Completed		

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
	discharge point to be decommissioned						
D0139-SIP:09	SW010 Summerfield B Discharge as a SWO to cease and discharge point to be decommissioned	A	30/11/2017	Yes	Not Started		The improvement programme will be reviewed by Irish Water to assess the works required to comply with the licence condition on a prioritised basis
D0139-SIP:10	Upgrade of drainage network	C	31/12/2017	Yes	Works Completed		
D0139-SIP:11	Upgrade of drainage network	C	31/12/2017	Yes	Works Completed		
D0139-SIP:12	Upgrade of Front Strand storm water holding tank	C	31/12/2015	Yes	Works Completed		
D0139-SIP:13	Upgrade of Summerfield and Strand Pumping Station, plus installation of a new pumping station at Green Park	C	30/11/2017	Yes	Works Completed		
D0139-SIP:14	Upgrade of the: Summerfield Pumping Station (associated with SW010), and Strand Pumping Station (associated with SW005)	C	31/12/2015	Yes	Works Completed		

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
D0139-SIP:15	Upgrading of Storm Water Overflows to comply with the criteria outlined in the DoECLG "Procedures and Criteria in relation to Storm Water Overflows, 1995"	C	31/12/2015	Yes	Works Completed		
D0139-SIP:16	Work to be completed as per Condition 5.6	C	31/12/2020	Yes	Works Completed		

A summary of the status of any improvements identified by under Condition 5.2 is included below.

4.2.2 IMPROVEMENT PROGRAMME SUMMARY

Improvement Identifier	Improvement Description / or any Operational Improvements	Improvement Source	Expected Completion Date	Comments
There are no Improvements Programme for this Agglomeration.				

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 Table.

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 list of the various reports required for this agglomeration and a brief summary of their recommendations.

5.a Licence Specific Reports Summary Table

Licence Specific Report	Required by licence	Year included in AER	Included in this AER	Reference to relevant section of AER
There is no Licence Specific Report Required in this AER Annual Review.				

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	No
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	N/A

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

Signed: Date: 03/06/2021

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

Katherine Walshe

Acting Head of Environmental Regulation.

7 APPENDIX

Appendix
Appendix 7.1 - Ambient monitoring summary

Youghal Upstream	Transitional						Median	Mean	95%ile
	EQS								
	Mean	95%ile	04/03/2020 12:50	03/06/2020 13:00	12/08/2020 12:00	07/10/2020 13:45			
D.O % O_2	80%<95%ile<120%		102.6	96.7	104.1	108.5			107.8
Temperature C°	≤ 1.5 C° increase		8.7	16.2	16.8	15.2	15.7	14.2	16.7
pH	6 < pH < 9		8	7.9	8.2	8	8.0	8.0	8.2
BOD mg/L	n/a	≤ 4	1.6	2.5	1.6	2.2			2.46
Orthophosphate (P) mg/l	≤0.04 @35 PSU (Median)		0.02	0.005	0.01	0.05	0.015		
Ammonia (N) mg/l	≤ 0.065	≤ 0.140	0.0175	0.0175	0.054	0.044		0.033	0.053
TON (N) mg/l	n/a		2.7	3.2	0.25	1.2			

Youghal Downstream	Transitional						Median	Mean	95%ile
	EQS								
	Mean	95%ile	04/03/2020 13:20	03/06/2020 13:15	12/08/2020 12:15	07/10/2020 14:00			
D.O % O_2	80%<95%ile<120%		102	102.5	109.2	107.9			109.0
Temperature C°	≤ 1.5 C° increase		8.4	17	18.1	15.8	16.4	14.8	17.9
pH	6 < pH < 9		7.9	8.1	8.2	8	8.1	8.1	8.2
BOD mg/L	n/a	≤ 4	1.5	2.5	1.3	1			2.35
Orthophosphate (P) mg/l	≤0.04 @35 PSU (Median)		0.02	0.005	0.02	0.02	0.020		
Ammonia (N) mg/l	≤ 0.065	≤ 0.140	0.0175	0.0175	0.102	0.0175		0.039	0.089
TN (N) mg/l	n/a		1.9	1.5	0.25	0.25			

Ambient Monitoring Point from WWDL (or as agreeded with EPA)	Irish Grid Reference	EPA Feature Coding tool Code	Bathing Water	Drinking Water	FWPM	Shellfish	Current WFD Status
Upstream Monitoring Point	E209890 N80993	TW38003144BR2001	No	No	No	No	Moderate
Downstream Monitoring Point	E210974 N77117	TW38003144BR2002	Yes	No	No	No	Moderate

Significace of Results	
Did the ambient monitoring results meet the EQS Required?	Yes
Is there an obervable negative impact on water quality?	Unknown - "observable" TBC
List the parameters causing the impact?	N/A
A deterioration has been identified, but it is not known if it is caused by the TP	N/A
Do the discharges from the WWTP have an observable negative impact on the WFD?	Unknown - "observable" TBC
Any other known impacts	Catchment Pressures