

Orla Harrington Environmental Licensing Programme Office of Climate, Licensing and Resource Use **Environmental Protection Agency** McCumiskey House Richview Clonskeagh Dublin 14.

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18th March 2015

IW-ER-LT0212

Re: Milltown Waste Water Discharge Authorisation (D0331-01)

Dear Orla Harrington,

other use. ection purpose of for In response to the Regulation 18(3)(b)-3 request for further information notice dated the 2nd of August 2012, please see below relevant information.

Section A: Non technical Summary

Please address each of the bullet points listed in Section A of the application form and update the non technical summary to reflect the information provided in response to this notice.

A revised non technical summary is attached in Appendix 1. cÔ

Section C: Infrastructure & Operation

Provide full details of upgrades to the WWTP stating when they occurred, the discharge quality from the plant and the current capacity both in terms of P.E. and hydraulic capacity. Please confirm whether an Environmental Impact Statement (EIS) was required as part of your planning permission application for upgrades proposed.

The new Waste Water Treatment Plant (WWTP) in Milltown was completed on the 1st of May 2011. The plant is a Design Build & Operate Plant (DBO) contracted to EPS, Mallow Co. Cork. The Milltown Waste Water Treatment Plant (WWTP) has a capacity to cater for 3,500 Population Equivalent (PE). The plant has a capacity to treat 1,890 m³/day and further capacity for storing 178.5m³ in the event of storm flows. The current PE entering the WWTP is estimated as 1,510 PE increasing to 1,524 PE by 2021. The plant is designed such that the treated effluent will comply with the standards shown in the following table:

Stjurthoiri / Directors; M. McNicholas (Chairman), Brendan Murphy, Michael O'Sullivan, John Tierney, Ofig Chiaraithe / Registered Office: Teach Cokil, 24-26 Sraid Thalboid, Bale Afna Clash 1/ Cokil House, 24-26 Talbot Street, Dublin 1 Is cuideachta phríobháideach i Uisce Éireann faoi theorainn sceireanna / Irish Water is a private company limited by shares Uimhir Chláraithe in Éirinn / Registered in Ireland No.: 530363

Parameter	Concentration
BOD mg/l	25
SS mg/l	35
COD mg/l	125

In September 2003, Kerry County Council received Part 8 Development consent for the proposed Milltown Sewerage Scheme, this was by means of the Part 8 Planning and Development Regulations 2001. An Bord Pleanála were not involved and an Environmental Impact Statement was not required.

Clarify whether the storm water overflows comply with the DoEHLG 'Procedures and Criteria in Relation to Storm Water Overflows, 1995'. Where a storm water overflow does not comply with these guidelines, give details of the plans for improvement

Further assessment is required to evaluate if stormwater overflows comply with the DoEHLG 'Procedures and Criteria in Relation to Storm Water Overflows, 1995'. There is no provision in the CIP K in 2014 -2016 for any upgrade of the existing collection network in Miltown, therefore any works which may be required will not commence prior to 2018.

Section D: Discharges to the Aquatic Environment

Give particulars of the source, location, nature, composition, quality, and rate of discharge arising from the agglomeration and, where relevant, the periods during which such emissions are FOI made or are to be made.

The WWTP includes a biological process based on two SBR Cells. Effluent from the WWTP discharges to the Maine River. The WWTP operates within the standards required by the Urban Waste Water Treatment regulations, i.e. BOD -25 mg/l, COD - 125 mg/l, Suspended Solids - 35 mg/l. The average daily volume discharged from the WWTP in 2013 was 472 m³. The quality of the treated effluent discharged in 2013 was on average 5.89 mg/l BOD, 34.13 mg/l COD and 10.49 mg/l suspended solids. The discharge operates by gravity on a continual basis from the WWTP.

Provide a hard copy of the information from Section D.1 and Section D.2

Sections D.1 and D.2 are provided in Appendix 2.

Section E: Monitoring

Submit a hard copy of updated monitoring data for the primary discharge point

Monthly averages of final effluent monitoring results for 2013 are provided in the table below.

	BOD	COD	SS	Ammonia	ТР
	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)
January	3.20	18.60	9.00	0.53	1.18
February	5.50	44.75	15.75	4.96	1.36
March	11.00	65.00	20.67	12.11	2.55
April	6.25	40.75	20.25	2.35	3.27
May	4.00	25.60	7.20	0.42	2.17
June	5.50	38.50	5.75	3.45	2.26
July	5.00	32.60	7.00	0.40	2.83
August	8.75	37.75	11.25	2.69	3.69
September	3.75	19.75	2.50	0.76	3.02
October	3.75	19.75	2.50	0.76	3.02
November	9.75	42.50	19.50	0.08	2.15
December	4.25	24.00	4.50	0.52	2.26
Average	5.89	34.13	10.49	e ^{2.42}	2.48
4 ° 4				other	

Provide an estimation of the quality of the waste water being emitted in relation to the primary discharge point, indicate if composite or continuous monitoring is in place.

The quality of the treated effluent discharged in 2013 was on average 5.89 mg/l BOD, 34.13 mg/l COD, 10.49 mg/l suspended solids, 2.42 mg/l ammonia and 2.48 mg/l P. The average flow in 2013 was 472 m³/day. This is equivalent to a daily discharge of 2.78 kg BOD/day, 16.10 kg COD/day, 4.95 kg SS/day, 1.14 kg ammonia and 1.17 kg total phosphorus. Composite sampling and continuous flow monitoring is in place. The wastewater treatment plant is not designed for nutrient removal.

Section F: Existing Environment & Impact of the Discharge(s)

Complete and submit a hard copy of all relevant sections of section F.1 and F.2

The relevant sections of F.1 and F.2 are attached in Appendix 3.

Best Regards,

Gerry Galvin

Chief Technical Advisor

Appendix 1 – Revised Non Technical Summary

NON-TECHNICAL SUMMARY SECTION A:

General:

Milltown is a town in mid-Kerry located at the junction of the N70 and R563, approximately 19km south of Tralee and 19km northwest of Killarney and 7km from Killorglin. The population of the town doubled from 415 in the 2006 census to 838 in the 2011 census. Milltown is a commuter town for both Tralee and Killarney.

The waste water from the agglomeration is collected in a combination of both combined and separate foul network. Extensive relaying works were carried out in 2009 to separate the storm from the foul sewer network along the main trunk lines.

Existing Waste Water Works:

The new Waste Water Treatment Plant (WWTP) in Milltown was completed by the 1st May 2011. The plant is a Design Build & Operate Plant (DBO). Milltown WWTP has a capacity to cater for 3,500 Population Equivalent (PE).

The WWTP includes a biological process based on two sequential batch reactor (SBR) cells. The following provisions are incorporated into the WWTR design: Aspection P ALOWNET PE

- Inlet pumping
- Storm water storage
- Automatic inlet screenings and grit removal
- A biological treatment process based on two SBR cells
- Provision of an on site sludge storage and concentration tank
- Control building to house electrical control panel, air blowers and a laboratory
- Emergency backup power supply

Effluent from the WWTP discharges to the Maine River.

The WWTP has a capacity to treat 1,890 m³/day and storm storage of 178.5 m³. The current PE entering the WWTP is estimated as 1,510 PE increasing to 1,524 PE by 2021. The WWTP is designed such that the treated effluent will comply with the standards set out in the Urban Wastewater Directive - 25 mg/l BOD, 35 mg/l SS and 125 mg/l COD.

Sources of Emissions:

The WWTP outfall discharges into the River Maine which is influenced by tidal changes at this point (81178E, 101423N).

Up to 3 DWF of the design flow is passed to the secondary treatment plant while the remaining inflow (up to the 5-year stormflows) will be passed to the storm water balancing tank. The storm water balancing tank is sized (178.5 m³) to retain the difference between 3 DWF and 6 DWF for a two-hour period prior to overflowing. Storm water is pumped back to the WWTP. The overflow from the storm water balancing tank discharges to the head of the WWTP outfall.

A storm water overflow is provided at the inlet of the WWTP to cater for inflows greater than the 5-year storm.

Nature and Quantities of Foreseeable emissions:

The WWTP operates within the standards required by the Urban Waste Water Treatment regulations, i.e. BOD 25 mg/l, COD 125 mg/l, suspended solids 35mg/l.

The average daily volume discharged from the WWTP in 2013 was 472 m³. The quality of the treated effluent discharged in 2013 was on average 5.89 mg/l BOD, 34.13 mg/l COD, 10.49 mg/l suspended solids, 2.42 mg/l ammonia and 2.48 mg/l P. The average flow is 472 m³/day. This is equivalent to a daily discharge of 2.78 kg BOD/day, 16.10 kg COD/day, 4.95 kg SS/day, 1.14 kg ammonia and 1.17 kg total phosphorus.

Technology for Prevention or Reduction of Emissions:

The treated effluent being discharged to the River Maine is well within the standards required under the Urban Waste Water Treatment Regulations.

The overall process as stated above is successful in removing BOD, nitrogen, and suspended solids from the final effluent which results in a reduction of harmful emissions from the treatment works. Technology in the form of mechanical equipment is used at the treatment plant so as to reduce the concentration of potentially harmful substances in the effluent prior to discharge.

Milltown wastewater treatment plant is operated on a DBO contract. The wastewater treatment plant is manned for approximately four bours per day, two days per week. There is a dial out alarm system on site.

Further Measures Planned to Eliminate or Reduce Emissions:

As stated previously, the WWTP operates well within the standards required by the Urban Waste Water Treatment regulations, i.e. BOD 25 mg/l, COD 125 mg/l, suspended solids 35mg/l, with the quality of the treated effluent discharged in 2013 being on average 5.89 mg/l BOD, 34.13 mg/l COD and 10.49 mg/l suspended solids.

Measures planned to Monitor Emissions to the Environment:

Sampling takes place at the wastewater treatment plant final effluent chamber in accordance with the provisions of the Urban Wastewater Treatment Regulations. The samples are flow proportional samples. The WWTP is operated using a SCADA system since construction.

Appendix 2 – Sections D.1 and D.2

Table D.1 (i) (a):EMISSIONS TO SURFACE/GROUND WATERS
(Primary Discharge Point)

Discharge Point Code: <u>SW1</u>

Source of Emission:	Milltown WWTP
Location:	Abbeylands, Milltown
Grid Ref. (12 digit, 6E, 6N):	81178E, 101423N
Name of receiving waters:	River Maine (Transitional)
River Basin District:	South Western River Basin District
Designation of receiving waters:	Salmonoid River to high
Flow rate in receiving waters:	1.15m ³ /sec (95 percentile flow)

Emission Details:

(i) Volume em	itted							
Normal/day	472 M ³	Maximum/day						1750 3 53
								1759 M°
Maximum rate/hour	73.3 M^3	Period of emission (avg)						
			60	min/hr	24	hr/day	365	day/yr
Dry Weather Flow	0.002							
	M ³ /sec							

Table D.1 (i) (b): EMISSIONS TO SURFACE/GROUND WATERS – Characteristics of the emission

(Primary Discharge Point)

Discharge Point Code: <u>SW1</u>

Number	Substance	As discharged		
		Max. Daily Averyage		
1	pH	, s ^{\$} 7.2		
2	Termperature	other 9		
3	Electrical Conductivity (@ 25°C)	aly: 201 406		
		Max. Daily average (mg/l)	Kg/day	
4	Suspended Solids	20.67	9.75	
5	Ammonia (as N)	12.11	5.71	
6	Biochemical Oxygen Demand	11.60	5.47	
7	Chemical Oxygen Demand	65.00	30.68	
8	Total Nitrogen (as N)	-	-	
9	Nitrite (as N)	-	-	
10	Nitrate (as N)	-	-	
11	Total Phosphorus (as P)	0.669	0.316	
12	Orthophosphate (as P) ^{Note 1}	0.241	0.114	
	unfiltered			
13	Sulphate (SO ₄)	15.4	7.269	
14	Phenols (sum) Note 2 (ug/l)	< 0.005	< 0.002	

Note 1: For waste water samples this monitoring should be undertaken on a sample filtered on 0.45 µm filter paper.

Note 2: USEPA Method 604, AWWA Standard Method 6240, or equivalent.

Table D.1(i)(c) Dangerous substances emissions to surface /ground watersPrimary Discharge Point- Characteristics of the emission

Discharge Point Code: SW1

Number	Substance	Max daily average	Kg/day	Kg/yr
		μg/l	A 1150	
1	Atrazine	<0.1	³⁰⁰ <0.00004	< 0.017
2	Dichloromethane	<1 0119, 200	< 0.0004	< 0.172
3	Simazine	<0.15 dto	< 0.00004	< 0.017
4	Toluene	Part Colin	< 0.004	< 0.172
5	Tributlyn	cti 0.02	< 0.000006	< 0.003
6	Xylenes	1500 1 0 M <1	< 0.002	< 0.172
7	Arsenic	For vie 0.58	0.0003	0.099
8	Chromium	scor 1	0.0004	0.172
9	Copper(mg/l)	< 0.025	< 0.012	<4.38
10	Cyanide(mg/t)	-	-	-
11	Fluoride(mg/l)	< 0.2	< 0.094	<34.31
12	Lead	< 0.5	< 0.0002	< 0.086
13	Nickel	1.4	0.0006	0.241
14	Zinc	<20	<0.009	<3.446
15	Boron	0.018	0.000008	0.003
16	Cadmium	< 0.5	< 0.0002	< 0.086
17	Mercury	< 0.5	<0.002	< 0.086
18	Selenium	0.6	0.0003	0.103
19	Barium	-	-	-

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Table D.1 (ii) (a):EMISSIONS TO SURFACE/GROUND WATERS
(Secondary Discharge Points)

Discharge Point Code: <u>Not Applicable</u>

Source of Emission:	Not applicable
Location:	Not applicable
Grid Ref. (12 digit, 6E, 6N):	Not applicable
Name of receiving waters:	Not applicable
River Basin District:	Not applicable
Designation of receiving waters:	Not applicable
Flow rate in receiving waters:	Not applicable
	Collect

Emission Details:

(i) Volume emitted				2	
Normal/day	M ³	Maximum/day m3			
					M^3
Maximum rate/hour	M ³	Period of emission (avg)			
			min/hr	hr/day	day/yr
Dry Weather Flow	M ³ /sec				

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Table D.1 (iii) (a):EMISSIONS TO SURFACE/GROUND WATERS
(Storm Water Overflow Point)

Discharge Point Code: <u>SW2</u>

Source of Emission:	Storm Water Overflow from WWTP Storm Tank
Location:	Abbeylands, Milltown
Grid Ref. (12 digit, 6E, 6N):	81178E, 101423N
Name of receiving waters:	River Maine (Transitional)
River Basin District:	South Western River Basin District
Designation of receiving waters:	Salmonoid River
Flow rate in receiving waters:	1.15m ³ /sec (95 percentile flow)
	Conse

Emission Details:

(i) Volume emitted					
Normal/day	M ³	Maximum/day m3			M ³
Maximum rate/hour	M ³	Period of emission (avg)			
		r errou or erriteston (uvg)	 min/hr	hr/day	day/yr
Dry Weather Flow	M ³ /sec				

Table D.1 (iii) (a):EMISSIONS TO SURFACE/GROUND WATERS
(Storm Water Overflow Point)

Discharge Point Code: <u>SW3</u>

Source of Emission:	Storm Water Overflow at WWTP Inlet Works
Location:	Abbeylands, Milltown
Grid Ref. (12 digit, 6E, 6N):	82044E, 100919N
Name of receiving waters:	Ahsullish Stream
River Basin District:	South Western River Basin District
Designation of receiving waters:	No data available
Flow rate in receiving waters:	No data available
	CORS

Emission Details:

(i) Volume emitted					
Normal/day	M ³	Maximum/day m3	 		M ³
Maximum rate/hour	M ³	Period of emission (avg)	 min/hr	hr/day	day/yr
Dry Weather Flow	M ³ /sec				

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D.2 Tabular Data on Discharge Points

Table D.2:

PT_CD	PT_TYPE	LA_NAME	RWB_TYPE	RWB_NAME	DESIGNATION	EASTING	NORTHING
Point Code Provide label ID's	Point Type (e.g., Primary/ Secondary/ Storm Water Overflow)	Local Authority Name (e.g., Donegal County Council)	Receiving Water Body Type (e.g., River, Lake, Groundwater, Transitional, Coastal)	Receiving Water Body Name (e.g., River Suir)	Protected Area Type (e.g., SAC, candidate SAC, NHA, SPA etc.)	6E-digit GPS Irish National Grid Reference	6N-digit GPS Irish National Grid Reference
				A: A	ther th		
SW1	Primary discharge point	Kerry County Council	Transitional	River Mainelly art	Castlemaine Harbour SAC	81178E	101423N
SW2	Storm water overflow from WWTP Storm Tank	Kerry County Council	Transitional	River Mane	Castlemaine Harbour SAC	81178E	101423N
SW3	Storm water overflow from WWTP Inlet Works	Kerry County Council	Stream Fot of COPY	Ahsullish Stream		82044E	100919N

Appendix 3 – Section F Including Appropriate Assessment Screening Report

SECTION F: EXISTING ENVIRONMENT & IMPACT OF THE DISCHARGES

F.1. Assessment of Impact on Receiving Surface or Ground Water

 Give summary details and an assessment of the impacts of any existing or proposed emissions on the environment, including environmental media other than those into which the emissions are to be made.

Potential impacts from the discharge of effluent from the Wastewater Treatment Plant include:

- Eutrophication due to discharge of Phosphorus and Nitrogen. The primary effect of eutrophication is to stimulate algal growth. Excess algal growth can lead to hypoxia in water, killing fish and organisms.
- Contamination of the aquatic food chain with a variety of pollutants in particular heavy metals which can be toxic to fish.

Such impacts could lead to a depletion of aquatic flora, and fauna downstream of the WWTP.

Details of all monitoring of the receiving water should be supplied via the following web based link: <u>http://epa.corasystems.com/EPA_WWD</u>. Tables F.1(i)(a) & (b) should be completed for the primary discharge point. Surface water monitoring locations upstream and downstream of the discharge point shall be screened for those substances listed in Tables F.1(i)(a) & (b). Monitoring of surface water shall be carried out at not less than two points, one upstream from the discharge location and one downstream.

Milltown WWTP discharges to the River Maine which is under tidal influence at the discharge point (SW1). Monitoring of surface water for substances listed in Tables F.1(i)(a) & (b) has not been carried out at SW1.

 For discharges from secondary discharge points Tables F.1(ii)(a) & (b) should be completed. Furthermore, provide summary details and an assessment of the impacts of any existing or proposed emissions on the surface water or ground (aquifers, soils, sub-soils and rock environment), including any impact on environmental media other than those into which the emissions are to be made.

Not applicable.

 Provide details of the extent and type of ground emissions at the works. For larger discharges to groundwaters, e.g., from Integrated Constructed Wetlands, large scale percolation areas, etc., a comprehensive report must be completed which should include, inter alia, topography, meteorological data, water quality, geology, hydrology, and hydrogeology. The latter must in particular present the aquifer classification and vulnerability. The Geological Survey of Ireland Groundwater Protection Scheme Dept of the Environment and Local Government, Geological Survey of Ireland, EPA (1999) methodology should be used for any such classification. This report should also identify all surface water bodies and water wells that may be at risk as a result of the ground discharge.

Not Applicable

o Describe the existing environment in terms of water quality with particular reference to environmental quality standards or other legislative standards. Submit a copy of the most recent water quality management plan or catchment management plan in place for the receiving water body. Give details of any designation under any Council Directive or Regulations that apply in relation to the receiving water.

Data from three hydrometric stations for the River Maine is available

- Castleisalnd
- Maine Bridge (Riverville)
- Castlemaine

While the Castlemain station is nearest to the discharge point, the data available at the station is limited to tidal maxima. The Maine Bridge (Riverville) station is located 14.0km upstream of the proposed discharge point and the data records provide the following information

 Dry weather flow 0.37 m³/s
 95 percentile flow 0.8 m³/s
 Contribution catchment 272 km²
 As no further flow data is available further demonstream from the Maine Bridge (Riverville) station, the flow data in the River Maine wat the proposed discharge point has been calculated by adjustment of the contributing catchment as follows:

- for st Additional contributing catching it 120 km²
- Dry Weather flow 0.53 m³/s^c
- 95 percentile flow 1.15 mg/s
- Total contributing catchment 392 km²

Waste Assimilative Capacity of River Maine

The Waste Assimilative Capacity (WAC) of the River Maine is defined as:

$WAC = (C_{max}-C_{back}) \times F_{95} \times 86.4 \text{ kg/day}$

Where C_{max} = maximum permissible concentration $C_{back} = background (upstream) concentration (mg/l)$ $F_{95} = 95$ percentile flow (m³/s) 86.4 = conversion factor

The background levels for the River Maine are as follows

 $BOD_5 1 mg/l$ MRP 0.017 mg/l Ammonia 0.06 mg/l

No.	Waste Assimilative C	apacity (WA	C) Calculation			Calculation S	heet
					Date	13/03/201	5
	WWTP	Milltown					
	Name of River	Maine					
1.1.1.1.1.1.1		m³/s	Data Source		m³/d		
	Dry Weather Flow	0.5750	Estimated		49,680)	
	95% Flow	1.1500	Kerry CC		99,360)	
5.7772	Mean Annual Flow	0.363	Estimated		31,355		
							ANN STREET
	2014 Mean Effluent Standa	r mg/l	1				
	Carbonaceous BOD	25.000					
	Ammonia Nitrogen (NH)	20.000	14 3 6				
	Ortho Phosphate (OP)	8.000	J				
	Average Background Conce	entration (Notio	onal)	Average Ba	ckground Cond	entration (Act	tual)
		mg/l	Data Source	mg/l	Data Source		
	Carbonaceous BOD	0.260	Notionally clean	1.0000	Kerry CC		
	Ammonia Nitrogen (NH)	0.008	Notionally clean	0.0600	Kerry CC		
	Ortho Phosphate (OP)	0.005	Notionally clean	0.0170	Kerry CC		· · · · · · · · · · · · · · · · · · ·
	Allowable Downstream Con	centration (Su	face Water Regula	ations)			
		95%ile mg/l	Data Ref		E. COLORISON		
	Carbonaceous BOD	2.60	SW regs - good stat	tus 💰	0.		
,	Ammonia Nitrogen (NH)	0.14	SW regs - good stat	us thei			
	Ortho Phosphate (OP)	0.075	SW regs - good stat	us,			a statistic en engeler
No. In Val	HARDING MELES AND	and a second second		July an	The sub- and a		
PE	WWTP Daily Flow	Flow in River	Altowa	ble effluent co	onc	Comments	
		95 Percentile	BQD C	NH	OP		
2.4.17.2	m³/d	m³/d	C'mg?	mg/l	mg/l		
1,510	340	99,360	686.93	38.74	20.55	Estimated Curr	ent PE
1,524	343	99,360	680.65	38.39	20.36	Estimated 2021	PE
3,500	788	99,360	297.84	16.79	8.91	Design PE	
	an anna an the second and	6	Contract to Stark match		Philippine State	No. Contraction	a fail in Stranger
PE	WWTP Daily Flow	Flow in River		WAC			
		95 Percentile	BOD	NH	OP		No. of Street,
	m³/d	m³/d	kg/d	kg/d	kg/d	1 State States	
1,510	340	99,360	233.39	13.16	6.98	Estimated Curre	ent PE
1,524	343	99,360	233.39	13.16	6.98	Estimated 2021	PE
3,500	788	99,360	234.55	13.23	7.01	Design PE	EUM
		a de la contra sera		C. E. E.			
PE	WWTP Daily Flow	Resultant Co	ncentration (Notio	nally Clean)	Resultant	Concentration	ı (Actual)
		BOD	NH	OP	BOD	NH	OP
		mall	ma/l	ma/l	ma/l	ma/l	ma/l
E	m³/d	mg/i	iiig/i			gr.	
1,510	m³/d 340	0.35	0.076	0.032	1.09	0.128	0.044
1,510 1,524	m³/d 340 343	0.35 0.35	0.076	0.032	1.09 1.09	0.128	0.044 0.045

Biological Quality Rating for the River Maine

The Biological Quality Ratings (Q Values) for the River Maine are provided below. The Assessment by the EPA is as follows;

"A slight deterioration was recorded downstream of Castleisland on the Maine. Conditions were satisfactory at the lower site. The Maine was open for salmon angling in 2012."

An extract from the EPA database of biological quality ratings is provided below (Obtained from http://www.epa.ie/QValue/webusers/HAResults.asp#MAINE).

River and Code: MAINE	22M01
Tributary of: Sea - Castlemaine Harbour	OS Catchment No: 197
OS Grid Ref of confluence: Q 778 013	

Date(s) Surveyed: 31/12/1971, 31/12/1976, 31/12/1981, 31/12/1986, 31/12/1990, 31/12/1994, 31/12/1996, 3/9/1998, 17/9/2002, 26/7/2005, 27/7/2005, 8/8/2007, 21/9/2011, 22/9/2011, 24/10/2013

	Biological Quality Ratings (Q Values)														
Station Nos.	1971	1976	1981	1986	1990	1994	1996	1998	2002	2005	2007	2011	2013		
0100	-	4-5	4	4	4	-	-	et USe.	-	-	-	-	-		
0200	-	-	4	4	4	3-4	3-4 11	3-4	4	3-4	-	-	-		
0400		4-5	4	4	3	3-4	es of for	3	3-4	3-4	3-4	4	3-4		
0500	5	4	4-5	4	4	4 purp	Jun 3-4	3-4	4	3-4	4	4	-		
0600	5	5	4-5	4	4	Pectilownet	3-4	-	-	-	-	-	15		
0700	-	-	5	4	FRIDA	10 ¹¹ 4	-	4	4	3-4	4	4	4		

Assessment: A slight deterioration was recorded downstream of Castleisland on the Maine. Conditions were satisfactory at the lower site. The Maine was open for salmon angling in 2012.

Station No.	Station Location	National X	Grid Ref. Y	Discovery Series No.	County Code
0100	Br 2 km E of Castleisland	101488	109591	72	KY
0200	(East) Br S of Castleisland	100178	109549	72	KY
0400	Br 2km d/s Castleisland	97860	109340	71	KY
0500	Currans Br	93810	106463	71	KY
0600	Maine Br, Currans	89103	104815	71	KY
0700	Br d/s Maine Br	89139	104830	71	KY

Site Altitude and	Upstream Catch	hment Characteristic	cs (where available):
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Station No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag.	Water	Other
0100	36	1	0	100	63	0	0	37	0	0	0
0200	30	45	0	100	68	5	18	2	4	0	4

0400	19	92	0	100	71	4	15	2	6	0	3
0500	10	156	5	95	73	3	12	2	7	0	3
0600	5	316	7	93	70	3	13	2	7	0	5
0700	5	316	7	93	70	3	13	2	7	0	5

Alt is in metres Area is km2 and Sil, Cal are % siliceous and calcareous bedrock and Pasture, Forestry, etc., are % of catchment area

Provide a statement as to whether or not emissions of main polluting substances 0 (as defined in the Dangerous Substances Regulations S.I. No. 12 of 2001) to water are likely to impair the environment.

The results from the Dangerous Substances sampling at Milltown (Table D.1(i)(c)) do not exceed the standards set out in the Dangerous Substances Regulations S.I. No. 12 and therefore should not cause any adverse effect on the receiving environment.

In circumstances where water abstraction points exist downstream of any 0 discharge describe measures to be undertaken to ensure that discharges from the waste water works will not have a significant effect on faecal coliform, salmonella and protozoan pathogen numbers, e.g., Cryptosporidium and Giardia, in the receiving water environment.
 applicable
 o Indicate whether or not emission from the agglomeration or any plant, methods, receiving water environment.

Not applicable

processes, operating procedures or other factors which affect such emissions are likely to have a significant effect on a European Site, as defined in Regulation 2(1) of the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. Cons 477 of 2011).

Undertake a screening for Appropriate Assessment and state whether the discharge(s), individually or in combination with other plans or projects, is likely to have a significant effect on a European Site(s), in view of best scientific knowledge and the conservation objectives of the site(s). Where it cannot be excluded, on the basis of objective scientific information, following screening for Appropriate Assessment, that the discharge(s), either individually or in combination with other plans or projects, will have a significant effect on a European Site, the applicant shall provide a Natura Impact Statement, as defined in Regulation 2(1) of the European Communities (Birds and Natural Habitats) Regulations (S.I. No. 477 of 2011). Where based on the screening it is considered that an Appropriate Assessment is not required, a reasoned response should be provided.

An Appropriate Assessment Screening for Milltown Agglomeration was prepared in May 2014 and is submitted with Irish Water response IW-ER-LT0213. The report concluded that the discharges and maintenance associated with the Milltown outfall are not likely to result in significant effects to key species or habitats. Consequently, this appropriate assessment screening exercise concludes that a Stage 2 Natura Impact Statement / Appropriate Assessment are not required in this instance.

 Describe, where appropriate, measures for minimising pollution over long distances or in the territory of other states.

Milltown WWTP operates within the standards required by the Urban Waste Water Treatment regulations, i.e. BOD 25mg/L COD 125mg/L suspended solids 35mg/L.

 This section should also contain full details of any modelling of discharges from the agglomeration. Full details of the assessment and any other relevant information on the receiving environment should be submitted as **Attachment F.1.**

No modelling of discharges from the Milltown Agglomeration has been carried out.

F.2 Tabular Data on Drinking Water Abstraction Point(s)

There are no downstream water abstraction points in the receiving waters

ABS_CD	AGG_SERVED	ABS_VOL	PT_CD	DIS_DS	EASTING	NORTHING	VERIFIED
Abstraction Code	Agglomeration served	Abstraction Volume in m ³ /day	Point Code Provide Iabel ID's	Distance Downstream in meters from Emission Point to the att Abstraction Point	6E-digit GRS Irish National Grid Reference	6N-digit GPS Irish National Grid Reference	Y = GPS used N = GPS not used
Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
			For inspection	AND C			
		Conse	D*				