Annual Environmental Report

2019

Whitegate Aghada

D0423-01

CONTENTS

1 EXECUTIVE SUMMARY AND INTRODUCTION TO THE 2019 AER

This Annual Environmental Report has been prepared for D0423-01, Whitegate Aghada, 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.

Sewage Upgrade Works (including a new WWTP at Whitegate) close to planning stage for Whitegate/ Aghada

1.2 TREATMENT SUMMARY

- Currently there is no treatment provided at Whitegate Aghada . Please refer to section 4 for details of the Programme of Improvements.

  Waste is untreated and discharges into Cork Harbour, at Long Point, from the combined collection system and via a septic tank. There are 3 secondary discharges from the agglomeration, 2 discharging to coastal water and one to groundwater.

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
TPEFF0500D0423SW002	WHITEGATE/AGHADA SEPTIC TANK	Untreated	Non-Compliant	COD, BOD, SS
TPEFF0500D0423SW003	Whitegate Aghada Secondary Discharge #2	Untreated	Non-Compliant	COD, BOD, SS

Discharge Point Reference	Treatment Plant	Discharge Type	Compliance Status	Parameters failing if relevant
TPEFF0500D0423GW004	Whitegate Aghada Secondary Discharge #3	Untreated	Non-Compliant	COD, BOD, SS
TPEFF0500D0423SW001	Ardnabourkey Estate WWTP	Untreated	Non-Compliant	COD, BOD, SS

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 WHITEGATE/AGHADA SEPTIC TANK - TREATED DISCHARGE

2.1.1 INFLUENT MONITORING SUMMARY

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
There is no Influent data included in the AER.			

2.1.2 EFFLUENT MONITORING SUMMARY - TPEFF0500D0423SW001

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	6	5	4	322	Fail
Suspended Solids mg/l	35	87.5	N/A	6	6	3	112	Fail
BOD, 5 days with Inhibition (Carbonaceous BOD) mg/l	25	50	N/A	6	6	5	128	Fail

pH	6-9	6-9	N/A	6	0	0	7.37	Pass
Ammonia-Total (as N) mg/l	ELV commencement date: 01/01/2020							
Total Oxidised Nitrogen (as N) mg/l	ELV commencement date: 01/01/2020							

Notes:
1– This represents the Emission Limit Values after the Interpretation provided for under Condition 2 of the licence is applied
2 - For parameters where a mean ELV applies

Cause of Exceedance(s):

No treatment provided

Significance of Results:

The discharge is non- compliant with the ELV's set in the Wastewater Discharge Licence.

2.1.3 EFFLUENT MONITORING SUMMARY - TPEFF0500D0423SW002

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	6	6	6	1236	Fail
Suspended Solids mg/l	35	87.5	N/A	6	6	5	941	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 with Condition 2 Interpretation included	Annual Mean	Overall Compliance (Pass/Fail)
BOD, 5 days with Inhibition (Carbonaceous BOD) mg/l	25	50	N/A	6	6	6	562	Fail
pH pH units	6-9	6-9	N/A	6	0	0	7.3	Pass

Notes:
1– This represents the Emission Limit Values after the Interpretation provided for under Condition 2 of the licence is applied
2 - For parameters where a mean ELV applies

Cause of Exceedance(s):

No Treatment

Significance of Results:

The discharge is non-compliant with the ELV's set in the Wastewater Discharge Licence.

2.1.4 EFFLUENT MONITORING SUMMARY - TPEFF0500D0423SW003

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	6	6	6	645	Fail
Suspended Solids mg/l	35	87.5	N/A	6	6	5	184	Fail
BOD, 5 days with Inhibition (Carbonaceous BOD) mg/l	25	50	N/A	6	6	6	266	Fail
pH pH units	6-9	6-9	N/A	6	0	0	7.32	Pass

Notes:
1– This represents the Emission Limit Values after the Interpretation provided for under Condition 2 of the licence is applied
2 - For parameters where a mean ELV applies

Cause of Exceedance(s):

No Treatment

Significance of Results:

The discharge is non-compliant with the ELV's set in the Wastewater Discharge Licence.

2.1.5 EFFLUENT MONITORING SUMMARY - TPEFF0500D0423GW004

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	6	6	6	3548	Fail
Suspended Solids mg/l	35	87.5	N/A	6	6	5	1473	Fail
BOD, 5 days with Inhibition (Carbonaceous BOD) mg/l	25	50	N/A	6	6	6	804	Fail
pH pH units	6-9	6-9	N/A	6	0	0	7.28	Pass

Notes:
1– This represents the Emission Limit Values after the Interpretation provided for under Condition 2 of the licence is applied
2 - For parameters where a mean ELV applies

Cause of Exceedance(s):

No Treatment

Significance of Results:

The discharge is non-compliant with the ELV's set in the Wastewater Discharge Licence.

2.2 AMBIENT MONITORING SUMMARY

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 Status
Ambient data for Cork Harbour is included in Appendix 7.1 - Ambient monitoring summary. **No groundwater monitoring was carried out for SW004 at Downstream -(Groundwater) GW004 (Ardnabourkey).**							

Significance of Results:

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

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.

2.3 OPERATIONAL PERFORMANCE SUMMARY

2.3.1TREATMENT EFFICIENCY REPORT

No influent monitoring is carried out as the agglomeration is untreated.

2.3.2TREATMENT CAPACITY REPORT SUMMARY

The agglomeration is untreated. The collected organic load (peak week) is calculated asfollows:

Name	Organic Capacity - Collected Load (PE)
Ardnabourkey Estate WWTP	1648.00
Whitegate Aghada Secondary Discharge #2	432.00
Whitegate Aghada Secondary Discharge #3	51.00
WHITEGATE/AGHADA SEPTIC TANK	154.00

2.4 SLUDGE / OTHER INPUTS

'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 2019.			

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 ragging or blocking	1	No	Yes
Breach of ELV	WWTP upgrade required to meet ELV	1	Yes	No

3.2.2 SUMMARY OF OVERALL INCIDENTS

Question	Answer
Number of Incidents in 2019	2
Number of Incidents reported to the EPA via EDEN in 2019	2
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 2019 (No. of events)	Total volume discharged in 2019 (m3)	Monitoring Status
SW002	186873, 65803	Yes	Low	Not yet Assessed	Unknown	Unknown	Not 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?	Not yet assessed
The SWO Assessment included the requirements of relevant of WWDL schedules?	N/A
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 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
D0423-SIP:02	Provision of secondary treatment for the agglomeration	C	31/12/2019	No	At Planning Stage	25/11/2022	An primary WWTP will be provided
D0423-SIP:03	Secondary Discharge Point to be discontinued	C	31/12/2019	No	At Planning Stage	25/11/2022	

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
Priority Substances Assessment	Yes	2015	No	

5.1 PRIORITY SUBSTANCES ASSESSMENT

The Priority Substances Assessment Report has been included in the AER 2015

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	Yes

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

Signed: Date: 05/03/2020

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

INDEX

NONCOMPLIANCE SUMMARY

Whitegate Aghada D0423-01 SW001 Long Point											
				Sample Code	77886	79364	80543	81978	83308	85261
				Sample Date	13/02/2019	17/04/2019	12/06/2019	07/08/2019	02/10/2019	11/12/2019
				Sample Type	Grab	Grab	Grab	Grab	Grab	Grab
Flow m^3/Day	ELV	Max ELV	Frequency	Actual						
BOD mg/L	25	50	6	6	46	59	179	215	87	187
COD mg/L	125	250	6	6	77	135	401	480	409	434
Suspended Solids mg/L	35	87.5	6	6	59	50	100	207	82	177
Ammonia (N) mg/l	5 (01/01/2020)	#VALUE!	6	6	8.3	11.2	31.4	68.4	24.4	32
pH	6 to 9		6	6	7.6	7.5	7.7	8.1	7.7	7.8
TON (N)	20 (01/01/2020)	#VALUE!	6	6	5.15	5.7	0.25	0.25	3.06	2.28
E.Coli MPN/100mls	n/a		6	6	>24196	>24196	24196	24196	>24196	>24196
Intestinal enterococci MPN/100mls	n/a		6	6	>24196	>24196	>24196	>24196	>24196	>24196
Faecal Coliforms MPN/100mls	n/a		6	6	>24196	>24196	>24196	24196	>24196	>24196

Whitegate Aghada D0423-01 SW002 Rostellan										
				Sample Code	77888	79360	80546	81980	83306	85258
				Sample Date	13/02/219	17/04/2019	12/06/2019	07/08/2019	02/10/2019	11/12/2019
				Sample Type	Grab	Grab	Grab	Grab	Grab	Grab
Flow m^3/Day	ELV	Max ELV	Frequency	Actual						
BOD mg/L	25	50	6	6	190	1848	229	247	411	451
COD mg/L	125	250	6	6	1259	2995	804	676	423	1257
Suspended Solids mg/L	35	87.5	6	6	105	2840	151	359	750	1443
pH	6 to 9		6	6	7.7	7	8	7.8	7.8	8.3
E.Coli cfu/100mls	n/a	#VALUE!	6	6	>24196	>24196	>24196	24196	>24196	>24196
Intestinal enterococci MPN/100mls	n/a	#VALUE!	6	6	>24196	>24196	15531	24196	>24196	>24196
Faecal Coliforms cfu/100mls	n/a	#VALUE!	6	6	>24196	>24196	>24196	24196	>24196	>24196

Whitegate Aghada D0423-01 SW003 "Lower Aghada"										
				Sample Code	77887	79359	80545	81979	83307	85260
				Sample Date	13/02/2019	17/04/2019	12/06/2019	07/08/2019	02/10/2019	11/12/2019
				Sample Type	Grab	Grab	Grab	Grab	Grab	Grab
Flow m^3/Day	ELV	Max ELV	Frequency	Actual						
BOD mg/L	25	50	6	6	497	67	202	163	531	141
COD mg/L	125	250	6	6	1041	190	455	480	1367	342
Suspended Solids mg/L	35	87.5	6	6	466	71	117	218	106	128
pH	6 to 9		6	6	7	7.6	7.4	7.6	7.2	7.1
E.Coli cfu/100mls	n/a	#VALUE!	6	6	>24196	>24196	>24196	24196	>24196	>24196
Intestinal enterococci MPN/100mls	n/a	#VALUE!	6	6	>24196	>24196	12997	>24196	19863	>24196
Faecal Coliforms cfu/100mls	n/a	#VALUE!	6	6	>24196	>24196	>24196	24196	>24196	>24196

Whitegate Aghada D0423-01 GW004 "Ardnabourkey Estate"										
				Sample Code	77885	79357	80541	81981	83309	85262
				Sample Date	13/02/2019	17/04/2019	12/06/2019	07/08/2019	02/10/2019	11/12/2019
				Sample Type	Grab	Grab	Grab	Grab	Grab	Grab
Flow m^3/Day	ELV	Max ELV	Frequency	Actual						
BOD mg/L	25	50	6	6	561	256	135	222	392	3260
COD mg/L	125	250	6	6	3135	753	330	659	1405	15010
Suspended Solids mg/L	35	87.5	6	6	836	518	70	317	957	6145
pH	6 to 9		6	6	7.1	7.3	7.5	7.4	7.2	7.2
E.Coli cfu/100mls	n/a	#VALUE!	6	6	>24196	>24196	>24196	24196	>24196	>24196
Intestinal enterococci MPN/100mls	n/a	#VALUE!	6	6	>24196	>24196	350	>24196	>24196	>24196
Faecal Coliforms cfu/100mls	n/a	#VALUE!	6	6	>24196	>24196	>24196	24196	>24196	>24196

Ambient Monitoring Summary

Ambient Monitoring Point from WWDL (or as agreeded with EPA)	Irish Grid Reference	EPA Feature Coding tool Code	Current EQS Status	Does Assessment of the monitoring results indicate the discharge is impacting on water quality
SW001Monitoring Point (Whitegate)	E183989 N63718	CW05003150LE8 008	Unpolluted	No
SW002 Monitoring Point (Rostellan)	E186676 N65750	CW05003150LE8 010	Unpolluted	No
SW003 Monitoring Point (Lower Aghada)	E185590 N65910	CW05003150LE8 009	Unpolluted	No
GW004 Mopnitoring Point (TBC)	TBC	TBC	Good	no ground water monitoring undertaken

MonitoringStationCode	MonitoringStationName	SampleDate	SampleMe	ParameterName	Parameter	Result	ResultString	LimitOfDe	ReportResult	ReportTextResult
CW05003150LE8008	Whitegate/Aghada SW001 Monitoring Point	13/02/2019 09:50	Grab	Ammonia-Total (as N)	mg/l		<0.035	0.00	0.0175	<0.035
CW05003150LE8008	Whitegate/Aghada SW001 Monitoring Point	12/06/2019 11:45	Grab	Ammonia-Total (as N)	mg/l	0.047		0.00	0.047	
CW05003150LE8008	Whitegate/Aghada SW001 Monitoring Point	07/08/2019 09:55	Grab	Ammonia-Total (as N)	mg/l	0.14		0.00	0.14	
CW05003150LE8008	Whitegate/Aghada SW001 Monitoring Point	02/10/2019 09:25	Grab	Ammonia-Total (as N)	mg/l	0.331		0.00	0.331	
CW05003150LE8008	Whitegate/Aghada SW001 Monitoring Point	13/02/2019 09:50	Grab	BOD - 5 days (Total)	mg/l		<1.0	1.00	0.5	<1.0
CW05003150LE8008	Whitegate/Aghada SW001 Monitoring Point	12/06/2019 11:45	Grab	BOD - 5 days (Total)	mg/l	5.6		1.00	5.6	
CW05003150LE8008	Whitegate/Aghada SW001 Monitoring Point	07/08/2019 09:55	Grab	BOD - 5 days (Total)	mg/l	6.6		1.00	6.6	
CW05003150LE8008	Whitegate/Aghada SW001 Monitoring Point	02/10/2019 09:25	Grab	BOD - 5 days (Total)	mg/l	2.5		1.00	2.5	
CW05003150LE8008	Whitegate/Aghada SW001 Monitoring Point	13/02/2019 09:50	Grab	Dissolved Oxygen	% Saturatic	95.3		0.00	95.3	
CW05003150LE8008	Whitegate/Aghada SW001 Monitoring Point	12/06/2019 11:45	Grab	Dissolved Oxygen	% Saturatic	98.2		0.00	98.2	
CW05003150LE8008	Whitegate/Aghada SW001 Monitoring Point	07/08/2019 09:55	Grab	Dissolved Oxygen	% Saturatic	95.7		0.00	95.7	
CW05003150LE8008	Whitegate/Aghada SW001 Monitoring Point	02/10/2019 09:25	Grab	Dissolved Oxygen	% Saturatic	90.1		0.00	90.1	
CW05003150LE8008	Whitegate/Aghada SW001 Monitoring Point	13/02/2019 09:50	Grab	E. Coli	no./100mls	97		0.00	97	
CW05003150LE8008	Whitegate/Aghada SW001 Monitoring Point	12/06/2019 11:45	Grab	E. Coli	no./100mls	144		0.00	144	
CW05003150LE8008	Whitegate/Aghada SW001 Monitoring Point	07/08/2019 09:55	Grab	E. Coli	no./100mls	1071		0.00	1071	
CW05003150LE8008	Whitegate/Aghada SW001 Monitoring Point	02/10/2019 09:25	Grab	E. Coli	no./100mls		>24196	0.00	24196	>24196
CW05003150LE8008	Whitegate/Aghada SW001 Monitoring Point	13/02/2019 09:50	Grab	Enterococci (Intestinal)	no./100mls	10		0.00	10	
CW05003150LE8008	Whitegate/Aghada SW001 Monitoring Point	12/06/2019 11:45	Grab	Enterococci (Intestinal)	no./100mls	235		0.00	235	
CW05003150LE8008	Whitegate/Aghada SW001 Monitoring Point	07/08/2019 09:55	Grab	Enterococci (Intestinal)	no./100mls	197		0.00	197	
CW05003150LE8008	Whitegate/Aghada SW001 Monitoring Point	02/10/2019 09:25	Grab	Enterococci (Intestinal)	no./100mls	9804		0.00	9804	
CW05003150LE8008	Whitegate/Aghada SW001 Monitoring Point	13/02/2019 09:50	Grab	Faecal coliforms	no./100mls	108		0.00	108	
CW05003150LE8008	Whitegate/Aghada SW001 Monitoring Point	12/06/2019 11:45	Grab	Faecal coliforms	no./100mls	171		0.00	171	
CW05003150LE8008	Whitegate/Aghada SW001 Monitoring Point	07/08/2019 09:55	Grab	Faecal coliforms	no./100mls	2247		0.00	2247	
CW05003150LE8008	Whitegate/Aghada SW001 Monitoring Point	02/10/2019 09:25	Grab	Faecal coliforms	no./100mls		>24196	0.00	24196	>24196
CW05003150LE8008	Whitegate/Aghada SW001 Monitoring Point	13/02/2019 09:50	Grab	pH	pH units	7.9		2.00	7.9	
CW05003150LE8008	Whitegate/Aghada SW001 Monitoring Point	12/06/2019 11:45	Grab	pH	pH units	8		2.00	8	
CW05003150LE8008	Whitegate/Aghada SW001 Monitoring Point	07/08/2019 09:55	Grab	pH	pH units	8		2.00	8	
CW05003150LE8008	Whitegate/Aghada SW001 Monitoring Point	02/10/2019 09:25	Grab	pH	pH units	7.8		2.00	7.8	
CW05003150LE8008	Whitegate/Aghada SW001 Monitoring Point	13/02/2019 09:50	Grab	Suspended Solids	mg/l	43		2.50	43	
CW05003150LE8008	Whitegate/Aghada SW001 Monitoring Point	12/06/2019 11:45	Grab	Suspended Solids	mg/l	49		2.50	49	
CW05003150LE8008	Whitegate/Aghada SW001 Monitoring Point	07/08/2019 09:55	Grab	Suspended Solids	mg/l	46		2.50	46	
CW05003150LE8008	Whitegate/Aghada SW001 Monitoring Point	02/10/2019 09:25	Grab	Suspended Solids	mg/l	21		2.50	21	
CW05003150LE8008	Whitegate/Aghada SW001 Monitoring Point	13/02/2019 09:50	Grab	Temperature	°C	9		0.00	9	
CW05003150LE8008	Whitegate/Aghada SW001 Monitoring Point	12/06/2019 11:45	Grab	Temperature	°C	13.7		0.00	13.7	
CW05003150LE8008	Whitegate/Aghada SW001 Monitoring Point	07/08/2019 09:55	Grab	Temperature	°C	17		0.00	17	
CW05003150LE8008	Whitegate/Aghada SW001 Monitoring Point	02/10/2019 09:25	Grab	Temperature	°C	12.3		0.00	12.3	
CW05003150LE8008	Whitegate/Aghada SW001 Monitoring Point	13/02/2019 09:50	Grab	Total Oxidised Nitrogen (as I	mg/l	0.77		0.00	0.77	
CW05003150LE8008	Whitegate/Aghada SW001 Monitoring Point	12/06/2019 11:45	Grab	Total Oxidised Nitrogen (as I	mg/l	0.42		0.00	0.42	
CW05003150LE8008	Whitegate/Aghada SW001 Monitoring Point	07/08/2019 09:55	Grab	Total Oxidised Nitrogen (as I	mg/l	1.01		0.00	1.01	
CW05003150LE8008	Whitegate/Aghada SW001 Monitoring Point	02/10/2019 09:25	Grab	Total Oxidised Nitrogen (as I	mg/l	0.78		0.00	0.78	
CW05003150LE8009	Whitegate/Aghada SW003 Monitoring (Lower Agh	13/02/2019 10:45	Grab	Ammonia-Total (as N)	mg/l		<0.035	0.00	0.0175	<0.035
CW05003150LE8009	Whitegate/Aghada SW003 Monitoring (Lower Agh	12/06/2019 12:10	Grab	Ammonia-Total (as N)	mg/l		<0.035	0.00	0.0175	<0.035
CW05003150LE8009	Whitegate/Aghada SW003 Monitoring (Lower Agh	07/08/2019 10:35	Grab	Ammonia-Total (as N)	mg/l	0.06		0.00	0.06	
CW05003150LE8009	Whitegate/Aghada SW003 Monitoring (Lower Agh	02/10/2019 09:15	Grab	Ammonia-Total (as N)	mg/l	0.196		0.00	0.196	
CW05003150LE8009	Whitegate/Aghada SW003 Monitoring (Lower Agh	13/02/2019 10:45	Grab	BOD - 5 days (Total)	mg/l		<1.0	1.00	0.5	<1.0
CW05003150LE8009	Whitegate/Aghada SW003 Monitoring (Lower Agh	12/06/2019 12:10	Grab	BOD - 5 days (Total)	mg/l	1.9		1.00	1.9	
CW05003150LE8009	Whitegate/Aghada SW003 Monitoring (Lower Agh	07/08/2019 10:35	Grab	BOD - 5 days (Total)	mg/l	6.3		1.00	6.3	
CW05003150LE8009	Whitegate/Aghada SW003 Monitoring (Lower Agh	02/10/2019 09:15	Grab	BOD - 5 days (Total)	mg/l	1.8		1.00	1.8	

CW05003150LE8009	Whitegate/Aghada SW003 Monitoring (Lower Agh	13/02/2019 10:45	Grab	Dissolved Oxygen	% Saturatic	98.5		0.00	98.5	
CW05003150LE8009	Whitegate/Aghada SW003 Monitoring (Lower Agh	12/06/2019 12:10	Grab	Dissolved Oxygen	% Saturatic	108.4		0.00	108.4	
CW05003150LE8009	Whitegate/Aghada SW003 Monitoring (Lower Agh	07/08/2019 10:35	Grab	Dissolved Oxygen	% Saturatic	124.7		0.00	124.7	
CW05003150LE8009	Whitegate/Aghada SW003 Monitoring (Lower Agh	02/10/2019 09:15	Grab	Dissolved Oxygen	% Saturatic	102.1		0.00	102.1	
CW05003150LE8009	Whitegate/Aghada SW003 Monitoring (Lower Agh	13/02/2019 10:45	Grab	E. Coli	no./100mls	75		0.00	75	
CW05003150LE8009	Whitegate/Aghada SW003 Monitoring (Lower Agh	12/06/2019 12:10	Grab	E. Coli	no./100mls	73		0.00	73	
CW05003150LE8009	Whitegate/Aghada SW003 Monitoring (Lower Agh	07/08/2019 10:35	Grab	E. Coli	no./100mls	211		0.00	211	
CW05003150LE8009	Whitegate/Aghada SW003 Monitoring (Lower Agh	02/10/2019 09:15	Grab	E. Coli	no./100mls	213		0.00	213	
CW05003150LE8009	Whitegate/Aghada SW003 Monitoring (Lower Agh	13/02/2019 10:45	Grab	Enterococci (Intestinal)	no./100mls	41		0.00	41	
CW05003150LE8009	Whitegate/Aghada SW003 Monitoring (Lower Agh	12/06/2019 12:10	Grab	Enterococci (Intestinal)	no./100mls		<10	0.00	5	<10
CW05003150LE8009	Whitegate/Aghada SW003 Monitoring (Lower Agh	07/08/2019 10:35	Grab	Enterococci (Intestinal)	no./100mls		<10	0.00	5	<10
CW05003150LE8009	Whitegate/Aghada SW003 Monitoring (Lower Agh	02/10/2019 09:15	Grab	Enterococci (Intestinal)	no./100mls	20		0.00	20	
CW05003150LE8009	Whitegate/Aghada SW003 Monitoring (Lower Agh	13/02/2019 10:45	Grab	Faecal coliforms	no./100mls	97		0.00	97	
CW05003150LE8009	Whitegate/Aghada SW003 Monitoring (Lower Agh	12/06/2019 12:10	Grab	Faecal coliforms	no./100mls	75		0.00	75	
CW05003150LE8009	Whitegate/Aghada SW003 Monitoring (Lower Agh	07/08/2019 10:35	Grab	Faecal coliforms	no./100mls	122		0.00	122	
CW05003150LE8009	Whitegate/Aghada SW003 Monitoring (Lower Agh	02/10/2019 09:15	Grab	Faecal coliforms	no./100mls	389		0.00	389	
CW05003150LE8009	Whitegate/Aghada SW003 Monitoring (Lower Agh	13/02/2019 10:45	Grab	pH	pH units	7.9		2.00	7.9	
CW05003150LE8009	Whitegate/Aghada SW003 Monitoring (Lower Agh	12/06/2019 12:10	Grab	pH	pH units	8.3		2.00	8.3	
CW05003150LE8009	Whitegate/Aghada SW003 Monitoring (Lower Agh	07/08/2019 10:35	Grab	pH	pH units	8.9		2.00	8.9	
CW05003150LE8009	Whitegate/Aghada SW003 Monitoring (Lower Agh	02/10/2019 09:15	Grab	pH	pH units	8		2.00	8	
CW05003150LE8009	Whitegate/Aghada SW003 Monitoring (Lower Agh	13/02/2019 10:45	Grab	Suspended Solids	mg/l	14		2.50	14	
CW05003150LE8009	Whitegate/Aghada SW003 Monitoring (Lower Agh	12/06/2019 12:10	Grab	Suspended Solids	mg/l	26		2.50	26	
CW05003150LE8009	Whitegate/Aghada SW003 Monitoring (Lower Agh	07/08/2019 10:35	Grab	Suspended Solids	mg/l	35		2.50	35	
CW05003150LE8009	Whitegate/Aghada SW003 Monitoring (Lower Agh	02/10/2019 09:15	Grab	Suspended Solids	mg/l	148		2.50	148	
CW05003150LE8009	Whitegate/Aghada SW003 Monitoring (Lower Agh	13/02/2019 10:45	Grab	Temperature	°C	8.9		0.00	8.9	
CW05003150LE8009	Whitegate/Aghada SW003 Monitoring (Lower Agh	12/06/2019 12:10	Grab	Temperature	°C	13.6		0.00	13.6	
CW05003150LE8009	Whitegate/Aghada SW003 Monitoring (Lower Agh	07/08/2019 10:35	Grab	Temperature	°C	18		0.00	18	
CW05003150LE8009	Whitegate/Aghada SW003 Monitoring (Lower Agh	02/10/2019 09:15	Grab	Temperature	°C	13.6		0.00	13.6	
CW05003150LE8009	Whitegate/Aghada SW003 Monitoring (Lower Agh	13/02/2019 10:45	Grab	Total Oxidised Nitrogen (as I	mg/l	0.83		0.00	0.83	
CW05003150LE8009	Whitegate/Aghada SW003 Monitoring (Lower Agh	12/06/2019 12:10	Grab	Total Oxidised Nitrogen (as I	mg/l	0.15		0.00	0.15	
CW05003150LE8009	Whitegate/Aghada SW003 Monitoring (Lower Agh	07/08/2019 10:35	Grab	Total Oxidised Nitrogen (as I	mg/l	0.7		0.00	0.7	
CW05003150LE8009	Whitegate/Aghada SW003 Monitoring (Lower Agh	02/10/2019 09:15	Grab	Total Oxidised Nitrogen (as I	mg/l	6.4		0.00	6.4	
CW05003150LE8010	Whitegate/Aghada SW002 Monitoring (Rostellan)	13/02/2019 10:35	Grab	Ammonia-Total (as N)	mg/l	0.04		0.00	0.04	
CW05003150LE8010	Whitegate/Aghada SW002 Monitoring (Rostellan)	12/06/2019 12:35	Grab	Ammonia-Total (as N)	mg/l	0.13		0.00	0.13	
CW05003150LE8010	Whitegate/Aghada SW002 Monitoring (Rostellan)	07/08/2019 10:40	Grab	Ammonia-Total (as N)	mg/l	0.06		0.00	0.06	
CW05003150LE8010	Whitegate/Aghada SW002 Monitoring (Rostellan)	02/10/2019 09:00	Grab	Ammonia-Total (as N)	mg/l		<0.035	0.00	0.0175	<0.035
CW05003150LE8010	Whitegate/Aghada SW002 Monitoring (Rostellan)	13/02/2019 10:35	Grab	BOD - 5 days (Total)	mg/l		<1.0	1.00	0.5	<1.0
CW05003150LE8010	Whitegate/Aghada SW002 Monitoring (Rostellan)	12/06/2019 12:35	Grab	BOD - 5 days (Total)	mg/l	4		1.00	4	
CW05003150LE8010	Whitegate/Aghada SW002 Monitoring (Rostellan)	07/08/2019 10:40	Grab	BOD - 5 days (Total)	mg/l	6.7		1.00	6.7	
CW05003150LE8010	Whitegate/Aghada SW002 Monitoring (Rostellan)	02/10/2019 09:00	Grab	BOD - 5 days (Total)	mg/l	2.6		1.00	2.6	
CW05003150LE8010	Whitegate/Aghada SW002 Monitoring (Rostellan)	13/02/2019 10:35	Grab	Dissolved Oxygen	% Saturatic	107		0.00	107	
CW05003150LE8010	Whitegate/Aghada SW002 Monitoring (Rostellan)	12/06/2019 12:35	Grab	Dissolved Oxygen	% Saturatic	114.2		0.00	114.2	
CW05003150LE8010	Whitegate/Aghada SW002 Monitoring (Rostellan)	07/08/2019 10:40	Grab	Dissolved Oxygen	% Saturatic	119.8		0.00	119.8	
CW05003150LE8010	Whitegate/Aghada SW002 Monitoring (Rostellan)	02/10/2019 09:00	Grab	Dissolved Oxygen	% Saturatic	92.2		0.00	92.2	
CW05003150LE8010	Whitegate/Aghada SW002 Monitoring (Rostellan)	13/02/2019 10:35	Grab	E. Coli	no./100mls	1187		0.00	1187	
CW05003150LE8010	Whitegate/Aghada SW002 Monitoring (Rostellan)	12/06/2019 12:35	Grab	E. Coli	no./100mls	3448		0.00	3448	
CW05003150LE8010	Whitegate/Aghada SW002 Monitoring (Rostellan)	07/08/2019 10:40	Grab	E. Coli	no./100mls	31		0.00	31	
CW05003150LE8010	Whitegate/Aghada SW002 Monitoring (Rostellan)	02/10/2019 09:00	Grab	E. Coli	no./100mls	2143		0.00	2143	
CW05003150LE8010	Whitegate/Aghada SW002 Monitoring (Rostellan)	13/02/2019 10:35	Grab	Enterococci (Intestinal)	no./100mls	249		0.00	249	

CW05003150LE8010	Whitegate/Aghada SW002 Monitoring (Rostellan)	12/06/2019 12:35	Grab	Enterococci (Intestinal)	no./100ml	435	0.00	435
CW05003150LE8010	Whitegate/Aghada SW002 Monitoring (Rostellan)	07/08/2019 10:40	Grab	Enterococci (Intestinal)	no./100ml	85	0.00	85
CW05003150LE8010	Whitegate/Aghada SW002 Monitoring (Rostellan)	02/10/2019 09:00	Grab	Enterococci (Intestinal)	no./100ml	1553	0.00	1553
CW05003150LE8010	Whitegate/Aghada SW002 Monitoring (Rostellan)	13/02/2019 10:35	Grab	Faecal coliforms	no./100ml	1607	0.00	1607
CW05003150LE8010	Whitegate/Aghada SW002 Monitoring (Rostellan)	12/06/2019 12:35	Grab	Faecal coliforms	no./100ml	4884	0.00	4884
CW05003150LE8010	Whitegate/Aghada SW002 Monitoring (Rostellan)	07/08/2019 10:40	Grab	Faecal coliforms	no./100ml	74	0.00	74
CW05003150LE8010	Whitegate/Aghada SW002 Monitoring (Rostellan)	02/10/2019 09:00	Grab	Faecal coliforms	no./100ml	4106	0.00	4106
CW05003150LE8010	Whitegate/Aghada SW002 Monitoring (Rostellan)	13/02/2019 10:35	Grab	pH	pH units	8	2.00	8
CW05003150LE8010	Whitegate/Aghada SW002 Monitoring (Rostellan)	12/06/2019 12:35	Grab	pH	pH units	8.4	2.00	8.4
CW05003150LE8010	Whitegate/Aghada SW002 Monitoring (Rostellan)	07/08/2019 10:40	Grab	pH	pH units	9	2.00	9
CW05003150LE8010	Whitegate/Aghada SW002 Monitoring (Rostellan)	02/10/2019 09:00	Grab	pH	pH units	7.9	2.00	7.9
CW05003150LE8010	Whitegate/Aghada SW002 Monitoring (Rostellan)	13/02/2019 10:35	Grab	Suspended Solids	mg/l	13	2.50	13
CW05003150LE8010	Whitegate/Aghada SW002 Monitoring (Rostellan)	12/06/2019 12:35	Grab	Suspended Solids	mg/l	24	2.50	24
CW05003150LE8010	Whitegate/Aghada SW002 Monitoring (Rostellan)	07/08/2019 10:40	Grab	Suspended Solids	mg/l	32	2.50	32
CW05003150LE8010	Whitegate/Aghada SW002 Monitoring (Rostellan)	02/10/2019 09:00	Grab	Suspended Solids	mg/l	6	2.50	6
CW05003150LE8010	Whitegate/Aghada SW002 Monitoring (Rostellan)	13/02/2019 10:35	Grab	Temperature	°C	8.8	0.00	8.8
CW05003150LE8010	Whitegate/Aghada SW002 Monitoring (Rostellan)	12/06/2019 12:35	Grab	Temperature	°C	13.1	0.00	13.1
CW05003150LE8010	Whitegate/Aghada SW002 Monitoring (Rostellan)	07/08/2019 10:40	Grab	Temperature	°C	17.9	0.00	17.9
CW05003150LE8010	Whitegate/Aghada SW002 Monitoring (Rostellan)	02/10/2019 09:00	Grab	Temperature	°C	9.8	0.00	9.8
CW05003150LE8010	Whitegate/Aghada SW002 Monitoring (Rostellan)	13/02/2019 10:35	Grab	Total Oxidised Nitrogen (as	mg/l	2.5	0.00	2.5
CW05003150LE8010	Whitegate/Aghada SW002 Monitoring (Rostellan)	12/06/2019 12:35	Grab	Total Oxidised Nitrogen (as	mg/l	1.9	0.00	1.9
CW05003150LE8010	Whitegate/Aghada SW002 Monitoring (Rostellan)	07/08/2019 10:40	Grab	Total Oxidised Nitrogen (as	mg/l	0.7	0.00	0.7
CW05003150LE8010	Whitegate/Aghada SW002 Monitoring (Rostellan)	02/10/2019 09:00	Grab	Total Oxidised Nitrogen (as	mg/l	0.27	0.00	0.27