

Annual Environmental Report

2021



Moylough

D0403-01

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1 EXECUTIVE SUMMARY AND INTRODUCTION TO THE 2021 AER

This Annual Environmental Report has been prepared for D0403-01, Moylough, in Galway 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.

All works related to O&M and not SIP. No improvements specific to meeting ELVs set on WWDL.

1.2 TREATMENT SUMMARY

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

- Moylough WWTP with a Plant Capacity PE of 1000, the treatment type is 2 - Secondary treatment

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
TPEFF1200D0403SW001	Moylough WWTP	Treated	Non-Compliant	Ammonia-Total (as N) mg/l BOD, 5 days with Inhibition (Carbonaceous BOD) mg/l ortho-Phosphate (as P) - unspecified mg/l

1.4 LICENCE SPECIFIC REPORTING

Assessment / Report
Priority Substances Assessment

2 TREATMENT PLANT PERFORMANCE AND IMPACT SUMMARY

2.1 MOYLOUGH WWTP - TREATED DISCHARGE

2.1.1 INFLUENT MONITORING SUMMARY - MOYLOUGH 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
BOD, 5 days with Inhibition (Carbonaceous BOD) mg/l	5	539	193
Ammonia-Total (as N) mg/l	5	110	46
COD-Cr mg/l	5	1732	490
ortho-Phosphate (as P) - unspecified mg/l	5	15	4.13
Hydraulic Capacity	N/A	1942	148

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 greater 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 - TPEFF1200D0403SW001

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	7	1	N/A	57	Pass
Suspended Solids mg/l	35	88	N/A	6	N/A	N/A	4.65	Pass
BOD, 5 days with Inhibition (Carbonaceous BOD) mg/l	25	50	N/A	7	1	1	26	Fail
pH units	9.00	9.00	N/A	6	N/A	N/A	7.66	Pass
Ammonia-Total (as N) mg/l	5.00	6.00	N/A	7	2	2	10	Fail
ortho-Phosphate (as P) - unspecified mg/l	3.00	3.60	N/A	7	4	3	3.28	Fail
Total Oxidised Nitrogen (as N) mg/l	N/A	N/A	N/A	2	N/A	N/A	13	
Total Nitrogen mg/l	N/A	N/A	N/A	2	N/A	N/A	16	

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):

Plant overloaded

Significance of Results:

The WWTP is non-compliant with the ELVs set in the Wastewater Discharge License. The impact on receiving waters is assessed further in Section2.

2.1.3 AMBIENT MONITORING SUMMARY FOR THE TREATMENT PLANT DISCHARGE TPEFF1200D0403SW001

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	163050, 248428	RS26T980250	No	No	No	No	Poor
Downstream	163131, 248311	RS26T980290	No	No	No	No	Poor

The table below provides a summary of monitoring results for designated ambient monitoring points. The upstream and downstream annual mean values are shown (mg/l), and the difference between both monitoring stations is given as a percentage of the Environmental Quality Standard (EQS) where relevant.

Parameter Name	Upstream Monitoring Point Location	Upstream Monitoring Point Annual Mean	Downstream Monitoring Point Location	Downstream Monitoring Point Annual Mean	EQS	% of EQS
BOD - 5 days (Total) mg/l	RS26T980250	9.30	RS26T980290	5.10	1.50	-280
Ammonia-Total (as N) mg/l	RS26T980250	1.20	RS26T980290	0.220	0.065	-1507.7
ortho-Phosphate (as P) - unspecified mg/l	RS26T980250	0.010	RS26T980290	0.020	0.035	28.6
pH units	RS26T980250	7.70	RS26T980290	7.90	N/A	
Dissolved Oxygen mg/l	RS26T980250	9.00	RS26T980290	9.00	N/A	

Significance of Results:

The WWTP discharge was not compliant with the ELV's set in the wastewater discharge licence.

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

The discharge from the wastewater treatment plant does not have an observable impact on the water quality.

The 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 - MOYLROUGH WWTP

2.1.4.1 Treatment Efficiency Report - Moylough 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	9242	1705	82
COD	23423	3756	84
TP	N/A	N/A	N/A
TN	N/A	1858	N/A
SS	N/A	271	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 - Moylough 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.

Moylough WWTP	
Peak Hydraulic Capacity (m ³ /day) - As Constructed	300
DWF to the Treatment Plant (m ³ /day)	100
Current Hydraulic Loading - annual max (m ³ /day)	1942
Average Hydraulic loading to the Treatment Plant (m ³ /day)	147.8
Organic Capacity (PE) - As Constructed	1000
Organic Capacity (PE) - Collected Load (peak week) ^{Note¹}	550
Organic Capacity (PE) - Remaining	450
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 - MOYLROUGH 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 2021.			

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)
Abatement Equipment offline	Plant or equipment breakdown at WWTP	1	No	No
Breach of ELV	Inadequate Operational Procedures / Training	1	Yes	No
Breach of ELV	WWTP not designed for P removal	1	Yes	No

3.2.2 SUMMARY OF OVERALL INCIDENTS

Question	Answer
Number of Incidents in 2021	3
Number of Incidents reported to the EPA via EDEN in 2021	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 2021 (No. of events)	Total volume discharged in 2021 (m3)	Monitoring Status
SW002	163001, 248345	Yes	Low	Meeting	Unknown	Unknown	Not Monitored

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 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?	Yes
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
D0403-SIP:01	Implement, in accordance with Condition 5.5, either an alternative primary discharge point or connection to another agglomeration.	C	31/12/2019	Yes	Not Started		Capital works not funded in RC3. Capital works funding post 2024 will be contingent on the project being included in the 2025-2029 investment period.
D0403-SIP:02	SW001 Primary Discharge Point to be discontinued	C	31/12/2019	Yes	Not Started		Capital works not funded in RC3. Capital works funding post 2024 will be contingent on the project being included in the 2025-2029 investment period.

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	Year included in AER	Included in this AER
Priority Substances Assessment	Yes	2016	Yes

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
Has a Technical amendment/licence review application been submitted to the Agency by IW?	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	Yes

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

Signed: Date: 26/04/2022

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

There are no Appendices included

Confidential Report

Client: Galway County Council

Date: 19 October 2021



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Monitored Entity Name	Monitored Entity Code	Station Name	Station Code	Sample Code	Sample Date	Sampling Method	Laboratory	Env Parameter	Result	Measurement Unit	Accredited	Limit of Detection	Irish Water/EPA requirement
Moylough	D0403	Moylough EFF SW001	TPEFF1200D0403SW001	28933-2	31/08/2021	Composite	TMS	pH	7.56	pH Units	Yes In House	Not applicable	Not applicable
Moylough	D0403	Moylough EFF SW001	TPEFF1200D0403SW001	28933-2	31/08/2021	Composite	TMS	Chloride	110	mg/l	Yes In House	1	Not applicable
Moylough	D0403	Moylough EFF SW001	TPEFF1200D0403SW001	28933-2	31/08/2021	Composite	TMS	Conductivity (at 20 oC)	1163	µS/cm	Yes In House	100	Not applicable
Moylough	D0403	Moylough EFF SW001	TPEFF1200D0403SW001	28933-2	31/08/2021	Composite	ALS	Total Hardness (as CaCO3)	389	mg/l	Yes Subcontracted	Not applicable	Not applicable
Moylough	D0403	Moylough EFF SW001	TPEFF1200D0403SW001	28933-2	31/08/2021	Composite	Elab	Cyanide	7	µg/l	Yes Subcontracted	5	5
Moylough	D0403	Moylough EFF SW001	TPEFF1200D0403SW001	28933-2	31/08/2021	Composite	TMS	Fluoride	250	µg/l	Yes In House	10	250
Moylough	D0403	Moylough EFF SW001	TPEFF1200D0403SW001	28933-2	31/08/2021	Composite	ALS	2,4-D	< 0.05	µg/l	Yes Subcontracted	0.05	Not applicable
Moylough	D0403	Moylough EFF SW001	TPEFF1200D0403SW001	28933-2	31/08/2021	Composite	ALS Prague	2,6-Dichlorobenzamide	< 0.050	µg/l	Yes Subcontracted	0.05	Not applicable
Moylough	D0403	Moylough EFF SW001	TPEFF1200D0403SW001	28933-2	31/08/2021	Composite	ALS	Trichlorobenzene (all isomers)	< 0.03	µg/l	Yes Subcontracted	0.03	Not applicable
Moylough	D0403	Moylough EFF SW001	TPEFF1200D0403SW001	28933-2	31/08/2021	Composite	ALS	Atrazine	< 0.020	µg/l	Yes Subcontracted	0.02	1
Moylough	D0403	Moylough EFF SW001	TPEFF1200D0403SW001	28933-2	31/08/2021	Composite	ALS	alpha-HCH - Hexachlorocyclohexane	< 0.004	µg/l	Yes Subcontracted	0.003	Not applicable
Moylough	D0403	Moylough EFF SW001	TPEFF1200D0403SW001	28933-2	31/08/2021	Composite	ALS	beta-HCH - Hexachlorocyclohexane	< 0.004	µg/l	Yes Subcontracted	0.003	Not applicable
Moylough	D0403	Moylough EFF SW001	TPEFF1200D0403SW001	28933-2	31/08/2021	Composite	ALS	Dichlobenil	< 4	ng/l	Yes Subcontracted	2	Not applicable

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Technical Manager

Confidential Report

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Monitored Entity Name	Monitored Entity Code	Station Name	Station Code	Sample Code	Sample Date	Sampling Method	Laboratory	Env Parameter	Result	Measurement Unit	Accredited	Limit of Detection	Irish Water/EPA requirement
Moylough	D0403	Moylough EFF SW001	TPEFF1200D0403SW001	28933-2	31/08/2021	Composite	ALS	Dieldrin	< 5	ng/l	Yes Subcontracted	4	Not applicable
Moylough	D0403	Moylough EFF SW001	TPEFF1200D0403SW001	28933-2	31/08/2021	Composite	ALS	Diuron	0.04	µg/l	Yes Subcontracted	0.01	0.9
Moylough	D0403	Moylough EFF SW001	TPEFF1200D0403SW001	28933-2	31/08/2021	Composite	ALS	gamma-HCH - Hexachlorocyclohexane	< 0.0043	µg/l	Yes Subcontracted	0.0027	Not applicable
Moylough	D0403	Moylough EFF SW001	TPEFF1200D0403SW001	28933-2	31/08/2021	Composite	ALS	Hexachlorocyclohexane (all isomers)	< 0.0123	µg/l	Yes Subcontracted	0.0087	0.02
Moylough	D0403	Moylough EFF SW001	TPEFF1200D0403SW001	28933-2	31/08/2021	Composite	ALS	Glyphosate	22.2	µg/l	Yes Subcontracted	0.1	30
Moylough	D0403	Moylough EFF SW001	TPEFF1200D0403SW001	28933-2	31/08/2021	Composite	Synlab	Hexachlorobutadiene	< 0.2	µg/l	Yes Subcontracted	0.2	0.5
Moylough	D0403	Moylough EFF SW001	TPEFF1200D0403SW001	28933-2	31/08/2021	Composite	ALS	Isodrin	< 0.006	µg/l	Yes Subcontracted	0.004	1
Moylough	D0403	Moylough EFF SW001	TPEFF1200D0403SW001	28933-2	31/08/2021	Composite	ALS	Isoproturon	< 0.01	µg/l	Yes Subcontracted	0.01	0.5
Moylough	D0403	Moylough EFF SW001	TPEFF1200D0403SW001	28933-2	31/08/2021	Composite	ALS	MCPA	< 0.05	µg/l	Yes Subcontracted	0.05	Not applicable
Moylough	D0403	Moylough EFF SW001	TPEFF1200D0403SW001	28933-2	31/08/2021	Composite	ALS	Mecoprop	< 0.04	µg/l	Yes Subcontracted	0.04	Not applicable
Moylough	D0403	Moylough EFF SW001	TPEFF1200D0403SW001	28933-2	31/08/2021	Composite	ALS	Simazine	< 0.022	µg/l	Yes Subcontracted	0.02	2
Moylough	D0403	Moylough EFF SW001	TPEFF1200D0403SW001	28933-2	31/08/2021	Composite	ALS	Linuron	< 0.01	µg/l	Yes Subcontracted	0.01	0.35
Moylough	D0403	Moylough EFF SW001	TPEFF1200D0403SW001	28933-2	31/08/2021	Composite	ALS	Antimony (filtered)	< 1.3	µg/l	Yes Subcontracted	1.6	Not applicable
Moylough	D0403	Moylough EFF SW001	TPEFF1200D0403SW001	28933-2	31/08/2021	Composite	ALS	Arsenic (filtered)	0.85	µg/l	Yes Subcontracted	0.24	12.5

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Moylough	D0403	Moylough EFF SW001	TPEFF1200D0403SW001	28933-2	31/08/2021	Composite	ALS	Barium (filtered)	16	µg/l	Yes Subcontracted	2	Not applicable
Moylough	D0403	Moylough EFF SW001	TPEFF1200D0403SW001	28933-2	31/08/2021	Composite	ALS	Boron (filtered)	< 56	µg/l	Yes Subcontracted	56	Not applicable
Moylough	D0403	Moylough EFF SW001	TPEFF1200D0403SW001	28933-2	31/08/2021	Composite	ALS	Cadmium (filtered)	< 0.02	µg/l	Yes Subcontracted	0.07	0.225
Moylough	D0403	Moylough EFF SW001	TPEFF1200D0403SW001	28933-2	31/08/2021	Composite	ALS	Chromium (filtered)	0.31	µg/l	Yes Subcontracted	2	2.5
Moylough	D0403	Moylough EFF SW001	TPEFF1200D0403SW001	28933-2	31/08/2021	Composite	ALS	Cobalt (filtered)	0.26	µg/l	Yes Subcontracted	0.08	Not applicable
Moylough	D0403	Moylough EFF SW001	TPEFF1200D0403SW001	28933-2	31/08/2021	Composite	ALS	Copper (filtered)	19	µg/l	Yes Subcontracted	1.8	2.5
Moylough	D0403	Moylough EFF SW001	TPEFF1200D0403SW001	28933-2	31/08/2021	Composite	ALS	Lead (filtered)	0.52	µg/l	Yes Subcontracted	0.3	1
Moylough	D0403	Moylough EFF SW001	TPEFF1200D0403SW001	28933-2	31/08/2021	Composite	ALS	Mercury (filtered)	< 0.010	µg/l	Yes Subcontracted	0.01	0.5
Moylough	D0403	Moylough EFF SW001	TPEFF1200D0403SW001	28933-2	31/08/2021	Composite	ALS	Molybdenum (filtered)	< 2.50	µg/l	Yes Subcontracted	2.7	Not applicable
Moylough	D0403	Moylough EFF SW001	TPEFF1200D0403SW001	28933-2	31/08/2021	Composite	ALS	Nickel (filtered)	1.5	µg/l	Yes Subcontracted	1	17
Moylough	D0403	Moylough EFF SW001	TPEFF1200D0403SW001	28933-2	31/08/2021	Composite	ALS	Selenium (filtered)	< 1.2	µg/l	Yes Subcontracted	0.6	Not applicable
Moylough	D0403	Moylough EFF SW001	TPEFF1200D0403SW001	28933-2	31/08/2021	Composite	ALS	Tin (filtered)	< 1.5	µg/l	Yes Subcontracted	1.5	Not applicable
Moylough	D0403	Moylough EFF SW001	TPEFF1200D0403SW001	28933-2	31/08/2021	Composite	ALS	Vanadium (filtered)	0.20	µg/l	Yes Subcontracted	0.08	Not applicable
Moylough	D0403	Moylough EFF SW001	TPEFF1200D0403SW001	28933-2	31/08/2021	Composite	ALS	Zinc (Filtered)	27	µg/l	Yes Subcontracted	4	4

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Monitored Entity Name	Monitored Entity Code	Station Name	Station Code	Sample Code	Sample Date	Sampling Method	Laboratory	Env Parameter	Result	Measurement Unit	Accredited	Limit of Detection	Irish Water/EPA requirement
Moylough	D0403	Moylough EFF SW001	TPEFF1200D0403SW001	28933-2	31/08/2021	Composite	ALS	Acenaphthene	< 0.010	µg/l	Yes Subcontracted	0.01	Not applicable
Moylough	D0403	Moylough EFF SW001	TPEFF1200D0403SW001	28933-2	31/08/2021	Composite	ALS	Acenaphthylene	< 0.010	µg/l	Yes Subcontracted	0.01	Not applicable
Moylough	D0403	Moylough EFF SW001	TPEFF1200D0403SW001	28933-2	31/08/2021	Composite	ALS	Anthracene	< 0.010	µg/l	Yes Subcontracted	0.01	0.05
Moylough	D0403	Moylough EFF SW001	TPEFF1200D0403SW001	28933-2	31/08/2021	Composite	ALS	Benzo(a)anthracene	< 0.010	µg/l	Yes Subcontracted	0.01	0.01
Moylough	D0403	Moylough EFF SW001	TPEFF1200D0403SW001	28933-2	31/08/2021	Composite	ALS	Benzo(g,h,i)perylene	< 0.010	µg/l	Yes Subcontracted	0.01	0.01
Moylough	D0403	Moylough EFF SW001	TPEFF1200D0403SW001	28933-2	31/08/2021	Composite	ALS	Benzo(a)pyrene	< 0.010	µg/l	Yes Subcontracted	0.01	0.01
Moylough	D0403	Moylough EFF SW001	TPEFF1200D0403SW001	28933-2	31/08/2021	Composite	ALS	Benzo(b)fluoranthene	< 0.010	µg/l	Yes Subcontracted	0.01	0.01
Moylough	D0403	Moylough EFF SW001	TPEFF1200D0403SW001	28933-2	31/08/2021	Composite	ALS	Benzo(k)fluoranthene	< 0.010	µg/l	Yes Subcontracted	0.01	0.01
Moylough	D0403	Moylough EFF SW001	TPEFF1200D0403SW001	28933-2	31/08/2021	Composite	ALS	Chrysene	< 0.010	µg/l	Yes Subcontracted	0.01	Not applicable
Moylough	D0403	Moylough EFF SW001	TPEFF1200D0403SW001	28933-2	31/08/2021	Composite	ALS	Dibenz (a,h) anthracene	< 0.010	µg/l	Yes Subcontracted	0.01	Not applicable
Moylough	D0403	Moylough EFF SW001	TPEFF1200D0403SW001	28933-2	31/08/2021	Composite	ALS	Fluoranthene	< 0.010	µg/l	Yes Subcontracted	0.01	0.6
Moylough	D0403	Moylough EFF SW001	TPEFF1200D0403SW001	28933-2	31/08/2021	Composite	ALS	Fluorene	< 0.010	µg/l	Yes Subcontracted	0.01	Not applicable
Moylough	D0403	Moylough EFF SW001	TPEFF1200D0403SW001	28933-2	31/08/2021	Composite	ALS	Indeno(1,2,3-c,d)pyrene	< 0.010	µg/l	Yes Subcontracted	0.01	Not applicable
Moylough	D0403	Moylough EFF SW001	TPEFF1200D0403SW001	28933-2	31/08/2021	Composite	ALS	Naphthalene	< 0.010	µg/l	Yes Subcontracted	0.01	65

Prepared by:


Svetlana Krivelo
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Approved by:


Dr Imelda Shanahan
Technical Manager

Confidential Report

Client: Galway County Council

Date: 19 October 2021



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Moylough	D0403	Moylough EFF SW001	TPEFF1200D0403SW001	28933-2	31/08/2021	Composite	ALS	Phenanthrene	< 0.010	µg/l	Yes Subcontracted	0.01	Not applicable
Moylough	D0403	Moylough EFF SW001	TPEFF1200D0403SW001	28933-2	31/08/2021	Composite	ALS	Pyrene	< 0.010	µg/l	Yes Subcontracted	0.01	Not applicable
Moylough	D0403	Moylough EFF SW001	TPEFF1200D0403SW001	28933-2	31/08/2021	Composite	ALS	Polyaromatic Hydrocarbons (PAH) -Sum	< 0.010	µg/l	Yes Subcontracted	0.01	Not applicable
Moylough	D0403	Moylough EFF SW001	TPEFF1200D0403SW001	28933-2	31/08/2021	Composite	ALS	1,2-Dichloroethane	< 1.00	µg/l	Yes Subcontracted	1.0	Not applicable
Moylough	D0403	Moylough EFF SW001	TPEFF1200D0403SW001	28933-2	31/08/2021	Composite	ALS	Benzene	< 1.00	µg/l	Yes Subcontracted	1.0	5
Moylough	D0403	Moylough EFF SW001	TPEFF1200D0403SW001	28933-2	31/08/2021	Composite	ALS	Carbon Tetrachloride	< 1.00	µg/l	Yes Subcontracted	1.0	Not applicable
Moylough	D0403	Moylough EFF SW001	TPEFF1200D0403SW001	28933-2	31/08/2021	Composite	ALS	Chloroform - Trichloromethane	< 1.00	µg/l	Yes Subcontracted	1.0	Not applicable
Moylough	D0403	Moylough EFF SW001	TPEFF1200D0403SW001	28933-2	31/08/2021	Composite	ALS	Dichloromethane	< 1.00	µg/l	Yes Subcontracted	1.0	Not applicable
Moylough	D0403	Moylough EFF SW001	TPEFF1200D0403SW001	28933-2	31/08/2021	Composite	ALS	Ethyl benzene	< 1.00	µg/l	Yes Subcontracted	1.0	Not applicable
Moylough	D0403	Moylough EFF SW001	TPEFF1200D0403SW001	28933-2	31/08/2021	Composite	ALS	m&p xylene	< 1.00	µg/l	Yes Subcontracted	1.0	5
Moylough	D0403	Moylough EFF SW001	TPEFF1200D0403SW001	28933-2	31/08/2021	Composite	ALS	o-xylene	< 1.00	µg/l	Yes Subcontracted	1.0	5
Moylough	D0403	Moylough EFF SW001	TPEFF1200D0403SW001	28933-2	31/08/2021	Composite	ALS	Trichloroethene - Trichloroethylene	< 1.00	µg/l	Yes Subcontracted	1.0	Not applicable
Moylough	D0403	Moylough EFF SW001	TPEFF1200D0403SW001	28933-2	31/08/2021	Composite	ALS	Tetrachloroethene - Tetrachloroethylene	< 1.00	µg/l	Yes Subcontracted	1.0	Not applicable

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Moylough	D0403	Moylough EFF SW001	TPEFF1200D0403SW001	28933-2	31/08/2021	Composite	ALS	Toluene	< 1.00	µg/l	Yes Subcontracted	1.0	5
Moylough	D0403	Moylough EFF SW001	TPEFF1200D0403SW001	28933-2	31/08/2021	Composite	ALS	Hexachlorobenzene	< 0.004	µg/l	Yes Subcontracted	0.002	0.5
Moylough	D0403	Moylough EFF SW001	TPEFF1200D0403SW001	28933-2	31/08/2021	Composite	ALS	Xylenes (Total)	< 2.0	µg/l	Yes Subcontracted	2.0	5

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